

Information Groups by Area

3



3.1 Neuroscience Area

Documents:	105	IF:	485.¹⁰⁷
Originals:	78	IF:	370.²⁵⁴
DI:	17	QI:	41

3.4 Large System Pathologies Area

Documents:	402	IF:	1781.⁰⁴⁸
Originals:	295	IF:	1448.³⁴⁴
DI:	63	QI:	155



3.2 Cardiovascular Area

Documents:	170	IF:	1161.⁷⁹
Originals:	125	IF:	817.⁰⁷⁸
DI:	36	QI:	103

3.5 Cancer and Human Molecular Genetics Area

Documents:	191	IF:	980.⁴⁵⁴
Originals:	159	IF:	848.²⁷⁶
DI:	38	QI:	101



3.3 Infectious Diseases and Immunity Area

Documents:	170	IF:	1064.⁰⁴⁵
Originals:	200	IF:	837.⁴⁵⁹
DI:	42	QI:	92



3.6 Surgery, Transplant and Health Technologies Area

Documents:	168	IF:	361.⁴¹
Originals:	124	IF:	245.³⁴²
DI:	10	QI:	41



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**

2018



3.1 Neuroscience Area

Exuperio Díez Tejedor Documents: **105** IF: **485.¹⁰⁷** Originals: **78** IF: **370.²⁵⁴** DI: **17** QI: **41**

- Psychiatry and Mental Health Group
- Neurology and Cerebrovascular Diseases Group
- Neuroprotective Strategies in Neurodegenerative Diseases Group
- Involvement of Glycinergic and Glutamatergic Systems in Central Nervous System Pathologies Group

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2010
2011
2012
2013



3.1 Neuroscience Area



Strategic Objectives	Development forecast for the coming years	Actions
<p>Neuroscience Area is composed of 4 research groups and has as general objectives the promotion of teaching, research and dissemination of knowledge in the field of neurosciences and neurological diseases, particularly in relation to clinical neurosciences.</p>	<p>Cohesion between different disciplines (biomedical research, engineering). Encourage and promote research among the healthcare staff who sometimes perceive research as something negative.</p>	<ul style="list-style-type: none"> • Performing annual workshops and seminars science
	<p>Innovation and technology transfer</p>	<ul style="list-style-type: none"> • Training in research methodology in specialized health personnel and in training
		<ul style="list-style-type: none"> • Innovation promotion program that involves health organizations, research institutions and companies

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Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

3.1 Neuroscience Area



Publications: **3**

Impact Factor: **36.951**

Q1: **I**

Psychiatry and Mental Health Group

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Nieves González Suárez. Facultativo Especialista de Área en Psiquiatría. Hospital Universitario La Paz

Ana Hospital Moreno. Facultativo Especialista de Área en Psicología Clínica. Hospital Universitario La Paz

Eduardo Jiménez Sola. Facultativo Especialista de Área en Psiquiatría. Hospital Universitario La Paz
Roberto Mediavilla Torres. Investigador Predocoral. Hospital Universitario La Paz

Ainoa Muñoz San José. Facultativo Especialista de Área en Psiquiatría. Hospital Universitario La Paz

Óscar Pajares González-Gallego. Enfermero Especialista en Salud Mental CSM Fuencarral. Hospital Universitario La Paz

Ángela Palao Tarrero. Facultativo Especialista de Área en Psiquiatría. Hospital Universitario La Paz

Pau Pérez Sales. Facultativo Especialista de Área en Psiquiatría. Hospital Universitario La Paz

Beatriz Rodríguez Vega. Jefa de sección de Psiquiatría. Profesora asociada. Facultad de Medicina (UAM). Hospital Universitario La Paz. Universidad Autónoma de Madrid

Rosa Villanueva Peña. Facultativo Especialista de Área en Psiquiatría. Hospital Universitario La Paz

Strategic Objective

The group is devoted to assess the efficacy of psychotherapeutic techniques as adjunctive to other therapeutic measures in mental disorders and other medical diseases.



3.1 Neuroscience Area

Their main areas of investigation are: research in bipolar disorder, severe mental disorder, and other medical disorder such as multiple sclerosis, cancer and chronic pain. We participate in clinical trials on new treatments and specific therapies in order to improve and the prognosis of these disorders.

Moreover, the group is involved in the evaluation of new treatments or new indications in mental disorders through the participation in clinical trials.

We are specially focused in the assessment of the efficacy and effectiveness of techniques such as Mindfulness and we evaluate hypothetical mediators of response, such as neurotrophic factors or factors related to inflammatory response.

Research lines

- Psychotherapeutic interventions in mental disorders
- Suicide prevention

Research Activity

Books and book chapters

Bravo Ortiz MF, López Cánovas FJ. Manual de psicofarmacología para profesionales de la salud mental. Madrid: Síntesis, 2018. p.1-162

Publications

- Bernardo M, de Dios C, Pérez V, Ignacio E, Serrano M, Vieta E, Mira JJ, Guilbert M, Roca M. Quality indicators in the treatment of patients with depression, bipolar disorder or schizophrenia. Consensus study. Rev Psiquiatr Salud Ment. 2018; 11(2): 66-75. Article. IF: 2.927, Q2
- Pérez-Sales P, Jan den Otter J, Hardi L, Wenzel T, Diaconu G, Cors G, Kastrup M. WPA Position statement on banning the participation of psychiatrists in the interrogation of detainees. World Psychiatry. 2018; 17(2): 237-8. Editorial Material. IF: 34.024, DI
- Pérez-Sales P. Ill-treatment and torture in demonstrations and other non-custodial settings. How can academic research help in the discussion? Torture. 2018; 28(1): 1-13. Editorial Material. Not Indexed

Public projects

Bravo Ortiz MF. AGES-CM 2-CM - Ambiente y genes en esquizofrenia (S2017/BMD-3740). CM. 2018-2019.

Management centre: FIBHULP

Bravo Ortiz MF. Contrato de apoyo a investigador (PEI-2017-AI/SAL-5716). CM. 2018-2020.

Management centre: FIBHULP

Bravo Ortiz MF. Intervenciones basadas en Mindfulness para mejorar la cognición social en pacientes con un primer episodio psicótico (PI17/00768). ISCI. 2018-2020.

Management centre: FIBHULP

de Dios Perrino C. Eficacia de un programa de actividad física aeróbica como intervención coadyuvante en pacientes bipolares estables con sobrepeso. Proyecto AEROBIP (PI17/01554). ISCI. 2018-2020.

Management centre: FIBHULP

de Dios Perrino C. Terapia cognitiva basada en mindfulness frente a intervención psicoeducativa en pacientes con trastorno bipolar con síntomas subsindrómicos depresivos: ensayo piloto randomizado (PI13/00352). ISCI. 2014-2018.

Management centre: FIBHULP

Private projects

Bayón Pérez C. Curso de investigación Mindfulness en la práctica clínica. Astrazeneca Farmacéutica Spain S.A. 2012-Ongoing.

Management centre: FIBHULP

Bravo Ortiz MF. II Jornada científica de sensibilización ante el estigma a la persona con enfermedad mental. Lundbeck España S.A. 2018-Ongoing.

Management centre: FIBHULP

Bravo Ortiz MF. Jornadas de investigación en el ámbito de intervenciones grupales en salud mental. Astrazeneca Farmacéutica Spain S.A. 2011-Ongoing.

Management centre: FIBHULP

Bravo Ortiz MF. XIV Jornadas de investigación en psiquiatría y salud mental: cognición, emoción y salud mental. Janssen-Cilag España S.A. 2014-Ongoing.

Management centre: FIBHULP

Bravo Ortiz MF. XVII Jornadas de Investigación. Construyendo puentes entre la salud mental infarto-juvenil y de adultos. Janssen-Cilag España S.A. 2016-Ongoing.

Management centre: FIBHULP

Calvo Sagardoy R. Cambios biomagnéticos y cognitivo-emocionales en el tratamiento de las alteraciones de la imagen corporal en pacientes con trastornos en la conducta alimentaria. Fundación Mapfre. 2005-Ongoing.

Management centre: FIBHULP

De Dios Perrino C. Regulación epigenética del sistema oxitocina-vasopresina y sociabilidad en la manía bipolar. Fundación para la investigación Biomédica Hospital Universitario La Paz. 2015-Ongoing.

Management centre: FIBHULP





3.1 Neuroscience Area

Rodríguez Vega B. Comparación de dos estrategias de intervención para el tratamiento de los trastornos depresivos en pacientes oncológicos. Lundbeck España S.A. 2007-Ongoing.

Management centre: FIBHULP

Rodríguez Vega B. Evaluacion cualitativa de dos estrategias de tratamiento para la depresión en un muestra de pacientes oncológicos PI-924. Lundbeck España S.A. 2007-Ongoing.

Management centre: FIBHULP

Rodríguez Vega B. Traducción y validación de los instrumentos reflective functioning questionnaire (RFQ) e inventory of personality organization. Fundación Vasca de Innovacion e Investigacion Sanitarias. 2018-Ongoing.

Management centre: FIBHULP

Clinical trials

Villanueva Peña R. Estudio de fase II, aleatorizado, doble ciego, controlado con placebo y de grupos paralelos para evaluar la eficacia y la seguridad de 4 dosis orales de BI 425809 una vez al día durante un periodo de tratamiento de 12 semanas en pacientes con esquizofrenia. Type: Clinical Trial, phase II.

HULP code: 5078. Sponsored's protocol code: 1346.9.

Sponsored by: Boehringer Ingelheim España S.A. Signed date: 11/05/2018

Villanueva Peña R. Cohorte de depresión resistente al tratamiento en Europa. Type: EPA-SP.

HULP code: PI-3281. Sponsored's protocol code: 54135419DEP4001.

Sponsored by: Janssen Pharmaceutica Nv. Signed date: 04/10/2018

Villanueva Peña R. Estudio de fase II, aleatorizado, doble ciego, controlado con placebo y de grupos paralelos para evaluar la eficacia y la seguridad de 4 dosis orales de BI 425809 una vez al día durante un periodo de tratamiento de 12 semanas en pacientes con esquizofrenia. Type: Clinical Trial, phase II.

HULP code: Anexo-I 5078. Sponsored's protocol code: 1346.9.

Sponsored by: Boehringer Ingelheim España S.A. Signed date: 23/10/2018

Patents and trademarks

Rodríguez Vega B., authors; FIBHULP, assignee. Brand name: En calma; ESM 3.695.071; 2017 December 12.





3.1 Neuroscience Area



Publications: 65

Impact Factor: 269.974

Q1: 21

Neurology and Cerebrovascular Diseases Group

- Exuperio Díez Tejedor.** Jefe de Servicio de Neurología. Hospital Universitario La Paz. Catedrático del Departamento de Neurología. Facultad de Medicina. Universidad Autónoma de Madrid
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- María Jesús Bullido Gómez-Heras.** Profesor Titular. Departamento de Biología Molecular. Facultad de Ciencias. CBM "Severo Ochoa"
- Fernando Carceller Benito.** Facultativo Especialista de Área en Neurocirugía. Hospital Universitario La Paz
- Sebastián Cerdán García-Esteller.** Investigador Postdoctoral. Laboratorio de Imagen y Espectroscopía por Resonancia Magnética. IIB "Alberto Sols"
- María Delia Chaverri Rada.** Facultativo Especialista de Área en Neurología. Hospital Universitario La Paz
- Jorge Eduardo Collazos Castro.** Jefe de Laboratorio de Reparación Neural y Biomateriales. Hospital Nacional de Parapléjicos de Toledo
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- Andrés Francisco Fernández Prieto.** Facultativo Especialista de Área en Radiología. Hospital Universitario La Paz
- Mireya Fernández-Fournier Fernández.** Facultativo Especialista de Área en Neurología. Hospital Universitario La Paz
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3.1 Neuroscience Area

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Antonio Martínez Bermejo. Jefe de Servicio de Neurología Pediátrica. Hospital Universitario La Paz. Profesor Asociado. Facultad de Medicina. Universidad Autónoma de Madrid

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Strategic Objective

CEREBROVASCULAR

- Development of translational research studies (both animal and clinical studies) in cerebrovascular diseases, with the objectives of increasing the understanding of the pathogenesis of both cerebral infarction (with cortical and subcortical affection) and cerebral hemorrhage. To identify prognostic biomarkers and therapeutic targets mainly aimed at the promotion of brain protection and repair, with a special interest on the development of cell therapy as well as in trophic factors, extracellular vesicles and remyelinating drugs. Clinical trials of cell therapy in acute cerebral infarction (clinical trial AMASCIS and European Consortium RESTORE-H2020).
- Development of innovative strategies in the diagnosis and treatment of ischemic stroke, through the development of an independent operator-ultrasound device for brain visualization and for enhancement by ultrasound of drug therapies (BDNF, exosomes) in the ischemic area.
- Evaluation of the benefit of the implementation of prehospital clinical scales able to identify of patients of cerebral artery occlusion susceptible to mechanical thrombectomy in order to shorten treatment delay and improve the prognosis of patients. Comparative analysis of benefit and risk of primary mechanical thrombectomy versus intravenous thrombolysis in patients with acute ischemic stroke within the first 4.5 hours from onset.
- Study of the clinical (neurological and neuropsychological) and anthropological factors influencing functional recovery and reintegration of stroke patients as well as the compliance with the recommendations for secondary stroke prevention.

HEADACHES AND NEUROPATHIC PAIN

- Analysis of the expression of the phenomenon central painful awareness in different primary and secondary headaches.

NEURODEGENERATION

Amyotrophic Lateral Sclerosis

- Analysis of the different profiles of cognitive impairment in ALS patients. Adaptation and validation of cognitive ALS specific scales for Spanish patients. Study of cognitive potentials for identification of possible specific EEG endophenotypes in ALS patients.
- Study of biomarkers in ALS and other motor neuron diseases. Genetic, metabolomic and proteomic profiling combined with clinical parameters .



3.1 Neuroscience Area

- Participation In Project MinE: International program analyzing the genome of 15000 patients and controls by the same genotyping platform.
- Functional study of Autonomic Nervous System in Amyotrophic Lateral Sclerosis. Identification of differential patterns of the disease presentation and their impact on clinical outcome .Alzheimer's disease.
- Study of the lysosomal pathway involvement in a model of neurodegeneration and cholesterol dysregulation in Alzheimer's disease. Parkinson's disease.
- Tremor as a negative predictive factor in developing dementia associated with Parkinson's disease.
- Evaluation of the benefits and risks of continuous infusion of intraduodenal levodopa in idiopathic Parkinson's disease. Hereditary ataxias.
- Assessment of therapeutic response to Frenkel training exercises enhanced by Wii game console in patients with cerebellar ataxia.
- Participation in the Registry of the European Consortium EFACTS (European Friedreich's Ataxia Consortium for Translational Studies) aimed at improve the knowledge of the epigenetic mechanisms related to silencing the expression of frataxin and the pathogenesis of the disease, identification of biomarkers and genes modifying the clinical expression of the disease, development of new therapies as well as cellular and animal models for the study of Friedreich's Ataxia.

COGNITION, BEHAVIOR AND NEUROLOGICAL ANTHROPOLOGY

- Analysis of the medium and long term results of workshops on post-stroke care attended by family and patients during the hospitalization time for an acute stroke on the degree of knowledge and ack - nowledge of stroke and its risk factors.
- Evaluation of the perceived quality of physicianpatient-family communication in cerebrovascular diseases and dementias.

NEUROIMMUNOLOGY

Multiple sclerosis

- Study of remyelinizers substances as a biomarker white matter lesion in multiple sclerosis patients.
- Analysis of white matter biomarkers in Theiler's Mourine Encephalomyelitis Virus (TMEV) animal model. Development of new reparative therapies based on the enhancement of remyelination in experimental animal model.
- Analysis of molecular and neuroimaging biomarkers of brain damage and repair in Multiple Sclerosis.

AUTONOMIC NERVOUS SYSTEM

- Evaluation of the Autonomic Nervous System in movement disorders.
- Evaluation of the Autonomic Nervous System in focal autonomic neuropathies and in Fabry disease.



- COMPASS-31 Study (collaboration with the Mayo Clinic): Registry of patients and controls with central and peripheral dysautonomia.

NEUROMUSCULAR DISEASES

- Observational study of the clinical course of patients with Charcot-Marie-Tooth disease. Identification of prognostic factors.
- Efficacy of evaluation of Eslicarbazepine acetate in neuropathic pain in patients with peripheral neuropathies.

SLEEP

- Development and evaluation of intervention protocols in childhood insomnia treatment.
- Analysis of sleep microstructure in newborns with Prader Willi Syndrome.
- Study on the efficacy of child insomnia treatment with oral iron supplements against placebo.

EPILEPSY

- Evaluation of the benefit of the implementation of an outpatient clinic for first seizures.
- Analysis of factors influencing the recurrence of seizures, tolerance and adherences to drugs, during the first monotherapy in patients with epilepsy.
- Analysis of neuropsychological disorders in the primary generalized epilepsy.
- Obstructive sleep apnea in Epilepsy.
- Epileptic encephalopathies and perampanel.

BRAIN DEVELOPMENT DISORDERS

- Study and functional classification of the gait of pediatric patients with cerebral palsy.
- Study and functional classification of the gait of patients with familial spastic paraparesis.
- Gait analysis as a tool for the differential diagnosis bet - ween child cerebral palsy and PEF in paediatric patients.

Research lines

- Cerebrovascular diseases
- Neurodegenerative diseases
- Neuroimmunology. Multiple sclerosis
- Neuromuscular diseases and spinocerebellar ataxias. Motor neuron diseases Amyotrophic lateral sclerosis
- Developmental disorders and neurological maturation (TRADESMA)
- Headache and neuropathic pain



3.1 Neuroscience Area

Research Activity

Doctoral theses

Llorente Ginés P. Role of proteases implicated in the lysosomal pathway on app processing in a cellular model of neurodegeneration [dissertation]. Madrid: UAM; 2018(20/12/2018).



Director: Bullido Gómez-Heras MJ.

López de Uralde Villanueva I. Indicios de sensibilización central en el dolor crónico inespecífico de cuello con características neuropáticas [dissertation]. Madrid: URJC; 2018(27/06/2018).

Directors: Fernández Carnero J; La Touche Arbizu R.

Moraleda Pérez S. Eficacia de la toxina botulínica A en el tratamiento de la parálisis facial periférica. Comparación de diferentes escalas en la evaluación de la función facial [dissertation]. Madrid: UAM; 2018(30/11/2018).

Director: Lasaletta Atienza L

Books and book chapters

Gil-Martínez A, Oliveira T. Métodos de control y terapéutica. In: Fonseca J, Mariz-Almeida A, Dias R. Bruxismo: Do Diagnóstico á Reabilitação. Queluz (Portugal): Sociedad Portuguesa de Trastorno Temporomandibular y Dolor Orofacial; 2018. p.58-60

Publications

- Aarnio K, Rodríguez-Pardo J, Siegerink B, Hardt J, Broman J, Tulkki L, Haapaniemi E, Kaste M, Tatlisumak T, Putala J. Return to work after ischemic stroke in young adults A registry-based follow-up study. *Neurology*. 2018; 91(20): E1909-17. Article. IF: 8.689; DI.
- Arellano CM, Vilches A, Clemente E, Pascual-Pascual SI, Bolinches-Amorós A, Castro AA, Espinos C, Rodríguez ML, Jendelova P, Erceg S. Generation of a human iPSC line from a patient with autosomal recessive spastic ataxia of Charlevoix-Saguenay (ARSACS) caused by mutation in SACSIN gene. *Stem Cell Res*. 2018; 31: 249-52. Editorial Material. IF: 3.929; Q1
- Balbas-Álvarez L, Candelas-Fernández, del Corral T, La Touche R, López-de-Uralde-Villanueva I. Effect of manual therapy, motor control exercise, and inspiratory muscle training on maximum inspiratory pressure and postural measures in moderate smokers: A randomized controlled trial. *J Manip Physiol Ther*. 2018; 41(5): 372-82. Article. IF: 1.274; Q3
- Beltran-Alacreu H, López-de-Uralde-Villanueva I, Calvo-Lobo C, Fernández-Carnero J, La Touche R. Clinical features of patients with chronic non-specific neck pain per disability level: A novel observational study. *Rev Assoc Med Bras*. 2018; 64(8): 700-9. Article. IF: 0.801; Q4
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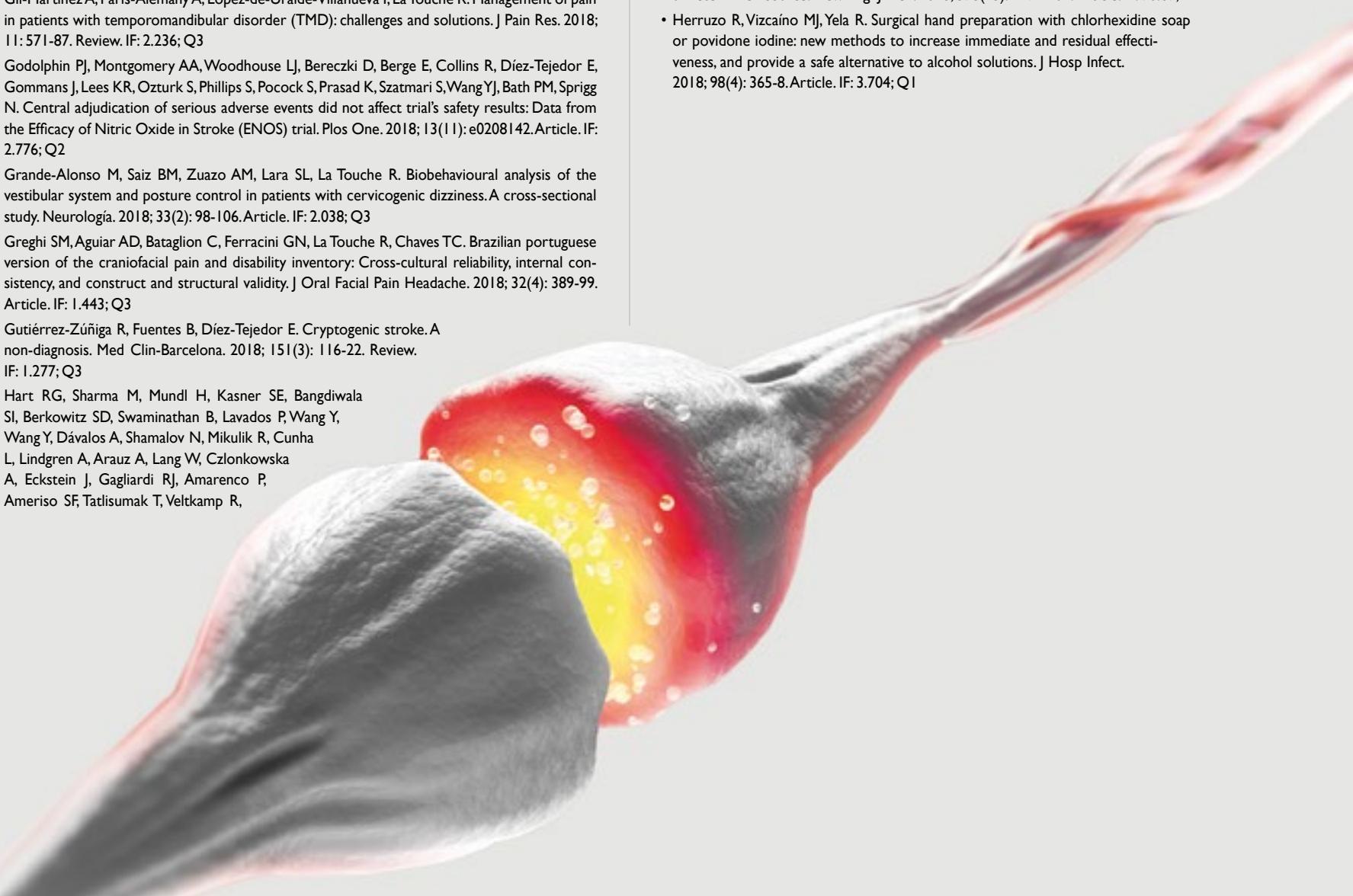


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3.1 Neuroscience Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

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3.1 Neuroscience Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

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2018

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Management centre: FIBHULP

Díez Tejedor E. Aplicación de nano partículas lipídicas biomodulares sectorizadas hacia la zona de preinfarto en la reparación mediada por citicina en el tratamiento de la isquemia cerebral. Modelo en ratas. Ferrer Farma S.A. 2009-Ongoing.

Management centre: FIBHULP

Díez Tejedor E. Brain repair therapy with exosomes derived mesenchymal stem cells in experimental intracerebral hemorrhage model. Roche Farma S.A. 2016-Ongoing.

Management centre: FIBHULP

Díez Tejedor E. Cátedra neurociencias clínicas UAM.V Symposium de neuroinmunología. Esclerosis múltiple. De la investigación a la práctica clínica. Sanofi Aventis S.A. 2016-Ongoing.

Management centre: FIBHULP

Díez Tejedor E. Desarrollo de nuevos productos terapéuticos para el tratamiento de la isquemia cerebral, basado en células madre. Cellerix S.L. 2008-Ongoing.

Management centre: FIBHULP

Díez Tejedor E. Desarrollo de una base de datos para optimizar terapéutica e investigación clínica en esclerosis múltiple. Bayer Hispania S.L. 2004-Ongoing.

Management centre: FIBHULP

Díez Tejedor E. Diseño de modelos para el desarrollo de nuevas terapias neuroreparadoras en ictus. Ferrer Internacional S.A. 2008-Ongoing.

Management centre: FIBHULP



3.1 Neuroscience Area



Díez Tejedor E. Efecto de los factores tróficos (cerebrolisina) y terapia con células madre en isquemia cerebral focal. Estudio experimental en ratas. Ever Neuropharma GMBH. 2010-Ongoing.

Management centre: FIBHULP

Díez Tejedor E. Effect of trophic factors (Cerebrolysin) and stem cells therapy in focal cerebral ischemia. Experimental study in rats. Ebewe Neuro Pharma GMBH. 2008-Ongoing.

Management centre: FIBHULP

Díez Tejedor E. Fabry and stroke epidemiological protocol. Risk factors in ischemic stroke patients fabry disease: an international, multicenter, epidemiological protocol. University of Rostock. 2011-Ongoing.

Management centre: FIBHULP

Díez Tejedor E. Frequency of Fabry disease in an unselected group of young stroke patients. ESO - European Stroke Organisation. 2008-Ongoing.

Management centre: FIBHULP

Díez Tejedor E. Informatización de la gestión de pacientes. Unidad de neuroinmunología y esclerosis múltiple en el Hospital Universitario La Paz. Sanofi Aventis S.A. 2014-Ongoing.

Management centre: FIBHULP

Díez Tejedor E. Investigación en el campo de la esclerosis múltiple. Biomed S.A. 2007-Ongoing.

Management centre: FIBHULP

Díez Tejedor E. Pacientes con esclerosis múltiple: análisis de la respuesta a tratamientos biológicos. Fundación Biogen Idec. 2013-Ongoing.

Management centre: FIBHULP

Díez Tejedor E. Pacientes con esclerosis múltiple: análisis de la respuesta al Natalizumab. Schering España S.A. 2011-Ongoing.

Management centre: FIBHULP

Díez Tejedor E. Registro clínico para el seguimiento de tratamiento anticoagulante en prevención secundaria tras un ictus cardioembólico. Boehringer Ingelheim España S.A. 2011-Ongoing.

Management centre: FIBHULP

Díez Tejedor E. Proyectos de inmunología para la Unidad de Esclerosis Múltiple, implantación del modelo EAE, desarrolló técnicas para determinar las células reguladoras y análisis de marcadores biológicos en pacientes con EM que estén en tratamiento con Natalizumab. Biogen Idec Ltd. 2008-Ongoing.

Management centre: FIBHULP

Frank García A. Análisis antropológico de la sobrecarga del cuidador principal de

personas con demencia. Estrategias de Comunicación. Stakeholders. 2018-Ongoing.

Management centre: FIBHULP

Frank García A. Formación de personal investigador orientada a la investigación en el área de la odontopediatría. Universidad Europea de Madrid S.L. 2013-Ongoing.

Management centre: FIBHULP

Frank García A. Generación de un banco de linfoblastos de pacientes con enfermedad de Alzheimer y controles. Consejo Superior Investigaciones Científicas (CSIC). 2004-Ongoing.

Management centre: FIBHULP

Frank García A. Validación de los biomarcadores proteicos y metabolómicos en muestras de pacientes. Neuron Biopharma S.A. 2010-Ongoing.

Management centre: FIBHULP

Gil Martínez A. Face mirror. Fundación para la Innovación y la Prospectiva en Salud en España (FIPSE). 2018-Ongoing.

Management centre: FIBHULP

Gil Martínez A. Sistema de interacción natural para análisis y rehabilitación de los trastornos de la marcha en la enfermedad de Parkinson (MOBEEZE). Fundación I+D del Software Libre. 2016-Ongoing.

Management centre: FIBHULP

Gutiérrez Fernández MD. Programa de formación en investigación de neurociencias y enfermedades cerebrovasculares en la FIBHULP. Rozona Centro de Formación SL. 2015-Ongoing.

Management centre: FIBHULP

Iváñez Mora V. Proyecto de creación de base de datos para la investigación clínica y epidemiológica en epilepsia. EISAI Farmaceutica S.A. 2009-Ongoing.

Management centre: FIBHULP

Moraleda Pérez S. Pacientes con parálisis facial periférica: registro de características clínicas antes y después del tratamiento con toxina botulínica tipo A y reeducación neuromuscular facial. Merz Pharma España S.L. 2014-Ongoing.

Management centre: FIBHULP

Noval Martín S. Estudio multicéntrico de tres años de duración para evaluar la tomografía de coherencia óptica como medida de valoración en pacientes con esclerosis múltiple. Novartis Farmaceutica S.A. 2012-Ongoing.

Management centre: FIBHULP

Noval Martín S. Identificación de factores pronósticos de recuperación visual tras la cirugía de tumores de la región selar. Novartis Farmaceutica S.A. 2010-Ongoing.

Management centre: FIBHULP



3.1 Neuroscience Area

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018



Pascual Pascual SI. Estudio de la eficacia de la toxina botulínica en el pie equino espástico de la parálisis cerebral y de los factores que influyen en la misma. Allergan S.A. 2008-Ongoing.

Management centre: FIBHULP

Pascual Pascual SI. Safety evaluation on the use of botulinum toxin type a for the treatment of spasticity in children after 20 years of experience 1996-2015. A retrospective monocenter observational study based on a data base containing over 1000 children. Ipsen Innovation. 2017-Ongoing.

Management centre: FIBHULP

Roda Frade JM. Programa de formación de un becario para el estudio del paciente diagnosticado con dolor crónico y/o trastornos del movimiento candidato a tratamiento con neuromodulación medular y cerebral. Boston Scientific Iberica S.A. 2017-Ongoing.

Management centre: FIBHULP

Rodríguez de Rivera Garrido FJ. Consorcio Europeo de Ataxia de Friedreich para la realización de estudios traslacionales. Stakeholders. 2015-Ongoing.

Management centre: FIBHULP

Royo Orejas A. Actualización y renovación de la actividad investigadora en la Sección de Nueroradiología del Hospital Universitario La Paz. Stakeholders. 2016-Ongoing.

Management centre: FIBHULP

Vivancos Matellano F. Análisis de la diferente evolución clínica de pacientes con enfermedad de Parkinson con tratamiento adyuvante asociado de un inhibidor de la dopa decarboxilasa y un inhibidor de la COMT. Lundbeck España S.A. 2008-Ongoing.

Management centre: FIBHULP

International projects

Díez Tejedor E. RESSTORE - Regenerative stem cell therapy for stroke in Europe. Therapeutic efficacy of allogenic adipose tissue derived mesenchymal stem cells for enhancing functional outcome in stroke patients. (Topic PHC-15-2015). H2020: UE. 2016-2020.

Management centre: FIBHULP

Clinical trials

Frank García A. Estudio de extensión en fase III, multicéntrico, a largo plazo sobre la seguridad y eficacia de AVP-786 (Bromhidrato de [D6]-Dextrometorfano Deuterado [D6-DM]/Sulfato de Quinidina [Q]) para el tratamiento de la agitación en pacientes con demencia de tipo Alzheimer. Type: Clinical Trial, phase III.

HULP code: 5155. Sponsored's protocol code: 15-AVP-786-303.

Sponsored by: Pharmaceuticals Inc. Signed date: 20/09/2018

Frank García A. Estudio de fase IIIB/multicéntrico, aleatorizado, con doble ciego, controlado con placebo y de grupos paralelos para investigar la eficacia y la seguridad de JNJ-54861911 en sujetos asintomáticos con riesgo de desarrollar demencia de Alzheimer. Type: Clinical Trial, phase II.

HULP code: Anexo-I 4448. Sponsored's protocol code: 54861911ALZ2003.

Sponsored by: Janssen Cilag International NV. Signed date: 16/03/2018

Frank García A. Estudio de fase III multicéntrico, aleatorizado, doble ciego, controlado con placebo, con diseño de grupos paralelos, para evaluar la eficacia, la seguridad y la tolerabilidad de AVP-786 (Bromhidrato de Deudextrometorfano [D6-DM]/Sulfato de Quinidina [Q]). Type: Clinical Trial, phase III.

HULP code: 4976. Sponsored's protocol code: 4976 17-AVP-786-305.

Sponsored by: Ph Research S.L. Signed date: 30/01/2018

Íváñez Mora V. Estudio aleatorizado, doble ciego, controlado con placebo, de búsqueda de dosis para evaluar la eficacia y la seguridad de Padsevonil como tratamiento adyuvante de crisis focales en sujetos adultos con epilepsia fármacoresistente. Type: Clinical Trial, phase II.

HULP code: 5026. Sponsored's protocol code: EP0091.

Sponsored by: UCB Biosciences GMBH. Signed date: 26/09/2018

López Arrieta JM. Estudio en fase II, multicéntrico, aleatorizado, doble ciego y controlado con placebo, en grupos paralelos, que evalúa la eficacia y seguridad de MTAU9937A en pacientes con enfermedad de Alzheimer de fase prodromática a leve. Type: Clinical Trial, phase II.

HULP code: 4924. Sponsored's protocol code: GN39763.

Sponsored by: Genentech Inc. Signed date: 18/05/2018

López Arrieta JM. Estudio en fase II, multicéntrico, aleatorizado, doble ciego y controlado con placebo, en grupos paralelos, que evalúa la eficacia y seguridad de MTAU9937a en pacientes con enfermedad de Alzheimer de fase prodromática a leve. Type: Clinical Trial, phase II.

HULP code: Anexo-I 4924. Sponsored's protocol code: GN39763.

Sponsored by: Genentech Inc. Signed date: 01/08/2018

Martínez Moreno M. Seguimiento clínico posterior a la comercialización en Europa de Synchromed II bajo la plataforma para el registro de vigilancia de producto (PSR) específico para la terapia neurológica - administración de fármaco selectiva. Type: Producto Sanitario.

HULP code: Anexo-I 4947. Sponsored's protocol code: PSR-TDD PMCF.

Sponsored by: Medtronic Bakkeen Research Center B.V. Signed date: 27/06/2018



3.1 Neuroscience Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

Martínez Moreno M. Seguimiento clínico posterior a la comercialización en Europa de Synchromed II bajo la plataforma para el registro de vigilancia de producto (PSR) específico para la terapia neurológica - administración de fármaco selectiva. Type: Producto Sanitario.

HULP code: 4947. Sponsored's protocol code: PSR-TDD PMCF.

Sponsored by: Medtronic Bakkeen Research Center B.V. Signed date: 07/03/2018

Pascual Pascual SI. Estudio de continuación, doble ciego, controlado con placebo, aleatorizado, multicéntrico, dividido en dos partes para investigar la seguridad, tolerabilidad, farmacocinética, farmacodinámica y eficacia de RO7034067 en pacientes con atrofia muscular espinal de tipo 2 y 3. Type: Clinical Trial, phase II.

HULP code: 4664. Sponsored's protocol code: BP39055.

Sponsored by: F.Hoffmann-La Roche Ltd. Signed date: 23/03/2018

Pascual Pascual SI. Estudio de extensión del seguimiento internacional, multicéntrico, doble ciego de 9 meses de duración para evaluar la seguridad y tolerabilidad a largo plazo de PXT3003 en pacientes con enfermedad de Charcot-Marie-Tooth de tipo 1A. Type: Clinical Trial, phase III.

HULP code: Anexo-II 4768. Sponsored's protocol code: PXT3003-03.

Sponsored by: Pharnext. Signed date: 21/09/2018

Pascual Pascual SI. Estudio de extensión del seguimiento internacional, multicéntrico, doble ciego de 9 meses de duración para evaluar la seguridad y tolerabilidad a largo plazo de PXT3003 en pacientes con enfermedad de Charcot-Marie-Tooth de tipo 1A. Type: Clinical Trial, phase III.

HULP code: Anexo-I 4768. Sponsored's protocol code: PXT3003-03.

Sponsored by: Pharnext. Signed date: 12/04/2018

Pascual Pascual SI. Tratamiento de extensión a largo plazo y sin enmascaramiento usando fosfato sódico de dexametasona intraeritrocitaria en pacientes con ataxia telangiectasia que participaron en el estudio IEDAT-02-2015. Type: Clinical Trial, phase III.

HULP code: 5062. Sponsored's protocol code: IEDAT-03-2018.

Sponsored by: Erydel S.P.A. Signed date: 08/06/2018

Paz Solís JF. PRO(Precision Retrospective Outcomes) study A7005. Type: EPA-SP.

HULP code: PI-3250. Sponsored's protocol code: A7005.

Sponsored by: Boston Scientific Corporation. Signed date: 27/07/2018

Tallón Barranco A. Estudio de extensión multicéntrico, abierto y de un solo grupo para evaluar la efectividad y la seguridad de Ocrelizumab en pacientes con esclerosis múltiple incluidos previamente en un ensayo clínico de fase IIIB/IV de Ocrelizumab

patrocinado por F. HOFF. Type: Clinical Trial, phase IIIb.

HULP code: 5050. Sponsored's protocol code: MN39158.

Sponsored by: F.Hoffmann-La Roche Ltd. Signed date: 18/06/2018

Vivancos Matellano F. Estudio aleatorizado, doble ciego y controlado con placebo para evaluar la eficacia y la seguridad de Safinamida 100 mg una vez al día, como tratamiento complementario, en pacientes con enfermedad de parkinson idiopática (EPI) con fluctuaciones motoras y dolor crónico relacionado con la enfermedad de Parkinson. Type: Clinical Trial, phase IV.

HULP code: 5150. Sponsored's protocol code: Z7219M01.

Sponsored by: Zambon S.A. Signed date: 25/10/2018

Patents and trademarks

Ballesteros García P, López Larrubia P, Domínguez Mateo L, Marco Contelles JL, Cerdán García-Esteller S, inventors; Universidad Nacional de Educación a Distancia, CSIC, assignees. Set of magnetic resonance imaging and spectroscopy cell acidity extrinsic indicators comprise polyol derivatives based on alditols. P200300936; 2003 April 23.

Valdivieso Amate F, Bullido Gómez-Heras MJ, Martínez García A, inventors; UAM, assignee. Method of identifying compounds that induce or inhibit endoplasmic reticulum stress or oxidative stress. P200702997, PCT/ES2008/000705, EP2221379, US20100304384; 2007 November 13.

Valdivieso Ámate F, Burgos Muñoz JS, Ramírez Moreno C, Sastre Merlin I, inventors; UAM, CSIC, assignees. Method of identifying therapeutic compounds which can be used for the treatment and/or prevention of infections and diseases caused by human herpes viruses. P200400965, PCT/ES2005/000209, EP1769677, US20070218004, AT447321, AU2005235319, CA2562787, JP2007533315; 2004 April 21.

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Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

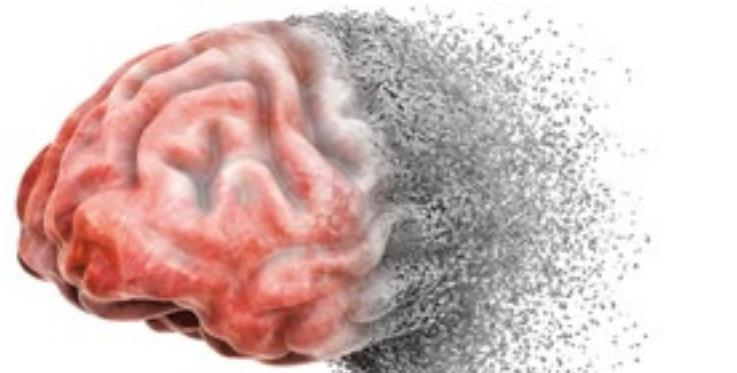
4

Scientific Report

2018



3.1 Neuroscience Area



Publications: 17

Impact Factor: 122.²⁵⁹

QI: 16

Antonio Cuadrado Pastor. Catedrático. Facultad de Medicina. Universidad Autónoma de Madrid

María Antón Valadés. Investigador Postdoctoral. CIBERNED

Maribel Escoll Guerrero. Investigador Postdoctoral. Universidad Autónoma de Madrid

Raquel Fernández Ginés. Estudiante de doctorado. Universidad Autónoma de Madrid

Ángel Juan García Yagüe. Investigador Postdoctoral. Universidad Autónoma de Madrid

Nadia Giselle Innamorato. Investigadora Predoctoral

Diego Lastra Martínez. Estudiante de doctorado. Universidad Autónoma de Madrid

Isabel Lastres Becker. Investigadora Senior (Contrato Ramón y Cajal). Universidad Autónoma de Madrid

Ángela Martínez Valverde. Investigadora Postdoctoral. CSIC. IIB "Alberto Sols"

Marta Pajares Cabetas. Investigador Postdoctoral. CIBERNED

Patricia Rada Llano. Investigadora Postdoctoral. IIB "Alberto Sols"

Natalia Robledinos Antón. Estudiante de doctorado. Universidad Autónoma de Madrid

Ana Isabel Rojo Sanchis. Profesor Ayudante Doctor. Universidad Autónoma de Madrid

Strategic Objective

Oxidative stress is a key element in the aetiopathogenesis of neurodegenerative diseases and their comorbidities. Our laboratory studies the antioxidant protec-

Neuroprotective Strategies in Neurodegenerative Diseases Group

tion mechanisms activated by extracellular signals and how this response could be regulated pharmacologically to provide a therapeutic benefit in these diseases.

To meet these two objectives, we are studying signalling pathways that regulate antioxidant metabolism and provide a general protective response. An important finding of this group was the observation that the PI3K/AKT/GSK-3 survival pathway regulates the transcription factor Nrf2, guardian of cellular redox homeostasis, that provides protection against oxidative, inflammatory and proteotoxic stress. For the past year we have been working on the validation this transcription factor as a new therapeutic target to modify progression of Parkinson's and Alzheimer's disease as well as co-morbid retinopathy and type II diabetes

Research lines

- Role of oxidative stress in neuronal death and neuroinflammation in neurodegenerative diseases
- The transcription factor Nrf2 as a new therapeutic target in Parkinson's and Alzheimer's disease
- Molecular basis of the role of Nrf2 in type 2 diabetes and its complications (diabetic retinopathy and nephropathy)



3.1 Neuroscience Area

Research Activity

Doctoral theses

Pajares Cabetas M. Transcription factor NRF2 regulates de expression of autophagy genes[dissertation]. Madrid: Universidad Autónoma de Madrid: 2018(19/10/2018).

Director: Cuadrado Pastor A.



Rubio Caballero C. Changes in gut microbiota associated to inflammation during ageing ans non-alcoholic steatohepatitis[dissertation]. Madrid: Universidad Autónoma de Madrid: 2018(14/12/2018).

Director: Martínez Valverde A.



Villar Lorenzo A. Papel del sustrato del receptor de la insulina 2 en la susceptibilidad al daño colestático en el hígado[dissertation]. Madrid: Universidad Autónoma de Madrid: 2018(25/10/2018).

Director: Martínez Valverde A.

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- Alcalde-Estevez E, Arroba AI, Sánchez-Fernández EM, Mellet CO, Fernández JMG, Masgrau L, Valverde AM. The sp(2)-iminosugar glycolipid I-dodecylsulfonyl-1-N,6O-oxomethylidenenon-jirimycin (DSO2-ONJ) as selective anti-inflammatory agent by modulation of hemeoxygenase-1 in Bv2 microglial cells and retinal explants. *Food Chem Toxicol.* 2018; 111: 454-66. Article. IF: 3.775; Q1
- Arroba AI, Campos-Caro A, Aguilar-Diosdado M, Valverde AM. IGF-I, Inflammation and retinal degeneration: A close network. *Front Aging Neurosci.* 2018; 10: 203. Review. IF: 3.633; Q2
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- Cuadrado A, Kugler S, Lastres-Becker I. Pharmacological targeting of GSK-3 and NRF2 provides neuroprotection in a preclinical model of tauopathy. *Redox Biol.* 2018; 14: 522-34. Article. IF: 7.793; DI
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- Ghezzi P, Floridi L, Boraschi D, Cuadrado A, Manda G, Levic S, D'Acquisto F, Hamilton A, Athersuch TJ, Selley L. Oxidative stress and inflammation induced by environmental and psychological stressors: A biomarker perspective. *Antioxid Redox Sign.* 2018; 28(9): 852-72. Review. IF: 5.828; Q1
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- Zarei M, Barroso E, Palomer X, Dai JL, Rada P, Quesada-López T, Escola-Gil JC, Cedo L, Zali MR, Molaei M, Dabiri R, Vázquez S, Pujol E, Valverde AM, Villarroya F, Liu Y, Wahli W, Vázquez-Camera M. Hepatic regulation of VLDL receptor by PPAR beta/delta and FGF21 modulates non-alcoholic fatty liver disease. *Mol Metab.* 2018; 8: 117-31. Article. IF: 6.181; Q1





3.1 Neuroscience Area

Public projects

Cuadrado Pastor A. Papel de NRF2 en la función y el destino del cerebro con Alzheimer (SAF2016-76520-R). MICINN. 2017-2019.

Management centre: UAM

Cuadrado Pastor A. Red de investigación de NRF2 como nodo del “patogenosoma” (SAF2015-71304-REDT). MICINN. 2015-2019.

Management centre: UAM

Cuadrado Pastor A. Advanced theranostic approach in cancer combining photodynamic therapy and nanoparticles (PCIN-2016-071). MICINN/ M.ERANET. 2016-2019.

Management centre: UAM

Martínez Valverde A. Inflammation associated with chronic metabolic damage in Type 2 diabetes and its complications. (SAF2015-65267R). MICINN. 2016-2018.

Management centre: CISC

Martínez Valverde A. Identification of novel modulators of chronic inflammation in prevalent diseases: unveiling divergent mechanisms of disease. INFLAMES. (PIE14/00045). ISCIII. 2015-2018.

Management centre: ISCIII

Martínez Valverde A. Mecanismos moleculares y comunicación intertisular en la resistencia a la insulina (B2017/BMD-3684 MOIR2-CM). CM. 2018-2020.

Management centre: CISC

Private projects

Martínez Valverde A. Experimental designs for studies on the role of G49 in diet-induced obesity (DIO) in mice and human cells: Impact on inflammation and mitochondria. AstraZeneca. 2018-2019.

Management centre: CISC



International projects

Cuadrado Pastor A. Knowledge transfer in redox biology for developing advanced molecular tools in neurodegenerative diseases - focus on the signature of Nrf2 transcription factor in diagnosis and therapy (ID:P37_732). European Union. 2016-2020.

Management centre: Victor Babes National Institute of Pathology. (Bucharest)

Martínez Valverde A. TREATMENT - Training European Network: Metabolic Dysfunctions associated with Pharmacological Treatment of Schizophrenia. (GA721236). EU H2020. 2017-2020.

Management centre: CISC

Patents and trademarks

Cuadrado Pastor A, Innamorato NG, inventors: CSIC, UAM. Use of sulforaphane as supplementary therapy for early-stage neurodegenerative disease. P201231693; 2012 November 06.

León Martínez R, Egea Maíquez J, Buendía Abaitua I, Parada Pérez E, Navarro González de Mesa E, inventors; Fundación para la Investigación Biomédica del Hospital Universitario de La Princesa, UAM, CSIC, DNS NEUROSCIENCE S.A., assignees. Use of 3-(2-isothiocyanatoethyl)-5-methoxy-1H-indole for the treatment of neurodegenerative diseases. P201300667; 2013 July 17.

León Martínez R, Buendía Abaitua I, Navarro González de Mesa E, Michalska P, Gameiro Ros I, López Vivo A, Egea Maíquez J, García López M, García García A, inventors; Fundación para la Investigación Biomédica del Hospital Universitario de La Princesa, UAM, DNS NEUROSCIENCE S.A., assignees. Compounds derived from 3-alkylamine-1H-indolyl acrylate and its use for the treatment of neurodegenerative diseases. P201400810, PCT/ES2015/000139, CA2964309; 2014 October 15.



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

3.1 Neuroscience Area


 Publications: **4**
 Impact Factor: **14.¹⁴**
 QI: **1**

Involvement of Glycinergic and Glutamatergic Systems in Central Nervous System Pathologies Group

Francisco Zafra Gómez. Catedrático. Facultad de Ciencias. Universidad Autónoma de Madrid

María del Carmen Aragón Rueda. Catedrática. Facultad de Ciencias. Universidad Autónoma de Madrid

Beatriz Fuensanta López Corcuera. Profesora Titular. Facultad de Ciencias. Universidad Autónoma de Madrid

Enrique Núñez Balbuena. Titulado Técnico Superior. Universidad Autónoma de Madrid

Eva María Porlan Alonso. Investigador Programa Ramón y Cajal. Universidad Autónoma de Madrid

Strategic Objective

Role of glutamate and glycine transporters in physiological and pathological aspects of glutamatergic and glycinergic neurotransmission

Involvement of glutamate transporters in excitotoxicity, ischemia and traumatic brain injury

Pathologies of glycinergic neurotransmission such as hyperekplexia and pain

Role of the adult neurogenesis in neurorepair

Role of microRNAs in ischemic tolerance

Research lines

The group studies the physiological and pathological aspects of glutamate fuxes in brain as potential targets to prevent excitotoxicity, associated with brain disfunctions like ischemia, o traumatic brain injury:

- 1- Identification and characterization of new GlyT2 mutations (SLC6A5 gene) associated to human hyperekplexia. Effects of the mutations on transporter structure, function, proteostasis and glycinergic neurotransmission. Role in presynaptic hyperekplexia of different genes related to GlyT2 trafficking, interactoma, posttranslational modifications. Rescue interventions
- 2- Study of plastic adaptations affecting glycine transporters in physiological and pathological nociception. Regulation of GlyTs by receptors modulating nociceptive signaling (P2XR, P2YR, mAch, nAch, a2 adrenergic, 5-HT). Signaling pathways
- 3- Neuron-glia crosstalk through microRNAs and exosomes
- 4- The group studies the physiological and pathological aspects Neuronal reparation by adult neurogenesis



3.1 Neuroscience Area

- A) Identification of novel regulatory mechanisms of adult neurogenesis by kinases
- B) Identification of novel regulatory mechanisms of adult neurogenesis by microRNAs and other non-coding RNAs

Research Activity

Doctoral theses

Benito Muñoz C. Estructura-función del transportador neuronal de glicina GlyT2: localización del sitio Na₃ y determinantes de inhibición [dissertation]. Madrid: Autónoma de Madrid; 2018(30/11/2018).

Director: López Corcuera B.

Publications

- Benito-Muñoz C, Perona A, Abia D, dos Santos HG, Núñez E, Aragón C, López-Corcuera B. Modification of a putative third sodium site in the glycine transporter GlyT2 influences the chloride dependence of substrate transport. *Front Mol Neurosci.* 2018; 11: 347. Article. IF: 3.72; Q2
- Giménez C, Zafra F, Aragón C. Pathophysiology of the glutamate and the glycine transporters: new therapeutic targets. *Rev Neurologia.* 2018; 67(12):491-504. Review. IF: 0.485; Q4
- Maldifassi MC, Martín-Sánchez C, Atienza G, Cedillo JL, Arnalich F, Bordás A, Zafra F, Giménez C, Extremera M, Renart J, Montiel C. Interaction of the 7-nicotinic subunit with its human-specific duplicated dup7 isoform in mammalian cells: Relevance in human inflammatory responses. *J Biol Chem.* 2018; 293(36): 13874-88. Article. IF: 4.106; Q2
- Piniella D, Martínez-Blanco E, Ibáñez I, Bartolomé-Martín D, Porlán E, Díez-Guerra J, Giménez C, Zafra F. Identification of novel regulatory partners of the glutamate transporter GLT-1. *Glia.* 2018; 66(12): 2737-55. Article. IF: 5.829; Q1

Public projects

López Corcuera B. El transportador neuronal de glicina GLYT2 en patologías humanas: hiperplexia y dolor. (SAF2017-84235-R). Ministerio de Economía, Industria y Competitividad. 2018-2020.

Management centre: UAM

Zafra Gómez F. Regulación por microRNAs de las sinapsis glutamatérgicas en isquemia. (SAF2014-55686-R). Ministerio de Economía, Industria y Competitividad. 2015-2018.

Management centre: UAM

Private projects

Zafra Gómez F. Mecanismos moleculares del Síndrome de Dravet. Fundación Ramón Areces. 2015-2018.

Management centre: CBMSO



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

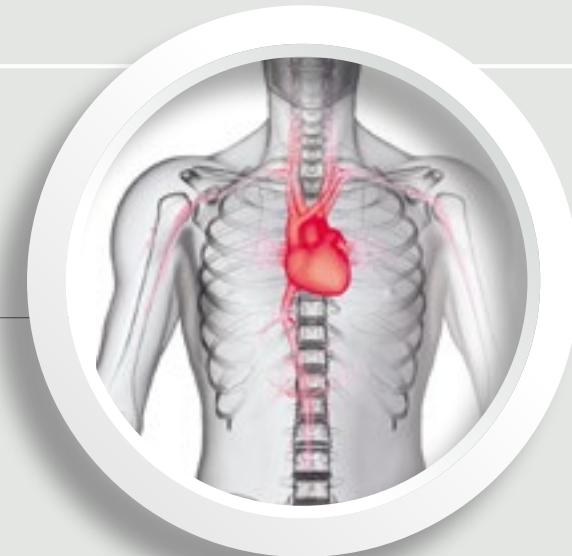
3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**

2018



3.2 Cardiovascular Area

José Luis López-Sendón Hentschel

Documents: **170**

IF: **1161.⁷⁹**

Originals: **125**

IF: **817.⁰⁷⁸**

DI: **36**

QI: **103**

- Research on Invasive Clinical Cardiology – ICCI-Paz Group
- Cardiovascular Epidemiology and Nutrition Group
- Coagulopathies and Alterations of Haemostasis Group
- Vascular Physiology and Pharmacology Group
- Vascular Pharmacology and Metabolism Group (FARMAVSM)
- Cardiology Research Group (HUF)

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2016
2017
2018



3.2 Cardiovascular Area



Strategic Objectives	Development forecast for the coming years	Actions
<p>Cardiovascular Area is composed of 6 groups that carry out basic, experimental and clinical research in the fields of cardiology and cardiovascular risk factors. The area has an important activity in the performance of international clinical trials of wide impact and applicability. The scientific production of the cardiovascular area is supported by a high impact factor. The groups also have extensive experience in training researchers.</p>	<p>To merge the groups by research lines in order to avoid the duplicities that make the group lose strength and competitiveness and to bet on being more competitive and to take better advantage of the resources.</p> <p>The area should be focused on consolidated and multidisciplinary research lines rather than structured by pathologies. The collaboration with research groups from other organizations should be the norm.</p> <p>Resources should be focused on priorities established by the researchers themselves, or directly by IdiPAZ after analyzing the scientific production of each group.</p> <p>Clinical research through the resources it provides (clinical trials) should guide basic research projects in order to offer the ideal field for translational medicine. This type of research also provides a stronger link between international research groups.</p>	<ul style="list-style-type: none"> Foster and support translational research lines. Establish relationships/collaboration/alliances with other IdiPAZ research groups and with groups from other institutions and maintain those already started. <ul style="list-style-type: none"> Analyze the scientific production of each group <ul style="list-style-type: none"> Encourage participation in clinical trials of researchers.

IdiPAZ





3.2 Cardiovascular Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4



Publications: 54

Impact Factor: 428.859

Q1: 36

Research on Invasive Clinical Cardiology – ICCI-Paz Group

José Luis López-Sendón Hentschel. Jefe de Servicio de Cardiología. Hospital Universitario La Paz

Isabel Antorrena Miranda. Facultativo Especialista de Área en Cardiología. Hospital Universitario La Paz

Eduardo Armada Romero. Facultativo Especialista de Área en Cardiología. Hospital Universitario La Paz

Almudena Castro Conde. Facultativo Especialista de Área en Cardiología. Hospital Universitario La Paz

Regina Dalmau González-Gallarza. Facultativo Especialista de Área en Cardiología. Hospital Universitario La Paz

Francisco Javier Domínguez Melcón. Facultativo Especialista de Área en Cardiología. Hospital Universitario La Paz

Carlos Escobar Cervantes. Facultativo Especialista de Área en Cardiología. Hospital Universitario La Paz

Jaime Fernández de Bobadilla Osorio. Facultativo Especialista de Área en Cardiología. Hospital Universitario La Paz

Javier Fuertes Beneítez. Facultativo Especialista de Área en Cardiología. Hospital Universitario La Paz

Guillermo Galeote García. Facultativo Especialista de Área en Cardiología. Hospital Universitario La Paz

Elvira Ana González García. Facultativo Especialista de Área en Cardiología. Hospital Universitario La Paz

Teresa González Gallego. Investigadora Senior (Contrato Ramón y Cajal). IIB "Alberto Sols"

Gabriela Guzmán Martínez. Facultativo Especialista de Área en Cardiología. Hospital Universitario La Paz

Ángel Manuel Iniesta Manjavacas. Facultativo Especialista de Área en Cardiología. Hospital Universitario La Paz

Santiago Jiménez Valero. Facultativo Especialista de Área en Cardiología. Hospital Universitario La Paz

Teresa López Fernández. Facultativo Especialista de Área en Cardiología. Hospital Universitario La Paz

Esteban López de Sá y Areses. Jefe de Sección de Cuidados Intensivos Cardiológicos. Hospital Universitario La Paz

José Luis Merino Llorens. Director Unidad Investigación en Arritmias/Electrofisiología Robótica. Hospital Universitario La Paz

José Raúl Moreno Gómez. Jefe de Sección de Hemodinámica. Hospital Universitario La Paz

María del Mar Moreno Yangüela. Jefe de Sección deImagen Cardiaca. Hospital Universitario La Paz

Rafael Peinado Peinado. Facultativo Especialista de Área en Cardiología. Hospital Universitario La Paz

Juan Ramón Rey Blas. Facultativo Especialista de Área en Cardiología. Hospital Universitario La Paz

Luis Riera del Moral. Facultativo Especialista de Área en Angiología y Cirugía Vascular. Hospital Universitario La Paz. Profesor Asociado Departamento de Cirugía. Universidad Autónoma de Madrid

Inmaculada Roldán Rabadán. Facultativo Especialista de Área en Cardiología. Hospital Universitario La Paz

José Ruiz Cantador. Facultativo Especialista de Área en Cardiología. Hospital Universitario La Paz

Silvia Cayetana Valbuena López. Médico Interno Residente en Cardiología. Hospital Universitario La Paz



3.2 Cardiovascular Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

Strategic Objective

The group consists of various healthcare units of the Department of Cardiology at Hospital La Paz: Clinic/Coronary Unit, interventional cardiology, cardiac imaging, electrophysiology, rehabilitation and adult congenital heart disease.

The main research lines focus on providing clinical responses, with local research protocols and direct participation in clinical trials and international multicentre registries. Moreover, clinical translational potential is reinforced through an institutional relationship with the CNIC.

Research lines

- Myocardial ischaemia. Acute and chronic. Diagnosis, prognosis and treatment
- Cardiac arrhythmias. Catheter navigation systems
- Diagnosis and treatment. Post cardiac arrest hypothermia
- Heart Failure. Diagnosis and treatment. Cardiotoxicity of antineoplastic agents
- Cardiac diagnostic imaging
- Aortic stenosis. Diagnosis and treatment
- Adult congenital heart diseases
- Endovascular therapy and new cellular therapies in peripheral vascular disease

Research Activity

Doctoral theses

López de Sá y Areses E. Manejo del síndrome post-parada cardiaca [dissertation]. Madrid: UAM; 2018(12/07/2018).

Director: López-Sendón JL.

Publications

- Aboal J, de Sa EL, Martín-Asenjo R, Masip J, Sionis A. Selection of the Best of 2017 on Acute Cardiac Care. Rev Esp Cardiol. 2018;71(2):123-4. Letter. IF: 5.126; Q1
- Alfonso F, Pérez-Vizcayno MJ, Cuesta J, del Blanco BG, García-Touchard A, López-Minguez JR, Masotti M, Zueco J, Cequier A, Velázquez M, Moreno R, Mainar V, Domínguez A, Moris C, Molina E, Rivero F, Jiménez-Quevedo P, Gonzalo N, Fernández-Pérez C. 3-Year clinical follow-up of the RIBS IV clinical trial a prospective randomized study of drug-eluting balloons versus everolimus-eluting stents in patients with in-stent restenosis in coronary arteries previously treated with drug-eluting stents. JACC-Cardiovasc Inte. 2018; 11(10):981-91. Article. IF: 9.544; D1
- Allhwala UK, Jolly SS, Dzavik V, Cairns JA, Kedev S, Balasubramanian K, Stankovic G, Moreno R, Valettas N, Bertrand O, Lavi S, Velianou JL, Sheth T, Meeks B, Brilakis ES, Bhindi R. The presence of

a CTO in a non-infarct-related artery during a STEMI treated with contemporary primary PCI is associated with increased rates of early and late cardiovascular morbidity and mortality. The CTO-TOTAL Substudy. JACC-Cardiovasc Inte. 2018; 11(7):709-11. Letter. IF: 9.544; D1

- Álvarez ABC, Leor OR, Moreno R, de Prado AP. Spanish Cardiac Catheterization and Coronary Intervention Registry. 27th official report of the Spanish Society of Cardiology Working Group on Cardiac Catheterization and Interventional Cardiology (1990-2017). Rev Esp Cardiol. 2018; 71(12):1036-46. Article. IF: 5.126; Q1
- Ameri P, Canepa M, Anker MS, Belenkov Y, Bergler-Klein J, Cohen-Solal A, Farmakis D, López-Fernández T, Lainscak M, Pudil R, Ruschitska F, Seferovic P, Filippatos G, Coats A, Suter T, Von Haehling S, Ciardiello F, de Boer RA, Lyon AR, Tocchetti CG. Cancer diagnosis in patients with heart failure: epidemiology, clinical implications and gaps in knowledge. Eur J Heart Fail. 2018; 20(5):879-87. Review. IF: 13.965; D1
- Anker MS, Lena A, Hadzibegovic S, Belenkov Y, Bergler-Klein J, de Boer RA, Cohen-Solal A, Farmakis D, von Haehling S, López-Fernández T, Pudil R, Suter T, Tocchetti CG, Lyon AR. Modern-day cardio-oncology: a report from the 'Heart Failure and World Congress on Acute Heart Failure 2018'. Esc Heart Fail. 2018; 5(6): 1083-91. Review. IF: 3.407; Q2
- Arceluz MR, Cruz PF, Falconi E, de Oca RM, Delgado R, Figueroa J, Ortega M, Merino JL. Electrical isolation of the superior vena cava by laser balloon ablation in patients with atrial fibrillation. J Interv Card Electr. 2018; 53(2): 217-23. Article. IF: 1.534; Q4
- Bansilal S, Bonaca MP, Cornel JH, Storey RF, Bhatt DL, Steg G, Im K, Murphy SA, Angiolillo DJ, Kiss RG, Parkhomenko AN, López-Sendón J, Isaza D, Goudev A, Kontny F, Held P, Jensen EC, Braunwald E, Sabatine MS, Ophus AJO. Ticagrelor for secondary prevention of atherothrombotic events in patients with multivessel coronary disease. J Am Coll Cardiol. 2018; 71(5): 489-96. Article. IF: 18.639; D1
- Barreiro-Pérez M, Li CH, Mesa D, Fernández-Golfín C, López-Fernández T, de Isla LP. Selection of the best of 2017 in cardiac imaging and structural interventionism. Rev Esp Cardiol. 2018; 71(2): 125-6. Letter. IF: 5.126; Q1
- Barrios V, Escobar C. New targets in arterial hypertension, are they justified? Rev Esp Cardiol. 2018; 71(8): 608-11. Editorial Material. IF: 5.126; Q1
- Barrios V, Escobar C, Cosín-Sales J, Bravo M, Saltijeral A, Ruiz-Ortiz M. Selection of the best of 2017 in clinical cardiology. Continuum healthcare between cardiology and primary care. Rev Esp Cardiol. 2018; 71(1): 59. Letter. IF: 5.126; Q1
- Barrios V, Escobar C, Pallares V, Egocheaga M I, Lobos J M, Bover R, Gómez Doblas J J, Cosín J. Management of heart failure in cardiology and primary care (MICCAP) program: Improving the management of patients with heart failure. Semergen. 2018; 44(8): 572-8. Article. Not Indexed
- Beygui F, Van Belle E, Ecclan P, Machecourt J, Hamm CW, de Sa EL, Flather M, Verheugt FWA, Vicaut E, Zannad F, Pitt B, Montalescot G. Individual participant data analysis of two trials on aldosterone blockade in myocardial infarction. Heart. 2018; 104(22): 1843-9. Article. IF: 5.082; Q1
- Bonaca MP, Wiviott SD, Morrow DA, Steg PG, Hamm C, Bhatt DL, Storey RF, Cohen M, Kuder J, Im K, Magnani G, Budaj A, Nicolau JC, Parkhomenko A, López-Sendón J, Dellborg M, Díaz R, Van de Werf F, Corbalán R, Goudev A, Jensen EC, Johanson P, Braunwald E, Sabatine MS. Reduction in subtypes and sizes of myocardial infarction with ticagrelor in PEGASUS-TIMI 54. J Am Heart Assoc. 2018; 7(22): e009260. Article. IF: 4.66; Q1



3.2 Cardiovascular Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

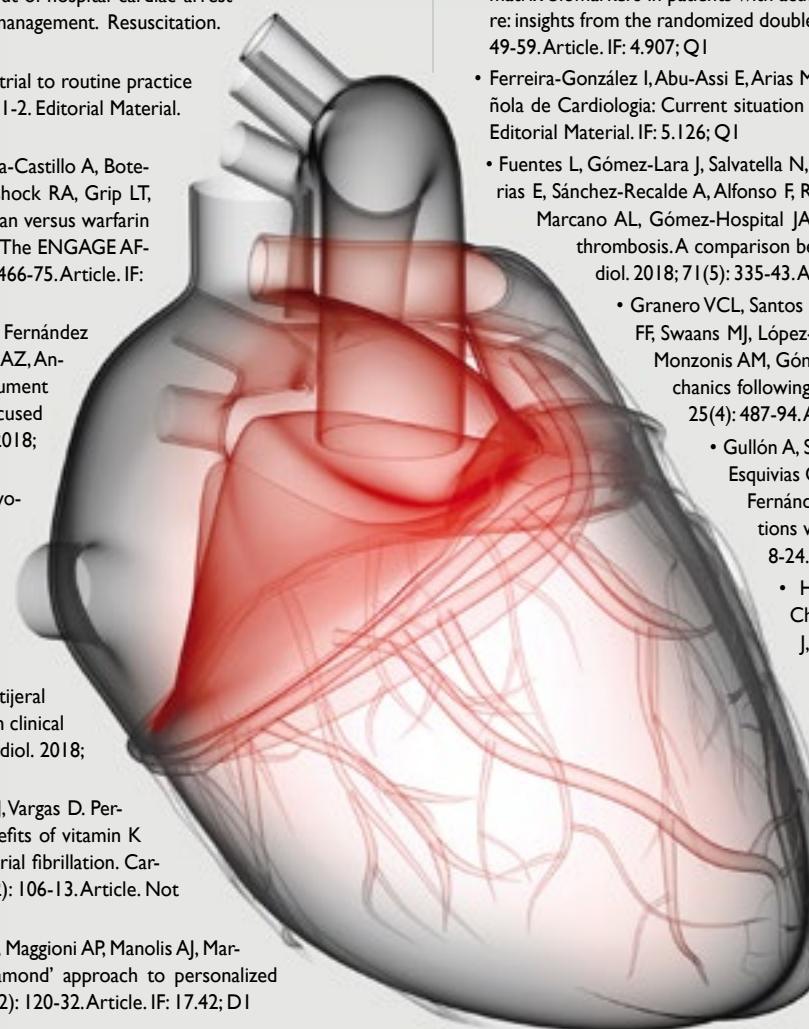
Associated Clinicians

4

Scientific Report

2018

- Caro-Codón J, Rey JR, López-de-Sa E, Fernández OG, Rosillo SO, Armada E, Iniesta AM, de Bobadilla JF, Cantador JR, Sotelo LR, Irazusta FJ, Bastón VR, Colunga PM, López-Sendón JL. Dataset regarding baseline and follow-up characteristics of out-of-hospital cardiac arrest patients focused on neurological outcomes. *Data Brief.* 2018; 21: 1140-4. Article. Not Indexed
- Caro-Codón J, Rey JR, López-de-Sa E, Fernández OG, Rosillo SO, Armada E, Iniesta AM, de Bobadilla JF, Cantador JR, Sotelo LR, Irazusta FJ, Bastón VR, Colunga PM, López-Sendón JL. Long-term neurological outcomes in out-of-hospital cardiac arrest patients treated with targeted-temperature management. *Resuscitation.* 2018; 133: 33-9. Article. IF: 4.572; DI
- Cervantes CE. Rivaroxaban: from ROCKET-AF trial to routine practice in Spain Foreword. *Future Cardiol.* 2018; 14(3): 1-2. Editorial Material. Not Indexed
- Corbalán R, Nicolau JC, López-Sendón J, García-Castillo A, Botorro R, Sotomayor G, Horna M, Ruff CT, Hamershock RA, Grip LT, Antman EM, Braunwald E, Giugliano RP. Edoxaban versus warfarin in Latin American patients with atrial fibrillation. The ENGAGE AF-TIMI 48 Trial. *J Am Coll Cardiol.* 2018; 72(13): 1466-75. Article. IF: 18.639; DI
- de Isla LP, Sánchez SD, Pagola J, Sánchez GGD, Fernández TL, Barrancos IMS, Martínez-Sánchez P, Gaviria AZ, Anguita M, Serrano ALR, Macho JT. Consensus document of the SEMI, SEMFYC, SEN, and SEC on focused cardiac ultrasound in Spain. *Rev Esp Cardiol.* 2018; 71(11): 935-40. Article. IF: 5.126; Q1
- Escobar C, Barrios V. Cost-effectiveness of Edoxaban. *Rev Esp Cardiol.* 2018; 71(12): 1089. Letter. IF: 5.126; Q1
- Escobar C, Barrios V, Pérez de Isla L. Optimal cholesterol levels in patients in real-life. A systematic review. *Semergen.* 2018; 44(1): 42-9. Review. Not Indexed
- Escobar C, Cosín-Sales J, Barrios V, Bravo M, Saltijeral A, Ruiz-Ortiz M. Selection of the best of 2017 in clinical cardiology. *Therapeutic Novelties.* *Rev Esp Cardiol.* 2018; 71(1): 60. Letter. IF: 5.126; Q1
- Escobar C, Barrios V, Prieto L, Lobos JM, Polo J, Vargas D. Perception of patients regarding burdens and benefits of vitamin K antagonists among patients with nonvalvular atrial fibrillation. *Cardiovasc Hematol Agents Med Chem.* 2018; 16(2): 106-13. Article. Not Indexed
- Ferrari R, Camici PG, Crea F, Danchin N, Fox K, Maggioni AP, Manolis AJ, Marzilli M, Rosano GMC, López-Sendón JL. A 'diamond' approach to personalized treatment of angina. *Nat Rev Cardiol.* 2018; 15(2): 120-32. Article. IF: 17.42; DI



- Ferreira JP, Barros A, Pitt B, Montalescot G, de Sa EL, Hamm CW, Flather M, Verheugt F, Shi H, Leite-Moreira A, Vincent J, Rossignol P, Zannad F. Collagen biomarker bioprofiles predicting the antifibrotic response to eplerenone in myocardial infarction: findings from the REMINDER trial. *Clin Res Cardiol.* 2018; 107(12): 1192-5. Letter. IF: 4.907; Q1
- Ferreira JP, Duarte K, Montalescot G, Pitt B, de Sa EL, Hamm CW, Flather M, Verheugt F, Shi H, Turgonyi E, Orri M, Rossignol P, Vincent J, Zannad F. Effect of eplerenone on extracellular cardiac matrix biomarkers in patients with acute ST-elevation myocardial infarction without heart failure: insights from the randomized double-blind REMINDER Study. *Clin Res Cardiol.* 2018; 107(1): 49-59. Article. IF: 4.907; Q1
- Ferreira-González I, Abu-Assi E, Arias MA, Gallego P, Sánchez-Recalde A, del Río I. *Revista Española de Cardiología:* Current situation and new projects. *Rev Esp Cardiol.* 2018; 71(3): 208-16. Editorial Material. IF: 5.126; Q1
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3.2 Cardiovascular Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

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3.2 Cardiovascular Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report
2017
2018

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3.2 Cardiovascular Area

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

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Clinical trials

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HULP code: PI-3015. Sponsored's protocol code: BAY-RIV-2017-01 FARAON.

Sponsored by: Bayer Hispania S.L. Signed date: 06/03/2018

Castro Conde A. Estudio multicéntrico español sobre la prevalencia e incidencia de la insuficiencia cardíaca en pacientes con diabetes tipo 2 en consultas hospitalarias del ámbito nacional. Type: NO-EPA.

HULP code: PI-3231. Sponsored's protocol code: DIABET-IC.

Sponsored by: Sociedad Española De Cardiología (SEC). Signed date: 30/05/2018

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HULP code: 4977. Sponsored's protocol code: FMD-TRI-2017-01.

Sponsored by: Ferrer Internacional S.A. Signed date: 04/07/2018

Escobar Cervantes C. Patrones de prescripción de Edoxabán en Europa: un estudio de utilización del medicamento mediante la revisión retrospectiva de historias clínicas. Type: EPA-OD.

HULP code: PI-3107. Sponsored's protocol code: DSE-EDO-01-14-EU.

Sponsored by: Daiichi-Sankyo Europe GMBH. Signed date: 14/02/2018

López de Sá Areces E. Ensayo pivotal europeo COOL-AMI: un ensayo multicéntrico, prospectivo, aleatorizado y controlado en el que se evalúan la seguridad y la eficacia del enfriamiento como tratamiento adyuvante en las intervenciones percutáneas de pacientes con infarto agudo. Type: Producto Sanitario.

HULP code: 5113. Sponsored's protocol code: COOL-AMI EU EDC 35.

Sponsored by: Zoll Circulation Inc. Signed date: 05/07/2018

López de Sá Areces E. Estudio clínico unicéntrico de una serie de casos para evaluar la viabilidad de integrar la hipotermia terapéutica con el sistema IVTM de Zoll como adyuvante de la angioplastia coronaria percutánea en pacientes con infarto agudo de miocardio. Type: Producto Sanitario.

HULP code: Anexo-I 4749. Sponsored's protocol code: COOL-AMI.

Sponsored by: Zoll Circulation Inc. Signed date: 19/01/2018



3.2 Cardiovascular Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

López de Sá Areses E. Estudio de fase IIB, randomizado, controlado con placebo para evaluar la seguridad y la eficacia de MEDI6012 en el infarto de miocardio agudo con elevación del segmento. Type: Clinical Trial, phase II.

HULP code: 5029. Sponsored's protocol code: D5780C00007.

Sponsored by: Medimmune. Signed date: 05/03/2018

López Fernández T. Epiq-affiniti ultrasound system study for cardiology. Type: NO-EPA.

HULP code: PI-2996. Sponsored's protocol code: 253494.

Sponsored by: Philips Ultrasound Inc. Signed date: 04/04/2018

López-Sendón Hentsche JL. Estudio de fase III fundamental, multicéntrico, aleatorizado, doble ciego, controlado con placebo, de grupos paralelos y determinado por los episodios para evaluar la eficacia y la seguridad de Vericiguat, un estimulador de la guanilato ciclasa soluble (GCS) por vía oral, en sujetos con insuficiencia cardíaca con fracción de eyección disminuida (ICFED): estudio Victoria (Vericiguat Global Study in Subjects with Heart Failure with Reduced Ejection Fraction). Type: Clinical Trial, phase III.

HULP code: Anexo-I 4685. Sponsored's protocol code: 1242-001.

Sponsored by: Merck Sharp and Dohme de España S.A. Signed date: 10/09/2018

López-Sendón Hentschel JL. Ensayo de fase III, aleatorizado y doble ciego para evaluar la eficacia y la seguridad de una dosis diaria de 10 mg de Empagliflozina en comparación con placebo en pacientes con insuficiencia cardíaca crónica con fracción de eyección preservada (ICC-FEP). Type: Clinical Trial, phase III.

HULP code: 4988. Sponsored's protocol code: 1245.110.

Sponsored by: Boehringer Ingelheim International GMBH. Signed date: 14/03/2018

López-Sendón Hentschel JL. Ensayo en fase III, aleatorizado y doble ciego para evaluar la eficacia y la seguridad de una dosis diaria de 10 mg de Empagliflozina en comparación con el placebo en pacientes con insuficiencia cardíaca crónica con fracción de eyección reducida (ICC-FER). Type: Clinical Trial, phase III.

HULP code: 5001. Sponsored's protocol code: 1245.121.

Sponsored by: Boehringer Ingelheim International GMBH. Signed date: 10/04/2018

López-Sendon Hentschel JL. Estudio aleatorizado, doble ciego, controlado con placebo, de grupos paralelos, multicéntrico, para demostrar los efectos de Sotagliflozina sobre los eventos cardiovasculares y renales en pacientes con diabetes tipo 2, factores de riesgo cardiovascular y función renal moderadamente reducida (SCORED). Type: Clinical Trial, phase III.

HULP code: Anexo-I 4943. Sponsored's protocol code: EFC14875.

Sponsored by: Sanofi-Aventis Recherche & Developpement. Signed date: 13/02/2018

López-Sendón Hentschel JL. Estudio de Colchicina en eventos cardiovasculares. Type: Clinical Trial, phase III.

HULP code: 4946. Sponsored's protocol code: COLCOT.

Sponsored by: Montreal Heart Institute. Signed date: 25/01/2018

Merino Llorens JL. Estudio eficaz: eficacia de choque de cardioversión/desfibrilación, un estudio aleatorizado que compara la pendiente fija y la anchura de impulso fija en una población general con desfibrilador automático implantable. Type: Producto Sanitario.

HULP code: 5067. Sponsored's protocol code: CRD-914/SJM-CIP-10221.

Sponsored by: Abbott Medical España S.A. Signed date: 18/04/2018

Moreno Gómez JR. Edoxabán frente al tratamiento estándar y sus efectos en los resultados clínicos de los pacientes que se han sometido a una implantación de válvula aórtica transcatéter (en fibrilación auricular). Type: Clinical Trial, phase III.

HULP code: Anexo-I 4843. Sponsored's protocol code: DU176B-C-U4001.

Sponsored by: Daiichi Sankyo Inc. Signed date: 18/04/2018

Moreno Gómez JR. Ensayo Clínico aleatorizado para comparar la eficacia del Stent Angiolite frente a un stent farmacoactivo de segunda generación como Xience en pacientes con indicación de intervención coronaria percutánea. Type: Producto Sanitario.

HULP code: Anexo-I 4517. Sponsored's protocol code: ANGIOLITE.

Sponsored by: Cardiva2 S.L. Signed date: 19/02/2018

Moreno Gómez JR. Ensayo pivotal europeo COOL-AMI: un ensayo multicéntrico, prospectivo, aleatorizado y controlado en el que se evalúan la seguridad y la eficacia del enfriamiento como tratamiento adyuvante en las intervenciones percutáneas de pacientes con infarto agudo. Type: Producto Sanitario.

HULP code: 5113. Sponsored's protocol code: COOL-AMI EU EDC 35.

Sponsored by: Zoll Circulation Inc. Signed date: 05/07/2018

Moreno Gómez JR. Estrategias de revascularización percutánea completa utilizando stents liberadores de Sirolimus recubiertos de polímero biodegradable en pacientes con síndrome coronario agudo y enfermedad coronaria multivaso. Type: Producto Sanitario.

HULP code: 5189. Sponsored's protocol code: BIOVASC.

Sponsored by: Erasmus Mc Holding B.V. Signed date: 18/12/2018

Moreno Gómez JR. Estudio clínico unicéntrico de una serie de casos para evaluar la viabilidad de integrar la hipotermia terapéutica con el sistema IVTM de Zoll como adyuvante de la angioplastia coronaria percutánea en pacientes con infarto agudo de miocardio. Type: Producto Sanitario.

HULP code: Anexo-I 4749. Sponsored's protocol code: COOL-AMI.

Sponsored by: Zoll Circulation Inc. Signed date: 19/01/2018

Moreno Gómez JR. Estudio con tomografía de coherencia óptica a 9 meses en stent farmacoactivo de polímero abluminal bioestable y sirolimus. Type: Producto Sanitario.



3.2 Cardiovascular Area

HULP code: 5094. Sponsored's protocol code: IHT-DES-2018-01.

Sponsored by: Iberhospitex S.A. Signed date: 12/11/2018

Moreno Gómez JR. Estudio Onyx One; un estudio aleatorizado y controlado con el Stent Resolute Onyx y tratamiento de doble antiagregación plaquetaria [dapt] de un mes para pacientes con alto riesgo de sangrado. Type: Producto Sanitario.

HULP code: Anexo-I 4961. Sponsored's protocol code: ONYX ONE.

Sponsored by: Medtronic Bakken Research Center B.V. Signed date: 03/10/2018

Moreno Gómez JR. Estudio Onyx One; un estudio aleatorizado y controlado con el Stent Rresolute Onyx y tratamiento de doble antiagregación plaquetaria [DAPT] de un mes para pacientes con alto riesgo de sangrado. Type: Producto Sanitario.

HULP code: 4961. Sponsored's protocol code: ONYX ONE.

Sponsored by: Medtronic Bakken Research Center B.V. Signed date: 05/01/2018

Moreno Gómez JR. Evaluación de la eficacia (ACC) y la seguridad de la endoprótesis recubierta con Biolimus A9TM Biofreedomtm de COCR en un ensayo aleatorizado en pacientes con coronariopatía (ACC con Biofreedomtm). Type: Producto Sanitario.

HULP code: 5042. Sponsored's protocol code: 17-EU-02.

Sponsored by: Biosensors Europe S.A. Signed date: 09/10/2018

Peinado Peinado R. Appraise ATP: evaluación de pacientes en prevención primaria previa implantación de un DCI – evaluación sistemática de la electroestimulación antitauquicárdica. Type: Producto Sanitario.

HULP code: PI-3142. Sponsored's protocol code: C1924.

Sponsored by: Boston Scientific Corporation. Signed date: 10/05/2018

Peinado Peinado R. Estudio eficaz: Eficacia de choque de cardioversión/desfibrila-

ción, un estudio aleatorizado que compara la pendiente fija y la anchura de impulso fija en una población general con desfibrilador automático implantable. Type: Producto Sanitario.

HULP code: 5067. Sponsored's protocol code: CRD-914/SJM-CIP-10221.

Sponsored by: Abbott Medical España S.A. Signed date: 18/04/2018

Rey Blas JR. Ensayo clínico aleatorizado, multicéntrico, abierto, controlado, fase III, paralelo, para evaluar la eficacia y seguridad de Ivabradina versus Digoxina en el control corónico de la frecuencia cardíaca en pacientes con fibrilación auricular en tratamiento. Type: Clinical Trial, phase III.

HULP code: 5128. Sponsored's protocol code: BRAKE-AF.

Sponsored by: Adolfo Fontela Cerezuela. Signed date: 22/08/2018

Patents and trademarks

Filgueiras Rama D, López de Sá y Areses E, Millet Roig J, Calvo Saiz CJ, inventors; Centro Nacional de Investigaciones Cardiovasculares Carlos III (CNIC), FIBHULP, Universidad Politécnica de Valencia, assignees. Method of predicting or prognosticating neurological performance in patients who have suffered a cardiac arrest and optionally comatose status due to ventricular fibrillation. PCT/EP2015/076893, EP3020333; 2014 November 17.

Riera del Moral LF, inventor; FIBHULP, assignee. Aortic endoprosthesis for the treatment of aneurysm. P201231638, PCT/ES2013/070712; 2012 October 24.



3.2 Cardiovascular Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4



Publications: **43**

Impact Factor: **336.074**

QI: **30**

Cardiovascular Epidemiology and Nutrition Group

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Strategic Objective

Our strategic objective is to produce relevant information to support clinical and population-based policies aimed at controlling CVD. The results of our studies have been explicitly incorporated into the National Strategy for Ischemic Heart Disease

Control and into the National Strategy for Obesity Prevention and Control, elaborated by the Ministry of Health.

Moreover, our research results have also supported the development of clinical guidelines in this field; specifically, the guidelines of the Spanish Society for Arterial Hypertension, and guidelines of the Spanish Society of Family Medicine, the leading society devoted to primary health care in Spain.

Research lines

- Cardiovascular and nutritional epidemiology

Research Activity

Publications

- Andrade-Gómez E, Martínez-Gómez D, Rodríguez-Artalejo F, García-Esquinas E. Sedentary behaviors, physical activity, and changes in depression and psychological distress symptoms in older adults. *Depress Anxiety*. 2018; 35(9): 884-97. Article. IF: 4.86; Q1
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3.2 Cardiovascular Area

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

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3.2 Cardiovascular Area

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3.2 Cardiovascular Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

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Management centre: FIBHULP

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Management centre: UAM

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

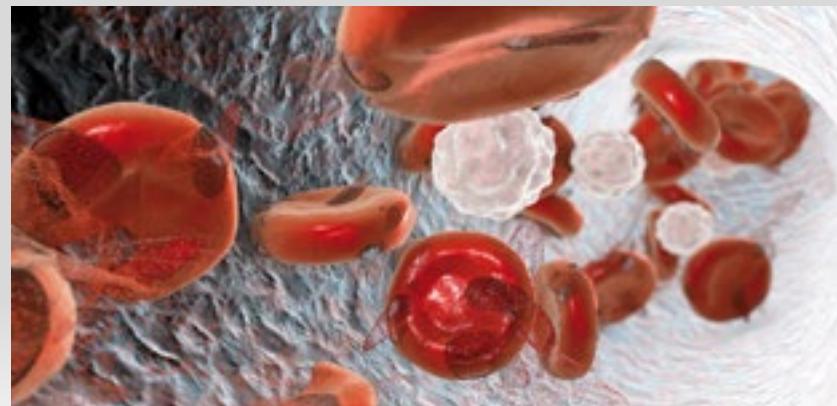
3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**2017
2018

3.2 Cardiovascular Area

 Publications: **12** Impact Factor: **110.552** QI: **5****Víctor Manuel Jiménez Yuste.** Jefe de Servicio de Hematología. Hospital Universitario La Paz**María Teresa Álvarez Román.** Facultativo Especialista de Área en Hematología y Hemoterapia. Hospital Universitario La Paz**Nora Viviana Butta Coll.** Investigadora Senior (Contrato Miguel Servet - Tipo 2). Jefe de Laboratorio. Hospital Universitario La Paz**Ihosvany Fernández Bello.** Investigador Postdoctoral. Hospital Universitario La Paz**Raquel Fernández Morata.** Técnico de Laboratorio. Hospital Universitario La Paz**Elena García Arias-Salgado.** Investigadora asociada. Advanced Medical Projects Madrid**Sara García Barcenilla.** Coordinadora de Estudios. Hospital Universitario La Paz**Mónica Martín Salces.** Facultativo Especialista de Área en Hematología y Hemoterapia. Hospital Universitario La Paz**Isabel Rivas Pollmar.** Médico Adjunto en Hematología. Hospital Universitario La Paz

Strategic Objective

This group's research activities address various relevant questions in the area of haematology and focus on the characterisation of the genetic and molecular basis of coagulation and haemostatic function. Our group investigates physiological pro-

Coagulopathies and Alterations of Haemostasis Group

cesses such as coagulation, haemostasis, innate immunity, inflammation, cell adhesion and migration, and cell signalling, with special emphasis on their relevance to pathological processes.

In addition, we perform epidemiological studies to facilitate patient data analysis and therapeutic treatment.

Research lines

1- Haemophilia A and B:

- Genetic and molecular studies in patients with haemophilia A and B
- Risk factors for the development of factor FVIII/FIX inhibitors in patients with haemophilia A and B. Individualised treatment adaptation based on the nature of antigenic epitopes
- Epidemiological studies of congenital haemophilia A and B, acquired haemophilia A and von Willebrand's disease

2- Haemostasis disorders:

- Haemostasis in thrombocytopenic diseases (immune thrombocytopenic purpura and myelodysplastic syndromes)
- Haemostasis in inflammatory diseases



3.2 Cardiovascular Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

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Management centre: FETH

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3.2 Cardiovascular Area



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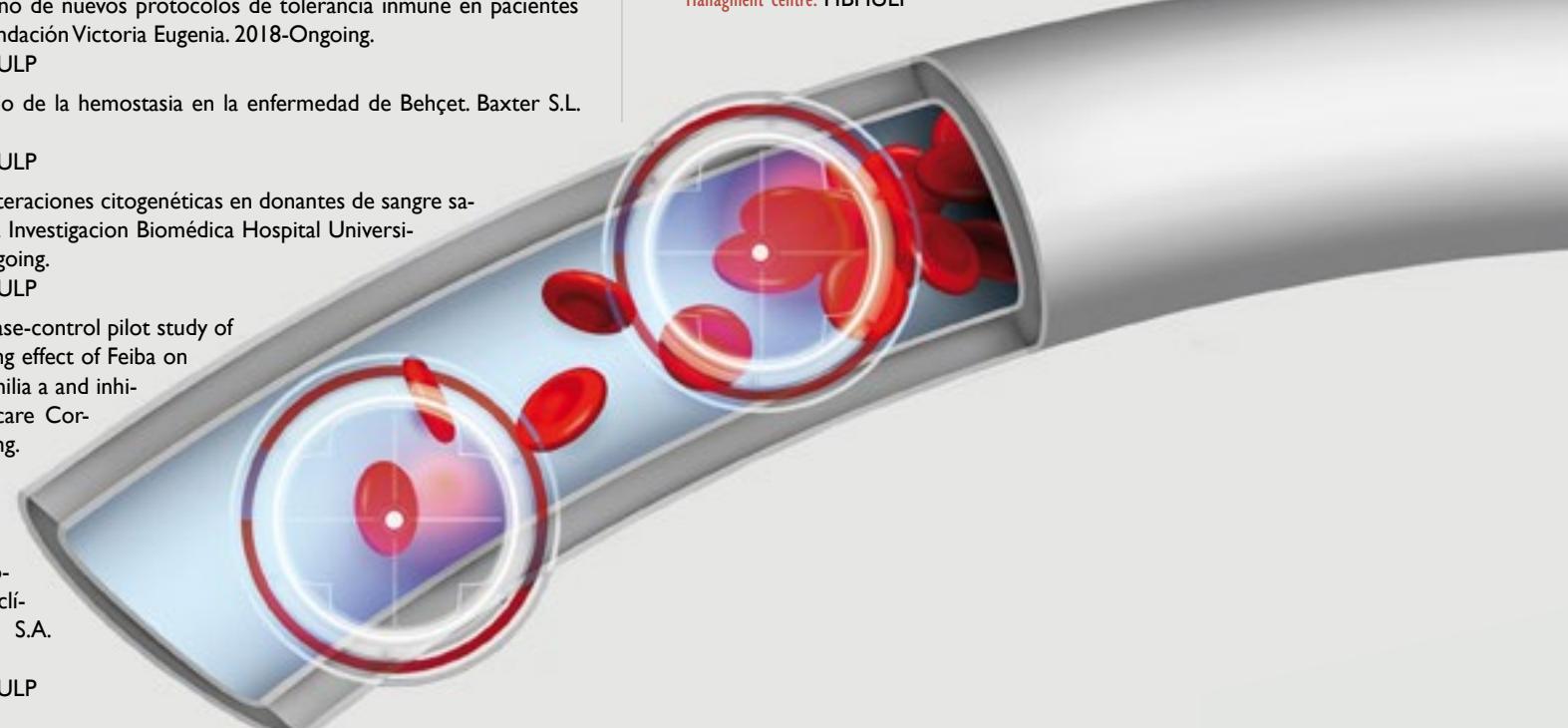
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Management centre: FIBHULP





3.2 Cardiovascular Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

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Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP

Jiménez Yuste VM. Monitorización del tratamiento con agentes bypass, en pacientes con hemofilia e inhibidor mediante tres métodos de evaluación global de la hemostasia. Sanofi Aventis S.A. 2007-Ongoing.

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HULP code: Anexo-II 4547. Sponsored's protocol code: 261303.

Sponsored by: Baxter Innovations GMBH. Signed date: 20/03/2018

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HULP code: 4930. Sponsored's protocol code: 201501.

Sponsored by: Baxalta Innovations GMHB. Signed date: 17/01/2018



3.2 Cardiovascular Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

Álvarez Román MT. Estudio epidemiológico transversal para comprender el enfoque actual del tratamiento en la atención regular de pacientes con hemofilia B en España y Portugal.Type: EPA-OD.

HULP code: PI-3254. Sponsored's protocol code: IIS-2017-12-04.

Sponsored by: CSL Behring S.A. Signed date: 26/07/2018

Álvarez Román MT. Evaluación en abierto y multicéntrica de la seguridad y la eficacia de la proteína de fusión del factor VIII FC recombinante de la coagulación (RFIIIFC; BIIIB031) en la prevención y el tratamiento de episodios de sangrado en pacientes con hemofilia a grave.Type: Clinical Trial, phase III.

HULP code: Anexo-I 4214. Sponsored's protocol code: 997HA306.

Sponsored by: Biogen Idec Ltd. Signed date: 17/09/2018

Álvarez Román MT. Evaluación en abierto y multicéntrico de la seguridad y la eficacia de una proteína de fusión del factor IX recombinante de la coagulación y FC (RFIXFC;BIIIB029) en la prevención y el tratamiento de episodios de sangrado en pacientes con hemofilia B grave.Type: Clinical Trial, phase III.

HULP code: Anexo-I 4143. Sponsored's protocol code: 998HB303.

Sponsored by: Biogen Idec Ltd. Signed date: 08/05/2018

Álvarez Román MT. Seguridad y eficacia de Turoctocog Alfa Pegol (N8-GP) en pacientes con hemofilia a no tratados previamente.Type: Clinical Trial, phase IIIa.

HULP code: Anexo-III 4125. Sponsored's protocol code: NN7088-3908.

Sponsored by: Novo Nordisk Pharma S.A. Signed date: 12/04/2018

Jiménez Yuste VM. Atlas-A/B: estudio de fase 3 para evaluar la eficacia y la seguridad de Fitusirán en pacientes con hemofilia A o B sin anticuerpos inhibidores de los factores VIII o IX.Type: Clinical Trial, phase III.

HULP code: Anexo-I 4919. Sponsored's protocol code: ALN-AT3SC-004.

Sponsored by: Sanofi-Aventis Recherche & Developpement. Signed date: 19/12/2018

Jiménez Yuste VM. Atlas-A/B: estudio de fase 3 para evaluar la eficacia y la seguridad de Fitusirán en pacientes con hemofilia A o B sin anticuerpos inhibidores de los factores VIII o IX.Type: Clinical Trial, phase III.

HULP code: 4919. Sponsored's protocol code: ALN-AT3SC-004.

Sponsored by: Sanofi-Aventis Recherche & Developpement. Signed date: 19/02/2018

Jiménez Yuste VM. Atlas-INH: estudio en fase 3 para evaluar la eficacia y la seguridad de Fitusirán en pacientes con hemofilia A o B y anticuerpos inhibidores de los factores VIII o IX.Type: Clinical Trial, phase III.

HULP code: Anexo-I 4918. Sponsored's protocol code: ALN-AT3SC-003.

Sponsored by: Sanofi-Aventis Recherche & Developpement. Signed date: 19/12/2018

Jiménez Yuste VM. ATLAS-INH: estudio en fase 3 para evaluar la eficacia y la seguridad de Fitusirán en pacientes con hemofilia A o B y anticuerpos inhibidores de los factores VIII o IX.Type: Clinical Trial, phase III.

HULP code: 4918. Sponsored's protocol code: ALN-AT3SC-003.

Sponsored by: Sanofi-Aventis Recherche & Developpement. Signed date: 19/02/2018

Jiménez Yuste VM. ATLAS-PPX: estudio abierto, internacional, de cambio de tratamiento para evaluar la eficacia y la seguridad de la Profilaxis con Fitusiran en pacientes con hemofilia A y B que recibian previamente Profilaxis con factores o agentes de puenteo.Type: Clinical Trial, phase III.

HULP code: 4900. Sponsored's protocol code: ALN-AT3SC-009/EFC15110.

Sponsored by: Sanofi-Aventis Recherche & Developpement. Signed date: 19/12/2018

Jiménez Yuste VM. Estudio abierto, multicéntrico y no controlado de la eficacia de RFVIIIFCrviifc para la inducción de tolerancia inmune (ITI) en sujetos con hemofilia a grave con inhibidores que se someten al primer tratamiento de ITI.Type: Clinical Trial, phase IV.

HULP code: Anexo-I 4899. Sponsored's protocol code: 997HA402.

Sponsored by: Bioverativ Therapeutics Inc. Signed date: 31/01/2018

Jiménez Yuste VM. Estudio no intervencionista, prospectivo, en el que se evalúan las hemorragias, las infusiones de factor VIII y los resultados percibidos por el paciente, en personas con hemofilia a grave.Type: EPA-SP.

HULP code: PI-3377. Sponsored's protocol code: 270-902.

Sponsored by: Biomarin Pharmaceutical Inc. Signed date: 24/10/2018

Jiménez Yuste VM. Explorer ™5- ensayo multicéntrico para evaluar la eficacia y seguridad de la administración de Concizumab en profilaxis en pacientes con hemofilia a grave sin inhibidores.Type: Clinical Trial, phase II.

HULP code: Anexo-I 4821. Sponsored's protocol code: NN7415-4255.

Sponsored by: Novo Nordisk A/S. Signed date: 04/06/2018

Jiménez Yuste VM. Safety and efficacy of turoctocog Alfa pegol (N8-GP) in prophylaxis and treatment of bleeds in previously N8-GP treated patients with severe haemophilia a (Pathfinder 8).Type: Clinical Trial, phase III.

HULP code: 5061. Sponsored's protocol code: NN7088-4410.

Sponsored by: Novo Nordisk A/S. Signed date: 13/06/2018

Martín Salces M. Estudio en fase III, prospectivo, abierto, internacional y multicéntrico sobre la eficacia y la seguridad de la Profilaxis con RVWF en la enfermedad grave de Von Willebrand.Type: Clinical Trial, phase III.

HULP code: Anexo-I 4884. Sponsored's protocol code: 071102.

Sponsored by: Baxalta Innovations GMGB. Signed date: 10/04/2018

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4



3.2 Cardiovascular Area



Publications: **18**

Impact Factor: **137.495**

Q1: **14**

Vascular Physiology and Pharmacology Group

Mercedes Salaices Sánchez. Catedrática. Departamento de Farmacología. Facultad de Medicina. Universidad Autónoma de Madrid

Andrea Aguado Martínez. Investigadora Postdoctoral. Universidad Autónoma de Madrid

María Jesús Alonso Gordo. Catedrática. Departamento de Ciencias Básicas de la Salud. Facultad de Ciencias de la Salud. Universidad Rey Juan Carlos

Constanza Ballesteros Martínez. Investigador Predoctoral. Universidad Autónoma de Madrid

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Javier Blanco Rivero. Profesor Contratado Doctor. Departamento de Fisiología. Facultad de Medicina. Universidad Autónoma de Madrid

Ana María Briones Alonso. Profesora Titular. Universidad Autónoma de Madrid

Laura Caracuel Cano. Investigadora Postdoctoral. Universidad Autónoma de Madrid

Ana Belén García Redondo. Investigadora Postdoctoral. Universidad Autónoma de Madrid

María González Amor. Investigadora Predoctoral. Universidad Autónoma de Madrid

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Marta Martínez Casales. Profesor Visitante. Universidad Rey Juan Carlos

Marta Miguel Castro. Científica titular. Instituto de Investigación en Ciencias de la Alimentación. Consejo Superior de Investigaciones Científicas

Roberto Palacios Ramírez. Investigador Postdoctoral. Universidad Rey Juan Carlos

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Lucía Serrano Díaz del Campo. Investigador Predoctoral. Universidad Autónoma de Madrid

Strategic Objective

Our group is a well-established research group with more than 30 years of experience in the study of the mechanisms involved in the functional, structural and mechanical alterations of the vasculature in various cardiovascular pathologies such as ageing, diabetes and, in particular, hypertension.

The group is located at the Faculty of Medicine (UAM) and maintains research collaborations with investigators at various universities in Spain and in other coun-



3.2 Cardiovascular Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

tries. Our main objective is to gain further insight into the physiological and molecular mechanisms involved in alterations of resistance and conductance arteries in cardiovascular pathologies. To conduct our research, we generally use various experimental approaches including *in vivo* animal models, *ex vivo* experiments and *in vitro* cellbased studies combined with physiological, pharmacological and molecular biology techniques. In addition, we have begun to translate this knowledge into human studies. In terms of the mediators involved, we have a particular interest in the role of prostanoids derived from the inducible isoform of cyclooxygenase (COX-2) and reactive oxygen species (and their interaction among each other or with other mediators such as nitric oxide) in inflammatory conditions that resemble those found in cardiovascular pathologies. This research is important given the essential role these mediators play in the control of vascular smooth muscle tone and vascular structure.

Research lines

- Inflammation and vascular function and remodelling. Changes with hypertension and other cardiovascular pathologies
- Adipose tissue and vascular alterations in cardiovascular pathologies
- Neural control of vascular tone
- Cardiovascular effects of heavy metals
- Antioxidant and antihypertensive properties of food bioactive compounds

Research Activity

Doctoral theses

Moreno Fernández S. Efecto de un hidrolizado de proteínas de clara de huevo en un modelo de obesidad inducido por dieta. Evaluación de su eficacia y seguridad en humanos [dissertation]. Madrid: Universidad Autónoma de Madrid; 2018 (23/10/2018).

Directors: Miguel Castro M, Garcés M.



Publications

- Alonso J, Canes L, García-Redondo AB, de Frutos PG, Rodríguez C, Martínez-González J. The nuclear receptor NOR-1 modulates redox homeostasis in human vascular smooth muscle cells. *J Mol Cell Cardiol.* 2018; 122:23-33. Article. IF: 5.056; Q1
- Assersen KB, Jensen PS, Briones AM, Rasmussen LM, Marcussen N, Toft A, Vanhoutte PM, Jensen BL, Hansen PBL. Periarterial fat from two human vascular beds is not a source of aldosterone to

promote vasoconstriction. *Am J Physiol-Renal.* 2018; 315(6):F1670-82. Article. IF: 3.323; Q1

- Avendaño MS, García-Redondo AB, Zalba G, González-Amor M, Aguado A, Martínez-Revelles S, Beltrán LM, Camacho M, Cachofeiro V, Alonso MJ, Salaices M, Briones AM. mPGES-1 (Microsomal Prostaglandin E Synthase-1) mediates vascular dysfunction in hypertension through oxidative stress. *Hypertension.* 2018; 72(2): 492-502. Article. IF: 7.017; DI
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- de las Heras N, Klett-Mingo M, Ballesteros S, Martín-Fernández B, Escribano O, Blanco-Rivero J, Balfagón G, Hribal ML, Benito M, Lahera V, Gómez-Hernández A. Chronic exercise improves mitochondrial function and insulin sensitivity in brown adipose tissue. *Front Physiol.* 2018; 9: 1122. Article. IF: 3.201; Q2
- Garcés-Rimón M, González C, Vera G, Uranga JA, López-Fandino R, López-Miranda V, Miguel M. Pepsin egg white hydrolysate improves glucose metabolism complications related to metabolic syndrome in zucker fatty rats. *Nutrients.* 2018; 10(4): 441. Article. IF: 4.171; Q1
- García-Redondo AB, Esteban V, Briones AM, del Campo LSD, González-Amor M, Méndez-Barbero N, Campanero MR, Redondo JM, Salaices M. Regulator of calcineurin I modulates vascular contractility and stiffness through the upregulation of COX-2-derived prostanoids. *Pharmacol Res.* 2018; 133: 236-49. Article. IF: 5.574; DI
- Lefranc C, Friederich-Persson M, Palacios-Ramírez R, Cat AND. Mitochondrial oxidative stress in obesity: role of the mineralocorticoid receptor. *J Endocrinol.* 2018; 238(3): R143-59. Review. IF: 4.381; Q1
- Llevenes P, Balfagón G, Blanco-Rivero J. Thyroid hormones affect nitrergic innervation function in rat mesenteric artery: Role of the PI3K/AKT pathway. *Vasc Pharmacol.* 2018; 108: 36-45. Article. IF: 3.33; Q2
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- Moreno-Fernández S, Garcés-Rimón M, González C, Uranga JA, López-Miranda V, Vera G, Miguel M. Pepsin egg white hydrolysate ameliorates metabolic syndrome in high-fat/high-dextrose fed rats. *Food Funct.* 2018; 9(1): 78-86. Article. IF: 3.241; Q1



3.2 Cardiovascular Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

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Public projects

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Management centre: URJC

Miguel Castro M. Hidrólisis de proteínas vegetales de alto valor biológico: obtención de péptidos antioxidantes y nuevas texturas culinarias para la elaboración de productos sin gluten. (AGL-2017-89213). MINECO. 2018-2021.

Management centre: CSIC

Salaices Sánchez M, Briones Alonso AM. Novel inflammatory mechanisms of vascular damage in hypertension and obesity. Role of pro-resolving lipid mediators as possible therapeutic strategy. (SAF2016-80305-P). MINECO. 2017-2020.

Management centre: UAM

Salaices Sánchez M. Ciber Enfermedades Cardiovasculares (CB16/11/00286). ISCIII. 2017-2022.

Management centre: UAM

Salaices Sánchez M. Mediadores y mecanismos moleculares de patologías aórticas y valvulares (B2017/BMD-3676). CM. 2018-2021.

Management centre: UAM

Private projects

Blanco Rivero J. Beneficio de la suplementación con agentes simbióticos en la prevención y mejora de las alteraciones de la inervación perivascular asociadas a la ingesta de una dieta rica en grasas. Italfármaco S.A. 2018-2019.

Management centre: FUAM

Ruiz Ortega M. Investigación del papel de la Interleuquina-17A en el daño cardiovascular asociado a las patologías renales. Sociedad Española de Nefrología. 2017-2018.

Management centre: Fundación Jiménez Diaz

Briones Alonso AM. Relación entre postranoides, especies reactivas de oxígeno y aldosterona del tejido adiposo y su papel en las alteraciones cardiovasculares asociadas a hipertensión y obesidad. Roche Farma S.A. 2014-Ongoing.

Management centre: FIBHULP

International projects

Miguel Castro M. Nuevas aplicaciones tecnológicas en quinua, otros pseudocereales y semillas andinas para el desarrollo de nuevos alimentos. Fundación Corporación Ecuatoriana para el Desarrollo de la Investigación y la Academia (REDCEDIA). Gobierno de Ecuador. 2017-2018.

Management centre: CSIC

Patents and trademarks

Garcés Rimón M, Miguel Castro M, López-Alonso Fandiño R, López-Miranda González V, Uranga Ocio J, inventors; CSIC, Universidad Rey Juan Carlos, assignees; Use of multifunctional bioactive products derived from the enzymatic hydrolysis of egg white proteins for treating metabolic syndrome. P201331767, PCT/ES2014/070880; 2013 December 04.

González-Muñiz R, Miguel Castro M, Pérez de Vega MJ, Balsera-Paredes B, S Moreno, inventors; CSIC, assignee. Compounds with antioxidant activity and uses thereof. P201630362; 2016 March 29. PCT/ES2017/070179, 28 de Marzo de 2017

González-Muñiz R, Pérez de Vega MJ, Miguel M, Balsera-Paredes B, Moreno S, inventors; CSIC, assignee. Triazolyl polyphenols with antioxidant activity and uses thereof; P201531450; 2015 November 08.

Miguel Castro M, Garcés Rimón M, López-Alonso Fandiño R, Sandoval Huertas M, inventors; CSIC, Mario Sandoval Huertas, assignees. Healthy food compositions having gel or foam textures and comprising hydrolyzed egg products. P201331886, PCT/ES2014/070902, EP3106042, US9648897, AR098685, JP2015130856, MX2014015135; 2013 December 20.

Miguel Castro M, López-Alonso Fandiño R, Ramos González MM, Aleixandre de Artiñano A, inventors; CSIC, assignee. Production of and antihypertensive properties of peptides derived from egg white proteins. P200501246 PCT/ES2006/070067; 2005 May 23.

Miguel Castro M, López-Alonso Fandiño R, Recio Sánchez MI, Ramos González MM, Aleixandre de Artiñano A, inventors; CSIC, assignee. Bioactive peptides derived



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2016
2015
2018

3.2 Cardiovascular Area

Aleixandre de Artiñano A, (Contreras Gómez M), inventors; CSIC, assignee. Bioactive peptides identified in enzymatic hydrolyzates of milk caseins and method of obtaining same. P200501373, PCT/ES2006/070079, EP1905779, EP2495250, US8354502, AU2006256720, BRPI0611729, CA2611416, CN101305017, CNI03254278, JP2008545774, KR20080045108, MX2007015528, NO20080103; 2005 June 08.



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

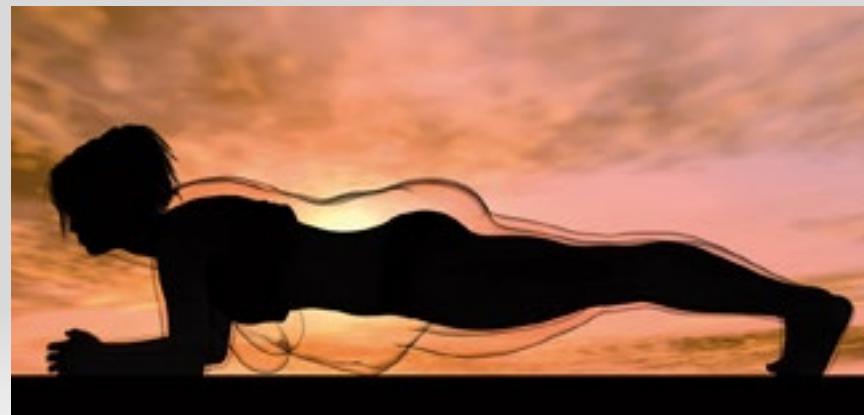
3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**2017
2018

3.2 Cardiovascular Area

Publications: **7**Impact Factor: **19.292**Q1: **2**

Vascular Pharmacology and Metabolism Group (FARMAVSM)

Carlos Félix Sánchez Ferrer. Catedrático de Farmacología. Universidad Autónoma de Madrid

Elena Cercas Alonso. Técnico Especialista en Análisis Clínico. Universidad Autónoma de Madrid

Pilar Dongil. Investigador Postdoctoral. Universidad Autónoma de Madrid

Jorge Francisco Gómez Cerezo. Jefe de Servicio de Medicina Interna. Hospital Universitario Infanta Sofía
Concepción Peiró Vallejo. Profesora Titular de Farmacología. Universidad Autónoma de Madrid

Tania del Mar Romacho Romero. Investigador Postdoctoral. Universidad Autónoma de Madrid

Susana Vallejo Fernán. Investigador Postdoctoral. Universidad Autónoma de Madrid

Álvaro San Hipólito Luengo. Investigador Predoctoral. Universidad Autónoma de Madrid

Alejandra Romero Martínez. Investigador Postdoctoral. Universidad Autónoma de Madrid

Inés Valencia Fernández. Investigador Postdoctoral. Universidad Autónoma de Madrid

Strategic Objective

Our research deals with the challenge 1 of the Spanish Strategy for Science and Technology and for Innovation: "Health, demographic change and wellbeing". The main goal is to improve our understanding of vascular ageing, both in healthy and

pathological conditions, like obesity and type 2 diabetes mellitus. Vascular ageing is associated with complex vascular structural and functional changes. It represents a crucial process for the health status of elderly people and the main risk factor for the development of cardiovascular diseases. Obesity and type 2 diabetes mellitus are extremely prevalent and closely related diseases, so that the term "diabesity" has been coined. Diabesity is among the highest health and socioeconomic challenge in Western countries, especially due to cardiovascular complications. Epidemiological studies indicate that these patients have reduced life expectancy, in close relation to the development of diseases, such as hypertension and atherosclerosis. Diabesity is also considered an age-related disease, as well as a progeric entity, sharing similar cellular and molecular mechanisms than the age-induced vascular dysfunction. Understanding the pathways involved in vascular damage and premature ageing associated to diabesity should help to delay vascular complications. Furthermore, preservation of vascular function in ageing should not only reduce deaths and disabilities secondary to cardiovascular events but should attenuate other negative aspects of the ageing process that lead to loss of function and/or disability, such as motor capacity and cognitive frailty. Indeed, it seems now quite evident that robustness in advanced age cannot be achieved without preservation of vascular function.



3.2 Cardiovascular Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

Research lines

The main objective of FARMAVASM for the next 5 years is to determine how those called progeric cardiometabolic diseases, particularly obesity, diabetes mellitus and/or metabolic syndrome, can favour the vascular aging process. In particular, we will analyse the role for selected adipokines over-produced and released by the inflamed adipose tissue in the development of premature vascular ageing. We aim to characterize the cellular and molecular mechanisms of action of selected adipokines that may lead to alterations in the vascular function and/or structure, as well as their interaction with other key factors influencing cardiometabolic diseases such as high glucose. Moreover, as pharmacologists, we aspire to characterize new pharmacological targets that could be relevant to prevent or delay accelerated vascular ageing and the associated cardiovascular risk. To achieve this global objective, we have now an active grant by the Plan Nacional de I+D covering 2015 to 2017, and we expect to obtain further financial support for the period 2018 to 2020. Furthermore, we have active projects with pharmaceutical companies (Boehringer Ingelheim). Our strategy will also include our incorporation to national networks (CIBER or RETICS), and international programmes (Horizon 2020). Indeed, this is in fact one of the reasons for asking our inclusion in IdiPAZ. Additionally, we aimed to include new researchers into FARMAVASM, both at pre- and postdoctoral level (FPU-MEC, FPU-UAM, Marie Skłodowska-Curie Actions, Juan de La Cierva, Ramón y Cajal)

Research Activity

Publications

- Bielza Galindo R, Llorente Gutiérrez J, Pérez González JL, Mora Casado A, Blanco Díaz D, Escalera Alonso J, Morales Fernández A, Molano Ortiz C, García López BE, del Amo del Arco N, Barro Ordovas JP, Arias Munana E, Neira Álvarez M, Sanz Rosa D, Gómez Cerezo JF. Intravenous iron, functional recovery and delirium in patients with hip fracture. FEDEREF study. Single-centre randomised, placebo-controlled, and double-blind clinical trial. 2014-001923-53: EudraCT number. Rev Esp Geriatr Gerontol. 2018; 53(1): 38-44. Article. Not Indexed
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Public projects

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Management centre: UAM

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Management centre: UAM

Private projects

Gómez Cerezo JF. Group for the study of the vascular disease in ageing (GEVA). Fundación General de la Universidad Europea de Madrid. 2016-2019.

Management centre: Fundación General de la Universidad Europea de Madrid

Peiró Vallejo C. Optimal in vitro system(s) for measuring the activity of ANG(1-7) at its receptor(s). GlaxoSmithKline Research & Development Limited. 2018-2018.

Management centre: FUAM

International projects

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Management centre: UAM



3.2 Cardiovascular Area

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Cardiology Research Group (HUF)

Alejandro Curcio Ruigómez. Jefe de Servicio. Hospital Universitario de Fuenlabrada
Javier Alonso Bello. Médico adjunto. Hospital Universitario de Fuenlabrada
Cármen Cristobal Varela. Médico adjunto. Hospital Universitario de Fuenlabrada
Adriana de la Rosa Riestra. Médico adjunto. Hospital Universitario de Fuenlabrada
Silvia del Castillo Arrojo. Médico adjunto. Hospital Universitario de Fuenlabrada
Nieves Estibal Ortega. Enfermera. Hospital Universitario de Fuenlabrada
Iria Andrea González García. Médico adjunto. Hospital Universitario de Fuenlabrada
Catherine Graupner Abad. Médico adjunto. Hospital Universitario de Fuenlabrada
Carlos Gutiérrez Landaluce. Médico adjunto. Hospital Universitario de Fuenlabrada
Rosa María Jiménez Hernández. Médico adjunto. Hospital Universitario de Fuenlabrada
Elena Moreno Merino. Enfermera. Hospital Universitario de Fuenlabrada
José María Serrano Antolín. Médico adjunto. Hospital Universitario de Fuenlabrada
Pedro Talavera Calle. Médico adjunto. Hospital Universitario de Fuenlabrada

Strategic Objective

Clinical research on cardiotoxicity in oncohaematological treatments, bioethical aspects of the management of defibrillators at the end of life.

Research Lines

- Cardiotoxicity by chemotherapy, prognostic value of biomarkers and echocardiographic parameters in cardiotoxicity by chemotherapy
- Management of implantable defibrillators in the terminally ill and in end-of-life care
- Prognostic value of new biomarkers in acute coronary syndrome
- Predictive value for the development of atrial fibrillation of atrial arrhythmias in cryptogenic stroke



Documents: 170 IF: 1064.045
 Originals: 200 IF: 837.459
 DI: 42 QI: 92

- AIDS and Infectious Diseases Group
- Molecular Microbiology Group
- Immuno-Rheumatology Group
- Innate Immune Response Group
- Diagnosis and Treatment of Diseases associated with Abnormalities of the Complement System Group
- Lymphocyte Pathophysiology in Immunodeficiencies Group

3.3 Infectious Diseases and Immunity Area

Eduardo López-Collazo

- Drug Hypersensitivity and Innate Immune Response Group
- Pediatric Respiratory, Systemic and Neurological Infections & Host Immune Response Group
- Pediatric Systemic Infections; HIV, Tuberculosis, Imported and Emergent Diseases Group
- Translational Research in Pediatric Oncology, Hematopoietic Transplantation and Cell Therapy Group
- Digestive Intestinal Diseases Research Group (HUF)



3.3 Infectious Diseases and Immunity Area



Strategic Objectives
Infectious Diseases and Immunity Area
is composed of 11 groups focused on the study of diseases related to the immune system such as HIV, autoimmune diseases, cancer, etc., as well as the molecular mechanisms that explain the phenomena associated with these pathologies.

Development forecast for the coming years

To identify priority research topics in our area and if necessary expand some of them.

To generate and develop scientific research projects that allow the production of knowledge in the biomedical area.

To generate a significant number of research products/results, such as publications in nationally and internationally indexed journals, journals that contribute to the social appropriation of knowledge.

To socialize the research results by presenting papers at national and international events

To establish agreements and strategic alliances with other communities of knowledge that allow academic discussion and project development.

To promote the training of young researchers and undergraduate and graduate students.

To develop a good system of applied research so that everything studied in the laboratory has repercussions on both our patients and our entities.

Actions

- Promote the priority research line identified

- Obtain national and international scientific research projects in biomedical area.

- Improve the annual number of publications in the first quartile and decile, and total impact factor of the area

- Increase the presence of area researchers in national and international events

- Search for synergies with other groups with similar and complement research lines.

- Training in research methodology undergraduate, predoctoral and postdoctoral personal.

- Promote the synergies of translational researchers and clinical researchers, and their incorporation into groups



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3.3 Infectious Diseases and Immunity Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4



Publications: 59 Impact Factor: 267.³⁰¹ QI: 30

AIDS and Infectious Diseases Group

José Ramón Arribas López. Facultativo Especialista de Área en Medicina Interna (Contrato de Intensificación). Unidad de VIH. Hospital Universitario La Paz. Profesor Asociado. Universidad Autónoma de Madrid

Marta Arsuaga Vicente. Médico Adjunto en Medicina Interna . Hospital Carlos III- Hospital Universitario La Paz

José Ignacio Bernardino de la Serna. Facultativo Especialista de Área en Medicina Interna. Unidad VIH. Hospital Universitario La Paz

Clara Crespillo Andújar. Médico adjunto en medicina interna. Unidad de Medicina Tropical. Hospital Carlos III- Hospital Universitario La Paz

Fernando de la Calle Prieto. Médico adjunto en Medicina Interna. Unidad de Medicina Tropical. Hospital Carlos III - Hospital Universitario La Paz. Profesor Colaborador. Universidad Autónoma de Madrid

Rosa de Miguel Buckley. Facultativo Especialista Adjunto en Medicina Interna. Hospital Universitarios La Paz

Marta Diaz Menéndez. Médico adjunto en Medicina Interna Unidad de Medicina Tropical. Hospital Universitario La Paz

Andrés Esteban Cantos. Investigador predoctoral. Hospital Universitario La Paz

Marta Gálvez Charro. Enfermera. Unidad de VIH. Hospital Universitario La Paz

Francisco Gayá Moreno. Investigador Predoctoral (Contrato de Estabilización de Técnicos de Apoyo). Hospital Universitario La Paz

Alicia González Baeza. Investigadora Predoctoral (Contrato FPI). Hospital Universitario La Paz

Juan Julián González García. Facultativo Especialista de Área en Medicina Interna. Unidad de VIH. Hospital Universitario La Paz

Pedro Herranz Pinto. Facultativo Especialista de Área en Dermatología. Jefe de Sección. Hospital Universitario La Paz

Víctor Hontañón Antoñana. Investigador predoctoral. Hospital Universitario La Paz

María Concepción Ladrón de Guevara García. Facultativo Especialista de Área en Microbiología y Parasitología. Hospital Carlos III- Hospital Universitario La Paz

María del Mar Lago Núñez. Facultativo Especialista de Área en Medicina Interna. Unidad de Medicina Tropical. Hospital Carlos III - Hospital Universitario La Paz

Luz Martín Carbonero. Facultativo Especialista de Área en Medicina Interna

Mario Mayoral Muñoz. Enfermero. Hospital Universitario La Paz

Juan José Miguel Castro. Enfermero. Hospital Universitario La Paz

Rocío Montejano Sánchez. Investigador Postdoctoral (Contrato Juan Rodés). Hospital Universitario La Paz

María Luisa Montes Ramírez. Facultativo Especialista de Área de Medicina Interna. Unidad de VIH. Hospital Universitario La Paz

Marta Mora Rillo. Facultativo Especialista de Área de Medicina Interna. Unidad de Enfermedades Infecciosas y Microbiología Clínica. Hospital Universitario La Paz



3.3 Infectious Diseases and Immunity Area



Francisco Moreno Ramos. Farmacéutico. Hospital Universitario La Paz

José María Peña Sánchez de Rivera. Jefe de Sección de Plaza Vinculada. Catedrático. Universidad Autónoma de Madrid. Hospital Universitario La Paz

Ignacio Pérez Valero. Investigador Postdoctoral. Hospital Universitario La Paz

Juan Carlos Ramos Ramos. Facultativo Especialista de Área en Medicina Interna. Hospital Universitario La Paz

Berta Rodés Soldevila. Investigadora Senior (Contrato I3). Hospital Universitario La Paz

Javier Rodríguez Centeno. Investigador postdoctoral. Hospital Universitario La Paz

Elena Sendagorta Cudós. Facultativo Especialista de Área de Dermatología. Hospital Universitario La Paz

Lucía Serrano Morago. Investigadora predoctoral. Hospital Universitario La Paz

Natalia Carolina Stella Ascariz. Investigador predoctoral. Hospital Universitario La Paz

Elena Trigo Esteban. Médico Adjunto en Medicina Interna. Unidad de Medicina Tropical. Hospital Carlos III - Hospital Universitario La Paz

Eulalia Valencia Ortega. Facultativo Especialista de Área en Medicina Interna. Hospital Universitario La Paz

Strategic Objective

Although great progress has been made, HIV infection remains an incurable disease. Even under the best circumstances, HIV-infected patients who receive current antiretroviral therapy have a survival disadvantage compared with the general non-infected population, which is estimated to be a life expectancy of 15 years less than the general population.

HIV infection is highly prevalent in Spain. Among western European countries, Spain has the second highest prevalence. An important local characteristic of the HIV-infected population in Spain is the high prevalence of hepatitis C coinfection.

This research line covers four main topics of research in HIV infection: antiretroviral treatment, HIV-HCV coinfection, metabolic complications and HIV-resistance to antiretroviral drugs. In addition, we are planning to start another research project on infections other than HIV.

The group has started a new research line regarding the aging and HIV Infection. Tropical diseases are increasing as a consequence of global travel. These diseases continue to be relatively rare however, and therefore, often sub-optimal treated if managed by non-specialists. Furthermore, every year an increasing amount of special travelers (pregnant, comorbidities, immunosuppressed) travel abroad, adding complexity in terms of a timely and effective diagnosis and management. The Tropical and Travel Medicine Unit provide both pre and posttravel assistance in imported infectious diseases. The aim of this Unit is to provide efficient and effective specialist care with proven or suspected tropical disease and a specific preventative travel advice, together with international vaccines recommended for the trip.

Research Lines

- Antiretroviral therapy & resistance
- Metabolic complications of antiretroviral therapy
- Liver disease
- Neurocognitive impairment
- Paediatric HIV infection and MTCT
- Epigenetic and cellular factors related to HIV progression
- Optimisation of antibiotic therapy (ID no HIV)
- Tropical diseases
- Emerging and re-emerging virus

Research Activity

Books and book chapters

Arribas López JR, García Río F, López-Collazo E. El Instituto de Investigación Sanitaria del Hospital Universitario La Paz. In: Cuervas-Mons Martínez V, García García A, García Puig J, Pajares García JM, Pastor y Aldeguer V, Rodríguez Montes JA, Usandizaga Beguiristáin JA, Vargas Núñez JA, eds. Cincuenta años de la Facultad de Medicina de la UAM. Madrid: UAM, 2018. p.521-8:

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3.3 Infectious Diseases and Immunity Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

- Bogoi RN, de Pablo A, Valencia E, Martín-Carbonero L, Moreno V, Vílchez-Rueda HH, Asensi V, Rodríguez R, Toledano V, Rodés B. Expression profiling of chromatin-modifying enzymes and global DNA methylation in CD4+T cells from patients with chronic HIV infection at different HIV control and progression states. *Clin Epigenetics*. 2018; 10: 20. Article. IF: 5.496; Q1
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- de la Calle-Prieto F, Gómez MPR, Beltrán LC, Gorraiz FJB. Painless nodule on the hand. *Enferm Infec Micr Cl.* 2018; 36(4): 249-50. Editorial Material. IF: 1.685; Q4
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3.3 Infectious Diseases and Immunity Area



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3.3 Infectious Diseases and Immunity Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

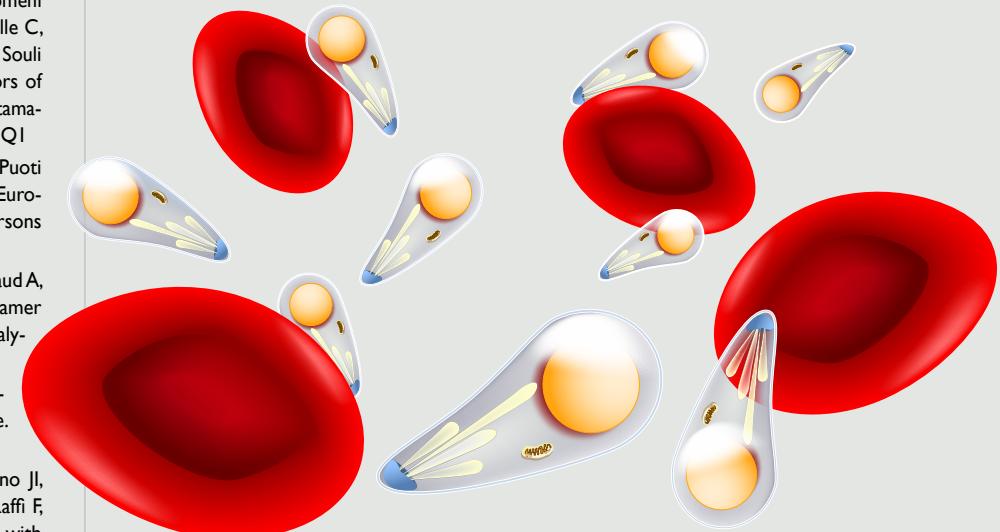
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Management centre: FIBHULP





3.3 Infectious Diseases and Immunity Area



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Management centre: FIBHULP

Arribas López JR. Contrato de intensificación (INT16/00136). ISCIII. 2017-2018.

Management centre: FIBHULP

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Management centre: FIBHULP

Arribas López JR. Tratamiento antirretroviral guiado por genotipo proviral: ensayo clínico piloto de prueba de concepto (TAR-PRO) (PII6/00837). ISCIII. 2017-2019.

Management centre: FIBHULP

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Management centre: FIBHULP

Díaz Menéndez M. Red de Investigación Cooperativa en Enfermedades Tropicales (RICET) (RD16/0027/0002). ISCIII. 2017-2021.

Management centre: FIBHULP

Gayá Moreno F. Contrato de estabilización (ECA07/013). CM. 2008-2019.

Management centre: FIBHULP

González García J. Efectos de la erradicación del VHC en pacientes con cirrosis avanzada por VHC. Una aproximación transnacional (PII4/01581). ISCIII. 2015-2019.

Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP

Pérez Valero I. Seguridad neurocognitiva de terapias antirretrovirales no convencionales con inhibidores de proteasa (IPS) (PII4/01876). ISCIII. 2015-2019.

Management centre: FIBHULP

Rodes Soldevila B. Contrato de estabilización (CES11/021). CM. 2012-2019.

Management centre: FIBHULP

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Management centre: FIBHULP

Private projects

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Management centre: FIBHULP

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Management centre: FIBHULP

Arribas López JR. Curso de actualización de la investigación en simplificación con inhibidores de proteasa. Janssen Cilag S.A Colombia. 2014-Ongoing.

Management centre: FIBHULP

Arribas López JR. Curso de actualización en investigación en VIH: aprendizajes pasados y nuevos conceptos. Janssen Cilag S.A Colombia. 2014-Ongoing.

Management centre: FIBHULP

Arribas López JR. Curso de avances en la investigación en el tratamiento con inhibidores de proteasa. Janssen Cilag S.A Colombia. 2015-Ongoing.

Management centre: FIBHULP

Arribas López JR. Estudio de longitud telomérica en pacientes infectados por el VIH expuestos a dos estrategias de tratamiento antirretroviral diferente (telomere length substudy). The European Treatment Network For HIV, Hepatitis and Global Infectious Diseases. 2016-Ongoing.

Management centre: FIBHULP

Arribas López JR. II curso de enfermedades por virus emergentes: preparándonos para la siguiente crisis de la investigación a la clínica. Stakeholders. 2017-Ongoing.

Management centre: FIBHULP

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Management centre: FIBHULP

Arribas López JR. Preparación y asesoramiento para el desarrollo del curso de investigación sobre VIH y deterioro neurocognitivo, a través del grupo "SIDA y Enfermedades Infecciosas". Bristol Myers Squibb S.A.U. 2012-Ongoing.

Management centre: FIBHULP



3.3 Infectious Diseases and Immunity Area



Arribas López JR. Programa de actualización en investigación sobre el envejecimiento en pacientes infectados por el VIH. Gilead Sciences S.L. 2017-Ongoing.

Management centre: FIBHULP

Arribas López JR. Registro descriptivo longitudinal retrospectivo de los pacientes naïve incluidos en la cohorte de pacientes con infección por VIH del Hospital La Paz de Madrid (Cohorte VIH- La Paz). Janssen-Cilag España S.A. 2010-Ongoing.

Management centre: FIBHULP

Arribas López JR. VIII Jornadas de actualización científica en enfermedades infecciosas. 27 y 28 de septiembre de 2012. Novartis Farmaceutica S.A. 2012-Ongoing.

Management centre: FIBHULP

Arribas López JR. XI Jornadas de actualización en enfermedades infecciosas: de la investigación a la práctica clínica. Gilead Sciences S.L. 2015-Ongoing.

Management centre: FIBHULP

Arsuaga Vicente M. I jornada científica en medicina tropical y del viajero: de la investigación a la clínica. Viso Farmaceutica S.L.U. 2018-Ongoing.

Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP

Díaz Menéndez M. Evaluación de la patología adquirida por viajeros de riesgo durante un viaje internacional: estudio prospectivo en un centro de referencia. International Society of Travel Medicine (ISTM). 2017-Ongoing.

Management centre: FIBHULP

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Management centre: FIBHULP

Gonzalez García JJ. Erradicación del virus de la hepatitis C en pacientes infectados por el VIH: efectos a largo plazo sobre la morbilidad y mortalidad no relacionada con la hepatopatía, sobre la activación inmune y sobre marcadores metabólicos, de inflamación y de baño enotelial. Fundación para la Innovación y la Prospectiva en Salud En España (FIPSE). 2011-Ongoing.

Management centre: FIBHULP

Gonzalez García JJ. Estudio de cohorte de pacientes con infección por VIH del Hospital La Paz de Madrid (Cohorte VIH-La Paz). Gilead Sciences S.L. 2008-Ongoing.

Management centre: FIBHULP

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Management centre: FIBHULP

Herranz Pinto P. Encuentro de actualización en psoriasis. Novartis Argentina S.A. 2017-Ongoing.

Management centre: FIBHULP

Herranz Pinto P. Identificación precoz de buenos respondedores primarios a las terapias biológicas en la psoriasis moderada a grave. Novartis Farmaceutica S.A. 2014-Ongoing.

Management centre: FIBHULP

Herranz Pinto P. Jornada científica: lucha antivenerea en el siglo XXI. Gilead Sciences S.L. 2016-Ongoing.

Management centre: FIBHULP

Herranz Pinto P. Jornadas científicas en genética práctica. Lilly S.A. 2018-Ongoing.

Management centre: FIBHULP

Herranz Pinto P. Preceptorship del Servicio de Dermatología del Hospital Universitario La Paz dirigido a dermatólogos (jornadas de investigación en actualización en manejo de la psoriasis). Novartis Argentina S.A. 2017-Ongoing.

Management centre: FIBHULP

Herranz Pinto P. Terapia biológica con artritis psoriásica y psoriasis y su investigación asociada. Merck Sharp and Dohme de España S.A. 2005-Ongoing.

Management centre: FIBHULP

Ladrón de Guevara García MC. V Jornadas de medicina del viajero y salud internacional: Nuevas vacunas, nuevos viajeros, nuevas medidas sanitarias: de la investigación a la práctica clínica. Glaxosmithkline S.A. 2017-Ongoing.

Management centre: FIBHULP

Paño Pardo JR. Evaluación de la utilización de antifúngicos a través de datos agre-



3.3 Infectious Diseases and Immunity Area



gados de consumo: elaboración de un modelo. Gilead Sciences S.L. 2010-Ongoing.

Management centre: FIBHULP

Pérez Valero I. Jornada de actualización en infecciones de transmisión sexual para atención primaria: de la investigación a la práctica clínica. Gilead Sciences S.L. 2015-Ongoing.

Management centre: FIBHULP

Rodés Soldevila B. Convenio marco: prácticas de María de Frutos del Pozo: master microbiología. Universidad Complutense de Madrid. 2016-Ongoing.

Management centre: FIBHULP

International projects

Arribas López JR. A new public-private funded project to combat carbapenem resistance (COMBAT-CARE). IMI. 2018-2020.

Management centre: FIBHULP

Clinical trials

Arribas López JR. Estudio de fase 2B aleatorizado, doble ciego, controlado con placebo para evaluar la actividad antiviral, los resultados clínicos, la seguridad, la tolerabilidad y farmacocinética de los tratamientos administrados por vía oral de Lumicitabina (JNJ-6404157). Type: Clinical Trial, phase II.

HULP code: 5035. Sponsored's protocol code: 64041575MPN2001.

Sponsored by: Janssen Cilag International NV. Signed date: 20/04/2018

Arribas López JR. Estudio de fase III, aleatorizado, multicéntrico, con grupos paralelos y de ausencia de inferioridad para evaluar la eficacia, la seguridad y la tolerabilidad del cambio a Dolutegravir más Lamivudina en adultos infectados por el VIH-1 con supresión virológica. Type: Clinical Trial, phase III.

HULP code: Anexo-II 4885. Sponsored's protocol code: 204862.

Sponsored by: ViiV Healthcare Uk Limited. Signed date: 21/11/2018

Arribas López JR. Estudio de fase III, aleatorizado, multicéntrico, con grupos paralelos y de ausencia de inferioridad para evaluar la eficacia, la seguridad y la tolerabilidad del cambio a Dolutegravir más Lamivudina en adultos infectados por el VIH-1 con supresión virológica. Type: Clinical Trial, phase III.

HULP code: Anexo-I 4885. Sponsored's protocol code: 204862.

Sponsored by: ViiV Healthcare Uk Limited. Signed date: 10/01/2018

Arribas López JR. Estudio fase 3B, aleatorizado, doble ciego, para evaluar el cambio de un tratamiento con una combinación a dosis fija (CDF) de Efavirenz/Emtricitabina/Tenofovir Disoproxil Fumarato (EFV/FTC/TDF) a una CDF de Emtricitabina/Rilpivirina/Tenofovir Alafenamida. Type: Clinical Trial, phase IIIb.

HULP code: Anexo-II 4375. Sponsored's protocol code: GS-US-366-1160.

Sponsored by: Gilead Sciences Inc. Signed date: 11/07/2018

Arribas López JR. Estudio fase III, multicéntrico, abierto, randomizado, para evaluar el cambio a MK 1439a en pacientes con supresión virológica infectados por el VIH-1 en un régimen de un inhibidor de proteasa potenciado con Ritonavir y dos inhibidores de la transcriptasa. Type: Clinical Trial, phase III.

HULP code: Anexo-II 4441. Sponsored's protocol code: 1439A-024.

Sponsored by: Merck Sharp & Dhome Corp. Signed date: 20/03/2018

Bernardino de la Serna JJ. Estudio en fase III para evaluar el efecto de la Pitavastatina para prevenir los acontecimientos vasculares en personas con infección por VIH-1. Type: Clinical Trial, phase III.

HULP code: 5170. Sponsored's protocol code: EU5332.

Sponsored by: Research Organisation Kc Ltd. Signed date: 05/12/2018

Bernardino de la Serna JJ. Estudio en fase IIIB, multicéntrico, abierto, para evaluar el cambio desde una pauta combinada de dosis fija de Elvitegravir/Cobicistat/Emcitrabina/Tenofovir Alafenamida o una pauta que contenga Tenofovir Disoproxil Fumarato a una combinación de dosis fija de Bictegravir/Emtricitabina/Tenofovir Alafenamida en sujetos de edad avanzada, de ≥65 años de edad, infectados por VIH-1 con supresión virológica. Type: Clinical Trial, phase IIIb.

HULP code: 4974. Sponsored's protocol code: 4974 GS-US-380-4449.

Sponsored by: Gilead Sciences Inc. Signed date: 09/01/2018

González García JJ. Ensayo clínico abierto, aleatorizado y multicéntrico para comparar la eficacia, seguridad y tolerabilidad de una pauta de tratamiento TAF/FTC/DRV/COBI cs.ABC/3TC/DTG en pacientes infectados por el VIH-1 naïve de tratamiento antirretroviral. Type: Clinical Trial, phase IV.

HULP code: 5184. Sponsored's protocol code: SYMTRI.

Sponsored by: Asociacion RIS (Red de Investigación en SIDA). Signed date: 27/12/2018

González García JJ. Estudio adaptativo, aleatorizado, doble ciego (abierto para el promotor), controlado con placebo para investigar el efecto antiviral, la seguridad, la tolerabilidad y la farmacocinética de GSK3640254 en adultos con infección por VIH-1 sin tratamiento previo. Type: Clinical Trial, phase II.

HULP code: 5200. Sponsored's protocol code: 208132.

Sponsored by: Laboratorios ViiV Healthcare S.L. Signed date: 30/11/2018

Herranz Pinto P. Ensayo aleatorizado, doble ciego, controlado con placebo, de grupos paralelos, multicéntrico, de fase 3 que investiga la eficacia, la seguridad y la tolerabilidad de Tralokinumab administrado en combinación con corticosteroides tópicos a pacientes adultos. Type: Clinical Trial, phase III.

HULP code: 5159. Sponsored's protocol code: LP0162-1346.

Sponsored by: Leo Pharma A/S. Signed date: 05/11/2018



3.3 Infectious Diseases and Immunity Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

Herranz Pinto P. Ensayo de extensión a largo plazo, multicéntrico, abierto y de un solo brazo, para evaluar la seguridad y eficacia de Tralokinumab en pacientes con dermatitis atópica que participaron previamente en ensayos clínicos con Tralokinumab - Ecztend. Type: Clinical Trial, phase III.

HULP code: 5158. Sponsored's protocol code: LP0162-1337.

Sponsored by: Leo Pharma A/S. Signed date: 13/12/2018

Herranz Pinto P. Estudio de fase 3, multicéntrico, aleatorizado, doble ciego y comparado con placebo, para evaluar la eficacia y la seguridad de Baricitinib en pacientes con dermatitis atópica de moderada a grave. Type: Clinical Trial, phase III.

HULP code: Anexo-I 4951. Sponsored's protocol code: I4V-MC-JAHM.

Sponsored by: Lilly S.A. Signed date: 20/06/2018

Herranz Pinto P. Estudio de fase 3, multicéntrico, doble ciego, en el que se evalúan la seguridad y la eficacia a largo plazo de Baricitinib en pacientes adultos con dermatitis atópica. Type: Clinical Trial, phase III.

HULP code: Anexo-I 4958. Sponsored's protocol code: I4V-MC-JAHN.

Sponsored by: Lilly S.A. Signed date: 19/09/2018

Herranz Pinto P. Estudio de fase 3, multicéntrico, doble ciego, en el que se evalúan la seguridad y la eficacia a largo plazo de Baricitinib en pacientes adultos con dermatitis atópica. Type: Clinical Trial, phase III.

HULP code: 4958. Sponsored's protocol code: I4V-MC-JAHN.

Sponsored by: Lilly S.A. Signed date: 09/02/2018

Herranz Pinto P. Estudio de fase 3B, multicéntrico, aleatorizado, en doble ciego, controlado con principio activo de comparación (Secukinumab) y de grupos paralelos, para evaluar la eficacia y la seguridad de Bimekizumab en adultos con psoriasis (PSO) en placas crónica de grado moderado o severo. Type: Clinical Trial, phase III.

HULP code: 5109. Sponsored's protocol code: PS0015.

Sponsored by: UCB Biosciences GMBH. Signed date: 04/12/2018

Herranz Pinto P. Estudio en fase 3, aleatorizado y abierto que evalúa la eficacia de Axicabtagene Ciloleucel en comparación con el tratamiento estándar en pacientes con linfoma difuso de células B grandes recidivante/resistente (ZUMA-7). Type: Clinical Trial, phase III.

HULP code: 5133. Sponsored's protocol code: KTE-C19-107 (ZUMA-7).

Sponsored by: Kite Pharma Inc. Signed date: 02/11/2018

Herranz Pinto P. Estudio en fase III de retirada aleatorizada, doble ciego, controlado con placebo y multicéntrico para investigar la eficacia y la seguridad de PF-04965842 en pacientes de 12 o más años de edad con dermatitis atópica moderada o grave con la opción de un tratamiento de rescate para aquellos pacientes que presenten un empeoramiento de la enfermedad. Type: Clinical Trial, phase III.

HULP code: 5141. Sponsored's protocol code: B7451015.

Sponsored by: Pfizer Inc. Signed date: 03/12/2018

Herranz Pinto P. Estudio en fase III de retirada aleatorizada, doble ciego, controlado con placebo y multicéntrico para investigar la eficacia y la seguridad de PF-04965842 en pacientes de 12 o más años de edad con dermatitis atópica moderada o grave con la opción de un tratamiento de rescate para aquellos pacientes que presenten un empeoramiento de la enfermedad. Type: Clinical Trial, phase III.

HULP code: 5089. Sponsored's protocol code: B7451014.

Sponsored by: Pfizer Inc. Signed date: 20/11/2018

Herranz Pinto P. Estudio multicéntrico, aleatorizado, con doble enmascaramiento y controlado con placebo, para evaluar la eficacia y seguridad de Mirikizumab con Secukinumab y placebo en pacientes con psoriasis en placas moderada a grave - Oasis. Type: Clinical Trial, phase III.

HULP code: 5056. Sponsored's protocol code: I6T-MC-AMAJ.

Sponsored by: Lilly S.A. Signed date: 07/05/2018

Montes Ramírez ML. Cohorte española de pacientes con infección por VIH mayores de 50 años para el estudio de fragilidad y la función física (HIV-FUNCRAIL). Type: EPA-SP.

HULP code: PI-3056. Sponsored's protocol code: FSG-TAR-2017-01 GESIDA.

Sponsored by: Fundación SEIMC-GESIDA. Signed date: 07/03/2018

Pérez Valero I. Ensayo clínico fase IV abierto, aleatorizado diseñado para evaluar la reversibilidad de la neurotoxicidad asociada al uso de Abacavir/ Lamivudina /Dolutegravir en el sistema nervioso central tras el cambio a una pauta de tratamiento antirretroviral basada en Alafenamida/Emtricitabina/Darunavir/Cobicistat. Estudio Detox. Type: Clinical Trial, phase IV.

HULP code: 5135. Sponsored's protocol code: GESIDA 10418.

Sponsored by: Fundación SEIMC-GESIDA. Signed date: 05/11/2018

Sendagorta Cudos E. Ensayo clínico fase IV, abierto, de brazo único y multicéntrico sobre la inmunogenicidad de la vacuna nonavalente frente al virus del papiloma humano en hombres infectados por el VIH que tienen sexo con hombres. Estudio Gesida 10017. Type: Clinical Trial, phase IV.

HULP code: 5051. Sponsored's protocol code: GESIDA 10017.

Sponsored by: Fundación SEIMC-GESIDA. Signed date: 01/06/2018

Patents and trademarks

Romero Gómez M, Solá Lamoglia R, González García JJ, inventors; Servicio Andaluz de Salud, Universidad de Sevilla, Fundació Institut Mar D'Investigacions Mèdiques, FIBHULP, assignees. Kit for decision making in patients with Hepatitis C genotypes 1 and 4. P201330731; 2013 May 21.

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

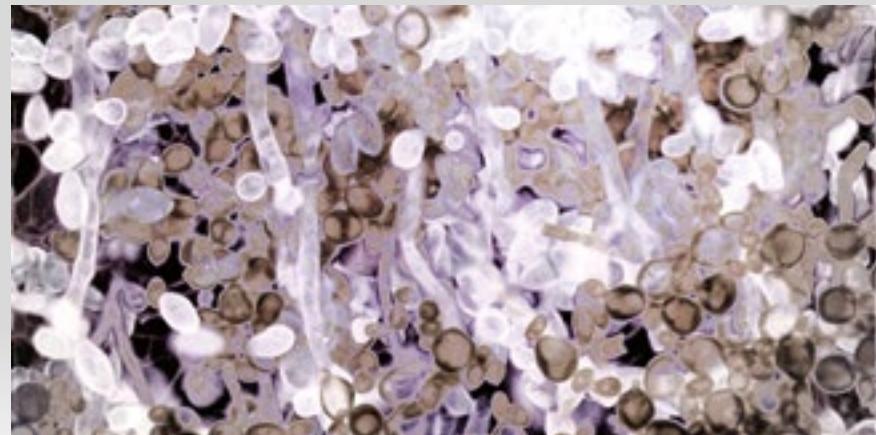
3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report****2018**

3.3 Infectious Diseases and Immunity Area

 Publications: **35** Impact Factor: **87.517** QI: **9**

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3.3 Infectious Diseases and Immunity Area



Strategic Objective

The Molecular Microbiology research group is integrated into the Department of Microbiology at Hospital La Paz, and a significant number of its members are physicians in the department devoted to microbiological diagnostic work. This integration determines the group's strategic approach and therefore, the different lines of research revolve around several aspects of clinical microbiology and infectious diseases. An important line of activity (Clinical Microbiology) is the result of the routine activities provided by the department, but goes further and deeper into the methodological, epidemiological and pathological challenges encountered in the daily routine.

One research line derived from the former is the development of methods for the molecular characterisation of pathogenic microorganisms, including microbiological diagnosis and epidemiological analysis, and more recently, microbial genomics. Another line focuses on the study of the evolution of pathogenic microorganisms. As a model of opportunistic pathogens, we study *Escherichia coli*, a microorganism that is well characterised at the genetic level and that is clinically relevant as the primary cause of urinary tract infections and one of the most frequently involved in bacteraemia.

As a model of viral pathogens, we study the dynamics of HIV viral populations over time and in terms of the response to antiretroviral treatment.

The taxonomy of the Mycobacteria and the study of *Mycobacterium tuberculosis* persistence are research lines developed jointly by the UAM and Hospital members of the group.

The Group includes a CSIC research scientist especialized in biocomputing and molecular dynamics.

Research Lines

- Molecular epidemiology and evolution of pathogens
- Molecular methods for diagnostics of infectious diseases
- Microbial genomics
- Tuberculosis and other Mycobacteria
- Clinical Microbiology

Research Activity

Publications

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3.3 Infectious Diseases and Immunity Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

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Management centre: FIBHULP

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3.3 Infectious Diseases and Immunity Area

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

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Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP

García Bujalance S. Evaluación del rendimiento del ensayo aptima HIV-1 quant para la detección y cuantificación del HIV-1 en muestras de plasma. Hologic Deutschland GMBH. 2016-Ongoing.

Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP

García Rodríguez J. Estudio de la sensibilidad in vitro y sinergia de anidulafungina y voriconazol frente a aislamientos clínicos de especies de aspergillus del Hospital Universitario La Paz. Pfizer SLU. 2010-Ongoing.

Management centre: FIBHULP



García Rodríguez J. Estudio poblacional de las especies de candida invasoras. Astellas Pharma S.A. 2010-Ongoing.

Management centre: FIBHULP

García Rodríguez J. Evaluación infectious diseases panel en cobas e801. Roche Diagnostics S.L. 2017-Ongoing.

Management centre: FIBHULP



3.3 Infectious Diseases and Immunity Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

García Rodríguez J. X Jornada científica de microbiología. Werfen España S.A.U. 2018-Ongoing.

Management centre: FIBHULP

Gómez-Gil Mira MR. Aislamiento, identificación, estudio de sensibilidad, control de calidad y envío al laboratorio central de enterobacterias productoras de carbapenemas. Astrazeneca Farmaceutica Spain S.A. 2016-Ongoing.

Management centre: FIBHULP

Gómez-Gil Mira MR. In vitro activities of ceftaroline, daptomycin, linezolid, and vancomycin against bacteremic methicillin-resistant staphylococcus aureus isolates. Astrazeneca Farmaceutica Spain S.A. 2013-Ongoing.

Management centre: FIBHULP

Mingorance Cruz J. Molecular epidemiology of resistance to linezolid in gram positive cocci in a tertiary hospital. Pfizer SLU. 2009-Ongoing.

Management centre: FIBHULP

Mingorance Cruz J. Desarrollo de un dispositivo lab on a chip para la detección en POCT(points of care testing) de la resistencia a antibióticos de muestras de orina. Diagnochip SPA. 2014-Ongoing.

Management centre: FIBHULP

Mingorance Cruz J. Identificación y caracterización de patógenos con interés intra-hospitalario bajos sistemas automatizables con potencial implantación hospitalaria. Biotools-Biotechnological Medical Laboratoi. 2009-Ongoing.

Management centre: FIBHULP

Mingorance Cruz J. La utilidad clínica de septifast para el diagnóstico de sepsis en pacientes nefrológicos. Roche Diagnostics S.L. 2010-Ongoing.

Management centre: FIBHULP

Mingorance Cruz J. Validación clínica de un biosensor para la identificación de streptococcus pneumoniae. Consejo Superior Investigaciones Científicas (CSIC). 2013-Ongoing.

Management centre: FIBHULP

Toro Rueda C. Evaluación del rendimiento de una prueba en el punto de atención (POCT) de QPCR para diagnóstico biológico. Epistem Ltd. 2012-Ongoing.

Management centre: FIBHULP

Toro Rueda C. Evaluación del rendimiento de una prueba en el punto de atención (POCT) de QPCR para el diagnóstico microbíologico. Epistem Ltd. 2012-Ongoing.

Management centre: FIBHULP

International projects

Mingorance Cruz J. European Gram Negative Antibacterial Engine (ENABLE). UE. 2014-2020.

Management centre: FIBHULP

Mingorance Cruz J. Quantification of the intestinal load of a targeted set of resistance genes to Monitor Antibiotic Resistance in paediatric transplant patients (qMAR). UE. 2018-2020.

Management centre: FIBHULP

Mingorance Cruz J. Optomechanics For Virology (VIRUSCAN). UE. 2016-2021.

Management centre: FIBHULP

Clinical trials

Loches Yague B. Estudio aleatorizado, multicéntrico, doble ciego, para comparar la eficacia y la seguridad de Ceftobiprol Medocaril con las de la Daptomicina en el tratamiento de la bacteriemia por Staphylococcus Aureus, incluida la endocarditis infecciosa. Type: Clinical Trial, phase III.

HULP code: 5171. Sponsored's protocol code: BPR-CS-009.

Sponsored by: Basilea Pharmaceutica Ltd. Signed date: 14/11/2018

Patents and trademarks

Mingorance Cruz J, Castán García P, Franco de Sarabia Rosado PM, inventors; 2B BLACKBIO S.L., assignee. Composition, method and kit for detecting fungi and yeasts by means of sequencing. PCT/ES2010/000248; 2010 June 02.

Mingorance Cruz J, Castán García P, Franco de Sarabia Rosado PM, inventors; BIOTOOLS BIOTECHNOLOGICAL & MEDICAL LABORATORIES S.A., assignee. Composition, method and kit for detecting bacteria by means of sequencing. PCT/ES2009/000507, EP2492352, US2013157265, CA2775273, MX2012004627; 2009 October 22.

Vicente Muñoz M, Mingorance Cruz J, Rueda González MS, inventors; CSIC, assignee. Method for determining state of growth and viability of bacterial FTsZ population, whether natural or cultivated, is based on determining existence of FTsZ rings in actively growing individual cells. P200200370; 2002 February 15.

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**2017
2018

3.3 Infectious Diseases and Immunity Area

Publications: **28**Impact Factor: **113.009**Q1: **9**

Immuno-Rheumatology Group

María Eugenia Miranda Carús. Facultativo Especialista de Área en Reumatología. Hospital Universitario La Paz

Pilar Aguado Acín. Facultativo Especialista de Área en Reumatología. Hospital Universitario La Paz

Alejandro Balsa Criado. Jefe de Servicio en Reumatología. Hospital Universitario La Paz. Profesor Asociado. Facultad de Medicina. Universidad Autónoma de Madrid

María Gema Bonilla Hernán. Facultativo Especialista de Área en Reumatología. Hospital Universitario La Paz

Ana Castilla Plaza. Facultativo Especialista de Área en Reumatología. Hospital Universitario La Paz

Eugenio de Miguel Mendieta. Facultativo Especialista de Área en Reumatología. Hospital Universitario La Paz

Paula Fortea Gordo. Investigadora Postdoctoral. Hospital Universitario La Paz

Sara García Carazo. Facultativo Especialista de Área en Reumatología. Hospital Universitario La Paz

Francisco de Borja Hernández de Breijo. Investigador Postdoctoral. Hospital Universitario La Paz

Emilio Martín Mola. Jefe de Servicio de Reumatología. Hospital Universitario La Paz

Ana Martínez Feito. Investigadora Predoctoral. Hospital Universitario La Paz

Irene Monjo Henry. Facultativo Especialista de Área en Reumatología. Hospital Universitario La Paz

María Victoria Navarro Compán. Facultativo Especialista de Área en Reumatología. Hospital Universitario La Paz

Laura Nuño Nuño. Médico Adjunto Interino en Reumatología. Hospital Universitario La Paz

María Dora Pascual-Salcedo Pascual. Químico Adjunto en Inmunología. Hospital Universitario La Paz

Chamaida Plasencia Rodríguez. Facultativo Especialista de Área en Reumatología. Hospital Universitario La Paz

Diana Peiteado López. Facultativo Especialista de Área en Reumatología. Hospital Universitario La Paz

Alejandro Villalba Yllán. Facultativo Especialista de Área en Reumatología. Hospital Universitario La Paz

Strategic Objective

Our objective is to investigate the pathogenesis of rheumatic diseases, specifically focusing on genetics, metabolic pathways and immunopathogenesis.

Research Lines

- Immunopathogenesis and genetics of inflammatory and autoimmune arthritis
- Imaging of inflammatory and autoimmune arthritis
- Immunopathogenesis and genetics of osteoporosis
- Immunogenicity of biological therapies with monoclonal antibodies



3.3 Infectious Diseases and Immunity Area



Research Activity

Publications

- Almodóvar R, Alonso JCT, Batlle E, Castillo C, Collantes-Estévez E, de Miguel E, González S, Gratacos J, Hernández A, Juanola X, Linares LF, Moreno MJ, Moreno M, Navarro-Compán V, Lozano CR, Sanz J, Sellas A, Loza E, Zarco P. Development of a checklist for patients with axial spondyloarthritis and psoriatic arthritis in daily practice: ONLY TOOLS project. *Reumatol Clin.* 2018; 14(3): 155-9. Article. Not Indexed
- Alonso JCT, Fontecha PDD, Almodóvar R, Canete JD, Morales CM, Moreno M, Plasencia-Rodríguez C, García JR, Queiro R. Recommendations of the Spanish Society of Rheumatology on treatment and use of systemic biological and non-biological therapies in psoriatic arthritis. *Reumatol Clin.* 2018; 14(5): 254-68. Article. Not Indexed
- Balsa A, Lula S, Marshall L, Szczypa P, Aikman L. The comparative immunogenicity of biologic therapy and its clinical relevance in psoriatic arthritis: a systematic review of the literature. *Expert Opin Biol Th.* 2018; 18(5): 575-84. Review. IF: 3.585; Q2
- Balsa A, Sanmartí R, Rosas J, Martín V, Cabeza A, Gómez S, Montoro M. Drug immunogenicity in patients with inflammatory arthritis and secondary failure to tumour necrosis factor inhibitor therapies: the REASON study. *Rheumatology.* 2018; 57(4): 688-93. Article. IF: 5.149; Q1
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- de Miguel E, Beltrán LM, Monjo I, Deodati F, Schmidt WA, García-Puig J. Atherosclerosis as a potential pitfall in the diagnosis of giant cell arteritis. *Rheumatology.* 2018; 57(2): 318-21. Article. IF: 5.149; Q1
- Flórez MT, Almodóvar R, Pérez FG, Cambrón ABR, Carmona L, Manzanero MAP, Cantalapiedra JA, Urruticochea-Arana A, Lozano CJR, Castro C, Fernández-Carbajido C, de Miguel E, Galíndez E, Vega JLA, Alonso JCT, Linares LF, Moreno M, Navarro-Compán V, Juanola X, Zarco P. The EJES-3D tool for personalized prescription of exercise in axial spondyloarthritis through multimedia animations: pilot study. *Rheumatol Int.* 2018; 38(7): 1277-84. Article. IF: 2.2; Q3
- González-Fernández M, Villamañan E, Jiménez-Nacher I, Moreno F, Plasencia C, Gayá F, Herrero A, Balsa A. Cost evolution of biological agents for the treatment of spondyloarthritis in a tertiary hospital: influential factors in price. *Int J Clin Pharm-Net.* 2018; 40(6): 1528-38. Article. IF: 1.692; Q4
- González-Serna D, Ortiz-Fernández L, Vargas S, García A, Raya E, Fernández-Gutiérrez B, López-Longo FJ, Balsa A, González-Álvaro I, Narváez J, Gómez-Vaquero C, Sabio JM, García-Portales R, González-Escribano MF, Tolosa C, Carreira P, Kiemeney L, Coenen MJH, Witte T, Schneider M, González-Gay MA, Martín J. Association of a rare variant of the TNFSF13B gene with susceptibility to Rheumatoid Arthritis and Systemic Lupus Erythematosus. *Sci Rep-Uk.* 2018; 8: 8195. Article. IF: 4.011; Q1
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3.3 Infectious Diseases and Immunity Area



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- Uson J, Loza E, Moller I, Acebes C, Andreu JL, Batlle E, Bueno A, Collado P, Fernández-Gallardo JM, González C, Palop MJ, Lisbona MP, Macarrón P, Maymo J, Narváez JA, Navarro-Compán V, Sanz J, Rosario MP, Vicente E, Naredo E. Recommendations for the use of ultrasound and magnetic resonance in patients with spondyloarthritis, including psoriatic arthritis, and patients with juvenile idiopathic arthritis. *Reumatol Clin.* 2018; 14(1): 27-35. Article. Not Indexed
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Public projects

de Miguel Mendieta E. Curso natural y factores predictivos de la espondiloartritis de inicio (PII3/02034). ISCI. 2014-2018.

Management centre: FIBHULP

Miranda Carús ME. Frecuencia, fenotipo y función de las células B reguladoras (BREG) en pacientes con artritis reumatoide (AR) preclínica, temprana y establecida (PII6/01189). ISCI. 2017-2019.

Management centre: FIBHULP

Miranda Carús ME. Frecuencia, fenotipo y función de las células T helper foliculares en sangre periférica de pacientes con artritis reumatoide (PII3/00084). ISCI. 2014-2018.

Management centre: FIBHULP

Miranda Carús ME. Red de Investigación en Inflamación y Enfermedades Reumáticas (RIER). (RD16/0012/0012). ISCI. 2017-2021.

Management centre: FIBHULP

Plasencia Rodríguez C. Identificación precoz de respuesta clínica a la terapia anti-TNF en la artritis reumatoide (PII6/00474). ISCI. 2017-2019.

Management centre: FIBHULP

de Miguel Mendieta E. Factores de riesgo de progresión radiográfica en columna de pacientes con espondilitis anquilosante. Influencia de los tratamientos actuales (PII7/01840). ISCI. 2018-2020.

Management centre: FIBHULP

Private projects

Aguado Acín P. Caracterización e historia natural de la hipofosfatemia en pacientes adultos con confirmación genética frente a pacientes con fosfatasa alcalina baja y test genético negativo. Hipofosfatemia del adulto. Alexion Pharmaceutical Inc. 2017-On-going.

Management centre: FIBHULP

Balsa Criado A. Desarrollo de biochips para monitorización de infliximab y la presencia de anticuerpos frente a infliximab en sangre. Img Pharma Biotech. 2017-On-going.

Management centre: FIBHULP

Balsa Criado A. Estudio de las comorbilidades en la artritis reumatoide. Roche Farma S.A. 2011-On-going.

Management centre: FIBHULP

Balsa Criado A. Estudio para determinar la correlación entre la calprotectina sérica y la actividad de la artritis reumatoide. Arepa. 2010-On-going.

Management centre: FIBHULP

Balsa Criado A. Preceptorship de investigación: "Individualized medicine: anti-TNF monitoring and clinical practice". Proteomika SL. 2013-On-going.



3.3 Infectious Diseases and Immunity Area



Management centre: FIBHULP

Balsa Criado A. Preceptorship del Servicio de Reumatología del HULP dirigido a reumatólogos. Novartis Argentina S.A. 2017-Ongoing.

Management centre: FIBHULP

Balsa Criado A. Preceptorship excelencia en reumatología. Novartis Chile S.A. 2013-Ongoing.

Management centre: FIBHULP

Balsa Criado A. Relación entre los niveles de fármaco circulante, la aparición de anticuerpos anti idiotípico y la respuesta clínica, en pacientes con enfermedades articulares inflamatorias (artritis reumatoide, artritis idiopática juvenil, artritis psoriática, enfermedad de Still y espondiloartropatías) que reciben tratamiento biológico. Pfizer SLU. 2011-Ongoing.

Management centre: FIBHULP

Balsa Criado A. Actualización y renovación de la actividad investigadora en el servicio de reumatología del Hospital Universitario La Paz. Roche Farma, S.A. 2016-Ongoing.

Management centre: FIBHULP

de Miguel Mendieta E. Carga de la enfermedad en pacientes con espondiloartritis de reciente comienzo. Assessment In Spondyloarthritis International Society. 2014-Ongoing.

Management centre: FIBHULP

Miranda Carús ME. Cell interactions in the pathogenesis of rheumatoid arthritis (RA): the role of IL-15 expressed by rheumatoid arthritis fibroblast-like synoviocytes (rafls) on B cell survival, differentiation and immunoglobulin (Ig) production. Roche Farma S.A. 2005-Ongoing.

Management centre: FIBHULP

Miranda Carús ME. Frecuencia y función de las células T helper foliculares circulantes y plasmablastos en pacientes con artritis reumatoide, y su relación con los niveles de autoanticuerpos: modificaciones asociadas con el bloqueo de la coestimulación por abatacept. Bristol Myers Squibb S.A.U. 2016-Ongoing.

Management centre: FIBHULP

Montes Ramírez ML. Estudio de hepatopatías en pacientes infectados por VIH sin hepatitis víricas que reciben tratamiento antirretroviral. Abbvie Spain S.L.U. 2016-Ongoing.

Management centre: FIBHULP

Plasencia Rodríguez C. Estudio de los niveles de fármacos biológicos en la cohorte española con enfermedades inflamatorias sistémicas. Establecimiento de los rangos terapéuticos óptimos. Fundación Parc Taulí. 2015-Ongoing.

Management centre: FIBHULP

Plasencia Rodríguez C. Identificación precoz de respuesta clínica a la terapia anti-TNF en la artritis reumatoide. Sociedad de Reumatología de la Comunidad de Madrid. 2018-Ongoing.

Management centre: FIBHULP

Clinical trials

Balsa Criado A. Estudio abierto, de 8 semanas, para comparar la comodidad y facilidad de uso de cinco pautas de tratamiento distintas de inyecciones intraarticulares de CNTX5 4975-05 en sujetos con dolor crónico de rodilla por artrosis moderada a grave. Type: Clinical Trial, phase III.

HULP code: 5179. Sponsored's protocol code: CNTX-4975I-OA-303.

Sponsored by: Centrexion Therapeutics Corp. Signed date: 13/12/2018

Balsa Criado A. Estudio aleatorizado, doble ciego y controlado con placebo para evaluar la eficacia y la seguridad de Sarilumab en pacientes con artritis de células gigantes. Type: Clinical Trial, phase III.

HULP code: 5137. Sponsored's protocol code: EFC15068.

Sponsored by: Sanofi Aventis S.A. Signed date: 14/11/2018

Balsa Criado A. Ensayo fase 3B, aleatorizado, doble ciego para evaluar la eficacia y seguridad de Abatacept sc en combinación con Metotrexato comparado con Metotrexato en monoterapia para conseguir la remisión clínica en adultos con artritis reumatoide temprana sin tratamiento previo con Metotrexato. Type: Clinical Trial, phase IIIb.

HULP code: Anexo-III 4470. Sponsored's protocol code: IM101-550.

Sponsored by: Bristol Myers Squibb International Corporation. Signed date: 21/03/2018

Balsa Criado A. Estudio multicéntrico, internacional, aleatorizado, doble ciego, controlado con alendronato para determinar la eficacia y seguridad de AMG 785 en el tratamiento de mujeres con osteoporosis postmenopáusica. Type: Clinical Trial, phase III.

HULP code: Anexo-V 3576. Sponsored's protocol code: 20110142.

Sponsored by: Amgen S.A. Signed date: 17/01/2018

Miguel Mendieta ED. Estudio multicéntrico, observacional no intervencionista, transversal y retrospectivo, para evaluar el control de la actividad de la enfermedad en condiciones de práctica clínica habitual en pacientes con espondilitis anquilosante y artritis psoriásica tratados en consultas de reumatología de España (Estudio Midas). Type: EPA-OD.

HULP code: PI-3434. Sponsored's protocol code: CAIN457FES03.

Sponsored by: Novartis Farmaceutica S.A. Signed date: 23/11/2018



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**2016
2017
2018

3.3 Infectious Diseases and Immunity Area

Balsa Criado A. Estudio en fase I/III aleatorizado y de grupos paralelos para evaluar la eficacia, la farmacocinética y la seguridad de CT-P13 subcutáneo y CT-P13 intravenoso en pacientes con artritis reumatoide activa. Type: Clinical Trial, phase I.

HULP code: Anexo-I 4825. Sponsored's protocol code: CT-P13 3.5.

Sponsored by: Celltrion Inc. Signed date: 03/04/2018

Balsa Criado A. Estudio multicéntrico, aleatorizado, doble ciego, controlado con placebo para evaluar la seguridad, tolerabilidad y eficacia de Secukinumab en pacientes con spondiloartritis axial no radiográfica activa durante un periodo de 2 años. Type: Clinical Trial, phase III.

HULP code: Anexo-I 4596. Sponsored's protocol code: CAIN457H2315.

Sponsored by: Novartis Farmacéutica SA. Signed date: 08/12/2018

Patents and trademarks

Pascual-Salcedo Pascual MD, Balsa Criado A, Plasencia Rodríguez C, authors; FI-BHULP, assignee. Brand name: BioDrug Analysis BIDA. CM 13.808.531, 2015 March 10.



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**2017
2018

3.3 Infectious Diseases and Immunity Area

 Publications: **35** Impact Factor: **170.566** Q1: **16**

Innate Immune Response Group

Eduardo Manuel López-Collazo. Director Científico de IdiPAZ. Investigador Senior (Contrato Miguel Servet - I2) Jefe de Laboratorio. Hospital Universitario La Paz

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Susana Alemany De La Peña. Investigadora Senior. Jefe de Laboratorio. IIB "Alberto Sols"

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María Susana Guerra García. Investigadora postdoctoral. Universidad Autónoma de Madrid

Ana Jaureguizar Oriol. Facultativo Especialista de Área en Neumología. Hospital Universitario La Paz

Charbel Antonio Maroun Eid. Facultativo Especialista de Área en Urgencias. Hospital del Norte

Eduardo Martín Arranz. Facultativo Especialista de Área en Gastroenterología. Hospital Universitario La Paz

Maria Dolores Martín Arranz. Jefa de Sección en Gastroenterología. Profesora Asociada. Hospital Universitario La Paz. Universidad Autónoma de Madrid

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Rebeca Pérez De Diego. Investigadora Senior (Contrato Ramón y Cajal). Hospital Universitario La Paz

Sanjiv Prashar. Profesor Titular. Universidad Rey Juan Carlos

Víctor Manuel Toledano Real. Investigador predoctoral. Hospital Universitario La Paz

Karla Marina Montalban Hernandez. Investigador predoctoral. Hospital Universitario La Paz

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Irene Mena Palomo. Investigador predoctoral. Universidad Rey Juan Carlos

Laura Sánchez-Maroto Capilla. Investigador predoctoral. Hospital Universitario La Paz

Roberto Lozano Rodríguez. Investigador predoctoral. Hospital Universitario La Paz

Veronica Terrón Arcos. Técnico de Laboratorio. Hospital Universitario La Paz



3.3 Infectious Diseases and Immunity Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

Strategic Objective

This group focuses on the study of the reprogramming of the innate immune response in the context of inflammatory diseases (e.g., sepsis, cystic fibrosis, acute coronary syndrome, lung cancer) using the description of the various molecular mechanisms that underlie the reprogramming of monocytes/macrophages during refractory states.

The innate immune response is activated in various clinical contexts that can be modelled in vitro. The initial reaction of the Innate Immune System is marked by an inflammatory response that is similar in different contexts.

However, after the initial response, a “deviation” is produced towards an “alternative” response that may, in many cases, lead to refractory states such as endotoxin and tumour tolerance. These refractory states may have undesirable clinical consequences and their study is the objective of our research.

Research Lines

- Molecular mechanisms of the innate immune system tolerance to tumours in several clinical contexts
- Molecular mechanisms of endotoxin tolerance in several clinical contexts: respiratory diseases (OSA and cystic fibrosis), acute coronary syndrome, sepsis and septic shock and leukaemias
- Role of the innate immune system in metastasis
- Myeloid cell polarization and atherogenesis
- Role of some mediators of the innate immune system in cardiovascular diseases

Research Activity

Books and book chapters

Arribas López JR, García Río F, López-Collazo E. El Instituto de Investigación Sanitaria del Hospital Universitario La Paz. In: Cuervas-Mons Martínez V, García García A, García Puig J, Pajares García JM, Pastor y Aldeguer V, Rodríguez Montes JA, Usandizaga Beguiristáin JA, Vargas Núñez JA, eds. Cincuenta años de la Facultad de Medicina de la UAM. Madrid: UAM, 2018. p.521-8

Publications

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- Alsina-Beauchamp D, Escos A, Fajardo P, González-Romero D, Díaz-Mora E, Risco A, Martín-Serrano MA, del Fresno C, Domínguez-Andrés J, Aparicio N, Zur R, Shiro N, Brown GD, Ardavin C, Netea MG, Alemany S, Sanz-Ezquerro JJ, Cuenda A. Myeloid cell deficiency of p38 gamma/p38 delta protects against candidiasis and regulates antifungal immunity. *EMBO Mol Med.* 2018; 10(5): e8485. Article. IF: 10.624; DI
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- Avendaño-Ortiz J, Maroun-Eid C, Martín-Quiros A, Toledo V, Cubillos-Zapata C, Gómez-Campeño PVarela-Serrano A, Casas-Martín J, Llanos-González E, Álvarez E, García-Río F, Aguirre LA, Hernández-Jiménez E, López-Collazo E. PD-L1 Overexpression During Endotoxin Tolerance Impairs the Adaptive Immune Response in Septic Patients via HIF1 alpha. *J Infect Dis.* 2018; 217(3): 393-404. Article. IF: 5.045; Q1
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3.3 Infectious Diseases and Immunity Area



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3.3 Infectious Diseases and Immunity Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

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Public projects

Avendaño Ortiz J. Contrato ayuda investigación (PEJ15/BIO/AI-0021). CM. 2016-2018.

Management centre: FIBHULP

Boscá Gomar L. Consorcio para el estudio del fracaso renal agudo: fisiopatología, nuevas terapias, biomarcadores y modelos experimentales. CM. 2018-2021.

Management centre: IIBM-AS (CSIC-UAM)

Boscá Gomar L. Modulación inmunometabólica del macrófago a través de mTOR y de la señalización purinérgica para favorecer la estabilidad de la placa en la aterogénesis. MINECO. 2018-2020.

Management centre: IIBM-AS (CSIC-UAM)

Boscá Gomar L. SAFETOLL - Desarrollo de nuevas aplicaciones terapéuticas de aptoll en enfermedades vasculares y autoinmunes. MINECO. 2018-2019.

Management centre: IIBM-AS (CSIC-UAM)

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Management centre: FIBHULP

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López-Collazo E. tolerancia a endotoxinas: ¿una puerta hacia el tratamiento eficaz de la sepsis? (PI14/01234). ISCIII. 2016-2018.

Management centre: FIBHULP

López-Collazo EM. Contrato de estabilización Miguel Servet (I2). ISCIII, CAM. 2009-2018.

Management centre: FIBHULP

López-Collazo EM. The risk of infections in several pathologies: a thorough study with clinical tools development for personalised medicine (PIE15/00065). ISCIII. 2016-2018.

Management centre: FIBHULP

Martín Arranz Md. (RTC-2015-4004-1). Ministerio de Ciencia, Innovación y Universidades. 2016-2019.

Management centre: FIBHULP

Pérez de Diego R. Contrato Ramón y Cajal (RyC 2011-07597). MINECO. 2011-2018.

Management centre: FIBHULP

Private projects

Boscá Gomar L. Biomateriales basados en grafeno: macrófagos: caracterización funcional para su aplicación en patología cardiovascular. Fundación Ramón Areces. 2017-2019.

Management centre: CSIC-UAM

Boscá Gomar L. Characterization of the immunometabolic actions of trabectedin and pm01183 in murine and human macrophages: an approach to understand the role of these drugs on tumor associated macrophages (TAM). Pharmamar. 2018-2019.

Management centre: CSIC-UAM

Boscá Gomar L. Valoración de la cardioprotección frente a infarto de miocardio por administración de aptámeros antagonistas selectivos de TLR4 (aptámero 4ft-aptoll). Neotec-CSIC. 2018-2019.

Management centre: CSIC-UAM

Cantero Cid R. Generación de microtejidos de colón tridimensionales automatizada para evaluación de fármacos antitumorales. Roche Farma S.A. 2017-Ongoing.

Management centre: FIBHULP

Cantero Cid R. Plataforma de ingeniería tisular e impresión 3D. Instituto Imdea Materiales. 2018-Ongoing.

Management centre: FIBHULP

Gómez Campelo P. Nodo científico Biobanco HULP. 2014-Ongoing.

Management centre: FIBHULP

Gómez Campelo P. Registro Nacional de Fracturas de Cadera. Estudio RNFC. Fundación Mutua Madrileña. 2018-Ongoing.



3.3 Infectious Diseases and Immunity Area



Management centre: FIBHULP

Martín Arranz MD. Efecto terapéutico de la administración colonoscópica de células madre mesenquimales derivadas de tejido adiposo humano de diferentes donantes (HASC) en un modelo de colitis de rata por enema de TNBS. Asociación de Médicos Especialista en Gastroenterología Area-5. 2010-Ongoing.

Management centre: FIBHULP

Martín Arranz MD. Estudio nacional en enfermedad inflamatoria intestinal sobre determinantes genéticos y ambientales. Eneida. Abbott Laboratories S.A. 2012-On-going.

Management centre: FIBHULP

Pérez de Diego R. Medicina de precisión en inmunodeficiencias primarias: desentrañando nuevas etiologías genéticas mediante aproximaciones "ómicas". Fundación Ramón Areces. 2015-Ongoing.

Management centre: FIBHULP

Clinical trials

Martín Arranz E. Eficacia de los bolos intravenosos de corticoides más tratamiento con corticoides orales en comparación con corticoides orales en monoterapia para el tratamiento de la colitis. Type: Clinical Trial, phase IV.

HULP code: 5044. Sponsored's protocol code: CECUM.

Sponsored by: GETECCU (Grupo Español de Trabajo en Enfermedad de Crohn y Colitis Ulcerosa). Signed date: 21/03/2018

Martín Arranz MD. Ensayo abierto y a largo plazo de la seguridad del tratamiento con BI655130 en pacientes con colitis ulcerosa activa moderada o grave que han finalizado ensayos anteriores de BI655130. Type: Clinical Trial, phase II.

HULP code: 5142. Sponsored's protocol code: BI655130.

Sponsored by: Boehringer Ingelheim España, S.A. Signed date: 13/09/2018

Martín Arranz MD. Estudio abierto de extensión y supervisión de la seguridad de pacientes con colitis ulcerosa de moderada a grave previamente inscritos en estudios de fase III con Etrolizumab. Type: Clinical Trial, phase III.

HULP code: Anexo-II 4274. Sponsored's protocol code: GA28951.

Sponsored by: F.Hoffmann-La Roche LTD. Signed date: 20/04/2018

Martín Arranz MD. Estudio de ampliación de fase 3, multicéntrico, sin enmascaramiento en el que se evalúa Ozanimod por vía oral para la enfermedad de Crohn activa de moderada a grave. Type: Clinical Trial, phase III.

HULP code: 5025. Sponsored's protocol code: RPC01-3204.

Sponsored by: Celgene International SARL. Signed date: 19/11/2018

Martín Arranz MD. Estudio de fase 3, aleatorizado, doble ciego, controlado con placebo y de grupos paralelos para evaluar la eficacia y la seguridad de SHP647 como tratamiento de inducción en sujetos con enfermedad de Crohn de moderada a grave (CARMEN CD 306). Type: Clinical Trial, phase III.

HULP code: 5085. Sponsored's protocol code: SHP647-306.

Sponsored by: Shire Human Genetic Therapies Inc. Signed date: 24/05/2018

Martín Arranz MD. Estudio de fase 3, aleatorizado, doble ciego, controlado con placebo y de grupos paralelos para evaluar la eficacia y la seguridad de SHP647 como tratamiento de mantenimiento en sujetos con enfermedad de Crohn de moderada a grave (CARMEN CD 307). Type: Clinical Trial, phase III.

HULP code: 5086. Sponsored's protocol code: SHP647-307.

Sponsored by: Shire Human Genetic Therapies Inc. Signed date: 24/05/2018

Martín Arranz MD. Estudio de fase 3, de extensión de seguridad a largo plazo de shp647 en sujetos con colitis ulcerosa de moderada a grave (AIDA). Type: Clinical Trial, phase III.

HULP code: Anexo-I 4965. Sponsored's protocol code: SHP647-304.

Sponsored by: Shire Human Genetic Therapies Inc. Signed date: 25/05/2018

Martín Arranz MD. Estudio de fase 3, multicéntrico, aleatorizado, con enmascaramiento doble y comparativo con placebo, en el que se evalúa Ozanimod por vía oral como tratamiento de mantenimiento para la enfermedad de Crohn activa de moderada a grave. Type: Clinical Trial, phase III.

HULP code: 5024. Sponsored's protocol code: RPC01-3203.

Sponsored by: Celgene International SARL. Signed date: 19/11/2018

Martín Arranz MD. Estudio de fase III multicéntrico, doble ciego y controlado con placebo de la eficacia y seguridad de Etrolizumab durante la inducción y el mantenimiento en pacientes con colitis ulcerosa activa de moderada a grave resistentes o intolerantes a los inhibidores de FNT. Type: Clinical Trial, phase III.

HULP code: Anexo-II 4188. Sponsored's protocol code: GA28950.

Sponsored by: F.Hoffmann-La Roche LTD. Signed date: 04/06/2018

Martín Arranz MD. Estudio de fase III, aleatorizado, multicéntrico, doble ciego, con doble simulación, para evaluar la eficacia y seguridad de Etrolizumab comparado con Infliximab en pacientes con colitis ulcerosa activa entre moderada e intensa que no han recibido tratamiento previo con inhibidores de FNT. Type: Clinical Trial, phase III.

HULP code: Anexo-II 4273. Sponsored's protocol code: GA29103.

Sponsored by: F.Hoffmann-La Roche LTD. Signed date: 24/04/2018

Martín Arranz MD. Estudio de inducción en fase III, multicéntrico, aleatorizado, doble ciego, de grupos paralelos, controlado con placebo, para evaluar Mirikizumab en pacientes con colitis ulcerosa moderada o gravemente activa sin respuesta a los tratamientos convencionales. Type: Clinical Trial, phase III.



3.3 Infectious Diseases and Immunity Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

HULP code: 5099. Sponsored's protocol code: I6T-MC-AMAN.

Sponsored by: Eli Lilly Co UK Ltd. Signed date: 16/07/2018

Martín Arranz MD. Estudio de inducción multicéntrico, aleatorizado, doble ciego y comparado con placebo para evaluar la eficacia y la seguridad de Upadacitinib (ABT-494) en sujetos con enfermedad de Crohn de moderada a grave que han tenido una respuesta insuficiente o intolerancia a un tratamiento convencional pero no han presentado fracaso terapéutico con fármacos biológicos. Type: Clinical Trial, phase III.

HULP code: 4966. Sponsored's protocol code: M14-433.

Sponsored by: Abbvie Spain S.L.U. Signed date: 16/07/2018

Martín Arranz MD. Estudio de inducción multicéntrico, aleatorizado, doble ciego y comparado con placebo para evaluar la eficacia y la seguridad de Upadacitinib (ABT-494) en sujetos con enfermedad de Crohn de moderada a grave que han tenido una respuesta insuficiente o intolerancia a un tratamiento convencional pero no han presentado fracaso terapéutico con fármacos biológicos. Type: Clinical Trial, phase III.

HULP code: 4967. Sponsored's protocol code: M14-431.

Sponsored by: Abbott Laboratories S.A. Signed date: 24/07/2018

Martín Arranz MD. Estudio de inducción nº I fase 3, multicéntrico, aleatorizado, con enmascaramiento, doble y comparativo con placebo, en el que se evalúa Ozanimod por vía oral como tratamiento de inducción para la enfermedad de Crohn activa de moderada a grave. Type: Clinical Trial, phase III.

HULP code: 5022. Sponsored's protocol code: RPC01-3201.

Sponsored by: Celgene International SARL. Signed date: 13/09/2018

Martín Arranz MD. Estudio de mantenimiento en fase III, multicéntrico, aleatorizado, doble ciego, de grupos paralelos, controlado con placebo sobre Mirikizumab en pacientes con colitis ulcerosa activa de moderada a grave. (LUCENT 2). Type: Clinical Trial, phase III.

HULP code: 5100. Sponsored's protocol code: I6T-MC-AMBG.

Sponsored by: Eli Lilly Co UK Ltd. Signed date: 16/07/2018

Martín Arranz MD. Estudio en fase I abierto, aleatorizado, de grupos paralelos para evaluar la farmacocinética, la eficacia y la seguridad de CT-P13 subcutáneo y CT-P13 intravenoso en pacientes con enfermedad activa de Crohn y pacientes con colitis ulcerosa activa. Type: Clinical Trial, phase I.

HULP code: Anexo-I 4901. Sponsored's protocol code: CT-P13 1.6.

Sponsored by: Celltrion INC. Signed date: 16/03/2018

Martín Arranz MD. Estudio multicéntrico aleatorizado, doble ciego y controlado con placebo de mantenimiento y de extensión a largo plazo, para evaluar la eficacia y la seguridad de Upadacitinib (abt-494) en sujetos con enfermedad de Crohn que han finalizado los estudios M1. Type: Clinical Trial, phase III.

HULP code: 4968. Sponsored's protocol code: M14-430.

Sponsored by: Abbvie Deutschland GMBH. Signed date: 17/08/2018

Martín Arranz MD. Estudio multicéntrico de fase II/III, aleatorizado, doble ciego y controlado con placebo, para evaluar la seguridad y la eficacia del tratamiento de inducción con BI655130 en pacientes con colitis ulcerosa activa de moderada a grave que no han respondido. Type: Clinical Trial, phase II.

HULP code: 5011. Sponsored's protocol code: I368.5.

Sponsored by: Boehringer Ingelheim España, S.A. Signed date: 01/06/2018

Martín Arranz MD. Estudio multicéntrico, aleatorizado, doble ciego, controlado con placebo, prueba de concepto de Ustekinumab en pacientes con lupus eritematoso sistémico activo. Type: Clinical Trial, phase III.

HULP code: Anexo-II 4765. Sponsored's protocol code: CNT01275CRD3005.

Sponsored by: Janssen Cilag International NV. Signed date: 14/06/2018

Martín Arranz MD. Estudio paralelo de fase IIA multicéntrico, aleatorizado, doble ciego y controlado con placebo para evaluar la eficacia y la seguridad de PRV-6527 (JNJ-40346527), un inhibidor del receptor del factor I estimulante de colonias, por vía oral, en pacientes con enfermedad de Crohn activa moderada o grave. Type: Clinical Trial, phase II.

HULP code: 5008. Sponsored's protocol code: PRV-6527-CD2A.

Sponsored by: Provention Bio INC. Signed date: 02/02/2018

Martín Arranz MD. Exploración de la posible interferencia de la microbiota intestinal en la respuesta clínica al Vedolizumab en pacientes con colitis ulcerosa. Type: EPA-SP.

HULP code: PI-3276. Sponsored's protocol code: FGA-VDE-2016-01.

Sponsored by: Fundació Hospital Vall D'Hebron. Signed date: 19/09/2018

Martín Arranz MD. Registro de exposición a largo plazo prospectivo y observational de pacientes adultos con colitis ulcerosa moderada a grave. Type: Clinical Trial, phase EPA-SP.

HULP code: PI-2741. Sponsored's protocol code: CNT0148UCO4001.

Sponsored by: Mapi Life Sciences UK Limited. Signed date: 25/04/2018

Martín Arranz MD. Un estudio de búsqueda de dosis en fase II, multicéntrico, aleatorizado, doble ciego, controlado por placebo para evaluar la eficacia y la seguridad de IM-838 en terapia de inducción y mantenimiento en colitis ulcerosa de moderada a grave (CALDOSE-1). Type: Clinical Trial, phase II.

HULP code: Anexo-I 5023. Sponsored's protocol code: PS-IMU-838-UC.

Sponsored by: Immunic AG. Signed date: 17/09/2018

Martín Arranz MD. Un estudio de búsqueda de dosis en fase II, multicéntrico, aleatorizado, doble ciego, controlado por placebo para evaluar la eficacia y la seguridad de IMU-838 en terapia de inducción y mantenimiento en colitis ulcerosa de moderada

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**

2018



3.3 Infectious Diseases and Immunity Area



a grave (CALDOSE-I). Type: Clinical Trial, phase II.

HULP code: 5023.

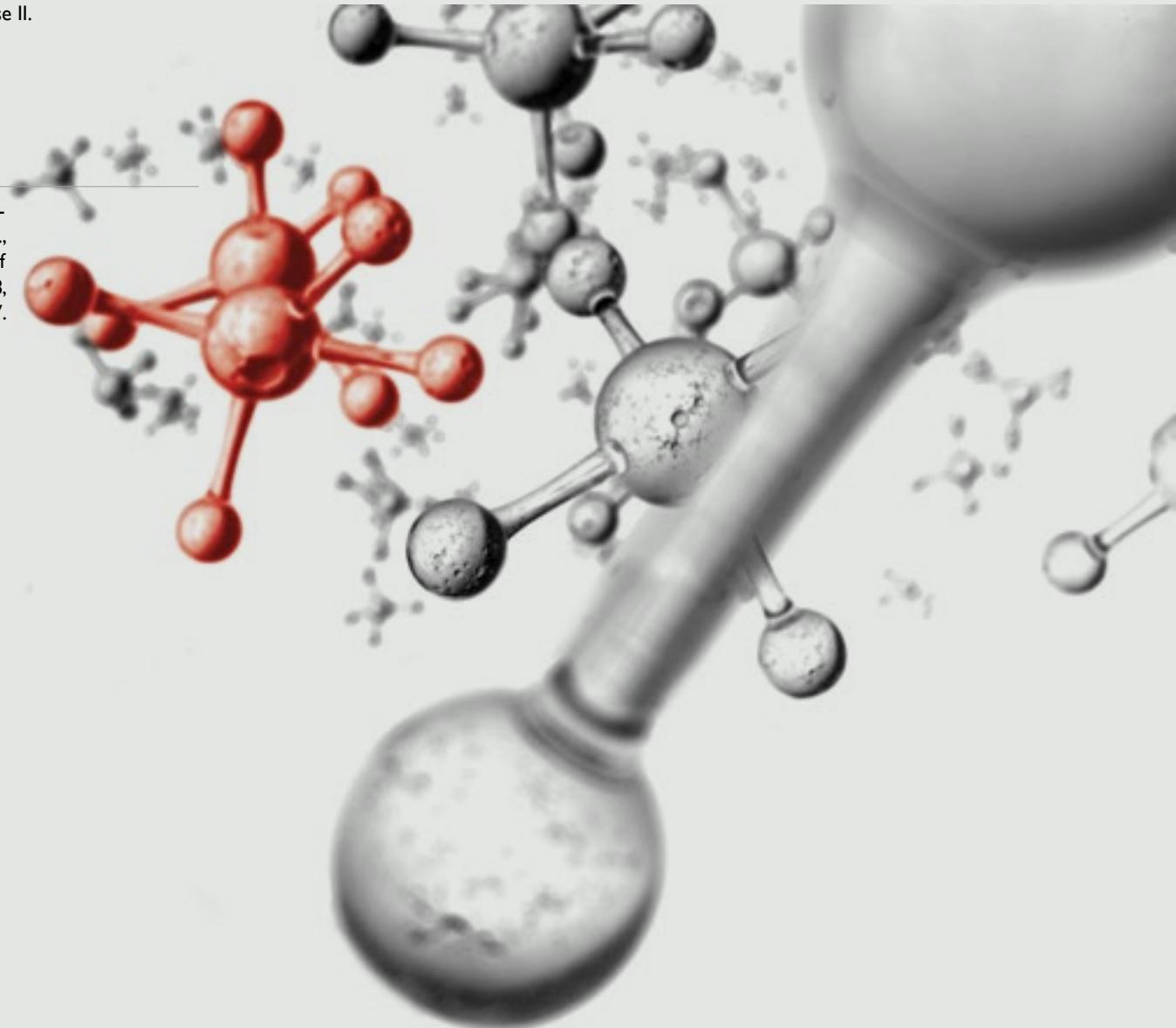
Sponsored's protocol code: PS-IMU-838-UC.

Sponsored by: Immunic AG.

Signed date: 05/06/2018

Patents and trademarks

Llamas Matías MA, López-Collazo E, inventors; FIBHULP, Llamas Matías MA, Empireo S.L., assignees. Method for determine the risk of developing an infectious disease. P201330768, PCT/ES2014/070434, EP3006570; 2013 May 27.





3.3 Infectious Diseases and Immunity Area

Publications: **8**Impact Factor: **39.201**QI: **1**

Diagnosis and Treatment of Diseases Associated with Abnormalities of the Complement System Group

Margarita López Trascasa. Investigadora "ad honorem" IdiPAZ. Hospital Universitario La Paz. Profesora Asociada. Universidad Autónoma de Madrid

Pilar Sánchez Corral Gómez. Investigadora Senior (Contrato Miguel Servet - I2). Jefe de Laboratorio. Hospital Universitario La Paz

Fernando Corvillo Rodríguez. Investigador Postdoctoral. Hospital Universitario La Paz

Laura Espinosa Román. Jefa de Servicio Nefrología Pediátrica. Hospital Universitario La Paz

Irene Gómez Delgado. Investigadora predoctoral. Hospital Universitario La Paz

Alberto López Lera. Investigador Postdoctoral. Contratado CIBERER. Hospital Universitario La Paz

Marta Melgosa Hijosa. Facultativo Especialista de Área en Nefrología Infantil. Hospital Universitario La Paz

Pilar Nozal Aranda. Facultativo Especialista de Área en Inmunología. Investigadora postdoctoral. Hospital Universitario La Paz

César Vélez Casanova. Técnico de Laboratorio. Hospital Universitario La Paz

Strategic Objective

This is a national reference group for the study of primary or acquired defects in the complement system.

The main aim is to gain an understanding of the molecular mechanisms underlying

in complement deficiency or dysregulation in several human diseases, the majority of which are classified as rare diseases.

In this context, the group implements and applies various methodological strategies (immunological, biochemical, proteomic and genetic) to detect clinically relevant deficiencies or functional defects in complement components. By following a clearly translational approach, the group also develops new diagnostic tests which are implemented in the clinical practice, especially for treatment adjustment and patient follow-up.

The research lines could be classified as: screening and characterization of genetic or acquired complement defects that cause renal pathology (I), functional and molecular diagnosis of deficiencies affecting individual components of the complement system (II), diagnosis and molecular studies in Hereditary Angioedema and screening for disease modifying genes (III), study of pathogenic mechanisms in acquired lipodystrophies (IV).

Research Lines

- Screening and characterization of genetic and acquired Complement defects in renal disease
- Biochemical and molecular diagnosis of isolated Complement deficiencies



3.3 Infectious Diseases and Immunity Area



- Screening and molecular characterization of disease modifying genes in Hereditary Angioedema
- Genetic and immunological mechanisms associated with Complement dysregulation in partial lipodystrophy

Research Activity

Doctoral theses

Corvillo Rodríguez F. Estudio de los mecanismos inmunopatológicos en lipodistrofias adquiridas de tipo parcial y generalizado [dissertation]. Madrid: UAM; 2018(22/06/18).

Director: López Trascasa M.

Books and book chapters

Melgosa Hijosa M. Epidemiología y etiología de la enfermedad renal crónica. In: Florentín de Merech L, Flores J, Ferrari J. Guía de trasplante renal pediátrico. Madrid: EFACIM, 2018. p.3-25

Publications

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- Corvillo F, Aparicio V, López-Lera A, Garrido S, Araujo-Vilar D, de Miguel MP, López-Trascasa M. Autoantibodies against perilipin I as a cause of acquired generalized lipodystrophy. *Front Immunol.* 2018; 9: 2142. Article. IF: 4.716; Q2
- Corvillo F, López-Trascasa M. Acquired partial lipodystrophy and C3 glomerulopathy: Dysregulation of the complement system as a common pathogenic mechanism. *Nefrologia.* 2018; 38(3): 258-66. Review. IF: 1.439; Q4
- de Jorge EG, Lera AL, Bayarri-Olmos R, Yébenes H, López-Trascasa M, de Córdoba SR. Common and rare genetic variants of complement components in human disease. *Mol Immunol.* 2018; 102: 42-57. Article. IF: 3.064; Q2
- Jiménez-Reinoso A, Marín AV, Subías M, López-Lera A, Román-Ortiz E, Payne K, MCS, Arbore G, Kolev M, Freeley SJ, Kemper C, Tangye SG, Fernandez-Malave E, de Córdoba SR, López-Trascasa M, Regueiro JR. Human plasma C3 is essential for the development of memory B, but not T, lymphocytes. *J Allergy Clin Immunol.* 2018; 141(3): 1151-4. Letter. IF: 14.11; DI
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- Pouw RB, Delgado IG, Lera AL, de Córdoba SR, Wouters D, Kuijpers TW, Sánchez-Corral P. High complement factor H-related (FHR)-3 levels are associated with the atypical hemolytic-uremic syndrome-risk allele CFHR3*B. *Front Immunol.* 2018; 9: 848. Article. IF: 4.716; Q2
- Sánchez-Corral P, Pouw RB, López-Trascasa M, Jozsi M. Self-damage caused by dysregulation of the complement alternative pathway: Relevance of the factor H protein family. *Front Immunol.* 2018; 9: 1607. Review. IF: 4.716; Q2

Public projects

López Trascasa M. COMPLEMENTO II-CM - El sistema del complemento en salud y enfermedad (S2017/BMD-3673). CM. 2018-2019.

Management centre: FIBHULP

López Trascasa M. Nuevos biomarcadores en enfermedades mediadas por el sistema del complemento (PI15/00255). ISCI III. 2016-2018.

Management centre: FIBHULP

Sánchez-Corral Gómez P. Contrato de estabilización I2. CM. 2008-2018.

Management centre: FIBHULP

Sánchez-Corral Martínez P. Nefropatías asociadas con desregulación del complemento: estudio de factores de riesgo y evolución mediante proteómica traslacional (PI16/00723). ISCI III. 2017-2019.

Management centre: FIBHULP

Private projects

Sánchez-Corral Gómez P. Contribución de variantes de las proteínas FHRS (Factor H-Retaled) del complemeto en patología renal. Fundación Senefro. 2018-Ongoing.

Management centre: FIBHULP

Clinical trials

Espinosa Román L. Carga de la enfermedad de la hipofosfatemia ligada al cromosoma X (XLH-QOL en adelante). Type: NO-EPA.

HULP code: PI-3004. Sponsored's protocol code: XLH-QoL-2017-02.

Sponsored by: Kyowa Kirin Farmaceutica S.L.U. Signed date: 18/01/2018

Patents and trademarks

López Trascasa M., authors; FIBHULP, assignee. Brand name: COMPLEMENTest; CM 009.658.791; 2011, January 14.



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

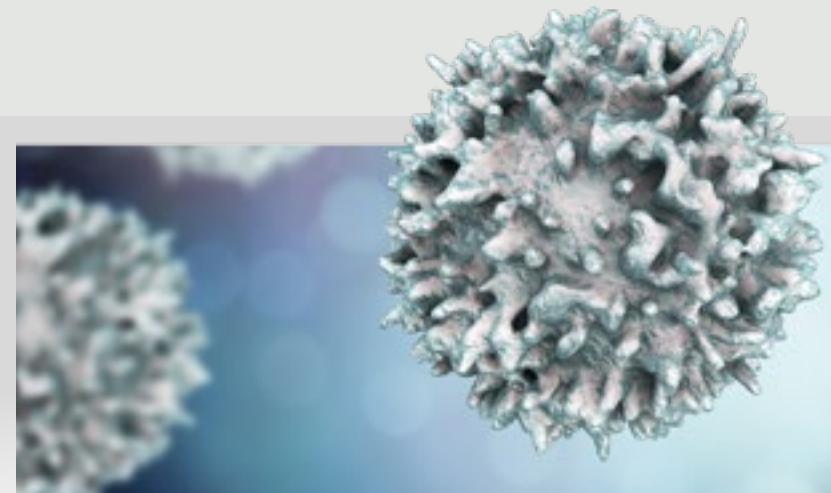
Associated Clinicians

4**Scientific Report**

2018



3.3 Infectious Diseases and Immunity Area

 Publications: **17** Impact Factor: **97.987** QI: **8**

Lymphocyte Pathophysiology in Immunodeficiencies Group

Eduardo López Granados. Coordinador de Inmunología. Hospital Universitario La Paz

Francisco Javier Alves Ferreira. Facultativo Especialista de Área en Anatomía Patológica. Hospital Universitario La Paz

María Coronel Díaz. Técnico especialista de Laboratorio

Lucía del Pino Molina. Investigadora Postdoctoral. Hospital Universitario La Paz

Diego Plaza López de Sabando. Facultativo Especialista de Área en Hemato-Oncología Pediátrica. Hospital Universitario La Paz

Ángel Julián Robles Marhuenda. Facultativo Especialista de Área en Medicina Interna. Hospital Universitario La Paz

Rebeca Rodríguez Pena. Facultativo Especialista de Área en Inmunología. Hospital Universitario La Paz

María Carmen Salcedo Moreno. Técnico de Laboratorio. Hospital Universitario La Paz

Ana Sastre Urguelles. Facultativo Especialista de Área en Hemato-Oncología Pediátrica. Hospital Universitario La Paz

Elena Sánchez Zapardiel. Facultativo Especialista de Área en Inmunología. Hospital Universitario La Paz

Juan Manuel Torres Canizales. Médico Inmunólogo. Hospital Universitario La Paz

Strategic Objective

Our group attempts to unravel the molecular bases of primary immunodeficiencies (PIDs), a large group of rare conditions (more than 350 types described so far) that virtually affect any cell type of the immune system and increase the risk of infections, autoimmunity and cancer in patients. We take a multidisciplinary clinical, anatomic, genetic, epigenetic and functional approach. By correlating clinical and experimental data, we aim to achieve a better understanding of these rare diseases and lay the grounds for, repurposed or new, more effective treatments.

Taking advantage of the knowledge and resources developed to dissect the immune system in PIDs, we are developing new schemes for immune monitoring of transplanted patients, to better estimate immunosupresion and tolerance, and early detection of severe complications as infections and rejection. Finally, we explore novel approaches for monitoring, and fine tuning.



3.3 Infectious Diseases and Immunity Area



Research Lines

- To define the anatomical, cellular, molecular and (epi)genetic bases of immunological dysfunction in patients diagnosed with primary immunodeficiency in our clinic
- The maturation and functional specialization of human B lymphocytes, and its pathophysiology in primary and secondary antibody immunodeficiencies
- The analysis of the immunological reconstitution after haemopoietic stem cell transplantation, and the discovery and clinical validation of immunological biomarkers for immunosuppression and tolerance in solid organ transplantation
- The development and clinical implementation of patient-tailored monitoring schemes of immunotherapies in wide clinical use

Research Activity

Books and book chapters

López Granados E, del Pino Molina L. Inmunodeficiencias primarias. Presentación en adultos. In: López Granados E, Rodríguez Pena R, Regueiro JR. Diagnóstico y monitorización inmunológica de las inmunodeficiencias primarias y secundarias. España: Elsevier, 2018. p.59-69

Rodríguez Pena R. Genética de las inmunodeficiencias primarias. In: López Granados E, Rodríguez Pena R, Regueiro JR. Diagnóstico y monitorización inmunológica de las inmunodeficiencias primarias y secundarias. España: Elsevier, 2018. p.95-108

López Granados E. Late-Onset combined Immunodeficiencies (LOCID). In: Milco D'Elios M, Rizzi M. Humoral primary immunodeficiencies. Switzerland: Springer, 2018. p.57-66

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- Gutiérrez-Camino A, Umérez M, Santos B, Martín-Guerrero I, de Andoín NG, Sastre A, Navajas A, Astigarraga I, García-Orad A. Pharmacogenetics in childhood acute lymphoblastic leukemia: involvement of miRNA polymorphisms in hepatotoxicity. *Epigenomics-Uk.* 2018; 10(4): 409-17. Article. IF: 4.404; Q1
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3.3 Infectious Diseases and Immunity Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

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Public projects

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Management centre: FIBHULP

Private projects

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Management centre: FIBHULP

López Granados E. Aplicaciones clínicas de la monitorización inmunológica avanzada en el trasplante de órgano sólido infantil. Fundación Mutua Madrileña. 2014-Ongoing.

Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP

Clinical trials

Sastre Urguelles A. Estudio de fase I/II, multicéntrico, abierto, a un solo brazo, de Ruxolitinib añadido a corticosteroides en pacientes pediátricos con enfermedad aguda de injerto contra huésped de grado II-IV tras trasplante alogénico de células madre hematopoyéticas. Type: Clinical Trial, phase I.

HULP code: 5119. Sponsored's protocol code: 5119 CINC424F12201.

Sponsored by: Novartis Farmaceutica S.A. Signed date: 02/07/2018

Sastre Urguelles A. Ensayo clínico fase I/2 de un brazo para evaluar la seguridad y la eficacia del Mesilato de Eribulina en combinación con Irinotecán en niños con tumores sólidos refractarios o recurrentes. Type: Clinical Trial, phase I.

HULP code: Ccontrato 5125. Sponsored's protocol code: E7389-G000-213.

Sponsored by: Eisai Europe Limited. Signed date: 02/10/2018

Robles Marhuenda AJ. Estudio aleatorizado, doble ciego, controlado por placebo, de 52 semanas de duración para evitar los acontecimientos adversos de especial interés en adultos con lupus eritematoso sistemático activo, con anticuerpos positivos, que toman Belimumab. Type: Clinical Trial, phase IV.

HULP code: Anexo-II 4282. Sponsored's protocol code: HGS1006-C1113.

Sponsored by: Human Genome Sciences Inc. Signed date: 28/09/2018

Sastre Urguelles A. Programa de registro europeo de Evoltra® LLA pediátrica. Type: EPA-LA.

HULP code: Anexo-I 3372. Sponsored's protocol code: CLO-08708.

Sponsored by: Genzyme Europe Bv. Signed date: 19/02/2018

Patents and trademarks

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Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4Scientific Report
2017
2018

3.3 Infectious Diseases and Immunity Area

Publications: **16**Impact Factor: **33.⁴⁵⁹**QI: **1**

Drug Hypersensitivity and Innate Immune Response Group

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Strategic Objective

Cutaneous adverse drug reactions are unpredictable and represent a plethora of skin diseases with various degrees of severity. The spectrum ranges from mild to potentially fatal multisystem maladies. Those of most concern are usually referred to as severe cutaneous adverse reactions (SCARs), and include acute generalized exanthematous pustulosis (AGEP), drug reaction with eosinophilia and systemic symptoms (DRESS), also known as drug induced hypersensitivity syndrome or hypersensitivity síndrome (DIHS/HSS), Stevens-Johnson's syndrome (SJS), and toxic epidermal necrolysis (TEN). Among them, SJS and TEN are the most severe clinical entities and are nowadays considered as variants of the same disease character-

rized by keratinocyte necrosis and epidermal detachment with the formation of subepidermal bullae. From the immunopathogenic point of view, SCARs are T-cell mediated type IV hypersensitivity reactions. However, T cells can orchestrate different types of immune responses and this functional heterogeneity has led to a further sub-classification into type IVa-IVd hypersensitivity that considers the distinct cytokine production pattern by T cell subpopulations, and emphasizes the participation of different effector cells causing inflammation and tissue damage. Current knowledge supports the active participation of cytotoxic lymphocytes in different clinical entities.

Our project aims to a better understanding of the immune mechanisms underlying the etiopathogenesis of these diseases. The study is performed in the framework of the consortium PIELenRed (Plataforma interdisciplinar para el estudio de reacciones cutáneas graves en red) integrated by researchers belonging to different hospitals in Madrid.

Reactivation of latent herpesvirus has been described during the development of some of the previously mentioned clinical entities. In order to improve our understanding of the behaviour of the immune system during viral replication, collaboration has been established with the Kidney Transplant Unit (Nephrology Service, HULP). Kidney transplant recipients are being followed immediately before and after transplant in order to identify patients with active CMV replication.



3.3 Infectious Diseases and Immunity Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

General objectives for the next 5 years

The main objectives are:

- I) Biobanking of samples of severe cutaneous adverse reactions to medications (DRESS, AGEP and SJS/TEN) associated to the registry PIElenRed, and integrated in the international registry RegiSCAR.
- II) To investigate in vitro test for drug causality assessment.
- III) To explore the involvement of the innate immune response (in particular natural cytotoxic activity) during the development of SCARs.
- IV) Identification of biomarkers of susceptibility.
- V) To find biomarkers for disease and response to treatments.
- VI) To explore the potential of microRNAs in SJS/TEN as biomarkers of disease and of response to treatments, as well as their relationship with pathogenic mechanisms.
- VII) To analyze the evolution of the cytotoxic response in patients with CMV replication.
- VIII) Compare the innate immune response in patients with CMV replication after kidney transplant and in patients with SCARs.

Research Lines

- Biobanking of biological samples from patients with severe cutaneous adverse reactions to medications (DRESS, AGEP and SJS/TEN)
- Development and evaluation of in vitro tests for drug causality assessment
- Identification of biomarkers of susceptibility
- Involvement of NK receptors in the etiopathogenesis of Stevens-Johnson syndrome /Toxic epidermal necrolysis (SJS/TEN)
- Differential analysis of the cytokine pattern involved in different SCARs (AGEP, DRESS and SJS/TEN)
- Analysis of miRNAs as biomarkers of disease and response to treatments

Research Activity

Publications

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Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018



3.3 Infectious Diseases and Immunity Area

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Management centre: FIBHULP

Bellón Heredia T. Lesiones cutáneas graves asociadas a medicamentos: registro de casos para la vigilancia epidemiológica, evaluación del manejo clínico y estudio de determinantes y mecanismo biológicos (PI13/01768). ISCIII. 2014-2018.

Management centre: FIBHULP



Private projects

Bellón Heredia T. Enfermedad por CMV después del trasplante renal. Importancia de la monitorización inmunológica: respuesta específica T CD8 y expresión de CD94/NKG2C en relación con el rechazo. Roche Farma S.A. 2010-Ongoing.

Management centre: FIBHULP

Bellón Heredia T. Formación en la investigación. SYF Galenus Center S.L. 2015-On-going.

Management centre: FIBHULP

Bellón Heredia T. Reacciones de hipersensibilidad cutánea graves asociadas a medicamentos: biobanco de muestras biológicas asociadas a un registro de casos para el estudio de los determinantes y mecanismos biológicos y realización del test de transformación linfocitaria (TTL) para la determinación de causalidad. Fundación para la Investigación Biomédica del Hospital Universitario Príncipe de Asturias. 2014-Ongoing.

Management centre: FIBHULP

Patents and trademarks

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Selgas Gutiérrez R, Bellón Heredia T, Rodríguez Sanz Al, Álvarez Builla J, Vaquero López JJ, Sánchez Alonso P, Alajarín Fernández R, inventors; FIBHULP, Universidad de Alcalá, assignees. Use of compounds derived from salts of pyridazine[3,2-b]benzimidazolium as anti-inflammatory agents. P201430411, PCT/ES2014/070603; 2013 July 25.

Sánchez Niño MD, Ortiz Arduán A; FIBHULP, Instituto de Investigación Sanitaria Fundación Jiménez Díaz. Pharmaceutical composition and its use in the manufacture of a medicament for treating chronic kidney disease and method for screening compounds. 2014 January 27.P201430081, PCT/ES2015/070039;

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018



3.3 Infectious Diseases and Immunity Area

Maria Cabrerizo



Cristina Calvo



Rosa Albañil



Maria Luz García García



Teresa del Rosal



Ana Méndez Echeverría



Inmaculada Casas

Publications: **20**

Impact Factor: **99.705**

QI: **7**

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Pediatric Respiratory, Systemic and Neurological Infections & Host Group

Mar Molinero Calamita. Colaboradora I+D+I. Centro Nacional de Microbiología. Instituto de Salud Carlos III

Almudena Otero Sánchez. Ayudante de Investigación I+D+I. Centro Nacional de Microbiología. Instituto de Salud Carlos III

Juan Francisco Pozo Sánchez. Investigador Titular de OPIs. Unidad de Virus Respiratorios y Gripe. Instituto de Salud Carlos III

Clara Udaondo Gascón. Facultativo Especialista en Reumatologa Pediátrica. Hospital Universitario La Paz

Strategic Objective

Infectious diseases are the most frequent pathology in childhood. Our group is focused in the study of paediatric infections with special attention to those associated to viruses.

The acute respiratory infections (ARIs) of lower respiratory tract are the most frequent infectious diseases in humans and these suppose at least 4 million of deaths yearly in the world. A high proportion of these infections are related with viral aetiology and particularly in children. In our country, the viral ARIs are one of the most frequent causes of hospitalization in children less than 2 years old. Using the metagenomics and applying an adapted method designed and developed for ARIs



3.3 Infectious Diseases and Immunity Area

study, we will have achieved an increased knowledge of viral infections in hospitalized children of all ages, as well as in outpatients. Metagenomics could allow recognizing new viruses and also permits a deeper knowledge of traditional respiratory virus groups. Any new technological tool and its application to respiratory infection will mean an improvement in the diagnosis and monitoring of these types of infections and their immediate use is specified for resolving alerts in public health associated with respiratory viral infections is like the case of MERS-CoV, avian flu, or other influenza pandemics. We are also interested in the study of the immunological response of the infants to the viral infections, and the mechanisms that allow developing recurrent wheezing, or asthma (the most frequent chronic disease in children). Emerging viral infections have also an important role in the pathology in childhood. Recently picornaviruses, mainly human parechovirus and enterovirus are causing outbreaks and several neurological infections, morbidity and mortality. They were associated with a wide range of pathologies, from febrile syndrome to respiratory, neurological or systemic diseases. In newborns, these infections can be severe, even fatal. Surveillance of these polio-like diseases is a public health concern and it is one of our group objectives.

Finally, to study viral infections in high risk group of children (newborn, chronic lung diseases, immunodeficiencies, oncologic patients, rheumatic diseases...) is also a priority in our group.

Research Lines

- Respiratory viral infections in hospitalized children. Viral metagenomic methods applied to the severe infections of the lower respiratory tract
- Respiratory viral infections in children in Primary Care
- Respiratory viral infections in high risk group of children (newborn, chronic lung diseases, immunodeficiencies, oncologic patients...)
- Applying of new technologies as echography to value risk conditions in viral infections
- Immune response of the children and interleukins profile in infants with respiratory viral infections and correlation with the development of recurrent wheezing in the first years of life
- Detection and characterization of enterovirus (EV) and parechovirus (PeV) systemic and neurological infections in children
- Neurological development in children with EV and PeV infections
- Kawasaki disease
- Osteoarticular infections
- Infections in children with rheumatic diseases

Research Activity

Books and book chapters

del Rosal T, Méndez A. Protocolo de transición del niño con inmunodeficiencia primaria. In: Navarro Torres M, Jara Vega P. Transición de niño a adulto ¿Cómo podemos ayudarles? Madrid: Ergon, 2018. p.144-148

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- Alcobendas R, Murias S, Remesal A, Calvo C. Oral treatment of osteoarticular infections caused by Kingella kingae in children. Eur J Rheumatol. 2018; 5(2): 147-8. Letter. Not Indexed
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3.3 Infectious Diseases and Immunity Area

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

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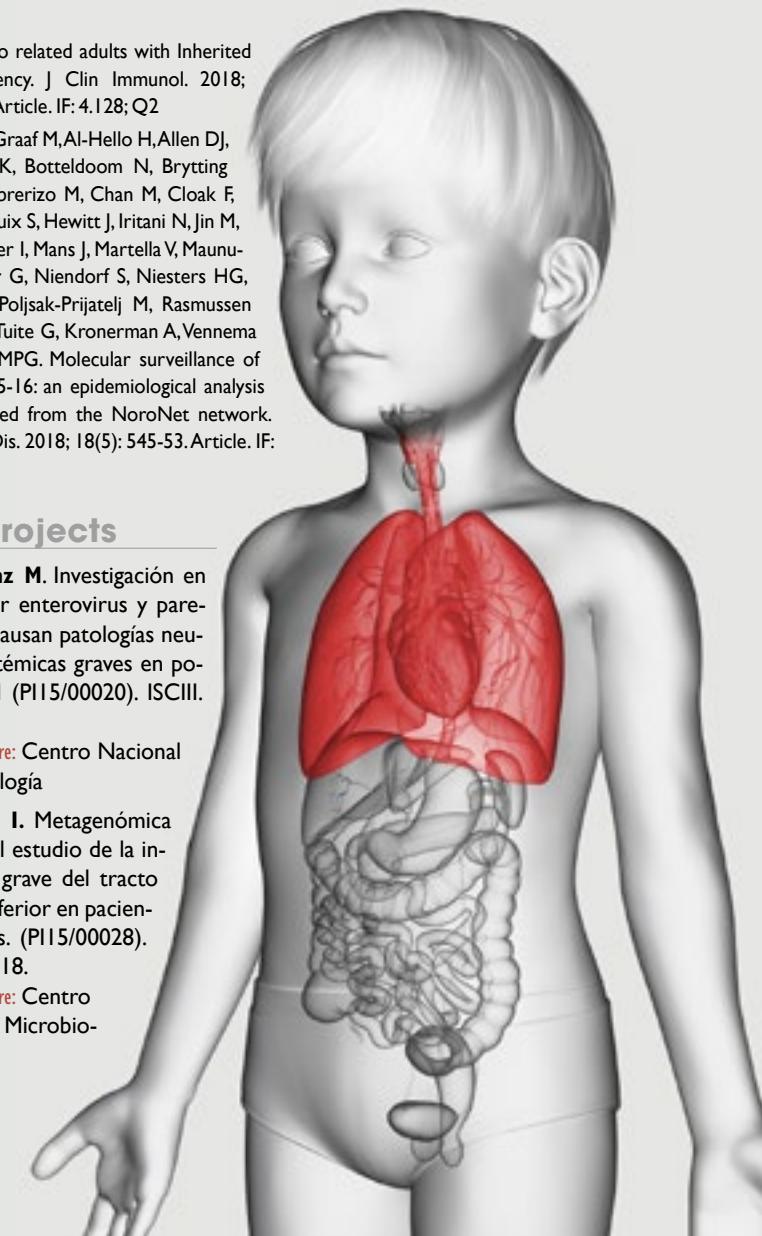
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Management centre: Centro Nacional de Microbiología

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Management centre: Centro Nacional de Microbiología





3.3 Infectious Diseases and Immunity Area



Private projects

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Management centre: SERGAS

Calvo Rey C, Martín Torres F. Evaluación de factores genéticos en la susceptibilidad y pronóstico de las infecciones por enterovirus. Proyecto ENTEROGEN. SERGAS. 2018-Ongoing.

Management centre: SERGAS

Calvo Rey C. Colonización por staphylococcus aureus resistente a meticilina en niños sanos de la comunidad (Estudio COSACO). Estudio multicéntrico de ámbito nacional. Fundación de la Asociación Española de Pediatría. 2018-Ongoing.

Management centre: FIBHULP

Calvo Rey C. Infecciones en niños con artritis idiopática juvenil. Fundación SEIP. 2017-Ongoing.

Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP

García García ML. Asociación de los distintos perfiles del viroma, la microbiota y la respuesta inmune con la gravedad de la bronquiolitis viral aguda y con el desarrollo de sibilancias recurrentes. Universidad Alfonso X El Sabio. 2018-2021.

Management centre: UAX

García García ML. Papel de la respuesta inmune a corto y medio plazo en lactantes con bronquiolitis grave. SEICAP. 2018-2019.

Management centre: NeumoMadrid

International projects

Calvo Rey C. Multi-Centre European study of major infectious diseases syndromes (MERMAIDS)- Community acquired sepsis-like syndrome and paediatric acute respiratory infection in childhood. PENTA. 2018-2019.

Management centre: St'Gerorges. University of London. SERGAS

Clinical trials

Calvo Rey C. Estudio de fase IIA sin enmascaramiento en lactantes con infección de las vías respiratorias bajas por el virus sincitial respiratorio, seguido de una parte con doble enmascaramiento controlada con placebo, para evaluar la seguridad, la tolerabilidad, la farmacocinética y el efecto antivírico de RV521 (REVIRAL I). Type: Clinical Trial, phase II.

HULP code: 5196. Sponsored's protocol code: REVCO03.

Sponsored by: Reviral Ltd. Signed date: 30/10/2018

Calvo Rey C. Estudio en fase II, doble ciego y controlado con placebo para evaluar la actividad antiviral, los resultados clínicos, la seguridad, la tolerabilidad y las relaciones entre farmacocinética y farmacodinámica de dosis diferentes de JNJ-53718678 en niños ≥28 días y ≤3 años de edad con infección respiratoria aguda debido a la infección por el virus respiratorio sincitial. Type: Clinical Trial, phase II.

HULP code: 5152. Sponsored's protocol code: 53718678RSV2002.

Sponsored by: Janssen-Cilag España S.A. Signed date: 05/10/2018

Calvo Rey C. Estudio en fase III, multicéntrico, aleatorizado, doble ciego y controlado con placebo para evaluar la eficacia y la seguridad de Pimodivir en combinación con la práctica clínica habitual en pacientes adolescentes, adultos y ancianos con gripe A no hospitalizados. Type: Clinical Trial, phase III.

HULP code: 4998. Sponsored's protocol code: 63623872FLZ3002.

Sponsored by: Janssen Pharmaceutica NV. Signed date: 04/07/2018

Calvo Rey C. Estudio en fase III, multicéntrico, aleatorizado, doble ciego y controlado con placebo para evaluar la eficacia y la seguridad de Pimodivir en combinación con la práctica clínica habitual en pacientes adolescentes, adultos y ancianos hospitalizados con gripe A. Type: Clinical Trial, phase III.

HULP code: Contrto 4997. Sponsored's protocol code: 63623872FLZ3001.

Sponsored by: Janssen Pharmaceutica NV. Signed date: 03/07/2018

Calvo Rey C. Desarrollo neurológico en niños con infección del SNC por parechovirus humano. Type: Estudio, phase NO-EPA.

HULP code: PI-2440. Sponsored's protocol code: PI-2440

Sponsored by: Cristina Calvo Rey. Signed date: 19/07/2018

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**2017
2018

3.3 Infectious Diseases and Immunity Area

Publications: **22**Impact Factor: **53.362**Q1: **4**

Pediatric Systemic Infections; HIV, Tuberculosis, Imported and Emergent Group

María José Mellado Peña. Jefe de Servicio. Hospital Universitario La Paz
Fernando Baquero Artigao. Facultativo Especialista de Área de Pediatría. Hospital Universitario La Paz. Profesor asociado. Universidad Autónoma de Madrid
Francisco José Climent Alcalá. Facultativo Especialista de Área de Pediatría. Unidad de Patología Compleja. Hospital Universitario La Paz. Clínico Colaborador docente. Universidad Autónoma de Madrid
Luis Escosa García. Facultativo Especialista de Área en Pediatría. Hospital Universitario La Paz
Marta García Fernández de Villalba. Facultativo Especialista de Área de Pediatría. Unidad de Patología Compleja. Hospital Universitario La Paz. Clínico Colaborador Docente. Universidad Autónoma de Madrid
María Milagros García López de Hortelano. Médico Adjunto de Pediatría Hospitalaria y Enfermedades Infectuosas y Tropicales. Hospital Universitario La Paz
Roi Piñeiro Pérez. Jefe del Servicio de Pediatría. Hospital General de Villalba
Talía Sainz Costa. Facultativo Especialista de Área en Pediatría. Hospital Universitario La Paz. Profesor colaborador. Investigador Juan Rodés. Universidad Autónoma de Madrid

Strategic Objective

- I. Vertically acquired HIV infection in children: Comorbidities, biomarkers, HIV reservoir, new therapeutic approaches.

2. Epidemiology of Paediatric Tuberculosis in Spain: molecular epidemiology of drug resistant strains, new diagnostic tools and new drugs for TB: Pharmacodynamics in children and TB-drugs Off-label use in paediatrics.
3. Congenital infections: burden of disease, prompt diagnosis and in-utero and postnatal management, host immune response.
4. Epidemiology of imported and emergent diseases in children: Identification and management of emergent outbreaks. Immuno-pathogenesis, preventive measures and management.
5. Immunization strategies in children: immune response in high risk patient's vaccine effectiveness and barriers.

Research Lines

Vertically acquired HIV infection in children

- Immuno-pathogenesis: Immune-activation, inflammation and biomarkers
- Epidemiology, immuno-virological factors
- Comorbidities, long term follow-up, cardiovascular risk, bone disorders, metabolic abnormalities, neurocognitive impairment, renal dysfunction



3.3 Infectious Diseases and Immunity Area



- Antiretroviral treatment: new drugs, resistances, dosage, toxicity in children, simplification strategies
- HIV eradication: barriers, HIV reservoir, new antiretroviral drugs and other strategies to achieve HIV replication control
- Gut Microbiota and bacterial traslocation intestinal as modulating factors for inflammation and Immune-activation in HIV-infected children
- Transition to adult care: barriers, strategies to maintain adherence to care

Epidemiology of paediatric Tuberculosis (TB)

- Epidemiology of paediatric TB. paediatric cases as a sentinel for burden of diseases
- Molecular Epidemiology of paediatric TB: resistant strains
- Immuno-pathogenesis: New diagnostic tools in special Populations: HIV-infected, ID patients, migrants and Internationally adopted children
- Management of critical situations. Neonatal TB, multidrug resistant and extra-pulmonary TB
- New fixed-dosed combinations. Off label drugs in children. Pharmacodinamic and pharmacokinetic

Congenital infectious diseases

- Congenital Citomegalovirus and Toxoplasma infections: diagnostic barriers, prognostic factors, new therapeutic approaches
- CHAGAS disease and congenital TB: diagnostic barriers, prognostic factors, pharmacokinetics in newborns and new drugs

Epidemiology of imported and emergent diseases in children

- Paediatric International Outbreaks: Epidemiology and public health impact: Zika. Rabies. Dengue. Chikungunya. Haemorrhagic fevers, Mers-co
- Imported diseases in Spain: epidemiology and special populations: adopted, migrant, refugees, travelers and ID children. Tropical and parasitic infections in children

Immunization strategies in children, including high risk patients

- Immunization and vaccine response in special populations: immunocompromised children, transplant recipients, chronic patients, HIV-infected, migrants
- Vaccine immunogenicity: barriers in paediatric populations

New challenges in vaccinology

Research Activity

Books and book chapters

Bustamante Amador J, García-López Hortelano M. Fiebre al volver del trópico. In: Martínez-Roig A, Díaz Conradi A. Diagnóstico y tratamiento en urgencias pediátricas.

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Climent FJ, García M, Escosa L, Rodríguez A. Protocolo de transición a adultos de pacientes con inmunodeficiencia primaria. In: Navarro Torres M, Jara Vega P. Transición de niño a adulto ¿Cómo podemos ayudarles? Madrid: Ergon, 2018. p.144/8

Escosa García L, Mellado Peña MJ.VIH en pediatría. In: Guerrero J, Caron A, Barreda A, Menéndez J, Ruiz J. Manual de diagnóstico y terapéutica en pediatría. Libro Verde Hospital Infantil La Paz. 2018 . Madrid: Editorial Panamericana S.L., 2018. p.1565-86

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Mellado Peña MJ. Parasitosis Intestinales. In: ED: J Guerrero, A Caron, A. Barreda, J Menéndez, J Ruiz. Manual de diagnóstico y terapéutica en pediatría. Libro Verde Hospital Infantil La Paz. 2018 . Madrid: Editorial Panamericana S.L., 2018. p.1419-30

Mellado Peña MJ. Tuberculosis. In: Guerrero J, Caron A, Barreda A, Menéndez J, Ruiz J. Manual de diagnóstico y terapéutica en pediatría. Libro Verde Hospital Infantil La Paz. 2018 . Madrid: Editorial Panamericana S.L., 2018. p.1613-23

Piñeiro Pérez R ¿Eres vacunofóbico? Dime, te escucho. Madrid: Undergraf, 2018. p.1-94

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Sainz Costa T, Mellado Pérez MJ. Protocolo de transición a adultos de pacientes con Infección Por el VIH. In: Navarro Torres M, Jara Vega P. Transición de niño a adulto ¿Cómo podemos ayudarles? Madrid: Ergon, 2018. p.134-43

Publications

- Aguilera-Alonso D, del Rosal T, Muñoz SP, Baquero-Artigao F. Neonatal epididymo-orchitis with pyocele caused by Escherichia coli: Successful treatment with antimicrobial therapy alone. Enferm Infec Micr Cl. 2018; 36(8): 530-1. Letter. IF: 1.685; Q4
- Aguilera-Alonso D, López Medina EM, del Rosal T, Villota Arrieta J, Escosa-García L, García-Hortelano M. Acalculous cholecystitis in a pediatric patient with plasmodium falciparum infection: a case report and literature review. Pediatr Infect Dis J. 2018; 37(2): e43-5. Article. IF: 2.317; Q2
- Alcalá FJC, de Villalta MGF, García LE, Alonso AR, Velasco LAA. Children's medically complex diseases unit. A model required in all our hospitals. An Pediatr. 2018; 88(1): 12-8. Article. IF: 1.166; Q3
- Artigao FB, Tato LMP, Amador JTR, Allen AA, de la Calle M, Frick MA, Mellgren AG, Tome MIG, Pérez DM, Julián AN. The Spanish Society of Paediatric Infectious Diseases guidelines on the pre-



3.3 Infectious Diseases and Immunity Area

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- Calvo C, Sainz T, Codoner-Franch P, Santiago B, García-García ML, Vera CG, Muñoz-Fernández MA, Pérez-Martínez A, Rivero I, Pérez CF, Mejías A, Martín-Torres F, Cabañas F. Paediatric research in Spain: Challenges and priorities. INVEST-AEP Platform. *An Pediatr.* 2018; 89(5): 314. e1-6 . Article. IF: 1.166; Q3
 - Chan A, Lensing AWA, Kubitza D, Brown G, Elorza D, Ybarra M, Halton J, Grunt S, Kenet G, Bonnet D, Santamaría A, Saracco P, Biss T, Climent F, Connor P, Palumbo J, Thelen K, Smith WT, Mason A, Adalbo I, Berkowitz SD, Hurst E, van Kesteren J, Young G, Monagle P. Clinical presentation and therapeutic management of venous thrombosis in young children: a retrospective analysis. *Thromb J.* 2018; 16: 29. Article. Not Indexed
 - de la Calle M, Baquero F, Rodríguez R, González M, Fernández A, Omeñaca F, Bartha JL. Successful treatment of intrauterine cytomegalovirus infection with an intraventricular cyst in a dichorionic diamniotic twin gestation using cytomegalovirus immunoglobulin. *J Matern-Fetal Neo M.* 2018; 31(16): 2226-9. Article. IF: 1.569; Q3
 - Deusch S, Serrano-Villar S, Rojo D, Martínez-Martínez M, Bargiela R, Vázquez-Castellanos JF, Sainz T, Barbas C, Moya A, Moreno S, Gosalbes MJ, Estrada V, Seifert J, Ferrer M. Effects of HIV, antiretroviral therapy and prebiotics on the active fraction of the gut microbiota. *AIDS.* 2018; 32(10): 1229-37. Article. IF: 4.499; Q1
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 - Falces-Romero I, Troyano-Hernández P, García-Bujalance S, Baquero-Artigao F, Mellado-Peña MJ, García-Rodríguez J. Detection of toxicogenic Clostridium difficile in paediatric patients. *Enferm Infec Micr Cl.* 2018; 36(6): 357-61. Article. IF: 1.685; Q4
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3.3 Infectious Diseases and Immunity Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

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3.3 Infectious Diseases and Immunity Area



Public projects

Sainz Costa T. Evaluación de factores determinantes del reservorio viral en niños infectados por el VIH: avanzando hacia la erradicación (ICII4/00207). ISCIII. 2015-2019.

Management centre: FIBHULP

Sainz Costa T. Contrato Juan Rodés (JR16/00021). ISCIII. 2017-2018.

Management centre: FIBHULP

Sainz Costa T. Hígado graso no alcohólico y esteatohepatitis en niños y adolescentes infectados por el VIH (PII7/01283). ISCIII. 2018-2020.

Management centre: FIBHULP

Private projects

García Fernandez de Villalta M. Evaluación de la adecuación del calendario de vacunaciones y el cumplimiento de las recomendaciones adicionales, por su patología de base, en niños con problemas complejos de salud. Fundación para la Investigación Biomédica Hospital Universitario La Paz. 2015-Ongoing.

Management centre: FIBHULP

Mellado Peña MJ. Respuesta a vacunas en niños y adolescentes infectados por el VIH en tratamiento antirretroviral: el cociente CD4/CD8 como predictor de respuesta. FIBHULP. 2017-Ongoing.

Management centre: FIBHULP

Mellado Peña MJ. Valoración de riesgo cardiovascular en niños y adolescentes infectados por el VIH. Asociación para el Estudio de las Enfermedades Infecciosas. 2014-Ongoing.

Management centre: FIBHULP

Mellado Peña MJ. VII Jornada de enfermedades tropicales pediátricas. Glaxosmithkline S.A. 2017-Ongoing.

Management centre: FIBHULP

Mellado Pérez MJ. Registro Nacional de Casos de Tuberculosis en la Edad Pediátrica de la Red Nacional de Estudio de Tuberculosis Pediátrica (pTBred). AEPED. 2016-2020.

Management centre: FIBHULP

Piñeiro Pérez R. Proyecto Inmuniza. MSD. 2018-Ongoing.

Management centre: Hospital General de Villalba

International projects

Mellado Peña MJ. Efecto de una intervención nutricional inmunomoduladora sobre la microbiota, translocación bacteriana, inflamación/activación inmune y respuesta a vacunas en la infección por el VIH en niños. Estudio piloto Pediabiota. European Society Of Pediatric Infectious Diseases (ESPID). 2014-Ongoing.

Management centre: FIBHULP

Mellado Peña MJ. INFRADEV - European Paediatric Translational Research Infrastructure (H2020-ID-EPTRI). UE. 2017-2019.

Management centre: FIBHULP

Mellado Peña MJ. Zikaction: Preparedness, research and action network on maternal-paediatric axis of zika infection in latin america and the caribbean (H2020-SCI-2016-RTDZika). UE. 2017-Ongoing.

Management centre: Fundación PENTA

Sainz Costa T. Utilidad de la ecografía torácica en la indicación de ventilación no invasiva en la bronquiolitis aguda del lactante hospitalizado. Estudio de cohorte. European Society of Pediatric Infectious Diseases (ESPID). 2017-Ongoing.

Management centre: FIBHULP

Clinical trials

Mellado Peña MJ. Estudio de fase 2B, multicéntrico, aleatorizado, doble ciego y controlado con placebo para evaluar la seguridad, la tolerabilidad, la eficacia y la inmunogenecidad de una pauta de 2 y 3 dosis de V160 (Vacuna Contra el Citomegalovirus (CMV) en mujeres sanas seronegativas de 16 a 35 años de edad. Type: Clinical Trial, phase II.

HULP code: 5093. Sponsored's protocol code: V160-002.

Sponsored by: Merck Sharp & Dhome Corp. Signed date: 28/05/2018

Mellado Peña MJ. Estrategia para el mantenimiento de la supresión del VIH en niños con Elvitegravir+ Darunavir/Ritonavir (PENTA 17). Type: Clinical Trial, phase II.

HULP code: Anexo-I 4492. Sponsored's protocol code: PENTA 17-SMILE.

Sponsored by: Fondazione Penta Onlus. Signed date: 18/01/2018

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018



3.3 Infectious Diseases and Immunity Area



Publications: 9

Impact Factor: 29.769

QI: 1

Antonio Pérez Martínez. Jefe de Servicio de Hematología y Oncología del Hospital Infantil. Hospital Universitario La Paz

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Sonsoles San Román Pacheco. Facultativo Especialista de Área en Pediatría, Oncología y Hematología. Hospital Universitario La Paz

Maria Vela Cuenca. Investigador Postdoctoral. Hospital Universitario La Paz

Translational Research in Pediatric Oncology, Hematopoietic Group

Strategic Objective

Our research program focuses on the molecular and immunological characterization of childhood cancer; the development of cell therapies, primarily through the susceptibility of tumor cells to Natural Killer cells; and the optimization of hematopoietic stem cells transplantation.

Research Lines

- Analysis of solid/hematological tumors samples to determine their susceptibility to cell therapy, at functional, protein expression and genetic level
- Cell therapy with activated NK cells in childhood cancer
- Hematopoietic progenitor transplantation as a platform for cell therapy
- Cell therapy with memory T lymphocytes as adoptive immunotherapy in transplantation of haematopoietic progenitors
- Optimization of cell therapy by the generation of an NKG2D antigenic chimeric receptor (NKG2DCAR). Evaluation of its specificity, persistence and activity (in



3.3 Infectious Diseases and Immunity Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

vitro and in vivo) for the treatment of childhood cancer

- Optimization of NK cell therapy using nanotechnology and antigenic chimeric receptors (CAR)
- Induction of immunological tolerance in solid organ transplantation through the induction of hematopoietic mixed chimerism by cell therapy
- Development of academic clinical trials and collaborations with the pharmaceutical industry as a strategy for the development of new therapies more effective and with fewer side effects in childhood cancer

Research Activity

Doctoral theses

Corral Sánchez D. Producción de células Natural Killer activadas con interleukina-15 para uso clínico en pacientes pediátricos con cáncer [dissertation]. Madrid: UAM; 2018(22/10/2018).

Director: Pérez Martínez A.

Publications

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- Fernández L, Leivas A, Valentín J, Escudero A, Corral D, de Paz R, Vela M, Bueno D, Rodríguez R, Torres JM, Díaz-Almirón M, López-Collazo E, Martínez-López J, Pérez-Martínez A. How do we manufacture clinical-grade interleukin-15-stimulated natural killer cell products for cancer treatment? *Transfusion.* 2018; 58(6): 1340-7. Article. IF: 3.111; Q2
- Perruccio K, Sisinni L, Pérez-Martínez A, Valentín J, Capolsini I, Massei MS, Caniglia M, Cesaro S. High incidence of early human herpesvirus-6 infection in children undergoing haploidentical manipulated stem cell transplantation for hematologic malignancies. *Biol Blood Marrow Tr.* 2018; 24(12): 2549-57. Article. IF: 3.599; Q2
- Ruiz-Pinto S, Pita G, Martín M, Alonso-Gordoa T, Barnes DR, Alonso MR, Herreiz B, García-Miguel P, Alonso J, Pérez-Martínez A, Carton AJ, Gutiérrez-Larraya F, García-Sáenz JA, Benítez J, Easton DF, Patino-García A, González-Neira A. Exome array analysis identifies ETFB as a novel

susceptibility gene for anthracycline-induced cardiotoxicity in cancer patients. *Breast Cancer Res Tr.* 2018; 167(1): 249-56. Article. IF: 3.471; Q2

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Public projects

Escudero López A. Identificación de biomarcadores genéticos que ayuden a predecir la evolución del trasplante de progenitores hematopoyéticos en edad pediátrica (PI17/01921). ISCIII. 2015-2020.

Management centre: FIBHULP

Pérez Martínez A. Técnico laboratorio (PEJ16/MED/TL-0713). CM. 2017-2019.

Management centre: FIBHULP

Pérez Martínez A. Diseño del receptor antigénico químérico Nkg2D (Car-Nkg2D) como terapia celular en los sarcomas infantiles (PI15/00973). ISCIII. 2015-2018.

Management centre: FIBHULP

Private projects

Pérez Martínez A. Ensayo clínica fase I/II, multicéntrico abierto, de infusión de células NK activadas para el tratamiento de niños, adolescentes y adultos jóvenes con sarcomas. Fundación La Sonrisa de Alex. 2017-Ongoing.

Management centre: FIBHULP

Pérez Martínez A. Estudio mediante tecnología de alto rendimiento de la predisposición hereditaria al cáncer infantil. Fundación Cris Contra el Cáncer. 2017-Ongoing.

Management centre: FIBHULP

Pérez Martínez A. Infusión de células natual killer como tratamiento de consolidacion en niños y adolescentes con leucemia mieloblastica aguda. Fundación Mutua Madrileña. 2015-Ongoing.

Management centre: FIBHULP



3.3 Infectious Diseases and Immunity Area



Pérez Martínez A. inmunoterapia con celulas natural killer en el cáncer infantil. Ayuntamiento de Pedroñeras. 2015-Ongoing.

Management centre: FIBHULP

Pérez Martínez A. Inmunoterapia en sarcomas: combinación del anticuerpo anti-cxcr4 y la terapia celular NK. Fundación La Sonrisa de Alex y María Paz Jiménez. 2016-Ongoing.

Management centre: FIBHULP

Pérez Martínez A. NK cell team-2: inmunoterapia con células natural killer en el niño. Fundación Cris Contra el Cancer. 2014-Ongoing.

Management centre: FIBHULP

Pérez Martínez A. Optimización de la terapia celular NK en sarcomas pediátricos mediante el uso nanopartículas multifuncionalizadas. Fundación Cris Contra el Cáncer. 2013-Ongoing.

Management centre: FIBHULP

Pérez Martínez A. Programa de educación médica en trasplante pediátrico. Gilead Sciences S.L. 2017-Ongoing.

Management centre: FIBHULP

Pérez Martínez A. Terapia celular basada en el receptor quimérico NKG2D (CAR-NKG2D) para la leucemia infantil. Fundación Uno Entre Cien Mil. 2015-Ongoing.

Management centre: FIBHULP

Pérez Martínez A. Terapia celular con el receptor antigénico químérico NKG2D(CAR-NKG2D) para los tumores sólidos infantiles. Fundación Asociación Española Contra el Cáncer. 2016-Ongoing.

Management centre: FIBHULP

Pérez Martínez A. Unidad de investigación y de terapias avanzadas en hematooncología infantil. Fundación Cris Contra el Cáncer. 2016-Ongoing.

Management centre: FIBHULP

Rubio Aparicio PM. Actualización y renovación de la actividad en el Servicio de Oncología Pediátrica del Hospital Universitario La Paz. Astellas Pharma S.A. 2012-Ongoing.

Management centre: FIBHULP

Clinical trials

Pérez Martínez A. Estudio multicéntrico de fase I/2, de aumento escalonado de la dosis, para evaluar la seguridad, la farmacocinética, la farmacodinámica y la eficacia de Quizartinib, en combinación con quimioterapia de reinducción y como tratamiento de mantenimiento con un solo agente. En pacientes pediátricos con MLA refractaria o en recaída de entre 1 mes y 18 años (y adultos jóvenes de hasta 21 años) con mutaciones de FLT3-ITD. Type: Clinical Trial, phase I.

HULP code: 5045. Sponsored's protocol code: AC220-A-U202.

Sponsored by: Daiichi Sankyo, Inc. Signed date: 05/09/2018

Pérez Martínez A. Estudio de fase 2B, abierto y de un solo grupo para evaluar la farmacocinética, la eficacia, la seguridad y la tolerabilidad de Letermovir en participantes pediátricos desde el nacimiento hasta menos de 18 años con riesgo de sufrir infección y/o enfermedad por CMV después de un trasplante alogénico de células madre hematopoyéticas (TCMH). Type: Clinical Trial, phase II.

HULP code: 5199. Sponsored's protocol code: MK-8228-030.

Sponsored by: Merck Sharp & Dhome Corp. Signed date: 11/12/2018

Pérez Martínez A. Ensayo en fase IB para evaluar Idelalisib en niños y adolescentes con linfoma difuso de células B grandes o linfoma mediastínico de células B recidivante o resistente en combinación con rice. Type: Clinical Trial, phase I.

HULP code: 4962. Sponsored's protocol code: GS-US-313-1090.

Sponsored by: Gilead Sciences Inc. Signed date: 12/07/2018

Pérez Martínez A. Estudio aleatorizado, abierto, de seguridad y eficacia de Ibrutinib en pacientes pediátricos y adultos jóvenes con linfoma no Hodgkin de células maduras B en recaída o refractario. Type: Clinical Trial, phase III.

HULP code: ANEXO-I 4644. Sponsored's protocol code: 54179060LYM3003.

Sponsored by: Janssen Cilag International Nv. Signed date: 30/11/2018

Patents and trademarks

Vela Cuenca M, González Navarro P, Valentín Quiroga J, Escudero López A, Pérez Martínez A, Fernández Casanova L, inventors; FIBHULP, CNIO, assignees. Anti-CX-CR4 antibody combined with activated and expanded natural killer cells for cancer immunotherapy. 62/642,313 US Provisional Application; 2018 March 13.

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**2017
2018

3.3 Infectious Diseases and Immunity Area

 Publications: **13** Impact Factor: **42.487** QI: **4**

Intestinal Diseases Research Group (HUF)

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Belén Hernández Muniesa. Farmacéutica. Hospital Universitario de Fuenlabrada

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Daniel Garza Jiménez. Enfermero del Servicio de Digestivo. Hospital Universitario de Fuenlabrada

Strategic Objective

The research group is formed by gastroenterologists, surgeons, radiologist, biologist, pharmacist and nurses, and its research area focuses on intestinal pathology, with special emphasis on chronic inflammatory bowel disease, which mainly includes two clinical entities, ulcerative colitis and Crohn's disease. Also our group has as areas of interest other entities or intestinal diseases such as colorectal cancer.

Research Lines

- The main lines of research include the participation and implementation of clinical and basic studies in ulcerative colitis and Crohn's disease, as well as epidemiological studies and clinical trials with new drugs and new therapies (such as stem cells) for the treatment of inflammatory bowel disease. Additionally, participation in basic and epidemiological studies in colorectal cancer



3.3 Infectious Diseases and Immunity Area



Research Activity

Books and book chapters

Hernández Muniesa B, Fernández Román AB, Piquerias Alcohol MB. Enfermedad aguda hepatocelular: hepatitis tóxica. In: Rodríguez Borja E. Patología hepatobilial y laboratorio clínico. Madrid: Asociación Española de Biopatología Médica - Medicina de Laboratorio, 2018. p.79-102

Publications

- del Moral AS, Viejo EP, Romero IM, Caravaca GR, Pérez FP. Systematic second-look surgery plus HIPEC in patients without evidence of recurrence, at high risk of carcinomatosis after colorectal cancer resection. *Cir Espan.* 2018; 96(2): 97-102. Article. IF: 0.835; Q4
- Vargas CRD, Algabe A, Guerra I, Serrano A, Pérez-Viejo E, Aullo C, Bermejo F. Resources used in the treatment of perianal Crohn's disease and the results in a real-life cohort. *Gastroent Hepat-Barc.* 2018; 41(6): 353-61. Article. IF: 1.126; Q4
- Guardiola-Arévalo A, Rodríguez RG, Gutiérrez MR, Moreno AZG, Vela AG, Simón RS, Hernando CG, Esteban EMA. Hepatitis B virus e antigen-negative chronic infection. Treatment based on glutamic pyruvic transaminase and hepatitis B virus deoxyribonucleic acid cut-off values. *Gastroent Hepat-Barc.* 2018; 41(3): 153-62. Article. IF: 1.126; Q4
- Berrnejo F, Aguas M, Chaparro M, Domenech E, Echarri A, García-Planella E, Guerra I, Gisbert JP, López-Sanromán A. Recommendations of the Spanish Working Group on Crohn's Disease and Ulcerative Colitis (GETECCU) on the use of tiopurines in inflammatory bowel disease. *Gastroent Hepat-Barc.* 2018; 41(3): 205-21. Review. IF: 1.126; Q4
- Arjona-Sánchez A, Barrios P, Boldo-Roda E, Camps B, Carrasco-Campos J, Martín VC, García-Fadrique A, Gutiérrez-Calvo A, Morales R, Ortega-Pérez G, Pérez-Viejo E, Prada-Villaverde A, Torres-Melero J, Vicente E, Villarejo-Campos P, Sánchez-Hidalgo JM, Casado-Adam A, García-Martín R, Medina M, Caro T, Villar C, Aranda E, Cano-Osuna MT, Diaz-López C, Torres-Tordera E, Briceno-Delgado FJ, Rufián-Peña S. HIPECT4: multicentre, randomized clinical trial to evaluate safety and efficacy of Hyperthermic intra-peritoneal chemotherapy (HIPEC) with Mitomycin C used during surgery for treatment of locally advanced colorectal carcinoma. *BMC Cancer.* 2018; 18: 183. Article. IF: 2.933; Q3
- Taxonera C, Ponferrada A, Riestra S, Bermejo F, Saro C, Martín-Arranz MD, Cabriada JL, Barreiro-de Acosta M, de Castro ML, López-Serrano P, Barrio J, Suárez C, Iglesias E, Argüelles-Arias F, Ferrer I, Marín-Jiménez I, Hernández-Camba A, Bastida G, Van Domselaar M, Martínez-Montiel P, Olivares D, Rivero M, Fernández-Salazar L, Nantes O, Merino O, Alba C, Gisbert JP, Martín-Rodríguez MD, Botella B, Carpio D, Ceballos D, Verdejo C, Morales I, Legido J, Penate M, Chaparro M, Algabe A, de Francisco R. Serial tuberculin skin tests improve the detection of latent tuberculosis infection in patients with inflammatory bowel disease. *J Crohns Colitis.* 2018; 12(11): 1270-9. Article. IF: 7.827; Q1
- Caro CR, Manzanedo I, Pereira F, Carrión-Álvarez L, Serrano A, Pérez-Viejo E. Cytoreductive surgery combined with hyperthermic intraperitoneal chemotherapy (HIPEC) in patients with gastric cancer and peritoneal carcinomatosis. *EJSO-Eur J Surg Onc.* 2018; 44(11): 1805-10. Article. Not Indexed
- Manzanedo I, Losada B, Martínez-Torres B, Pereira F, Serrano A, Juez I, Pérez-Viejo E, Gutiérrez D, Peiró V, Aullo C. Validation of diagnostic methods for peritoneal carcinomatosis secondary to ovarian cancer. CT-scan, PET-CT or laparoscopy, what is the best? *Minerva Ginecol.* 2018; 70(4): 488-90. Letter. Not Indexed
- Chaparro M, Garre A, Ricart E, Iborra M, Mesonero F, Vera I, Riestra S, García-Sánchez V, de Castro ML, Martín-Cardona A, Aldeguer X, Mínguez M, de-Acosta MB, Rivero M, Muñoz F, Andréu M, Bargallo A, González-Munoza C, Calle JLP, García-Sepulcre MF, Bermejo F, Huguet JM, Cabriada JL, Gutiérrez A, Manosa M, Villoria A, Carboj AY, Lorente R, García-López S, Piquerias M, Hinojosa E, Arajol C, Sicilia B, Conesa AM, Sainz E, Almela P, Llao J, Roncero O, Camo P, Taxonera C, Van Domselaar M, Pajares R, Legido J, Madrigal R, Lucendo AJ, Alcaín G, Domenech E, Gisbert JP. Short and long-term effectiveness and safety of vedolizumab in inflammatory bowel disease: results from the ENEIDA registry. *Aliment Pharm Ther.* 2018; 48(8): 839-51. Article. IF: 7.731; DI
- García-Alonso FJ, Santamaría IM, Arévalo AG, Becerra RP, Barros AL, Rivera ND, Casas GM, Terradillos SA, Riofrío AL, Peco CAE, Rodríguez EA, Bermejo F. Self-formation assessed by cumulative summation test does not reach recommended thresholds for optical diagnosis of colorectal polyps 7mm. *Digest Dis Sci.* 2018; 63(10): 2573-81. Article. IF: 2.397; Q3
- Chaparro M, Verreth A, Lobatón T, Gravito-Soares E, Julsgaard M, Savarino E, Magro F, Birón IA, López-Serrano P, Casanova MJ, Gompertz M, Vitor S, Arroyo M, Pugliese D, Zabana Y, Vicente R, Aguas M, Shitrit ABG, Gutiérrez A, Doherty GA, Fernández-Salazar L, Cadilla JM, Huguet JM, O'Toole A, Stasi E, Marcos NM, Villoria A, Karmiris K, Rahier JF, Rodríguez C, Palomares MDL, Fiorino G, Benítez JM, Principi M, Naftali T, Taxonera C, Mantzaris G, Sebkova L, Iade B, Lissner D, Bradley IF, Roman ALS, Marín-Jiménez I, Merino O, Sierra M, Van Domselaar M, Caprioli F, Guerra I, Peixe P, Piquerias M, Rodríguez-Lago I, Ber Y, van Hoeve K, Torres P, Gravito-Soares M, Rudbeck-Resdal D, Bartolo O, Peixoto A, Martín G, Armuzzi A, Garre A, Donday MG, de Carpi FJM, Gisbert JP. Long-term safety of in utero exposure to anti-TNF alpha drugs for the treatment of inflammatory bowel disease: Results from the multicenter European TEDDY Study. *Am J Gastroenterol.* 2018; 113(3): 396-403. Article. IF: 10.241; DI
- Bermejo F, Guerra I, Algabe A, López-Sanromán A. Pharmacological approach to the management of Crohn's disease patients with perianal disease. *Drugs.* 2018; 78(1): 1-18. Review. IF: 4.993; DI
- García-Planella E, Manosa M, Chaparro M, Beltrán B, Barreiro-de-Acosta M, Gordillo J, Ricart E, Bermejo F, García-Sánchez V, Piquerias M, Llao J, Gisbert JP, Cabre E, Domenech E. Serial semi-quantitative measurement of fecal calprotectin in patients with ulcerative colitis in remission. *Scand J Gastroenterol.* 2018; 53(2): 152-7. Article. IF: 2.152; Q4

Public projects

Guerra Marina I. Suspensión del tratamiento anti-TNF en pacientes con enfermedad inflamatoria intestinal: ensayo clínico multicéntrico, prospectivo y aleatorizado (GIS-SUSANTI-TNF-2015). ISCIII. 2017-Ongoing.

Management centre: Hospital Universitario La Princesa



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

3.3 Infectious Diseases and Immunity Area

Bermejo San José F. Estudio prospectivo y multicéntrico sobre la epidemiología y características ómicas de la enfermedad inflamatoria intestinal de reciente diagnóstico en España. Estudio IBDomics (GIS-2016-IBDomics). ISCIII. 2017-Ongoing.

Management centre: Hospital Universitario La Princesa

Private projects

Bermejo San José F. Colorectal cancer omics collection. Universal Diagnosis S.L (UDX). 2018-Ongoing.

Management centre: HUF

International projects

Bermejo San José F. Registro de exposición a largo plazo prospectivo y observacional de pacientes adultos con colitis ulcerosa moderada a grave (CINTO148U-CO4001). Janssen Biotech. 2018-Ongoing.

Management centre: HUF

Bermejo San José F. Estudio de seguridad a largo plazo de Entyvio (vedolizumab): un estudio de cohortes internacional, observacional y prospectivo de comparación de vedolizumab con otros agentes biológicos en pacientes con colitis ulcerosa o enfermedad de Crohn (MLN-0002_401). Takeda Development Centre Europe. 2018-Ongoing.

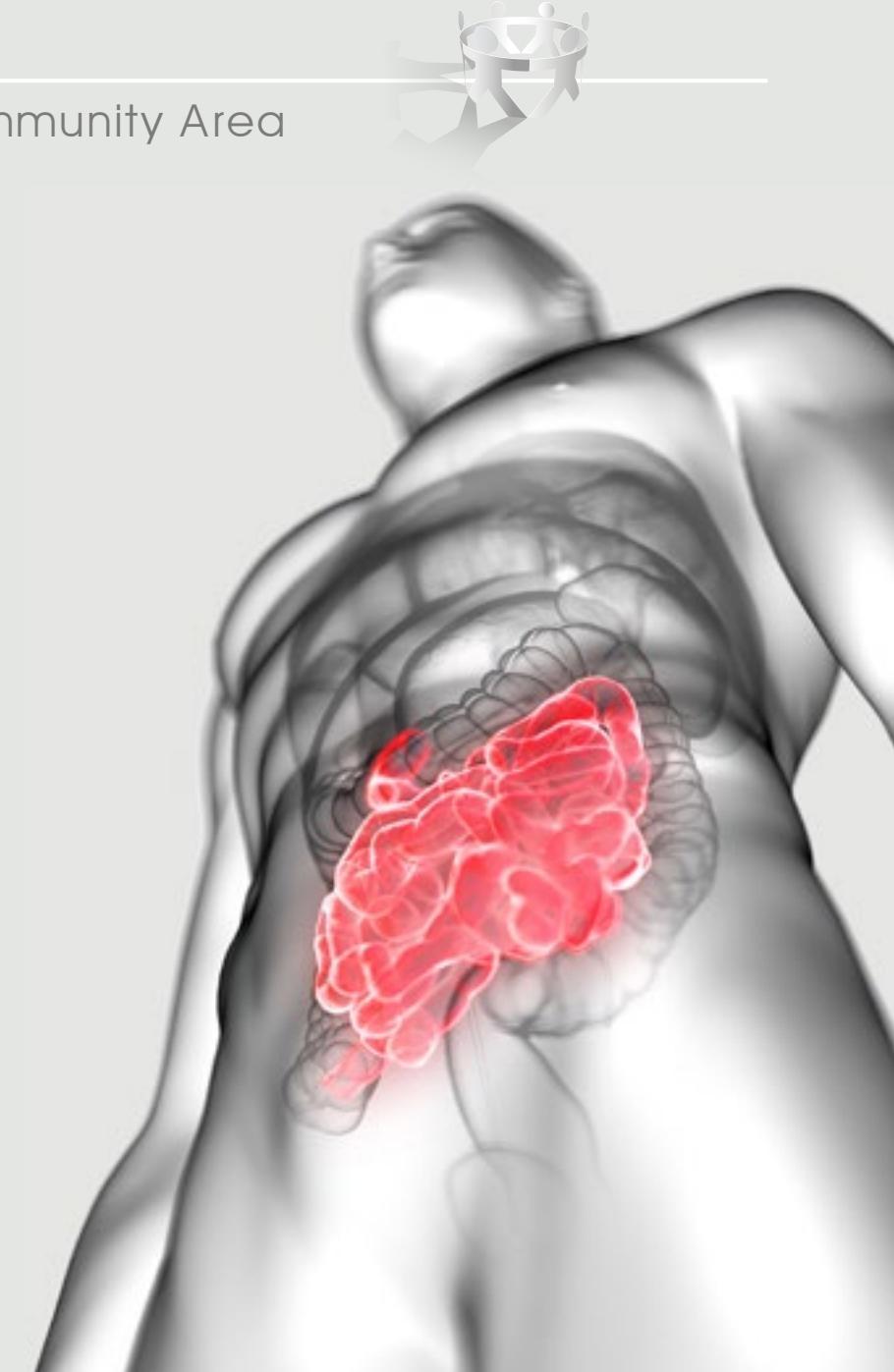
Management centre: HUF

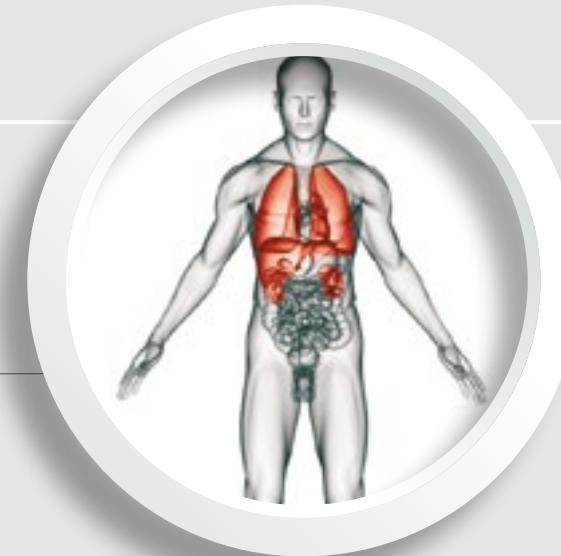
Bermejo San José F. Estudio observacional posterior a la comercialización de cohortes de pacientes con EII tratados con CT-P13 en la práctica clínica habitual (CONNECT) (HOS-INF-2015-01). Hospira, UK Ltd-Pfizer. 2017-2019.

Management centre: HUF

Bermejo San José F. Registro no-intervencionista a largo plazo para evaluar la seguridad y efectividad de HUMIRA (Adalimumab) en pacientes con colitis ulcerosa activa moderada-grave (P11-282). AbbVie. 2014-Ongoing.

Management centre: HUF





Documents: 402 IF: 1781.048

Originals: 295 IF: 1448.344

DI: 63 QI: 155

- Internal Medicine and Systemic Diseases Group
- Organic Dysfunction and Failure in the Aggression Group
- Respiratory Diseases Group
- Regulation of Gene Expression and by Hypoxia Group
- Nephrology Group
- Neonatology Group
- Aging and Fragility in the Elderly Group
- Molecular Hepatology Group

3.4 Large System Pathologies Area

Francisco García Río

- Diagnosis and Treatment of Allergic Diseases Group
- Gynecologic Oncology Group
- Patient Blood Management Group
- Endocrine Diseases Group
- Urology Group
- Health Care Nurses Research Group
- Maternal and Fetal Medicine Group
- Emergency and Critical Pathology Group



3.4 Large System Pathologies Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

Strategic Objectives	Development forecast for the coming years	Actions
<p>Area includes 16 research groups that focus their interest on the study of pathogenic mechanisms and therapeutic options in some of the most prevalent diseases in our environment: respiratory, allergological, renal, digestive, gynaecological, ophthalmological and paediatric, both in stable phase and at different levels of severity. In addition, we maintain interest in their involvement in the different phases of development, analyzing both the neonatal phase and old age.</p>	<p>Redefinition of the area with a more transversal character. Although this proposal requires a greater elaboration and consensus of all the groups in the area, the reformulation of the area is proposed as a new one focused, for example, on inflammation and hypoxia.</p> <p>Incorporation of related groups from other areas (immunorheumatology, hepatology, among others) and consolidation of some emerging groups.</p> <p>To ensure that 50% of the publications are in the first quartile of each thematic area.</p> <p>To promote intramural collaborations between groups.</p>	<ul style="list-style-type: none"> • Conduct seminars and coordination meetings among groups of different areas <ul style="list-style-type: none"> • Promote work and synergies with other research groups of the institute with a deeper trajectory. <ul style="list-style-type: none"> • Improve the annual number of publications in the first quartile <ul style="list-style-type: none"> • Promote work and synergies with other research groups of the institute with a deeper trajectory.

IdiPAZ



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4



3.4 Large System Pathologies Area



Publications: 12



Impact Factor: 40.⁴⁸⁵



QI: 6

Internal Medicine and Systemic Diseases Group

Francisco Arnalich Fernández. Jefe Servicio de Medicina Interna. Hospital Universitario La Paz. Catedrático. Facultad de Medicina. Universidad Autónoma de Madrid

Gema Atienza Toledo. Técnico de Laboratorio. Universidad Autónoma de Madrid

Anna Bordas Sánchez. Investigadora Predocoral. Universidad Autónoma de Madrid

José Luis Cedillo Mireles. Investigador Predocoral (contrato FPU). Universidad Autónoma de Madrid

María del Carmen Fernández Capitán. Jefa de Sección de Medicina Interna. Hospital Universitario La Paz

Carolina Martín Sánchez. Investigadora Predocoral (Contrato FPI). Universidad Autónoma de Madrid

Carmen Montiel López. Catedrática. Facultad de Medicina. Universidad Autónoma de Madrid

María Angustias Quesada Simón. Facultativo Especialista de Área en Medicina Interna. Hospital Universitario La Paz. Profesora Honoraria. Universidad Autónoma de Madrid

Jaime Renart Pita. Investigador Científico. IIB "Alberto Sols"

Juan José Ríos Blanco. Subdirector Médico. Hospital Universitario La Paz

Strategic Objective

In the setting of the systemic response frequently found in patients attended in Internal Medicine wards, our group has studied some regulatory mechanisms of the innate immune response in patients with sepsis and other inflammatory states such as acute coronary syndromes (ACS), cystic fibrosis and cancer.

The first line of our research is the link between the parasympathetic and innate immune systems, that is the molecular mechanisms by which acetylcholine can influence the immune system via the "cholinergic anti-inflammatory pathway".

This pathway is mediated by the vagus nerve which releases acetylcholine to interact with the $\alpha 7$ subunit of the nicotinic acetylcholine receptor ($\alpha 7\text{nAChR}$).

We firstly reported that the neuronal $\alpha 7$ nicotinic receptor subunit gene (CHR-NAT7) is partially duplicated in the human genome forming a hybrid gene (CHRFA-M7A) with the novel FAM7A gene, and provided experimental data showing that dup $\alpha 7$ could modulate $\alpha 7$ receptor-mediated synaptic transmission and cholinergic anti-inflammatory response (J Biol Chem 2011). The Toll-like receptor (TLR) plays an important role in the induction of the hyperinflammatory response and tissue injury in sepsis. We found that the $\alpha 7$ gene expression level in septic patients' peripheral blood mononuclear cells (PBMC) is a clinically relevant marker to assess the magnitude of the patient's inflammatory state, disease severity, and clinical outcome (J Infect Dis 2015).

Another exciting line of our research is the involvement of the $\alpha 7$ -nicotinic receptor and its endogenous modulator dup $\alpha 7$ in human smoking-related tumors, and particularly their involvement in tobacco carcinogen-induced tumor development and chemotherapy resistance. This topic has attracted a grant from the Ministerio de Economía y Competitividad from 2014-2017. Besides, professor Jaime Renart who works in our team group, is doing new research on the molecular mecha-



3.4 Large System Pathologies Area

nisms of podoplanin, a type I transmembrane mucin widely known as a marker for lymphatic endothelial cells that has a critical role during development of the heart, lungs and lymphatic endothelial system. The expression of podoplanin is significantly enhanced during tissue remodelling processes and in several types of human cancer, including squamous cell carcinomas.

Research Lines

Applied research lines:

- Molecular mechanisms involved in the innate immune response
- Link between the parasympathetic and innate immune systems

Collaborative research line:

- Adaptive immune response in human immunodeficiency virus (HIV) infection
- Multicentric group: RIETE group (Registro Español de Enfermedad Trombo-Embólica)
- Molecular mechanisms of podoplanin during tissue remodelling processes and in several types of human cancer
- Mechanisms and clinical features of systemic autoimmune diseases

Lines of study framed in basic research projects:

- Study of the pathophysiological role of nicotinic $\alpha 7$ and $\delta\mu\alpha 7$ receptors expressed in human macrophages, neurons and lung carcinoma cells
- Identification of signalling pathways connecting nicotinic $\alpha 7$ receptors and negative regulators of TLR-mediated inflammation in human macrophages

Research Activity

Publications

- Bikdei B, Lobo JL, Jiménez D, Green P, Fernández-Capitán C, Bura-Riviere A, Otero R, DiTullio MR, Galindo S, Ellis M, Parikh SA, Monreal M. Early use of echocardiography in patients with acute pulmonary embolism: Findings from the RIETE Registry. *J Am Heart Assoc.* 2018; 7(17): e009042. Article. IF: 4.66; Q1
- Chai-Adisaksophia C, Iorio A, Crowther MA, de Miguel J, Salgado E, Zdravkova M, Fernández-Capitán C, Nieto JA, Barillari G, Bertoletti L, Monreal M. Vitamin K antagonists after 6 months of low-molecular-weight heparin in cancer patients with venous thromboembolism. *Am J Med.* 2018; 131(4): 430-7. Article. IF: 4.76; Q1
- Galanaud JP, Bertoletti L, Amitrano M, Fernández-Capitán C, Pedrajas JM, Rosa V, Barrón M, Lorenzo A, Madridano O, Quere I, Kahn SR, Prandoni P, Monreal M. Predictors of post-thrombotic ulcer after acute DVT: The RIETE Registry. *Thromb Haemostasis.* 2018; 118(2): 320-8. Article. IF: 4.733; Q1

- Grandone E, Di Micco PP, Villani M, Colaizzo D, Fernández-Capitán C, del Toro J, Rosa V, Bura-Riviere A, Quere I, Blanco-Molina A, Margaglione M, Monreal M. Venous thromboembolism in women undergoing assisted reproductive technologies: Data from the RIETE Registry. *Thromb Haemostasis.* 2018; 118(11): 1962-8. Article. IF: 4.733; Q1
- Guisado JG, Trujillo-Santos J, Arcelus JL, Bertoletti L, Fernández-Capitán C, Valle R, Hernández-Hermoso JA, Calvo-Sotelo AE, Nieto JA, Monreal M. Prognosis of venous thromboembolism in orthopaedic surgery or trauma patients and use of thromboprophylaxis. *Rev Clin Esp.* 2018; 218(8): 399-407. Article. IF: 1.043; Q3
- Maldifassi MC, Martín-Sánchez C, Atienza G, Cedillo JL, Arnalich F, Bordas A, Zafra F, Giménez C, Extremera M, Renart J, Montiel C. Interaction of the 7-nicotinic subunit with its human-specific duplicated $\delta\mu$ isoform in mammalian cells: Relevance in human inflammatory responses. *J Biol Chem.* 2018; 293(36): 13874-88. Article. IF: 4.106; Q2
- Montejo R, Stella-Ascariz N, Monge S, Bernardino JL, Pérez-Valero I, Montes ML, Valencia E, Martín-Carbonero L, Moreno V, González-García J, Rodríguez-Centeno J, Rodés B, Cantos AE, Alejos B, de Miguel R, Arnalich F, Perona R, Arribas JR. Impact of nucleos(t)ide reverse transcriptase inhibitors on blood telomere length changes in a prospective cohort of aviremic HIV-infected adults. *J Infect Dis.* 2018; 218(10): 1531-40. Article. IF: 5.045; Q1
- Rabadán IR, Esteve-Pastor MA, Anguita-Sánchez M, Muniz J, Siles JC, Quesada MA, Ortiz MR, Martín F, Selles MM, Bertomeu V, Lip GYH, Fillat AC, Badimon L. Relation of quality of anticoagulation control with different management systems among patients with atrial fibrillation: Data from FANTASIIA Registry. *Eur J Clin Invest.* 2018; 48(5): e12910. Article. IF: 2.784; Q1
- Renart J, Mauro DS, Agorreta A, Rutherford K, Gemmell NJ, Quintanilla M. Evolutionary history of the podoplanin gene. *Gene Rep.* 2018; 13: 28-37. Article. Not Indexed
- Robles-Marhuenda A, Vaca M, Romero P, Ferreira A, López-Granados E, Arnalich F. Francisella philomiragia: Think of chronic granulomatous disease. *J Clin Immunol.* 2018; 38(3): 257-9. Letter. IF: 4.128; Q2
- Rubio-Rivas M, Corbella X, Pestana-Fernández M, Tolosa-Vilella C, Guillén-del Castillo A, Colunga-Argüelles D, Trapiella-Martínez L, Iniesta-Arandia N, Castillo-Palma MJ, Saez-Comet L, Egurbide-Arberas MV, Ortego-Centeno N, Freire M, Vargas-Hitos JA, Ríos-Blanco JJ, Todoli-Parra JA, Rodríguez-Carballeira M, Marín-Ballve A, Segovia-Alonso P, Pla-Salas X, Madronero-Vuelta AB, Ruiz-Muñoz M, Fonollosa-Pla V, Simeón-Aznar CP, Moraga EC, Calvo E, Carbonell C, Castillo MJ, Chamorro AJ, Colunga D, Corbella X, Egurbide MV, Espinosa G, Fonollosa V, Freire M, Hernández FJG, León RG, del Castillo AG, Iniesta N, Lorenzo R, Madronero AB, Mari B, Martín A, Ortego-Centeno N, Conesa MP, Pestana M, Pla X, Blanco JJJ, Carballeira MR, Rivas MR, Muñoz MR, Comet LS, Segovia P, Simeón CP, Soto A, Tari E, Todoli JA, Tolosa C, Trapiella L, Hitos JAV, Verdejo G. First clinical symptom as a prognostic factor in systemic sclerosis: results of a retrospective nationwide cohort study. *Clin Rheumatol.* 2018; 37(4): 999-1009. Article. IF: 2.293; Q3
- Sánchez-Cano D, Ortego-Centeno N, Callejas JL, Pla VF, Ríos-Fernández R, Tolosa-Vilella C, Espinosa-Garriga G, Colunga-Argüelles D, Egurbide-Arberas MV, Rubio-Rivas M, Freire M, Ríos-Blanco JJ, Trapiella-Martínez L, Rodríguez-Carballeira M, Marín-Ballve A, Pla-Salas X, Simeón-Aznar CP. Interstitial lung disease in systemic sclerosis: data from the Spanish scleroderma study group. *Rheumatol Int.* 2018; 38(3): 363-74. Article. IF: 2.2; Q3



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

3.4 Large System Pathologies Area

Public projects

Montiel López C. Arnalich Fernández F. Resistance to chemotherapy and EGFR-targeted therapy induced by tobacco use through nicotinic receptors in non-small cell lung cancer: in vitro, in vivo and patient studies (SAF2017-82689-R). Ministerio de Economía, Industria y Competitividad. 2018-2020.

Management centre: UAM

Private projects

Arnalich Fernández F. Estudio de disfunción ventricular precoz en pacientes con esclerodermia. Glaxosmithkline S.A. 2011-Ongoing.

Management centre: FIBHULP

Arnalich Fernández F. Gestión multidisciplinar de la asistencia al paciente con insuficiencia cardíaca. Academia de Estudios MIR S.L. 2008-Ongoing.

Management centre: FIBHULP

Arnalich Fernández F. Plan de difusión de la enfermedad de Fabry. Almirall S.A. 2015-Ongoing.

Management centre: FIBHULP

Fernández Capitán MC. Estudio longitudinal predictivo de hipertensión pulmonar postrombótica basado en la creación de una red de biobancos vinculados a datos clínicos de embolismo pulmonar (Estudio Osiris). Laboratorios Farmacéuticos Rovi S.A. 2015-Ongoing.

Management centre: FIBHULP

Ríos Blanco JJ. Estudio de hipertensión pulmonar en la cohorte de pacientes con infección VIH del Hospital La Paz. Actelion Pharmaceuticals España. 2010-Ongoing.

Management centre: FIBHULP

Ríos Blanco JJ. Estudio de la relación entre la rigidez arterial y la función endotelial en pacientes con hipertensión de bata blanca. Menarini Diagnósticos S.A. 2009-On-going.

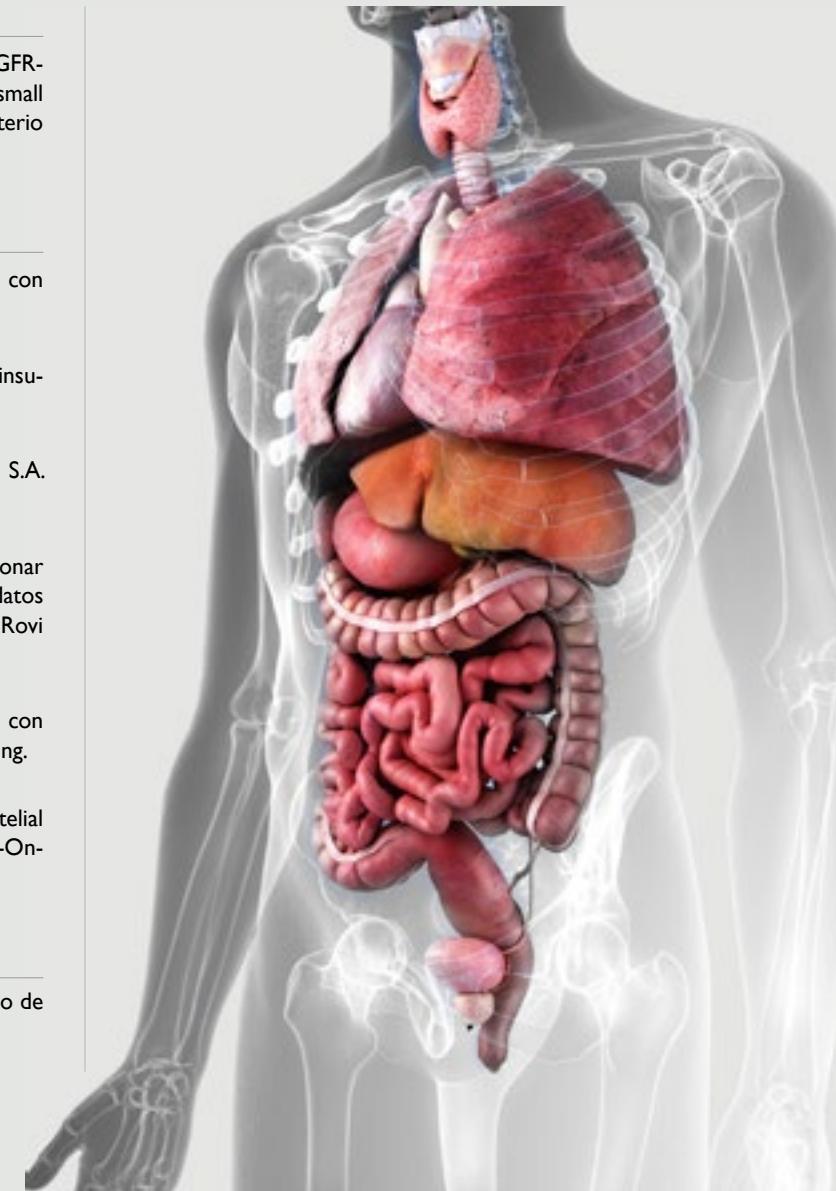
Management centre: FIBHULP

Clinical trials

Quesadas Simón A. Revisión observacional en serie de historias clínicas del uso de Repatha® en sujetos europeos con hiperlipidemia. Type: EPA-SP.

HULP code: Anexo-I PI-2828. Sponsored's protocol code: AMG-EVO-2016-01.

Sponsored by: Amgen S.A. Signed date: 29/05/2018



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4



3.4 Large System Pathologies Area



Publications: 15

Impact Factor: 74.455

QI: 6

Organic Dysfunction and Failure in the Aggression Group

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3.4 Large System Pathologies Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

Strategic Objective

The global objective of the investigation team on Dysfunction and Organ Failure in Aggression is the optimization of the patient management in the really critical ill patients who can develop organ dysfunction or organ failure. Multiorgan Dysfunction & Multiorgan Failure Syndrome (MOF-MOD Syndrome) are correlated with bad prognostic and high mortality rates.

D-FMO Syndrome is correlated both with the disease severity and the therapeutic efforts. The therapeutic management of the patient must be early and directed to specific objectives.

Otherwise, the support measures must be directed to the specific situations (like sepsis, trauma...) and to the Organs or Systems in Dysfunction or Failure (coagulation, haemodynamic, respiratory or renal...)

Finally, the detection or D-FMO Syndrome employing not only single markers (clinic) but early and organ specific biomarkers (basic or advanced biochemical markers, molecular markers...) can bring a higher efficacy and better results.

Research Lines

- Biomarkers
- Resuscitation income
- Therapeutic support

Research Activity

Doctoral theses

Agrifoglio Rotaeche A. Farmacocinética de micafungina en una población de pacientes quemados críticos [dissertation]. Madrid: Universidad Autónoma de Madrid; 2018(21/06/2018).

Directors: Cachafeiro Fuciños L, Sánchez Sánchez SM.

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Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report****2018**

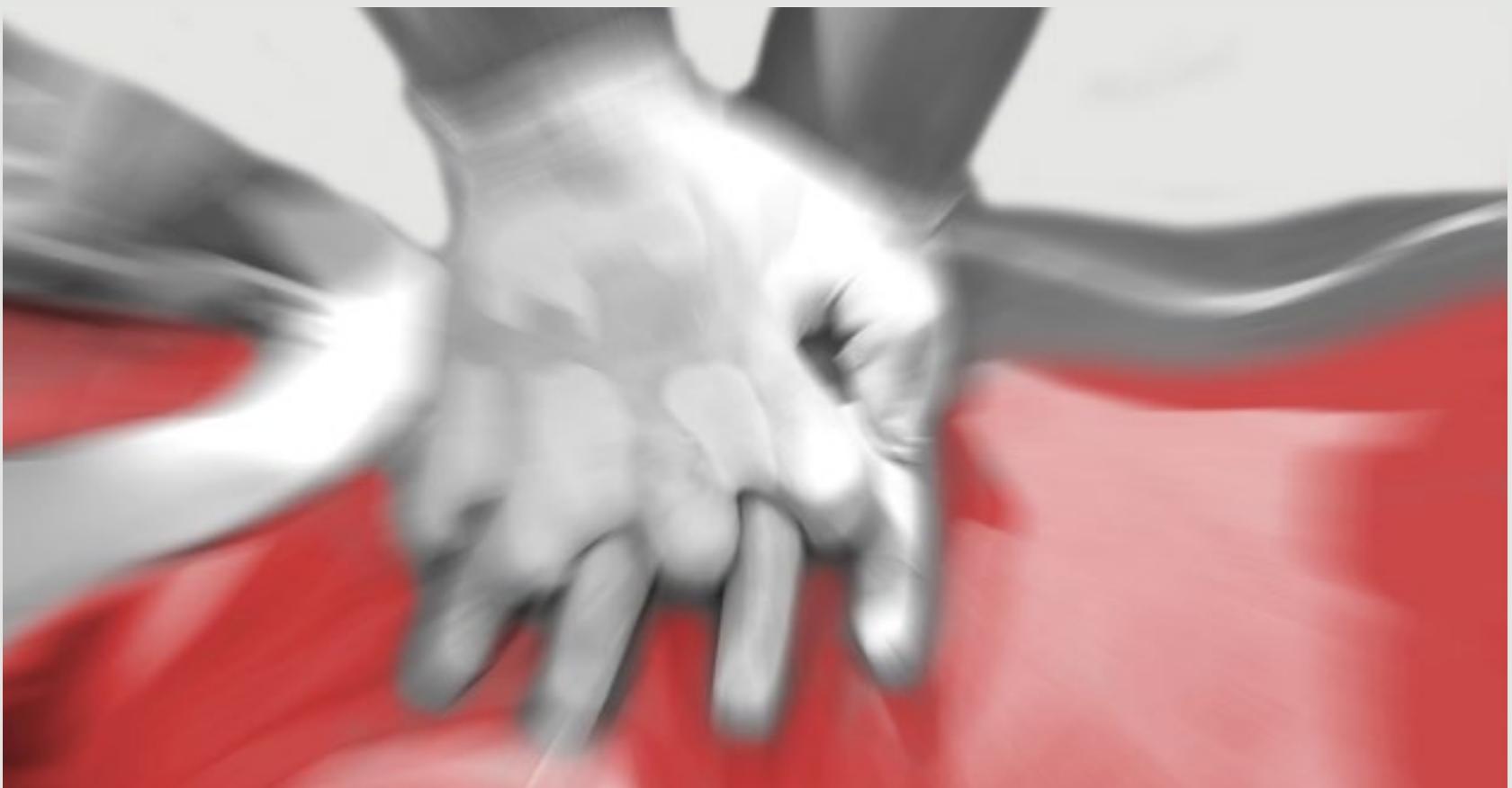
3.4 Large System Pathologies Area

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Patents and trademarks

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3.4 Large System Pathologies Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report****2018** Publications: **25** Impact Factor: **135.075** QI: **17**

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Strategic Objective

Our group studies the molecular mechanisms of cardiovascular morbidity associated with sleep breathing disorders, in particular, the sleep apnoeahypopnoea syndrome(SAHS).

We also provide evidence for making clinical decisions on patients with these disorders. We conduct studies to evaluate the mechanisms involved in the development of arterial hypertension, arrhythmias, heart failure, ischaemic heart disease, pulmonary hypertension, pulmonary embolism, and carbohydrate metabolism disorders.



3.4 Large System Pathologies Area



In terms of the pathogenesis of airflow limitations, several of our projects have focused on small airway function, bronchial hyperresponsiveness and exercise adaptation in a number of obstructive diseases, particularly COPD, asthma and cystic fibrosis. We also evaluate the objective measurement of daily physical activity in these patients and contribute to the best definition of its determinants and its clinical and prognostic usefulness. We collaborate with other research groups to study the contribution of the innate immune system to the evolution of these diseases and the relationship between the response to hypoxia and the clinical expression of COPD and SAHS.

Finally, in the field of the systematisation of lung function testing, we create reference values for various population groups and define the methodological aspects of the measurement of exhaled breath condensate and nitric oxide.

Research Lines

- Morbidity of sleep-disordered breathing
- Pathogenesis of airflow limitation
- Systematization of lung function testing

Research Activity

Doctoral theses

Pardo Rovira P. Valor pronóstico de la reversibilidad bronquial en pacientes con enfermedad pulmonar obstructiva crónica [dissertation]. Madrid: UAM; 2018(19/06/2018).

Director: García Río F

Ponce Dorrego MD. Tratamiento endovascular de los shunts portosistémicos congénitos [dissertation]. Madrid: UAM; 2018(16/10/2018).

Directors: Álvarez-Sala Walther R, Garzón Moll G.

Ruiz Pérez D. Atenuación del rechazo inmunitario con células madre mesenquimales derivadas de tejido adiposo en un modelo experimental murino de trasplante de pulmón [dissertation]. Madrid: UCM; 2018(10/12/2018).

Directors: García Río F, Largo Aramburu C, Álvarez Gómez de Segura I

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Peiró Vallejo C, García Río F. Másteres universitarios y programas de doctorado. In: Cuervas-Mons Martínez V, García García A, García Puig J, Pajares García JM, Pastor y Aldeguer V, Rodríguez Montes JA, Usandizaga Beguiristáin JA, Vargas Núñez JA, eds. Cincuenta años de la Facultad de Medicina de la UAM. Madrid: UAM; 2018. p.253-68

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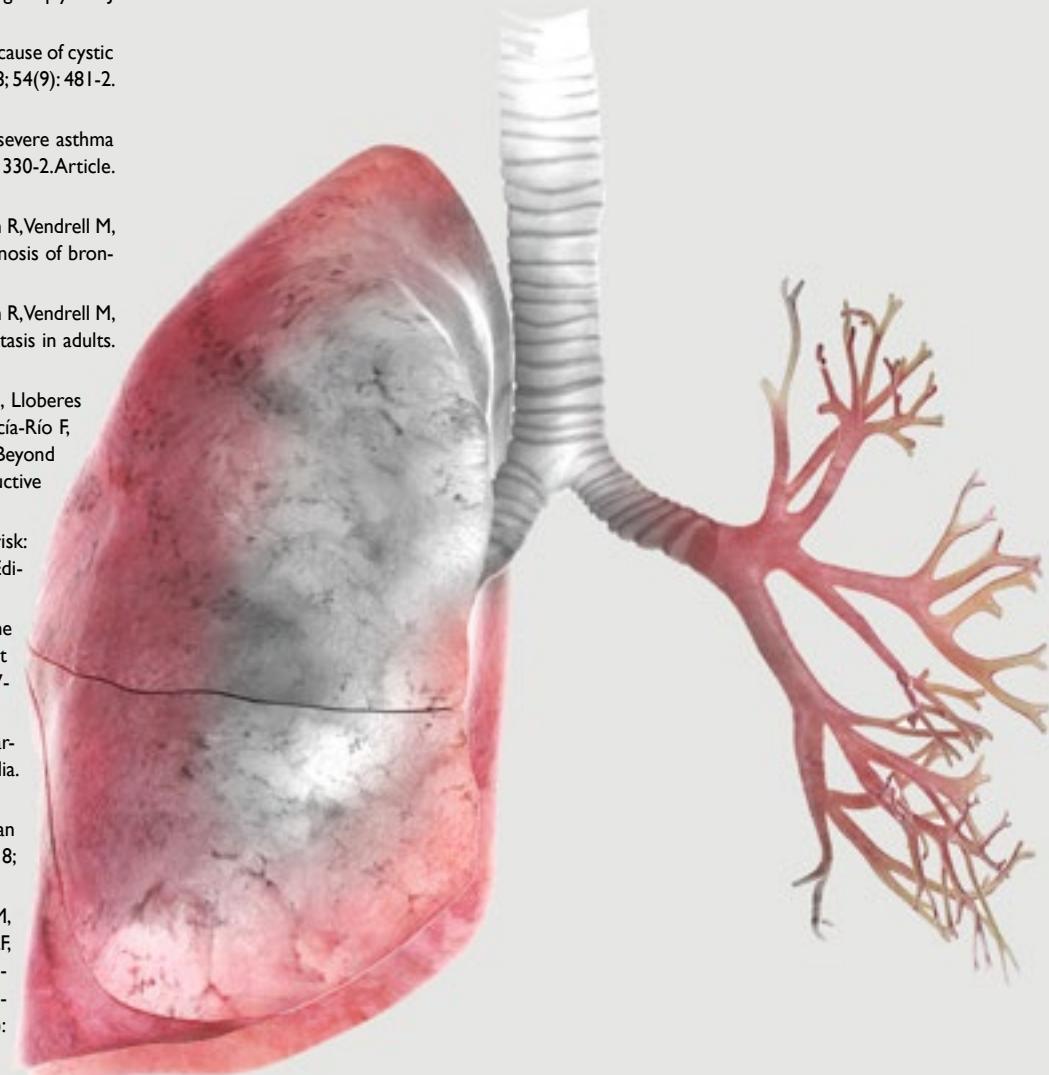
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3.4 Large System Pathologies Area



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3.4 Large System Pathologies Area



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Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: Fundación RESPIRA

Galera Martínez R. Relación entre la actividad física cotidiana de pacientes con EPOC y la actividad de su sistema inmune innato y adaptativo. *SEPAR.* 2018-2020.

Management centre: Fundación RESPIRA

García Río FJ. Análisis de la actividad del sistema inmune innato en pacientes con síndrome de apneas-hipopneas del sueño. *ROCHE Pharma.* 2016-2018.

Management centre: FIBHULP

García Río FJ. Análisis de la actividad del sistema inmune innato en pacientes con síndrome de apneas-hipopneas del sueño grave. *Roche Farma S.A.* 2014-Ongoing.

Management centre: FIBHULP

García Río FJ. Contribución de las alteraciones de la percepción de la disnea al diagnóstico de asma ficticio en obesos. *Astrazeneca Farmaceutica Spain S.A.* 2009-On-going.

Management centre: FIBHULP

García Río FJ. Relación entre la actividad física cotidiana de pacientes con EPOC y la actividad de su sistema inmune innato y adaptativo. *MENARINI.* 2018-2020.

Management centre: Fundación NEUMOMADRID

García Río FJ. Programa de educación sanitaria de actividad física cotidiana en pacientes con enfermedad pulmonar obstructiva crónica moderada-muy grave. *Boehringer Ingelheim.* 2017-2019.

Management centre: Fundación NEUMOMADRID

García Río FJ. Morbilidad cardiovascular en la enfermedad pulmonar obstructiva crónica. Análisis de factores determinantes (HD-EPOC). *Glaxosmithkline.* 2018-2019.

Management centre: Fundación NEUMOMADRID

García Río FJ. Caracterización clínica de distintos fenotipos de exacerbación de EPOC. Evaluación de sus factores de riesgo, pronóstico y persistencia a medio plazo. *NEUMOMADRID.* 2016-2018.

Management centre: Fundación NEUMOMADRID

García Río FJ. Efecto de la CPAP nasal sobre la progresión de la enfermedad vascular retiniana en pacientes con apnea obstructiva del sueño y retinopatía diabética no proliferativa (Estudio RetinAS). *SEPAR.* 2017-2019.

Management centre: Fundación RESPIRA

García Río FJ. The impact of a Sleep and Circadian Intervention Program (SCIP) in chronic musculoskeletal pain (CMP) rehabilitation: a feasibility PILOT study. *CIBERES.* 2018-2020.

Management centre: CIBERES

Gómez Carreras L. Auditoría clínica sobre manejo de fibrosis pulmonar idiopática (FPI) en el área sanitaria del Hospital La Paz. *Boehringer Ingelheim España S.A.* 2016-Ongoing.

Management centre: FIBHULP

Santiago Recuerda A. Efecto del tratamiento con ventilación mecánica no invasora y humidificación en las complicaciones infecciosas respiratorias. *Menarini Diagnósticos S.A.* 2014-Ongoing.

Management centre: FIBHULP

Villasante Fernández-Montes C. Programa docente en clínica e investigación. *Astrazeneca Farmaceutica Spain S.A.* 2017-Ongoing.

Management centre: FIBHULP



3.4 Large System Pathologies Area



Clinical trials

Alcolea Batres S. Estudio observacional retrospectivo para determinar el estado de riesgo de pacientes con hipertensión arterial pulmonar en España. Type: EPA-OD.

HULP code: PI-3044. Sponsored's protocol code: ACT-HAP-01-2017.

Sponsored by: Actelion Pharmaceuticals España. Signed date: 23/01/2018

Álvarez-Sala Walther R. Estudio de fase 3, multicéntrico, aleatorizado, doble ciego y controlado con comparador para evaluar la seguridad y la eficacia de Delafloxacino intravenoso con cambio a vía oral en sujetos adultos con neumonía bacteriana adquirida en la comunidad. Type: Clinical Trial, phase IIIa.

HULP code: Anexo-I 4545. Sponsored's protocol code: ML-3341-306.

Sponsored by: Melinta Therapeutics Inc. Signed date: 04/01/2018

Álvarez-Sala Walther R. Estudio fase IIB, aleatorizado (estratificado), doble ciego (abierto para promotor), de grupos paralelos, controlado con placebo, de búsqueda de dosis de Nemiralisib (GSK2269557) añadido al estándar de tratamiento frente solo al estándar de tratamiento. Type: Clinical Trial, phase II.

HULP code: 4905. Sponsored's protocol code: 200879.

Sponsored by: Glaxosmithkline S.A. Signed date: 22/01/2018

Álvarez-Sala Walther R. Estudio observacional transversal para caracterizar la EPOC grave en España. Type: EPA-OD.

HULP code: PI-2984. Sponsored's protocol code: CGI-COR-2017-01.

Sponsored by: Chiesi Farmaceutici S.P.A. Signed date: 05/02/2018

García Río FJ. Caracterización de la variable “minutos diarios de marcha” como una medida útil de actividad física en pacientes con EPOC. Type: NO-EPA.

HULP code: PI-3342. Sponsored's protocol code: FUC-EPO-2018-01.

Sponsored by: Coordinadora Catalana de Fundaciones. Signed date: 25/09/2018

García Río FJ. Estudio observacional para la validación de un cuestionario para la actividad física de pacientes con EPOC en la práctica clínica: cuestionario SAQ-COPD (Spanish activity questionnaire in COPD). Type: NO-EPA.

HULP code: PI-3011. Sponsored's protocol code: AST-SAQ-2017-01.

Sponsored by: Astrazeneca Farmacéutica Spain S.A. Signed date: 28/03/2018

García Río FJ. Importancia de la evaluación de la respuesta y la estandarización con proteómica en la obstrucción buscando desenlaces novedosos y significativos. Type: EPA-SP.

HULP code: PI-3340. Sponsored's protocol code: SEP-ICS-2017-01.

Sponsored by: Fundación Española del Pulmón. SEPAR. Signed date: 02/08/2018

Gracia Río FJ. Caracterización de la variable minutos diarios de marcha como una medida útil de actividad física en pacientes con EPOC. Type: NO-EPA.

HULP code: Anexo-I PI-3342. Sponsored's protocol code: FUC-EPO-2018-01.

Sponsored by: Coordinadora Catalana de Fundaciones. Signed date: 26/11/2018

Prados Sánchez C. Estudio abierto en fase III para evaluar la seguridad a largo plazo y la eficacia de la Politerapia con VX-659 en pacientes con fibrosis quística, homocigotos o heterocigotos para la mutación F508DEL. Type: Clinical Trial, phase III.

HULP code: 5047. Sponsored's protocol code: VX17-569-105.

Sponsored by: Vertex Pharmaceuticals Incorporated. Signed date: 18/07/2018

Prados Sánchez C. Estudio en fase III, aleatorizado, doble ciego y controlado para evaluar la eficacia y la seguridad de la politerapia con VX-659 en pacientes con fibrosis quística, heterocigotos para la mutación F508DEL y una mutación de la función mínima (F/MF). Type: Clinical Trial, phase III.

HULP code: 5036. Sponsored's protocol code: VX17-569-102.

Sponsored by: Vertex Pharmaceuticals Incorporated. Signed date: 14/06/2018

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**2017
2018

3.4 Large System Pathologies Area



Publications: 3

Impact Factor: 16.¹²⁹

QI: 2

Regulation of Gene Expression and by Hypoxia Group

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Maria Tiana Cerrolaza. Investigador Posdoctoral. Universidad Autónoma de Madrid

Barbara Acosta Iborra. Investigador Posdoctoral. Universidad Autónoma de Madrid

Strategic Objective

The elucidation of the cellular and molecular responses to changes in oxygen tension constitutes an exciting research topic given the dependence of virtually all human tissues on appropriate oxygen supply and the involvement of hypoxia in high-incidence pathologies such as cardiopulmonary diseases and cancer. The Hypoxia Inducible transcription Factor (HIF) plays a pivotal role in this response

by controlling the expression of most of the genes involved in the adaptation to hypoxia. Our research group aims to provide novel insight into transcriptional response to hypoxia and to exploit this knowledge to improve clinical management of pathologies in which hypoxia is a common feature. To this end we are currently involved in the following.

Research Lines

- Identification of network motifs within the gene regulatory network regulated by HIF and study of their role in the adaptation to hypoxia
- Characterization of the effect of hypoxia/HIF on endothelial cell proliferation and integration of this response in the induction of angiogenesis
- Analysis of the functional effect of polymorphisms affecting HIF binding and investigation of their correlation with the different phenotypes in chronic respiratory diseases and cancer



3.4 Large System Pathologies Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

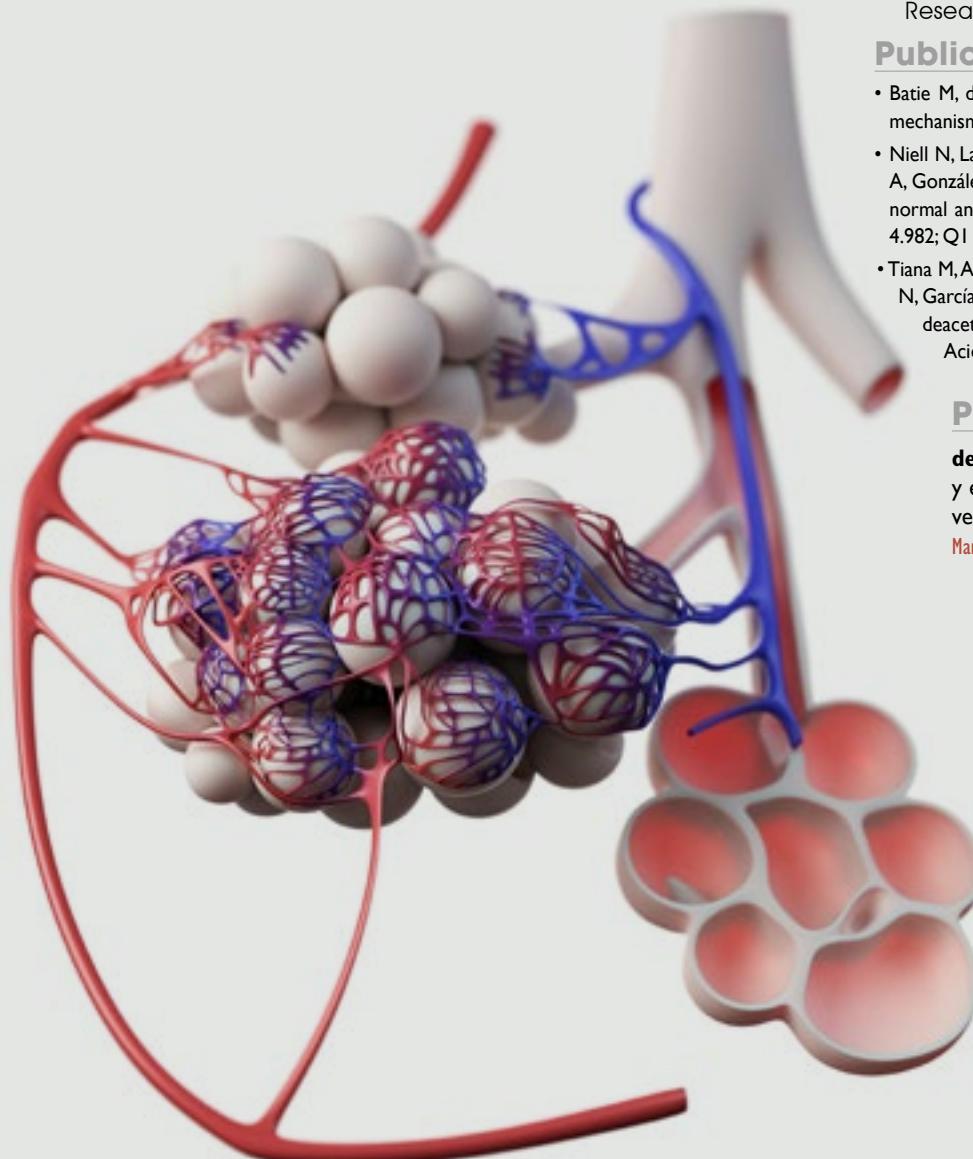
3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

Research Activity

Publications

- Batie M, del Peso L, Rocha S. Hypoxia and chromatin: A focus on transcriptional repression mechanisms. *Biomedicines*. 2018; 6(2): 47. Review. Not Indexed
- Niell N, Larriba MJ, Ferrer-Mayorga G, Sánchez-Pérez I, Cantero R, Real FX, del Peso L, Muñoz A, González-Sancho JM. The human PKP2/plakophilin-2 gene is induced by Wnt/beta-catenin in normal and colon cancer-associated fibroblasts. *Int J Cancer*. 2018; 142(4): 792-804. Article. IF: 4.982; Q1
- Tiana M, Acosta-Iborra B, Puente-Santamaría L, Hernansanz-Agustín P, Worsley-Hunt R, Masson N, García-Río F, Mole D, Ratcliffe P, Wasserman WW, Jimenez B, del Peso L. The SIN3A histone deacetylase complex is required for a complete transcriptional response to hypoxia. *Nucleic Acids Res.* 2018; 46(1): 120-33. Article. IF: 11.147; D1

Public projects

del Peso Ovalle L. Hipoxia y angiogenesis: mecanismos básicos en fisiología y enfermedad (SAF2017-88771-R). Ministerio de Ciencia, Innovación y Universidades. 2018-2020.

Management centre: UAM

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

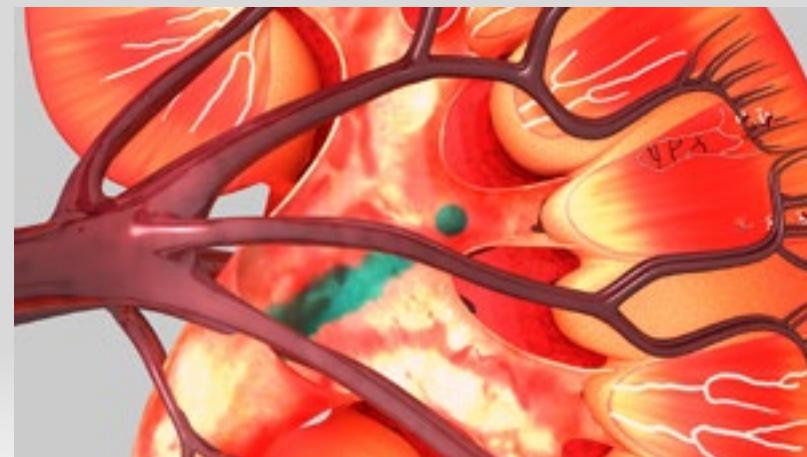
3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**2017
2018

3.4 Large System Pathologies Area

Publications: **31**Impact Factor: **451.835**QI: **18**

Nephrology Group

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María Elena González García. Facultativo Especialista de Área en Nefrología. Hospital Universitario La Paz

Guadalupe González Mateo. Investigadora Postdoctoral. Hospital Universitario La Paz

Carlos Jiménez Martín. Jefe de Sección de Nefrología. Hospital Universitario La Paz

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Teresa Olea Tejero. Facultativo Especialista de Área en Nefrología. Hospital Universitario La Paz

Ramón Pece Serrano. Facultativo Especialista de Área en Nefrología. Hospital Universitario La Paz
Almudena Pérez Torres. Dietista-Nutricionista. Hospital Universitario Santa Cristina

Begoña Rivas Bécerra. Facultativo Especialista de Área en Nefrología. Hospital Universitario La Paz
María Dolores Sánchez Niño. Investigadora Postdoctoral. Hospital Universitario La Paz

Rafael Jesús Sánchez Villanueva. Facultativo Especialista de Área en Nefrología. Hospital Universitario La Paz
Máximo Alberto Torre Carballada. Facultativo Especialista de Área en Nefrología. Hospital Universitario La Paz

Strategic Objective

The strategic objective of this care-research group is to enable, by developing a deep understanding of the various components that make up nephrology (kidney diseases in initial stages, progression of kidney disease, particular and general complications of dialysis and kidney transplantation), access by affected patients to the best diagnostic and therapeutic interventions available at any time. Each of the areas must ensure a minimum level of research and development activity representing the innovation in these areas. The lines of research are at times cross-sectional to the four components indicated for overall nephrology.



3.4 Large System Pathologies Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

Research Lines

The lines of research are occasionally cross-sectional to the four components indicated for nephrology as a whole

A) Incipient nephropathies and kidney disease progression:

- Glomerular and tubular nephropathies. New diagnostic markers and interventions
- Organisational Research (computerisation, organisation of generational change in the department and network)
- Morbidity, mortality and progression of Diabetic Nephropathy and other glomerular nephropathies
- Autosomal Dominant Polycystic Kidney Disease. Family Studies and treatment approaches with Tolvaptan
- Association of cardiovascular disease with the progress of nephropathies (NEFRONA multicenter study, REDinREN)
- Incorporation of a psychologist into the department of nephrology: criteria and process. Issues on monitoring therapeutic adherence, in particular among transplanted patients
- Occult Hepatitis C virus in different kidney disease situations

B) Complications of dialysis

- Establishment of normal peritoneal functional in humans. Implications for patient survival and long-term treatment. New dialysis fluids. Aquaporin 1 (AQPI) and its genetic polymorphisms: relationship with peritoneal transport of water. Multicentre European study
- The alternatively activated macrophage in peritoneal effluent (AAM): its relationship with defence and peritoneal fibrosis. CCL18 as a chemokine of AAM and a mediator of peritoneal fibrosis
- Peritoneal biopsy for the complete evaluation of the peritoneal membrane. A correspondence study with cell and components findings in peritoneal effluent during kidney transplantation is ongoing (Multicenter)
- Cardiovascular risk in patients with advanced kidney disease and on dialysis. Endocrine aspects. The abdominal adipocyte and adipocytokines. FABP antagonists as blockers of the adipocyte-macrophage response. Nonthyroidal diseases, influence on CKD patients. FGF 21 role in uremic insulin resistance
- Mouse model for peritoneal dialysis: exploration of the effects of dialysis fluids, pharmacological interventions and genetic manipulation (KO, transgenic)
- Allergic reactions to hemodialysis membranes: mechanisms and alternatives

C) Complications of kidney transplantation:

- Toxicity due to immunosuppressants. Ultrasound contrast in the analysis of renal microvasculature in kidney transplantation and complications

- The involvement of CMV in the renal graft response: anticipated diagnosis
- The transplantation career since the values of the patient: health outcome reper- cussion

Research Activity

Publications

- Soriano JB, Rojas-Rueda D, Alonso J, Anto JM, Cardona PJ, Fernández E, García-Basteiro AL, Benavides FG, Glenn SD, Krish V, Lazarus JV, Martínez-Raga J, Masana MF, Nieuwenhuijsen MJ, Ortiz A, Sánchez-Niño MD, Serrano-Blanco A, Tortajada-Girbes M, Tyrovolas S, Haro JM, Naghavi M, Murray CJL. The burden of disease in Spain: Results from the Global Burden of Disease 2016. *Med Clin Barcelona.* 2018; 151(5): 171-90. Article. IF: 1.277; Q3
- Sanjuán JB, Navarro-González JF, Arenas MD, Torregrosa JV, Menéndez JT, de Francisco ALM, González-Parra E, Cora MJL, Álvarez JES, Martín-Malo A, Vila PM, Bajo MA, Santos ID. Pharmacological interactions of phosphate binders. *Nefrología.* 2018; 38(6): 573-8. Editorial Material. IF: 1.439; Q4
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- Ferreira M, Jiménez C, López MO, González E, Santana MJ, Selgas R. Short-term efficacy and safety of treatment with febuxostat in kidney transplant recipient. An unicentric observational study. *Nefrología.* 2018; 38(3): 331-2. Letter. IF: 1.439; Q4
- Martín-Sánchez D, Poveda J, Fontecha-Barriuso M, Ruiz-Andrés O, Sánchez-Niño MD, Ruiz-Ortega M, Ortiz A, Sanz AB. Targeting of regulated necrosis in kidney disease. *Nefrología.* 2018; 38(2): 125-35. Review. IF: 1.439; Q4
- Pérez-Torres A, García MEG, José-Valiente BS, Rubio MAB, Díez OC, López-Sobaler AM, Selgas R. Protein-energy wasting syndrome in advanced chronic kidney disease: prevalence and specific clinical characteristics. *Nefrología.* 2018; 38(2): 141-51. Article. IF: 1.439; Q4
- Ossorio M, Martínez V, Bajo MA, del Peso G, Castro MJ, Romero S, Selgas R, Bellón T. Prominent levels of the profibrotic chemokine CCL18 during peritonitis: In vitro downregulation by vitamin D receptor agonists. *Biomed Res Int.* 2018; 6415892. Article. IF: 2.197; Q3
- Valino-Rivas L, Cuarental L, Grana O, Bucala R, Leng L, Sanz A, Gómez G, Ortiz A, Sánchez-Niño MD. TWEAK increases CD74 expression and sensitizes to DDT proinflammatory actions in tubular cells. *Plos One.* 2018; 13(6): e0199391. Article. IF: 2.776; Q2
- Adlbrecht C, Blanco-Verea A, Bouzas-Mosquera MC, Brion M, Burtscher M, Carbone F, Chang TT, Charmandari E, Chen JW, Correia-Costa L, Dullaart RPF, Eleftheriades M, Fernández-Fernández B, Goliasch G, Gremmel T, Groeneveld ME, Henrique A, Huelsmann M, Jung C, Lichtenauer M, Montecucco F, Nicolaides NC, Niessner A, Palmeira C, Pirklbauer M, Sánchez-Niño MD, Sotiriadis A, Sousa T, Sulzgruber P, van Beek AP, Veronese N, Winter MP, Yeung KK, Bouzas-Mosquera A. Research update for articles published in EJCI in 2016. *Eur J Clin Invest.* 2018; 48(10): e13016. Review. IF: 2.784; Q1
- Martín-Sánchez D, Fontecha-Barriuso M, Carrasco S, Sánchez-Niño MD, von Massenhausen A, Linkermann A, Cannata-Ortíz P, Ruiz-Ortega M, Egido J, Ortiz A, Sanz AB. TWEAK and RIPK1 mediate a second wave of cell death during AKI. *P Natl Acad Sci Usa.* 2018; 115(16): 4182-7. Article. IF: 9.58; DI



3.4 Large System Pathologies Area



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3.4 Large System Pathologies Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

Pillay JD, Pirsahab M, Pishgar F, Polinder S, Postma MJ, Pourshams A, Poustchi H, Pujar A, Prakash S, Prasad N, Purcell CA, Qorbani M, Quintana H, Quistberg DA, Rade KW, Radfah A, Rafay A, Rafiee A, Rahim F, Rahimi K, Rahimi-Movaghari A, Rahman M, Rahman MU, Rahman MA, Rai RK, Rajasic S, Ram U, Ranabhat CL, Ranjan P, Rao PC, Rawaf DL, Rawaf S, Razo-García C, Reddy KS, Reiner RC, Reitsma MB, Remuzzi G, Renzaho AMN, Resnikoff S, Rezaei S, Rezaeian S, Rezai MS, Riahi SM, Ribeiro ALP, Rios-Blancas MJ, Roba KT, Roberts NLS, Robinson SR, Roever L, Ronfani L, Rosenthal G, Rostami A, Rothenbacher D, Roy A, Rubagotti E, Sachdev PS, Saddik B, Sadeghi E, Safari H, Safdaran M, Safi S, Safiri S, Sagar R, Sahebkar A, Sahraian MA, Salam N, Salama JS, Salamat P, Saldanha RD, Saleem Z, Salimi Y, Salvi SS, Salz I, Sambala EZ, Samy AM, Sanabria J, Sanchez-Nino MD, Santomauro DF, Santos IS, Santos JV, Milicevic MMS, Jose BPS, Sarker AR, Sarmiento-Suarez R, Sarrafzadegan N, Sartori B, Sarvi S, Sathian B, Satpathy M, Sawant AR, Sawhney M, Saxena S, Sayyah M, Schaeffner E, Schmidt MI, Schneider IJC, Schottker B, Schutte AE, Schwelbel DC, Schwendicke F, Scott JG, Sekerija M, Sepanlou SG, Servan-Mori E, Seyedmousavi S, Shabaninejad H, Shackelford KA, Shafeesabet A, Shahbazi M, Shaheen AA, Shaikh MA, Shams-Beyranvand M, Shamsi M, Shamsizadeh M, Sharafi K, Sharif M, Sharif-Alhoseini M, Sharma R, She J, Sheikh A, Shi PL, Shiferaw MS, Shigematsu M, Shiri R, Shirkoohi R, Shiu I, Shokraneh F, Shrine MG, Si S, Siabani S, Siddiqi TJ, Sigfusdottir ID, Sigurvinssdottr R, Silberberg DH, Silva DAS, Silva JP, Da Silva NT, Silveira DBA, Singh JA, Singh NP, Singh PK, Singh V, Sinha DN, Sliwa K, Smith M, Sobaih BH, Sobhani S, Solangwi E, Soneji SS, Soofi M, Sorensen RJD, Soriano JB, Soyiri IN, Sposato LA, Sreeramareddy CF, Srinivasan V, Stanaway JD, Starodubov VI, Stathopoulou V, Stein DJ, Steiner C, Stewart LG, Stokes MA, Subart ML, Sudaryanto A, Sufiyan MB, Sur PJ, Sutradhar I, Sykes BL, Sylaja PN, Sylte DO, Szoekie CEI, Tabares-Seisdedos R, Tabuchi T, Tadakamda SK, Takahashi K, Tandon N, Tasew SG, Taveira N, Tehrani-Banishashemi A, Tekalign TG, Tekle MG, Temsah MH, Temsah O, Terkawi AS, Teshale MY, Tesserna B, Tessema GA, Thankappan KR, Thiruvukkarasi S, Thomas N, Thrift AG, Thurston GD, Tilahun B, To QG, Tobe-Gai R, Tonelli M, Topor-Madry R, Torre AE, Tortajada-Cirbes M, Touvier M, Tovani-Palone MR, Tran BX, Tran KB, Tripathi S, Troeger CE, Truelsen TC, Truong NT, Tsadik AG, Tsoi D, Car LT, Tuzcu EM, Tyrovolas S, Ukwaja KN, Whiff I, Undurraga EA, Updike RL, Usman MS, Uthman OA, Uzun SB, Vaduganathan M, Vaezi A, Vaidya G, Valdez PR, Varavikova E, Vasankari TJ, Venketasubramanian N, Villafaina S, Violante FS, Vladimirov SK, Vlassov V, Vollset SE, Vos T, Wagner GR, Wagnew FS, Waheed Y, Wallin MT, Watson JL, Wang YP, Wang YP, Wassie MM, Weiderpass E, Weintraub RG, Weldegebreal E, Weldegeworgs KG, Werdecker A, Werkhenn AA, West TE, Westerman R, Whiteford HA, Widecka J, Wilner LB, Wilson S, Winkler AS, Wiysonge CS, Wolfe CDA, Wu SL, Wu YC, Wyper GMA, Xavier D, Xu GL, Yadgir S, Yakkola A, Jabbari SHY, Yakob B, Yan LJL, Yano Y, Yaseri M, Yasin YJ, Yentur GK, Yeshaneh A, Yimer EM, Yip P, Yirsaw BD, Yisma E, Yonemoto N, Yonga G, Yoon SJ, Yotebieng M, Younis MZ, Yousefifard M, Yu CH, Zadnik V, Zaidi Z, Bin Zaman S, Zamani M, Zare Z, Zeleke AJ, Zenebe ZM, Zhang AL, Zhang K, Zhou MG, Zodpey S, Zuhlik L, Naghavi N, Murray CJL. Global, regional, and national age-sex-specific mortality for 282 causes of death in 195 countries and territories, 1980–2017: a systematic analysis for the Global Burden of Disease Study 2017. Lancet. 2018; 392(10159): 1736–88. Article IF: 59.102; DI:

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3.4 Large System Pathologies Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

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3.4 Large System Pathologies Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

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3.4 Large System Pathologies Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

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3.4 Large System Pathologies Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

Kahsay A, Kalani R, Kapil U, Karami M, Martín BK, Karch A, Karema C, Karimi SM, Kasacian A, Kassa DH, Kassa GM, Kassa TD, Kassa ZY, Kassebaum NJ, Kastor A, Katikireddi SV, Kaul A, Kawakami N, Karyani AK, Kebede S, Keiyoro PN, Kemp GR, Kengne AP, Keren A, Kereselidze M, Khader YS, Khafaei MA, Khajavi A, Khalid N, Khalil IA, Khan EA, Khan MS, Hang YHK, Khanna T, Khater MM, Khatony A, Khazaeipour Z, Khazaie H, Khoja AT, Khosravi A, Khosravi MH, Kibret GD, Kidenemariam ZT, Kiirithio DN, Kilgore PE, Kim D, Kim JY, Kim YE, Kim YJ, Kimokoti RW, Kinfu Y, Kinra S, Kisa A, Kivimaki M, Kochhar S, Kokubo Y, Kololo T, Kopek JA, Koseki MN, Kosen S, Koul PA, Koyanagi A, Krishan K, Krishnaswami S, Krohn KJ, Defo BK, Bicer BK, Kumar GA, Kumar M, Kumar P, Kumta FA, Kutz MJ, Lad SD, Lafranconi A, Lal DK, Lalloo R, Lam H, Lam FH, Lang JJ, Lansky S, Lansing VC, Laryea DO, Lassi ZS, Latifi A, Laxmaiah A, Lazarus JV, Lee JB, Lee PH, Leigh J, Leshargie CT, Leta S, Levi M, Li SS, Li XH, Li YC, Liang J, Liang XF, Liben MI, Lim LL, Limenith MA, Linn S, Liu SW, Lorkowski S, Lotufo PA, Lozano R, Lunevicius R, Mabika CM, Macarayan ERK, Mackay MT, Madotto F, Mahmood TA, Mahotra NB, Majdan M, Majdzadeh R, Majeed A, Malekzadeh R, Malik MA, Mamun AA, Mariano WA, Manda AL, Mangalam S, Mansournia MA, Mantovani LG, Mapoma CC, Marami D, Maravilla JC, Marcenes W, Marina S, Martins-Melo FR, Martz W, Marzan MB, Mashamba-Thompson TP, Masiye F, Mason-Jones AJ, Massenburg BB, Mathur MR, Main PK, Mazidi M, McGrath JJ, Mehata S, Mehendale SM, Mehndiratta MM, Mehrrota R, Mehrzadi S, Mehta KM, Mehta V, Mekonnen TC, Meles HG, Meles KG, Melese A, Melku M, Memiah PTN, Memish ZA, Mendoza W, Mengesha MM, Mengistu DT, Mengistu G, Mensah GA, Merete ST, Mereteja A, Mereteja TJ, Mestrovic T, Mezgebe HB, Miangotar Y, Miazgowski B, Miazgowski T, Miller TR, Miller-Petrie MK, Mini GK, Mirabi P, Mirica A, Mirrakhimov EM, Misganaw AT, Moazen B, Mohammad KA, Mohammadi M, Mohammadifard N, Mohanmmdi-Khanaposhtani M, Mohammed MA, Mohammed S, Mokdad AH, Mola GD, Molokhia M, Monasta L, Montanez JC, Moradi G, Moradi M, Moradi-Lakeh M, Moradinazar M, Moraga P, Morgado-Da-Costa J, Mori R, Morrison SD, Mosapour A, Moschos MM, Mousavi SM, Muchie AA, Muchie KF, Mueller UO, Mukhopadhyay S, Murphy TB, Muller K, Murthy GVS, Musa J, Musa KI, Mustafa G, Muthupandian S, Nachega JB, Nagel G, Naghavi M, Naheed A, Nahmjou A, Naik G, Naili P, Najafi F, Naldi L, Nangia V, Nansseu JR, Naschnero BR, Nawaz H, Ncama BP, Neamati N, Negoi I, Negoi RI, Neupane S, Newton CRJ, Ngalesoni FN, Ngunjiri JV, Nguyen G, Nguyen LH, Nguyen TH, Ningrum DNA, Nirayo YL, Nisar MM, Nixon MR, Nomura S, Noroozi M, Noubiap JJ, Nouri HR, Shiadeh MN, Nowroozi MR, Nyandwi A, Nyasulu PS, Odell CM, Ofori-Asenso R, Ogah OS, Ogbo FA, Oh IH, Okoro A, Oladimeji O, Olagunju AT, Olagunju TO, Olivares PR, Olusanya BO, Olusanya JO, Ong SK, Ortiz A, Osgood-Zimmerman A, Ota E, Otieno BA, Oststavnov SS, Owolabi MO, Oyekale AS, Pakhalé MPAS, Pakhare AP, Pana A, Panda BK, Panda-Jonas S, Pandey AR, Park EK, Parsian H, Patel S, Patil ST, Patle A, Patton GC, Paturi VR, Paudel D, Pedroso MM, Peprah EK, Pereira DM, Perico N, Pesudovs K, Petri WA, Petzold M, Pierce M, Pigott DM, Pillay JD, Pirsahab M, Polanczyk GV, Postma MJ, Pourmalek F, Pourshams A, Poustchi H, Prakash S, Prasad N, Purcell CA, Purwar MB, Qorbani M, Quansah R, Radfar A, Rafay A, Rafiei A, Rahim F, Rahimi-Movaghah A, Rahimi-Movaghah V, Rahman M, Rahman MS, Rahman MU, Rahman MA, Rahman SU, Rai RK, Rajati F, Rajsic S, Ram U, Ranabhat CL, Ranjan P, Rawaf DL, Rawaf S, Ray SE, Razo-García C, Reiner RC, Reis C, Remuzzi G, Renzaho AMN, Resnikoff S, Rezaei S, Rezaeian S, Rezaei MS, Riahi SM, Rios-Blancas MJ, Roba KT, Roberts NLS, Roever L, Ronfani L, Rosenthal G, Rostami A, Rubagotti E, Ruhago GM, Sabde YD, Sachdev PS, Saddik B, Moghaddam SS, Safari H, Safari Y, Safari-Faramani R, Safdarian M, Safi S, Safiri S, Sagan R, Sahebkar A, Sahraian MA, Sajadi HS, Salahshoor M, Salam N, Salama JS, Salamat P, Saldanha RDF, Sateen Z, Salimi Y, Salimzadeh H, Salomon JA, Santosh S, Salz I, Sanibala EZ, Samy AM, Sanabria J, Sanchez-Nino MD, Santos IS, Milicevic MMS, Jose BPS, Sardana M, Sarker AR, Sanniento-Suarez R, Saroshe S, Sarrafadeegan N, Sartorius B, Sarvi S, Sathian B, Satpathy M, Sawant AR, Sawhney M,

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3.4 Large System Pathologies Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

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3.4 Large System Pathologies Area

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3.4 Large System Pathologies Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

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Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP

Selgas Gutiérrez R. Actualización y renovación de la actividad investigadora en nefrología clínica hospitalaria. Hospital Universitario La Paz. 2009-Ongoing.

Management centre: FIBHULP

Selgas Gutiérrez R. Atención domiciliaria continuada para pacientes en diálisis domiciliaria y Biología celular del macrófago peritoneal y su relación con la fibrosis peritoneal. Baxter S.L. 2009-Ongoing.

Management centre: FIBHULP

Selgas Gutiérrez R. Cardiovascular disease and peritoneal membrane damage in peritoneal dialysis as concurrent consequences of a common mechanism dependent on the glucose effect in peritoneal adipocytes. Extramural. Baxter S.L. 2008-Ongoing.

Management centre: FIBHULP

Selgas Gutiérrez R. Creación de un centro de referencia para el estudio de los mecanismos implicados en las reacciones de hipersensibilidad a las membranas de hemodialisis basadas en polysulfona. Chiesi España S.A. 2017-Ongoing.

Management centre: FIBHULP

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Management centre: FIBHULP

Selgas Gutiérrez R. Evaluación e intervención en el bienestar emocional del personal y pacientes nefrológicos. Wyeth Farma S.A. 2007-Ongoing.

Management centre: FIBHULP

Selgas Gutiérrez R. Historia natural de la microcirculación del injerto renal mediante ecografía resaltada por contraste. Análisis en el paciente transplantado, tratado con sin anti-calcineurínicos. Genzyme SLU. 2009-Ongoing.

Management centre: FIBHULP



3.4 Large System Pathologies Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

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Management centre: FIBHULP

Selgas Gutiérrez R. La donación de vivo en el trasplante renal: representaciones y prácticas sociales en la toma de decisión. Un estudio socio-antropológico. Stakeholders. 2013-Ongoing.

Management centre: FIBHULP

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Management centre: FIBHULP

Selgas Gutiérrez R. Monitorización del rechazo humorar del receptor de trasplante renal. Novartis Farmaceutica S.A. 2015-Ongoing.

Management centre: FIBHULP

Selgas Gutiérrez R. Quinto curso de formación científica de educadores en enfermedad renal crónica avanzada (ERCA). Vifor Fresenius Medical Care Renal Pharma España S.L. 2017-Ongoing.

Management centre: FIBHULP

International projects

Selgas Gutiérrez R. Clinical validation of miniature wearable dialysis machine (WEAKID). UE. 2017-2019.

Management centre: FIBHULP

Clinical trials

Peces Serrano R. Estudio posautorización de seguridad multicéntrico y no intervencionista de 6 años de duración realizado en pacientes a los que se ha recetado Jinarc® debido a poliquistosis renal autosómica dominante. Type: EPA-LA.

HULP code: PI-2881. Sponsored's protocol code: 156-12-299.

Sponsored by: Otsuka Pharmaceutical Development & Commercialization Inc.

Signed date: 09/02/2018

Jiménez Martín C. Evaluación de la consistencia clínica y la solidez analítica de Immunobiogram® como herramienta biotecnológica de diagnóstico in vitro para ayudar a la toma de decisiones en el ajuste del tratamiento inmunodepresor del trasplante renal. Estudio Transbio. Type: NO-EPA.

HULP code: PI-3105. Sponsored's protocol code: BHP-IBG-2017-01.

Sponsored by: Biohope Scientific Solutions For Human Health S.L.

Signed date: 13/02/2018

Jiménez Martín C. Impacto de los niveles de Tacrolimus en la prevención del rechazo en pacientes de edad avanzada receptores de trasplante renal de novo: estudio observacional prospectivo en las condiciones de la práctica clínica habitual. Estudio Bitácora. Type: EPA-SP.

HULP code: PI-3314. Sponsored's protocol code: CHI-TAC-2018-01.

Sponsored by: Chiesi Farmaceutici S.P.A. Signed date: 01/10/2018

López Oliva MO. Suspensión de la profilaxis con Valganciclovir en trasplantados renales CMV-seropositivo que mantienen la inmunidad celular CD8+ CMV-específica tras recibir Timoglobulina. Type: Clinical Trial, phase III.

HULP code: ANEXO-I 4892. Sponsored's protocol code: FCO-TIM-2015-01.

Sponsored by: Fundación para la Investigación Biomédica de Córdoba (Fibico-Imibic).

Signed date: 22/10/2018

Patents and trademarks

Selgas Gutiérrez R, Bellón Heredia T, Rodríguez Sanz AI, Álvarez Builla J, Vaquero López JJ, Sánchez Alonso P, Alajarín Fernández R, inventors; FIBHULP, Universidad de Alcalá, assignees. Use of compounds derived from salts of pyridazine[1',6':1,2]pyrido[3,4-b]indolinium as anti-inflammatory agents. P201331143, PCT/ES2014/070603; 2013 July 25.

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Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**2017
2018

3.4 Large System Pathologies Area

**Publications: 43****Impact Factor: 155.105****QI: 26**

Neonatology Group

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Strategic Objective

Prevent structural damage to organs and systems in the high risk newborn.

Reduce the impact of the processes that occurred in the peri-neonatal stage in later life.

Research Lines

- Developmental Neurobiology
- Neonatal pulmonary and cardiovascular pathology
- Thyroid in term and preterm neonates
- Nutrition. Breast feeding. Mycrobiota
- Perinatal and neonatal infectology. Inmunology and vaccines
- Neurodevelopmental. Follow-up



3.4 Large System Pathologies Area



Research Activity

Doctoral theses

Chinea B. Importancia de la leche humana y sus características nutricionales. Efectos a corto, medio y largo plazo [dissertation]. Madrid: UCM; 2018(21/03/2018).

Director: Saenz Pipaon Marcos M.

Books and book chapters

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3.4 Large System Pathologies Area



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3.4 Large System Pathologies Area



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3.4 Large System Pathologies Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

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Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP

Private projects

Aroca Peinado A. Actividades formativas científica y de investigación en cirugía cardíaca pediátrica. Medtronic Iberica S.A. 2005-Ongoing.

Management centre: FIBHULP

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Management centre: FIBHULP

Bravo Laguna MC. Valoración cuantitativa de la repercusión hemodinámica del ductus arterioso persistente y su tratamiento en el recién nacido de bajo peso. Neonat-care S.L. 2008-Ongoing.

Management centre: FIBHULP

Buño Soto A. Actualización y renovación de la actividad investigadora en el servicio de análisis clínicos del Hospital Universitario La Paz. Radiometer Medical APS. 2012-Ongoing.

Management centre: FIBHULP

Buño Soto A. Estudio en población cognitivamente sana (sin demencia) para la determinación de valores de referencia de una nueva técnica diagnóstica basada en espectroscopía raman. Raman Health Technologies S.L. 2016-Ongoing.

Management centre: FIBHULP

Buño Soto A. Evaluación de un nuevo sistema analítico de inmunoensayo atellica solutions en el laboratorio core del Servicio de Análisis Clínicos. Siemens Healthcare S.L. 2017-Ongoing.

Management centre: FIBHULP

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3.4 Large System Pathologies Area



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Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP

Cabañas González F. Impacto de las técnicas de reproducción asistida en la salud del recién nacido. Stakeholders. 2011-Ongoing.

Management centre: FIBHULP

Del Olmo Barros MJ. Jornadas de investigación y atención directa en musicoterapia hospitalaria. Stakeholders. 2015-Ongoing.

Management centre: FIBHULP

Omeñaca Terés F. Leche materna en niños prematuros: características nutricionales e infección por citomegalovirus. Infacare Pharmaceutical Corporation. 2010-Ongoing.

Management centre: FIBHULP

Pellicer Martínez A. Desarrollo de un equipo de ultrasonidos para la ayuda al diagnóstico de meningitis. Neos New Born Solutions S.L. 2018-Ongoing.

Management centre: FIBHULP

Pellicer Martínez A. Online cerebral pressure autoregulation continuous monitoring as a neurobiomarker to guide assessment and intervention to prevent or minimise brain injury in the high-risk preterm infant. Abbvie Spain S.L.U. 2017-Ongoing.

Management centre: FIBHULP

Saenz de Pipaón Marcos M. Efecto de la suplementación precoz con ácido araquídico y ácido docosahexanoico (DHA) en la evolución de las concentraciones plasmáticas y eritrocitarias de DHA en recién nacidos prematuros: ensayo controlado aleatorizado. Nestle España S.A. 2016-Ongoing.

Management centre: FIBHULP

Salas Hernández S. I Curso multidisciplinar en la atención al seguimiento de niños nacidos con peso < 1.500 g. Abbott Laboratories S.A. 2011-Ongoing.

Management centre: FIBHULP

International projects

Pellicer Martínez A. Dobutamine for neonatal circulatory failure defined by novel biomarkers (NEO CIRC). European Union. 2011-2018.

Management centre: FIBHULP

Clinical trials

Sáenz de Pipaón Marcos M. Estudio aleatorizado, doble ciego y controlado con placebo para evaluar el efecto de un probiótico en niños prematuros. Type: Product Alimentario.

HULP code: Ccontrato 5098. Sponsored's protocol code: PRE/18.02.

Sponsored by: Probisearch S.L. Signed date: 25/09/2018

Valverde Núñez E. Efecto del Alopurinol en pacientes con encefalopatía hipóxico-isquémica tratados con hipotermia- albino- ensayo clínico multicéntrico aleatorizado, ciego, controlado con placebo. Type: Clinical Trial, phase III.

HULP code: 4800. Sponsored's protocol code: ALBINO.

Sponsored by: Instituto Investigación Sanitaria H La Fe. Signed date: 17/01/2018

Patents and trademarks

Segovia Iñigo C, Montes Bueno MT, inventors; Segovia Iñigo C, assignee. Positioning device for neonates (Utility model). U201330102; 2013 January 31.

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

3.4 Large System Pathologies Area



Publications: **16**

Impact Factor: **31.717**

QI: **4**

Aging and Fragility in the Elderly Group

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Juan Carlos Abánades Herranz. Subdirector Médico. Responsable de la Unidad de Formación e Investigación. Atención Primaria

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Strategic Objective

- To promote and improve the quality of research in the field of Primary Health Care and Geriatrics in the area of influence of IdiPAZ.
- To continue the follow-up of the Cohorts of the Group: elderly people with population-based (Peñagrande Study), patients with frailty syndrome (FONDA) and patients with Type 2 Diabetes Mellitus (MADiabetes).



3.4 Large System Pathologies Area



- Progress in the epidemiological study of frailty in the elderly.
- To consolidate clinical studies related to hip fracture and chronic diseases in the elderly, specially the Diabetes Mellitus.

Research Lines

- Frailty syndrome in the elderly. To promote the detection of frailty syndrome in elderly people above 75 years that consults at the Primary Health Care Center of the Hospital La Paz Setting and create a new cohort of those patients with functional impairment. Additionally, to develop and evaluate an intervention program with these patients, focused on the physical exercise, the geriatric evaluation, management of comorbidity, in the medication adjustment in nutritional supplementation when necessary
- Follow-up of patients with Type 2 Diabetes Mellitus (MADIabetes Cohort, more than 3.500 patients) and prediabetes patients (SPREDIA Cohort, n=600) of Madrid, to analyze clinical and psychosocial factors related to clinical outcomes (cardiovascular events, chronic kidney disease, retinopathy, and mortality), we are developing predictive models for main outcomes (chronic kidney disease, all-cause mortality and cardiovascular mortality)
- Coordination of the National Registry of Hip Fractures: a multicenter observational study including patients from 75 Spanish hospitals with an acute fragility hip fracture. The registry collects data from the acute hospital phase and a one-month follow-up

Research Activity

Books and book chapters

Sáez López P, Ojeda Thies C, Otero Puime A, González-Montalvo JI. Registro Nacional de Fracturas de Cadera por Fragilidad. Informe Anual 2017. Madrid: RNFC. IdiPAZ, 2018.

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3.4 Large System Pathologies Area



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Public projects

De Burgos Lunar C. Validación de los diagnósticos de fibrilación articular, infarto agudo de miocardio, ictus y exitus registrados en la historia clínica informatizada de la atención primaria (PII3/00632).

Management centre: FIBHULP



Private projects

González Montalvo JI. Proyecto de actualización bibliográfica básica de temas de investigación, documentación, actualización y transmisión bibliográfica en sesiones conjuntas de servicio. Lundbeck España S.A. 2008-Ongoing.

Management centre: FIBHULP

González Montalvo JI. Estudio de la evolución a medio y largo plazo tras el tratamiento integral de los pacientes con fractura de cadera. Evaluación de los factores predictivos del pronóstico funcional y vital (Estudio Fonda). Conforem S.L. 2012-On-going.

Management centre: FIBHULP

González Montalvo JI. Herramienta gratuita, destinada a los profesionales de la salud, con el objetivo de ayudar a éstos en la planificación y elaboración

de dietas terapéuticas personalizadas para sus pacientes en riesgo nutricional y aptas para cubrir las necesidades nutricionales de estos últimos, creando, al efecto, una sede, sitio o portal web en la red internet. Nestle España S.A. 2017-Ongoing.

Management centre: FIBHULP

González Montalvo JI. Proyecto del registro nacional de fracturas de cadera por fragilidad en el anciano. Amgen S.A. 2017-Ongoing.

Management centre: FIBHULP

González Montalvo JI. Prevención secundaria de fracturas por fragilidad: descripción del tipo de pacientes y del funcionamiento de una fracture liaison service en pacientes con fractura de cadera tratados en un servicios de ortopedia. FIBHULP. 2018-Ongoing.

Management centre: FIBHULP

González Montalvo JI, Gómez Campelo P. Registro Nacional de Fractura de la Cadera. Estudio RNFC. Fundación Mutua Madrileña. 2018-Ongoing.

Management centre: FIBHULP

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

3.4 Large System Pathologies Area



Publications: **8**

Impact Factor: **27.369**

QI: **6**

Molecular Hepatology Group

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Strategic Objective

Our research interest is focused on the study of the molecular mechanisms underlying the most severe paediatric liver disorders, namely cholestasis, which results from the impaired secretion of bile from the liver to the intestine.

As such, it represents a clinical and biochemical syndrome that is produced by a wide variety of disease processes that affect the liver. Individuals with cholestasis manifest jaundice, severe itching, malabsorption of fats and lipidsoluble vitamins and, in many cases, progressive liver damage. These clinical manifestations are due to the accumulation in blood and tissues of substances normally secreted in the bile, such as bilirubin, bile acids, and cholesterol and to the absence of bile from the intestine.

When manifested in early infancy, cholestasis is often life threatening and usually requires liver transplantation. Extrahepatic biliary atresia (EHBA), Alagille syndrome and progressive familial intrahepatic cholestasis (PFIC) constitute the main paediatric cholestatic disorders. EHBA is an enigmatic disease of unknown aetiology, characterised by a precocious and accelerated obstruction of the biliary tree. Alagille syndrome is associated with mutations in the Jag1 gene and is characterised by a paucity or absence of intrahepatic bile ducts. PFIC encompasses a heterogeneous group of autosomal recessive diseases that exhibit similar clinical features. These diseases are caused by mutations in proteins located in the canalicular membrane of the hepatocyte and in proteins involved in bile secretion, such as the bile salt



3.4 Large System Pathologies Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

Research Lines

- Molecular basis of paediatric liver diseases
- Liver Pathobiology

Research Activity

Books and book chapters

Hierro L. Protocolo de transición en Hepatología (hepatitis autoinmune y trasplante hepático). In: Navarro M, Jara P, Cobas J, Barrio I, Hierro L, Muñoz J, Ojeda JJ, Ortiz A, Prados MC. Transición de niño a adulto: ¿Cómo podemos ayudarles?. Barcelona: Ergon, 2018, p.79-85

Navarro M, Jara P, Cobas J, Barrio I, Hierro L, Muñoz J, Ojeda JJ, Ortiz A, Prados MC. Transición de niño a adulto: ¿Cómo podemos ayudarles?. Barcelona: Ergon, 2018.

Publications

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- Garrido F, Pacheco M, Vargas-Martínez R, Velasco-García R, Jorge I, Serrano H, Portillo F, Vázquez J, Pajares MA. Identification of hepatic protein-protein interaction targets for betaine homocysteine S-methyltransferase. *Plos One.* 2018; 13(6): e0199472. Article. IF: 2.776; Q2
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- Pajares MA, Pérez-Sala D. Mammalian sulfur amino acid metabolism: A nexus between redox regulation, nutrition, epigenetics, and detoxification. *Antioxid Redox Sign.* 2018; 29(4): 408-52. Review. IF: 5.828; Q1
- Socha P, Janczyk W, Dhawan A, Baumann U, D'Antiga L, Tanner S, Iorio R, Vajro P, Houwen R, Fischler B, Dezsofi A, Hadzic N, Hierro L, Jahnel J, McLin V, Nobili V, Smets F, Verkade HJ, Debray D. Wilson's disease in children: A position paper by the hepatology Committee of the European Society for Paediatric Gastroenterology, Hepatology and Nutrition. *J Pediatr Gastr Nutr.* 2018; 66(2): 334-44. Article. IF: 3.015; Q1.
- Vajro P, Fischler B, Burra P, Debray D, Dezsofi A, Nuzio SG, Hadzic N, Hierro L, Jahnel J, Lamireau T, McKiernan P, McLin V, Nobili V, Socha P, Smets F, Baumann U, Verkade HJ. The health care transition of youth with liver disease into the adult health system: Position paper from ESPGHAN and EASL. *J Pediatr Gastr Nutr.* 2018; 66(6): 976-90. Article. IF: 3.015; Q1

Public projects

Hierro Llanillo L. Identificación de causas genéticas y epigenéticas en enfermedades colestásicas infantiles idiopáticas (PII15/01127). ISCIII. 2016-2018.

Management centre: FIBHULP

Hierro Llanillo L. TOMOXLIVER-Estudio de la disfunción del hepatólogo desde un abordaje multidisciplinar (S2017/BMD-3817). CM. 2018-2020.

Management centre: FIBHULP

Vicent López D. Contrato de estabilización I2. ISCIII/CAM. 2008-2025.

Management centre: FIBHULP

Vicente Capa C. Contrato de técnico de apoyo. Garantía juvenil (PE)15/BIO/TL-0238). CM. 2016-2018.

Management centre: FIBHULP

Private projects

Díaz Fernández MC. Superando barreras. Hacia una mejor calidad de vida: estado actual del trasplante pediátrico en el Hospital Infantil La Paz. Astellas Pharma S.A. 2014-Ongoing.

Management centre: FIBHULP

Hierro Llanillo L. Desarrollo de métodos de diagnóstico molecular de enfermedades hepáticas infantiles de carácter hereditario. Fundación Pfizer. 2005-Ongoing.

Management centre: FIBHULP

Hierro Llanillo L. Diagnóstico molecular de enfermedades hepáticas infantiles de carácter hereditario. Fundación ACS. 2012-Ongoing.

Management centre: FIBHULP

Hierro Llanillo L. Identificación de nuevos genes responsables de enfermedades



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report
2017
2018

3.4 Large System Pathologies Area

hepáticas infantiles. Fundación ACS. 2015-Ongoing.

Management centre: FIBHULP

Jara Vega P. Estudio epidemiológico, observacional sobre el riesgo de desarrollo de síndrome linfoproliferativo en pacientes pediátricos trasplantados hepáticos, en el HULP. Roche Farma S.A. 2008-Ongoing.

Management centre: FIBHULP

Vicent López D. Caracterización clínica del nuevo factor de riesgo cardiovascular trimetilamina-N-oxido en pacientes diabéticos obesos. Sección de Endocrinología y Nutrición Severo Ochoa. 2015-Ongoing.

Management centre: FIBHULP

International projects

Hierro Llanillo ML. European reference Network on hepatological diseases. UE. 2016-2020.

Management centre: FIBHULP

Jara Vega P. ERN - TransplantChild support core systems for IT platforms services. European Union. 2018-2019.

Management centre: FIBHULP

Jara Vega P. European reference Network on transplantation in children. European Union. 2018-2019.

Management centre: FIBHULP

Clinical trials

Hierro Llanillo L. Ensayo abierto y con un solo grupo para evaluar la farmacocinética, la seguridad y la eficacia de Daclatasvir (DCV) en combinación con Sofosbuvir (SOF) en niños de entre 3 y menos de 18 años con infección por los genotipos del 1 al 6 del virus de la hepatitis crónica (HCC). Type: Clinical Trial, phase II.

HULP code: 5118. Sponsored's protocol code: AI44423.

Sponsored by: Bristol Myers Squibb International Corporation. Signed date: 07/08/2018

Hierro Llanillo L. Estudio de fase 3 aleatorizado, con doble enmascaramiento, controlado con placebo, para demostrar la eficacia y la seguridad de A4250 en niños con colestasis intrahepática familiar progresiva de tipos 1 y 2 (PEDFIC 1). Type: Clinical Trial, phase III.

HULP code: 4969. Sponsored's protocol code: A4250-005.

Sponsored by: Albireo AB. Signed date: 17/04/2018

Hierro Llanillo L. Estudio abierto de extensión para evaluar la eficacia y la seguridad a largo plazo de A4250 en niños con colestasis intrahepática familiar progresiva de

tipo 1 y 2 (PEDFIC 2). Type: Clinical Trial, phase III.

HULP code: 4970. Sponsored's protocol

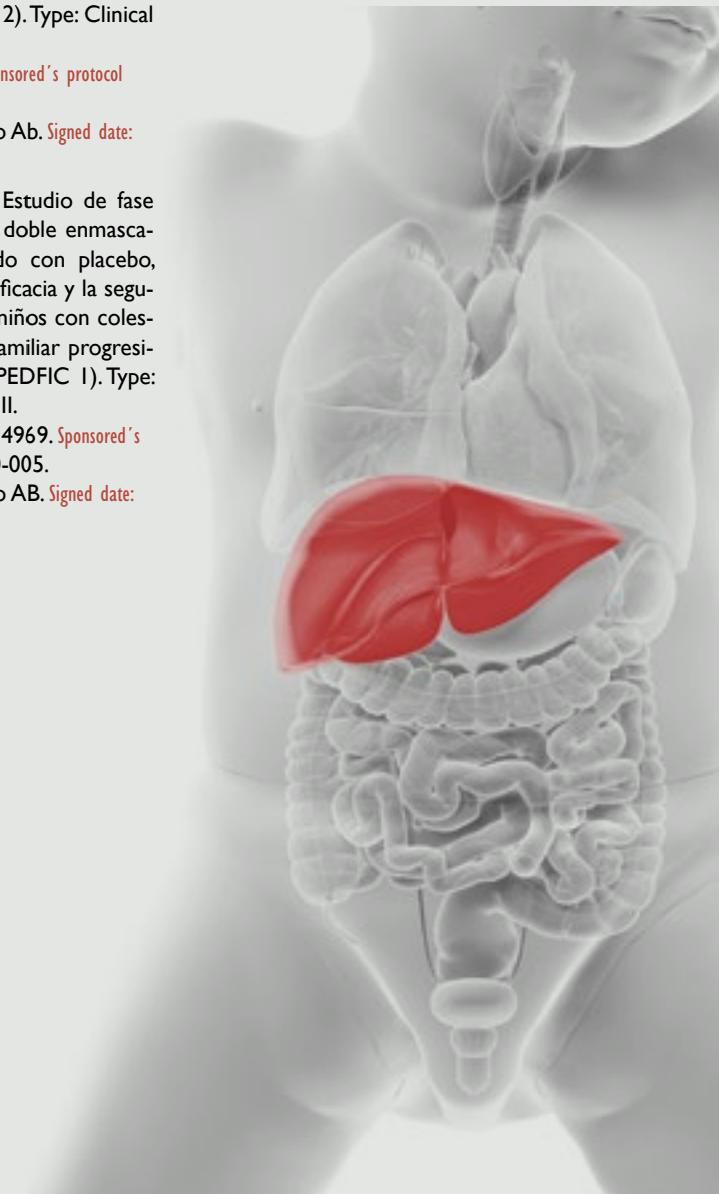
code: A4250-008.

Sponsored by: Albireo AB. Signed date: 01/10/2018

Hierro Llanillo L. Estudio de fase 3 aleatorizado, con doble enmascaramiento, controlado con placebo, para demostrar la eficacia y la seguridad de A4250 en niños con colestasis intrahepática familiar progresiva de tipos 1 y 2 (PEDFIC 1). Type: Clinical Trial, phase III.

HULP code: Anexo-I 4969. Sponsored's protocol code: A4250-005.

Sponsored by: Albireo AB. Signed date: 17/09/2018





3.4 Large System Pathologies Area

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**2017
2018 Publications: **34** Impact Factor: **137.663** QI: **10**

Diagnosis and Treatment of Allergic Diseases Group

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Santiago Olalde Sánchez. Facultativo Especialista de Área en Alergología. Hospital Universitario La Paz

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Strategic Objective

These group members are specialists in various areas of allergic diseases, which enable them to perform clinical studies and basic research on the main allergic diseases (food allergies, asthma and rhinitis, urticaria/ angioedema and drug allergies). The group's strategic research objectives include:

- The development of new techniques to improve the diagnosis of food allergies by determining the molecular sensitisation profile
- The treatment of food allergies with oral desensitisation protocols



3.4 Large System Pathologies Area

- The study of hyperresponsiveness and airway inflammation in asthma, as well as the role of allergen exposure and comorbidities in this disease
- The study of the pathogenesis and treatment of eosinophilic diseases of the airways (eosinophilic bronchitis) and the gastrointestinal tract (eosinophilic oesophagitis)
- The characterisation of various types of angioedema caused by Bradykinin (hereditary and acquired) and improvements in their diagnosis and treatment
- Research on the epidemiology and pathomechanisms of severe adverse reactions caused by immune hypersensitivity reactions to drugs

Research Lines

- Food allergy (milk, egg, fruit, cereals): molecular diagnosis (by allergenic components) and treatment with oral desensitisation
- Epidemiology, physiopathology, diagnosis and treatment of angioedema and urticaria
- Studies on bronchial hyperresponsiveness to direct and indirect agents and airway inflammation
- Eosinophilic diseases of the respiratory tract (eosinophilic bronchitis) and digestive system (eosinophilic esophagitis)
- Persistent and difficult to control asthma: study on the influence of common and occupational allergens, comorbidities and new therapies
- Aspirin-exacerbated respiratory disease (AERD): inflammatory markers and desensitisation protocol
- Adverse immunologic reactions to drugs: study on the cellular and molecular mechanisms involved
- Molecular basis of allergy: characterization of allergens and modulating factors of allergenicity. Novel allergy biomarkers: microRNAs and mRNAs. Seeking the differences of specific IgE between allergic patients and asymptomatic individuals

Research Activity

Books and book chapters

Domínguez Ortega J. Inhaladores de cartucho presurizado. In: Plaza Moral V, Giner Donaire J. GEMA inhaladores: terapia inhalada, fundamentos, dispositivos y aplicaciones prácticas. Madrid: Luzán 5, 2018. p.27-33

Domínguez Ortega J. Inhaladores para el lactante y el niño. In: Plaza Moral V, Giner Donaire J. GEMA inhaladores: terapia inhalada, fundamentos, dispositivos y aplicaciones prácticas. Madrid: Luzán 5, 2018. p.63-6

Domínguez Ortega J. Módulo 3: situaciones especiales. Niños y adolescentes. In: Plaza Moral V, Giner Donaire J. Programa de educación en asma para enfermería. Madrid: Luzán 5, 2018. p.7-14

Domínguez Ortega J. Módulo 3: situaciones especiales. Alergia. In: Plaza Moral V, Giner Donaire J. Programa de educación en asma para enfermería. Madrid: Luzán 5, 2018. p.1-6

Publications

- Bermejo EM, Caballero T, López-Trascasa M, Peregrín PC, Herrera JG. Acquired angioedema with anti-C1-inhibitor autoantibodies during assisted reproduction techniques. *J Invest Allergol Clin.* 2018; 28(1): 62-4. Editorial Material. IF: 3.802; Q2
- Bernstein DL, Lummus ZL, Kesavulu B, Yao JB, Kotyan L, Miller D, Cartier A, Cruz MJ, Lemiere C, Munoz X, Quirce S, Tarlo S, Sastre J, Boulet LP, Weirauch MT, Kaufman K. Genetic variants with gene regulatory effects are associated with diisocyanate-induced asthma. *J Allergy Clin Immunol.* 2018; 142(3): 959-69. Article. IF: 14.11; DI
- Boboleo I, del Pozo V, Sanz V, Cabañas R, Fiandor A, Alfonso-Carrillo C, Salcedo MA, Revuelto RH, Quirce S. Aspirin desensitization in aspirin-exacerbated respiratory disease: New insights into the molecular mechanisms. *Respir Med.* 2018; 143: 39-41. Article. IF: 3.237; Q2
- Bogoi RN, de Pablo A, Valencia E, Martín-Carbonero L, Moreno V, Vilchez-Rueda HH, Asensi V, Rodríguez R, Toledano V, Rodes B. Expression profiling of chromatin-modifying enzymes and global DNA methylation in CD4+T cells from patients with chronic HIV infection at different HIV control and progression states. *Clin Epigenetics.* 2018; 10:20. Article. IF: 5.496; Q1
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- Canas JA, Sastre B, Rodrigo-Muñoz JM, Fernández-Nieto M, Barranco P, Quirce S, Sastre J, del Pozo V. Eosinophil-derived exosomes contribute to asthma remodelling by activating structural lung cells. *Clin Exp Allergy.* 2018; 48(9): 1173-85. Article. IF: 4.471; Q2
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3.4 Large System Pathologies Area

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3.4 Large System Pathologies Area



Public projects

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Management centre: FIBHULP

Quirce Gancedo S. Towards precision medicine in the study of risk factors and triggers of asthma (PREMEDAS). CIBERES. 2017-2019.

Management centre: Hospital Valle Hebrón

Rodríguez Pérez MR. Contrato Miguel Servet II (CPII13/00022). ISCIII/CAM. 2014-2025.

Management centre: FIBHULP

Private projects

Caballero Molina MT. Curso teórico-práctico de formación en investigación en angioedema. Shire Pharmaceuticals Ibérica S.L. 2017-Ongoing.

Management centre: FIBHULP

Caballero Molina MT. Development and trans-cultural validation of an international specific questionnaire (IHAE-QOL) for assessment of health related quality of life in adult patients with hereditary angioedema due to c1 inhibitor deficiency (HAE) and quality of life study (DTV-IHAE-QOL). Hereditary Angio-Edema In. 2009-Ongoing.

Management centre: FIBHULP

Domínguez Ortega FJ. Asesoramiento para el diseño del estudio clínico "ensayo clínico prospectivo multicéntrico aleatorizado de doble simulación controlado con placebo de búsqueda de la dosis más eficaz para el tratamiento de rinitis/riñoconjuntivitis por alergia frente al polen gramíneas. Inmunotek. 2015-Ongoing.

Management centre: FIBHULP

Domínguez Ortega FJ. Conocimientos básicos en patología alérgica para un médico residente e investigadores de Hospital Universitario La Paz. Glaxosmithkline S.A. 2017-Ongoing.

Management centre: FIBHULP

Quirce Gancedo SE. II Jornadas científicas sobre conocimientos básicos en patología alérgica para un médico residente e investigadores del Hospital Universitario La Paz. Glaxosmithkline S.A. 2018-Ongoing.

Management centre: FIBHULP

Quirce Gancedo SE. New findings in asthma, allergy and atopic dermatitis. Omnitix Pharma S.L. 2018-Ongoing.

Management centre: FIBHULP

Quirce Gancedo SE. Relación entre asma y obesidad en la población española mayor o igual a 18 años. Novartis Farmaceutica S.A. 2009-Ongoing.

Management centre: FIBHULP

Quirce Gancedo SE. Sesiones en investigación del diagnóstico molecular como herramienta de identificación de perfiles de respuesta en pacientes con enfermedad respiratoria alérgica y alergia a alimentos. Thermo Fisher Diagnostics SLU. 2017-On-going.

Management centre: FIBHULP

Rodríguez Pérez MR. Evaluación de la capacidad alergénica de productos alimentarios mediante test de activación de basófilos y sensibilización cutánea con alimentos. Angulas Aguinaga S.A.U. 2018-Ongoing.

Management centre: FIBHULP

International projects

Quirce Gancedo S. E-PHOCAS (PHenotyping of OCcupational ASthma). EAACI (European Academy o Allergy and Clinical Immunology). 2016-2020.

Management centre: University Hospital of Strasbourg

Clinical trials

Caballero Molina MT. BCX7353-302: un estudio fase 3, aleatorizado, doble ciego, controlado con placebo, de grupos paralelos para evaluar la eficacia y seguridad de dos dosis diferentes de BCXS7353 como tratamiento oral para la prevención de ataques en pacientes con angioedema. Type: Clinical Trial, phase III.

HULP code: 4984. Sponsored's protocol code: BCX7353-302.

Sponsored by: Biocryst Pharmaceuticals Inc. Signed date: 16/05/2018

Caballero Molina MT. BCX7353-204: estudio abierto para evaluar la seguridad a largo plazo de BCX7353 oral diario en pacientes con angioedema hereditario tipos I y II. Type: Clinical Trial, phase II.

HULP code: 4993. Sponsored's protocol code: BCX7353-204.

Sponsored by: Biocryst Pharmaceuticals Inc. Signed date: 05/02/2018

Barranco Sanz MPE. Estudio observacional prospectivo para evaluar la carga médica y su asociación al uso de corticosteroides orales en pacientes con asma grave en España. Estudio Levante. Type: EPA-SP.

HULP code: PI-3046. Sponsored's protocol code: PI-3046 EPA-SP AST-COR-2017-02Y

D3250R00031.

Sponsored by: Astrazeneca Farmaceutica Spain S.A. Signed date: 08/02/2018

Caballero Molina MT. Registro de pacientes de Firazyr-IOS (Icatibant Outcome Survey). Type: EPA-LA.

HULP code: Anexo-III 3080. Sponsored's protocol code: IOS.

Sponsored by: Shire Pharmaceuticals Iberica S.L. Signed date: 20/09/2018

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report
2017
2018



3.4 Large System Pathologies Area



Quirce Gancedo SE. Registro de pacientes con asma grave no controlada (Gema-Data). Type: EPA-SP.

HULP code: PI-3272. Sponsored's protocol code: VPM-SAL-2017-01.

Sponsored by: Fundación Española del Pulmón. SEPAR. Signed date: 18/05/2018

Gómez Traseira C. Efecto de la intervención 'Escalera de la leche' en el desarrollo de tolerancia y en el reconocimiento de epítopos de células B en niños alérgicos a proteínas de leche de vaca. Type: Producto Alimentario.

HULP code: PI-3274. Sponsored's protocol code: PI-3274.

Sponsored by: Fundación para la Investigación Biomédica del Hospital Clínico San Carlos. Signed date: 21/06/2018

Domínguez Ortega FJ. Estudio piloto sobre el control del asma en pacientes con rinitis alérgica a polen de gramíneas tratados con inmunoterapia sublingual de 5 gramíneas (Staloral®) vs placebo. 5 graps. Type: Clinical Trial, phase III.

HULP code: Anexo-I 4284. Sponsored's protocol code: DOM-STA-2014-01.

Sponsored by: Stallergenes Iberica S.A. Signed date: 10/01/2018



Patents and trademarks

Valenta R, Constantin C, Quirce Gancedo, SE, inventors; Phadia AB, assignee. Novel wheat allergens. PCT/SE2008/051377, EP2225266, US2010305049, AU2008330230, CA2707190, CN101932597, JP2011505134, RU2010126590; 2007 November 30.

Caballero Molina MT, Prior Gómez N, Remor Bitencourt EA, authors, FIBHULP, assignee. Brand name: HAE-QoL HEREDITARY ANGIOEDEMA QUALITY OF LIFE. CM 13.083.068; 2014 July 15.



Sánchez Herreros R, Martínez Fernández J, Castro Morera A, Gasset Vega M, Rodríguez Pérez RM, Pedrosa Delgado M, Quirce Gancedo S, inventors; FIBHULP, CSIC, assignees. Food allergen extracts and methods of producing and using the same. EP16382413.9 (Publication Number pending); 2016 September 06.

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Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report
2017
2018



3.4 Large System Pathologies Area



Publications: 7

Impact Factor: 11.959

QI: 1

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Strategic Objective

The main objective of our group is to study all aspects related to gynaecologic malignancies. It includes from diagnosis to treatment and follow-up. For the next years we will focus our research on the malignancies affecting female uterus, including cervical and endometrial cancer as well as uterine sarcomas.

We will develop at least two stable and comprehensive specific research lines trying to pay attention to molecular aspects as well as clinical features of the Gynaecological cancers. But we will support the rest of aspects of the subspecialty



3.4 Large System Pathologies Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

Research Lines

- Evaluation, treatment and surgery of oncologic diseases in gynecology
- Pelvic floor reconstructive surgery
- Molecular disorders in preeclampsia, placenta and other obstetrical diseases

Research Activity

Publications

- Coronado PJ, Rychlik A, Martínez-Maestre MA, Baquedano L, Fasero M, García-Arreza A, Morales S, Lubián DM, Zapardiel I. Role of lymphadenectomy in intermediate-risk endometrial cancer: a matched-pair study. *J Gynecol Oncol.* 2018; 29(1): e1. Article. IF: 2.914; Q1
- de-la-Noval BD, Tejeda MDD, Yébenes L, Zapardiel I, Gutiérrez AH, García JD. Recurrent endometriosis following tibolone hormone replacement therapy after mucinous ovarian carcinoma. *Eur J Gynaecol Oncol.* 2018; 39(2): 310-3. Article. IF: 0.245; Q4
- Díaz de la Noval B, Frías Aldeguer L, Leal García MA, García López E, Díaz Almirón M, Herrera de la Muela M. Increasing survival of metastatic breast cancer through locoregional surgery. *Minerva Ginecol.* 2018; 70(1): 44-52. Article. Not Indexed
- Ferrón G, de Santiago J, Querleu D, Martínez A, Ángeles MA, Boulet B, Guyon F, Zapardiel I. Left lateral endosurgical extraperitoneal total hysterectomy with para-aortic and pelvic lymphadenectomy: A novel approach for the obese patient with endometrial cancer. *J Minim Invas Gyn.* 2018; 25(4): 730-6. Article. IF: 2.414; Q2
- La Russa M, Zapardiel I, Halaska MJ, Zalewski K, Laky R, Dursun P, Lindquist D, Sukhin V, Polte-rauer S, Biliatis I. Conservative management of endometrial cancer: a survey amongst European clinicians. *Arch Gynecol Obstet.* 2018; 298(2): 373-80. Article. IF: 2.199; Q2
- Minig L, Fagotti A, Scambia G, Salvo G, Patrono MG, Haidopoulos D, Zapardiel I, Domingo S, Sotiropoulou M, Chisholm G, Ramírez PT. Incidence of lymph node metastases in women with low-risk early cervical cancer (< 2 cm) without lymph-vascular invasion. *Int J Gynecol Cancer.* 2018; 28(4): 788-93. Article. IF: 1.746; Q3
- Padilla-Iserte P, Minig L, Zapardiel I, Chiva L, Laky R, de Santiago J. Current situation in gynecological oncology training in Spain: where we are and where we want to go. *Clin Transl Oncol.* 2018; 20(4): 517-23. Article. IF: 2.441; Q3

Private projects

Hernández Gutiérrez A. Convocatoria interna Jesús Antolin Garcíarena 2018 - Contrato Emanuela Spagnolo. Fundación para la Investigación Biomédica Hospital Universitario La Paz. 2018-Ongoing.

Management centre: FIBHULP

Hernández Gutiérrez A. Factores inmunológicos en la transformación maligna de

la endometriosis. Fundación para la Investigación Biomédica Hospital Universitario La Paz. 2018-Ongoing.

Management centre: FIBHULP

Herrera de la Muela MJ. Calidad de vida y satisfacción con la cirugía en mujeres con cáncer de mama con reconstrucción postmastectomía: Estudio Brecar (Breast Cancer Reconstruction Study). Fundación para la Investigación Biomédica Hospital Universitario La Paz. 2015-Ongoing.

Management centre: FIBHULP

Muñoz Muñiz MM. Actualización en patología del suelo pélvico: de la investigación a la clínica (10^a edición). Astellas Pharma S.A. 2017-Ongoing.

Management centre: FIBHULP

Zapardiel Gutiérrez I. Curso de investigación en laparoscopia ginecológica avanzada en cadáveres. Stakeholders. 2013-Ongoing.

Management centre: FIBHULP

Zapardiel Gutiérrez I. Evaluación del antígeno epididimal humano -HE4 - en el diagnóstico diferencial y seguimiento de la endometriosis superficial y profunda. Abbott Laboratories S.A. 2012-Ongoing.

Management centre: FIBHULP

Zapardiel Gutiérrez I. III Curso de investigación en laparoscopia avanzada en cadáveres. Karl Storz Endoscopia Iberica S.A. 2015-Ongoing.

Management centre: FIBHULP

Zapardiel Gutiérrez I. Ultraestadificación molecular ganglio centinela en cáncer de cérvix: mRNA e6/e7 hpv. Fundación para la Investigación Biomédica Hospital Universitario La Paz. 2013-Ongoing.

Management centre: FIBHULP

Clinical trials

Hernández Gutiérrez A. Seguridad y beneficios del dispositivo de captura de células tumorales metastásicas en pacientes con cáncer de ovario avanzado. Type: Producto Sanitario.

HULP code: Anexo-I 4723. Sponsored's protocol code: MTRAP-2016-01.

Sponsored by: Mtrap Inc. Signed date: 20/12/2018

López Carrasco A. Estudio aleatorizado, controlado con placebo, doble ciego, de grupos paralelos, multicéntrico, de dosis-respuesta para evaluar la eficacia y seguridad de diferentes dosis orales de BAY 1128688 en mujeres con endometriosis sintomática durante un tratamiento. Type: Clinical Trial, phase II.

HULP code: Anexo-I 4904. Sponsored's protocol code: BAY 1128688/17472.

Sponsored by: Bayer AG. Signed date: 18/09/2018



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

3.4 Large System Pathologies Area

López Carrasco A. Estudio aleatorizado, doble ciego, de grupos paralelos, multicéntrico y de fase IIB para evaluar la eficacia y seguridad de dos dosis diferentes de Vilaprisán (BAY 1002670) frente a placebo en mujeres con endometriosis sintomática. Type: Clinical Trial, phase II.

HULP code: 5079. Sponsored's protocol code: BAY1002670/15792.

Sponsored by: Bayer AG. Signed date: 25/09/2018

Patents and trademarks

Zapardiel Gutiérrez I, de Santiago García J, inventors; FIBHULP, assignee. Laparoscopic surgical instrument. P201230950, PCT/ES2013/000139; 2012 June 18.

Zapardiel Gutiérrez I, de Santiago García J, inventors; FIBHULP, assignee. Surgical device. P201330532, PCT/ES2014/070277; 2013 April, 15.



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018



3.4 Large System Pathologies Area



Publications: 23

Impact Factor: 59.097

QI: 7

Manuel Quintana Díaz. Facultativo Especialista de Área en Medicina Intensiva. Hospital Universitario La Paz. Profesor Asociado Facultad de Medicina. Universidad Autónoma de Madrid

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Ana María Martínez Virto. Facultativo Especialista de Área en Medicina Familiar y Comunitaria. Coordinadora Adjunta de Urgencias. Hospital Universitario La Paz

Paloma Oliver Sáez. Facultativo Especialista de Área en Análisis Clínicos. Tutora de residentes de Análisis Clínicos. Hospital Universitario La Paz

María Inmaculada Pinilla Fernández. Facultativo Especialista de Área en Radiodiagnóstico. Hospital Universitario La Paz

Patient Blood Management Group

María Angélica Rivera Núñez. Facultativo Especialista de Área en Medicina Interna. Hospital Universitario La Paz

Marcelino Sánchez Casado. Facultativo Especialista de Área en Medicina Intensiva. Hospital Virgen de la Salud

Strategic Objective

Stratifying risk in the critically ill patient

- Stratify pulmonary thromboembolism risk
- Try to diagnose the potentially ill politraumatized patient at the emergency room Enhance the use of blood products
- Critically ill patient coagulopathy
- Early diagnose of anemia at the emergency room
- Intravenous iron usage

Anticoagulation Reservoir

Patient Blood Management Implementation



3.4 Large System Pathologies Area



Research Lines

- Critical Bleeding
- Anticoagulation reversal

Research Activity

Doctoral theses

Silva Obregón JA. Fragilidad como predictor de mortalidad en ancianos ingresados en UCI por patología médica. Modelo predictor de mortalidad hospitalaria.[dissertation]. Madrid: UAM; 2018(20/12/2018).

Directors: Quintana Díaz M, Huerta Álvarez C

Tung Chen Y. Utilidad de la ecografía en el manejo de fluidos y la terapia de transfusión en la hemorragia digestiva en el ámbito de urgencias.[dissertation]. Madrid: UAM; 2018(03/12/2018).

Directors: Quintana Díaz M, Blancas Gómez Casero R

Munayco Sánchez AJ. Gestión de Hospitales de Campaña (Cirugía de Control de Daños) para desplazados internos en un teatro de operaciones bélico. Despliegue y activación bajo el fuego.[dissertation]. Madrid: UAM; 2018(26/10/2018).

Directors: Quintana Díaz M, Carbayo Herencia J

Books and book chapters

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Quintana Díaz M, Ariza Cadena F. Hemorragia crítica. En el posparto: uso de la tromboelastografía y la tromboelastometría. In: Fernández Bello I. Técnicas para la evaluación global de la hemostasia. Barcelona: Ambos Marketing Services, 2018. p.77-89

Quintana Díaz M, Ariza Cadena F. Hemorragia crítica. Utilidad de las pruebas viscoelásticas durante el sangrado crítico por trauma. In: Fernández Bello I. Técnicas para la evaluación global de la hemostasia. Barcelona: Ambos Marketing Services, 2018. p.90-101

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N, Barla G, Carobene A. The EuBIVAS: Within- and between-subject biological variation data for electrolytes, lipids, urea, uric acid, total protein, total bilirubin, direct bilirubin, and glucose. *Clin Chem.* 2018; 64(9): 1380-93. Article. IF: 6.891; DI

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• Aarsand AK, Roraas T, Fernández-Calle P, Ricos C, Díaz-Garzón J, Jonker N, Perich C, González-Lao E, Carobene A, Minchinela J, Coskun A, Simón M, Álvarez V, Bartlett WA, Fernández-Fernández P, Boned B, Braga F, Corte Z, Aslan B, Sandberg S. The biological variation data critical appraisal checklist: A standard for evaluating studies on biological variation. *Clin Chem.* 2018; 64(3): 501-14. Article. IF: 6.891; DI

• Alba CJ, Erce JAG. The role of the internist in the patient blood management program. *Med Clin Barcelona.* 2018; 150(12): 469-71. Editorial Material. IF: 1.277; Q3

• Barea-Mendoza JA, Chico-Fernández M, Sánchez-Casado M, Molina-Díaz I, Quintana-Díaz M, Jiménez-Moragas JM, Pérez-Barcena J, Llompart-Pou JA. Predicting survival in geriatric trauma patients: A comparison between the TRISS methodology and the Geriatric Trauma Outcome Score. *Cir Espan.* 2018; 96(6): 357-62. Article. IF: 0.835; Q4

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3.4 Large System Pathologies Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

- MC, de Carlos-Vicente JC, Hernández-Rastrollo R, Holanda-Pena MS, Pilar-Orive FJ, Ocete-Hita E, Rodríguez-Núñez A, Serrano-González A, Blanch L. Admission, discharge and triage guidelines for paediatric intensive care units in Spain. *An Pediatr*. 2018; 88(5):287. Article. IF: 1.166; Q3
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- Revollo R, Alcaide MJ, Abehsera D, Martín-Camean M, Gomes MSEF, Alonso-Luque B, Bartha JL. Prediction of chorioamnionitis in cases of intraamniotic infection by ureaplasma urealyticum in women with very preterm premature rupture of membranes or preterm labour. *J Matern-Fetal Neo M*. 2018; 31(14): 1839-44. Article. IF: 1.569; Q3
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Public projects

Martí de Gracia M. Mejora de la adecuación en la solicitud de pruebas de imagen con radiación ionizante (Tc Y Rx) en los servicios de urgencias hospitalarios. Proyecto MAPAC-Imagen II (PI16/01828). ISCIII. 2017-2019.

Management centre: FIBHULP

Private projects

Oliver Sáez P. Estudio comparativo multicéntrico sobre contaminación por microorganismos de las tiras reactivas de glucemia de uso hospitalario. Abbott Laboratories S.A. 2012-Ongoing.

Management centre: FIBHULP

Oliver Sáez P. Estudio de gasometría en el lugar de asistencia. Beneficio para el paciente. Asociación Española de Farmacéuticos Analistas (AEFA). 2012-Ongoing.

Management centre: FIBHULP

Quintana Diaz M. Curso avanzado para técnicos en simulación clínica. Stakeholders. 2018-Ongoing.

Management centre: FIBHULP

Quintana Diaz M. Curso soporte vital avanzado. Stakeholders. 2018-Ongoing.

Management centre: FIBHULP

Quintana Diaz M. Identificación de factores de gravedad en el paciente con traumatismo potencialmente grave. Fundación para la Investigación Biomédica Hospital Universitario La Paz. 2013-Ongoing.

Management centre: FIBHULP

Quintana Diaz M. Implantacion de un programa de cursos de formacion de la mas alta calidad destinado a veterinarios en España. Improve Formación Veterinaria S.L. 2016-Ongoing.

Management centre: FIBHULP

Quintana Diaz M. Curso de instructores en soporte vital avanzado plan nacional de resucitación cardiopulmonar de la semicyuc. Astrazeneca Farmaceutica Spain, S.A. 2018-Ongoing.

Management centre: FIBHULP

Quintana Diaz M. Estudio de monitorización de heparinas de bajo peso molecular como profilaxis en un servicio de urgencias. Bayer Hispania S.L. 2011-Ongoing.

Management centre: FIBHULP

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**2017
2018

3.4 Large System Pathologies Area

Publications: **11**Impact Factor: **54.2¹⁴**QI: **2**

Endocrine Diseases Group

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Noemí González Pérez de Villar. Facultativo Especialista de Área en Endocrinología y Nutrición. Hospital Universitario La Paz

Natalia Hillman Gadea. Facultativo Especialista de Área en Endocrinología y Nutrición. Hospital Universitario La Paz

Beatriz Lecumberri Santamaría. Facultativo Especialista de Área en Endocrinología y Nutrición. Hospital Universitario La Paz

Luis Felipe Pallardo Sánchez. Profesor Emérito. Universidad Autónoma de Madrid

Paola Andrea Parra Ramírez. Facultativo Especialista de Área en Endocrinología y Nutrición. Hospital Universitario La Paz

Lourdes Sáez de Ibarra y Vélez de Mendizábal. Enfermera Educadora Unidad de Diabetes, Endocrinología y Nutrición. Hospital Universitario La Paz

Strategic Objective

The objective of this group is both basic and applied investigation, with its interest focused on translational investigation, comprising two specific areas within the speciality of Endocrinology and Nutrition.

The first, within metabolic pathology, includes diabetes and obesity. The second is focused on endocrine organ-specific pathology (thyroid, pituitary gland, neuro-endocrinology and rare endocrine disorders).



3.4 Large System Pathologies Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

Research Lines

Metabolic pathology

- Diabetes and pregnancy
- Diabetes related complications
- Advanced technologies in diabetes
- Epidemiological, clinical and comprehensive therapeutic approach to obesity
- Adipose brown tissue metabolism

Organ-specific pathology

- Molecular biology applied to the diagnosis and treatment of neuroendocrine disorders
- Prognosis and treatment of differentiated thyroid cancer
- Study of GnRH deficiency
- GH secretion alterations and cardiometabolic pathology
- Clinical-genetic characterizations of rare

Research Activity

Doctoral theses

Guillén Sacoto MA. Diabetes gestacional en embarazos múltiples. Impacto del control metabólico materno para el feto. Síndrome metabólico y alteración de I metabolismo hidro carbonado materno postparto.[dissertation]. Madrid: UAM; 2018 (04/04/2018).

Director: Herranz de la Morena L.

Parra Ramírez PA. Utilidad de la ecografía con contraste en la localización de lesiones paratiroides en pacientes con hiperparatiroidismo primario[dissertation]. Madrid: UAM; 2018 (31/05/2018).

Director: Álvarez Escolá C.

Publications

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Private projects

Herranz de la Morena L. Jornadas de formación en investigación sobre diabetes y obesidad. Astrazeneca Farmaceutica Spain S.A. 2013-Ongoing.

Management centre: FIBHULP

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018



3.4 Large System Pathologies Area



Publications: **49**

Impact Factor: **184.6**

QI: **16**

Urology Group

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José María Alonso Dorrego. Facultativo Especialista de Área en Uroología. Hospital Universitario La Paz

Mario Álvarez Maestro. Facultativo Especialista de Área en Uroología. Hospital Universitario La Paz

Luisa María Botella Cubells. Investigadora Científica. Centro de Investigaciones Biológicas - CSIC

José Ramón Cansino Alcaide. Facultativo Especialista de Área en Uroología. Hospital Universitario La Paz

Cristina de Castro Guerín. Facultativo Especialista de Área en Uroología. Hospital Universitario La Paz

Mercedes Ferrer Parra. Profesor Titular. Departamento de Fisiología. Universidad Autónoma de Madrid

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Maria Justa García Matres y Cortés. Facultativo Especialista de Área en Uroología. Hospital Universitario La Paz

Juan Gómez Rivas. Facultativo Especialista de Área en Uroología. Hospital Universitario La Paz

Estefanía Esperanza Linares Espinós. Facultativo Especialista de Área en Uroología. Hospital Universitario La Paz

Pedro López Pereira. Jefe de Servicio de Urología Pediátrica. Hospital Universitario La Paz

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Jose Antonio Moreno Valle. Facultativo Especialista de Área en Uroología. Hospital Universitario La Paz

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Francisco Real. Investigador Senior. Centro Nacional de Investigaciones Oncológicas

Emilio Ríos González. Médico Adjunto en Uroología. Hospital Universitario La Paz

Fermín Rodríguez de Bethencourt y Codés. Facultativo Especialista de Área en Uroología. Hospital Universitario La Paz

Ángel Tabernero Gómez. Facultativo Especialista de Área en Uroología. Hospital Universitario La Paz

Maria del Mar Valés Gómez. Científico Titular. Centro Nacional de Biotecnología-CSIC

Strategic Objective

We aim to consolidate a strong research group into:

- Urologic Oncology
- Reconstructive surgery



3.4 Large System Pathologies Area

- Endurologic and minimally invasive surgery
- Lithiasis
- Incontinence / Neuro-urology
- Andrology / Reproduction

Through basic and experimental research, clinical research, translational research and clinical trials.

The results of this projects should be translated into doctoral theses, publications in high impact journals and visibility factor, as to finally achieve patents and trademarks.

Research Lines

Urological Oncology

The group's efforts will focus on the following fields of research:

BLADDER CANCER

- Immunological response in patients with bladder cancer treated with BCG
- Urinary markers in diagnosis and prediction of response in patients with bladder cancer
- New immunomodulatory treatments in bladder cancer
- New imaging methods for the diagnosis of bladder cancer
- Efficacy of combined chemo and immunotherapy hyperthermia in bladder cancer

PROSTATE CANCER

- Castration resistant prostate carcinoma, immune response, and evaluation of predictive markers of therapeutic response
- Medical treatment of locally advanced and metastatic prostate cancer
- Development of new surgical minimally invasive techniques for localized prostate cancer

KIDNEY CANCER

- Development of new surgical minimally invasive techniques for localized kidney cancer
- Research of new therapeutic lines in hereditary renal cancer
- Medical treatment

Reconstructive surgery

- Development and improvement of new reconstructive surgery techniques for complex urethral strictures, genitourinary congenital malformations and genitourinary fistulas
- Development of a Regenerative Medicine Unit and Tissue Bioengineering applied to reconstructive urologic surgery

Endurologic and minimally invasive surgery

- Development of new endourological surgery techniques for minimally invasive treatment of benign prostatic hyperplasia and urinary lithiasis
- Development of a learning program in laparoscopy and other minimally invasive surgeries

Lithiasis

- Study of new inhibitors of crystallization of urine solutes as prevention of lithogenesis
- Metabolic study of renal lithiasis

Incontinence and Neuro-urology

- Study and treatment of chronic pelvic pain
- Development and improvement of new systems for

Research Activity

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3.4 Large System Pathologies Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

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3.4 Large System Pathologies Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

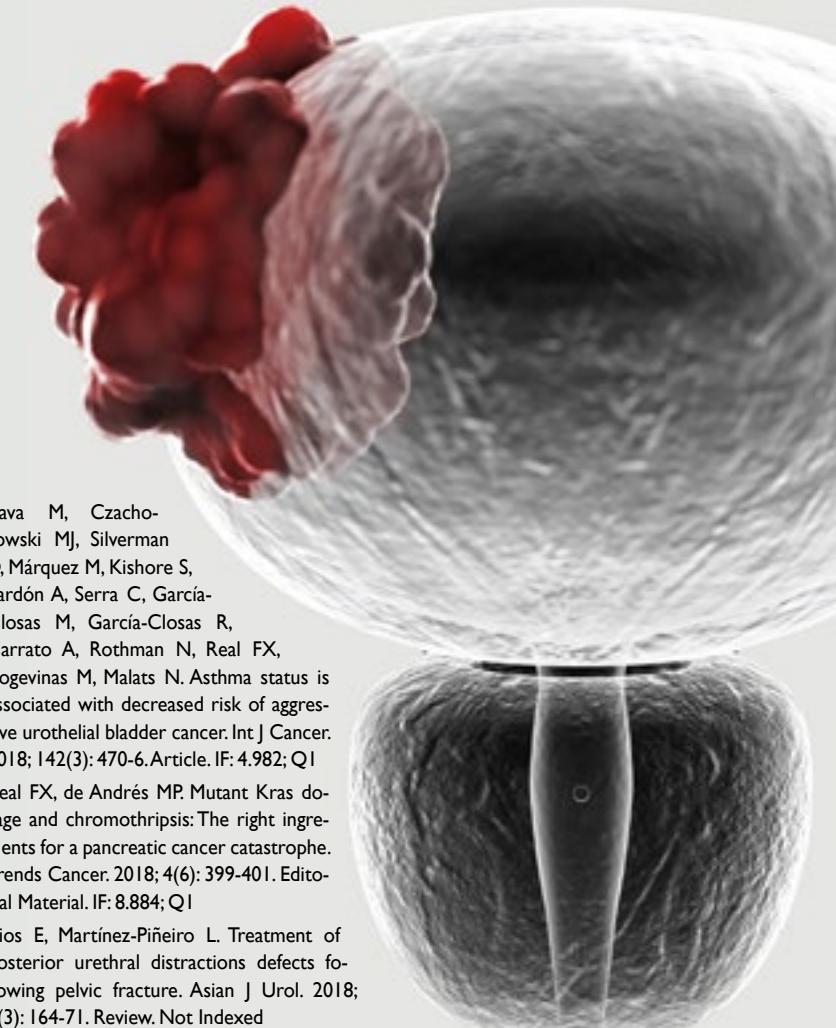
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4

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3.4 Large System Pathologies Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
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3.4 Large System Pathologies Area



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Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**2017
2018

3.4 Large System Pathologies Area



Publications: **1**

Impact Factor: **1.994**

QI: **0**

Jesús Castro Toro. Supervisor de Área Funcional. Hospital Universitario La Paz
Laura Alonso Recio. Profesora Contratada. Universidad a Distancia de Madrid
Alicia Cerón Serrano. Enfermera asistencial. Hospital Universitario La Paz
María Nélida Conejo Pérez. Enfermera. Fundación para el Desarrollo de la Enfermería (FUDEN). Hospital Universitario La Paz
Víctor Manuel Cornejo del Río. Supervisor de Unidad Quirúrgica. Hospital Carlos III- Hospital Universitario La Paz
María Ricardina Delgado Sandoval. Enfermera en Servicio de Consultas Externas. Hospital Universitario La Paz
María Luisa Díaz Martínez. Profesora Contratada. Universidad Autónoma de Madrid
María Durán Agüí. Enfermera en Servicio de Medicina Interna. Hospital Universitario La Paz
Matilde Fernández y Fernández-Arroyo. Profesora en la Unidad Docente de Matronas. Hospital Universitario La Paz
Salomé Herrero Cereceda. Enfermera Unidad Quirúrgica. Hospital Cantoblanco-Hospital Universitario La Paz
Patricia Luna Castaño. Enfermera en Servicio de Cuidados Intensivos Pediátricos. Hospital Universitario La Paz
Jesús Morente López. Enfermero en Unidad de Cuidados Críticos. Hospital Universitario La Paz. Profesor colaborador. Universidad Pontificia de Comillas

Health Care Nurses Research Group

Pedro Piqueras Rodríguez. Supervisor de Enfermería en Unidad de Neonatología. Hospital Universitario La Paz

Ana Ramos Cruz. Supervisor de Enfermería en Reanimación Maternidad. Hospital Universitario La Paz. Profesora Asociada de Grado de Enfermería. Centro Universitario de Ciencias de la Salud San Rafael-Nebrija

María del Carmen Sellán Soto. Profesora Contratada. Universidad Autónoma de Madrid

Gema Tapia Serrano. Enfermera en el Servicio de Neonatología. Hospital Universitario La Paz

Adrián Torres Hidalgo. Enfermero. Técnico de salud en la Gerencia Asistencial de Hospitales. Hospital Universitario La Paz

Strategic Objective

Care is an indispensable activity for survival, since humanity exists. Care has been relevant as a primary function to promote and develop all those activities that make people live.

This research group aims to collaborate on growing clinical evidence on health care. The real gap between what generates scientific knowledge and the decisions that are made in the day to day is ethically unacceptable. Between 30 and 40% of patients do not receive care consistent with the results of the research and around 20-25% of care may be unnecessary or potentially harmful. Evidence-Based Practice



3.4 Large System Pathologies Area



(PBE) or Evidence is based on the fact that greater knowledge and use of research results in clinical practice will contribute to improving the health of the population. Today, it is well known that the implementation of the best scientific evidence available in the clinical practice improves quality of care and clinical outcomes.

In addition, decision-makers based on available evidence tend to be more satisfied with their role and focus on improving the quality of care given to patients.

Finally, it should be noted that using evidence in daily practice can achieve health goals at a minimum cost.

Cost-effectiveness studies have been conducted in which evidence-based care is linked to a reduction in health costs compared to traditional care.

At the same time, society is facing new economic, political, demographic, social and cultural challenges that require health services capable of meeting the growing health needs of the population.

It is necessary to investigate in clinical practice the most advanced care in order to achieve the full development of care and ensure the achievement of the best results in terms of overall health and quality of life of patients. Effectiveness of interventions, greater cohesion of health care teams, and of course, all contribute to the sustainability of the health system and user satisfaction.

Research Lines

- Vital Processes and complex care
- Technological innovation and its application in health care
- Management of care and results of professional practice

Research Activity

Doctoral theses

Tapia Serrano G. Seguridad del paciente neonatal en el uso de productos sanitarios relacionados con la alimentación [dissertation]. Madrid: UCM; 2018(23/02/2018).

Directors: Pacheco del Cerro E, Rivas Paterna AB.

Books and book chapters

García Barreales S, Tapia Serrano G, Henández Villar L. Riesgo social en el niño en etapa escolar y adolescencia. In: García Barreales S. Atención enfermera en el niño con riesgo social. España: FUDEN, 2018. p.97-140

Fernández y Fernández-Arroyo M, Pedraza Anguera A, Gómez del Pulgar M, Alcolea Cosin T, Oter Quintana C. Aprendizaje y satisfacción de los padres con la enseñanza sanitaria del baño del recién nacido. In: XXII Encuentro Internacional de Investigación en Cuidados. Madrid: Unidad de Investigación en Cuidados de Salud, 2018. p.385-383

Publications

- Alonso-Rocio L, Martín-Plasencia P, Ruiz M, Serrano JM. Differences in cognitive performance in nondemented Parkinson's disease: A latent profile analysis of cognitive subtypes. *J Clin Exp Neuropsyc.* 2018; 40(8): 777-89. Article. IF: 1.994; Q3

Private projects

Castro Toro J. Efectividad de la aplicación móvil -Vivir con EPOC- para mejorar la adherencia al tratamiento y la calidad de vida en pacientes con enfermedades pulmonar obstructiva crónica. Fundación Vodafone España. 2018-Ongoing.

Management centre: FIBHULP.

International projects

Sellán Soto MC. Construcción de género en niñas y niños desde la actividad lúdica por la salud integral. CODEM. 2014-2018.

Management centre: Red Internacional de Enfermería en Salud infantil

Sellán Soto MC. Construcción de género en niñas y niños desde la actividad lúdica por la salud integral. CODEM. 2014-2018.

Management centre: Red Internacional de Enfermería en Salud infantil

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

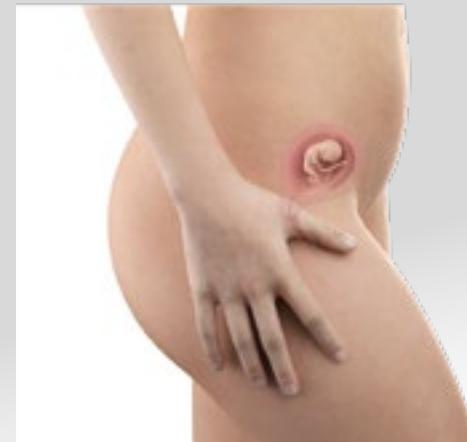
3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**2017
2018

3.4 Large System Pathologies Area

Publications: **10**Impact Factor: **13.19**QI: **0**

Maternal and Fetal Medicine Group

José Luis Bartha Rasero. Jefe de Servicio de Obstetricia y Ginecología. Hospital Universitario La Paz. Catedrático de Obstetricia y Ginecología. Universidad Autónoma de Madrid

Eugenio Antolín Alvarado. Jefe de Sección de Obstetricia y Ginecología. Hospital Universitario La Paz. Profesor asociado. Universidad Autónoma de Madrid

Marta Cortés León. Médico Especialista en Ginecología y Obstetricia. Hospital Universitario La Paz

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María del Mar González Arlazón. Facultativo Especialista de Área en Ginecología y Obstetricia. Hospital Universitario La Paz

María de la Calle Fernández-Miranda. Jefa de Sección de Tocología de Alto Riesgo y Obstetricia Médica. Hospital Universitario La Paz. Profesora asociada. Universidad Autónoma de Madrid

María de la Cruz González Álvarez. Facultativo Especialista de Área en Ginecología y Obstetricia. Hospital Universitario La Paz

Inmaculada Duyos Mateo. Facultativo Especialista de Área en Ginecología y Obstetricia. Hospital Universitario La Paz

Beatriz Herrero Ruiz. Médico Adjunto de la Sección de Ecografía y Medicina Fetal. Hospital Universitario La Paz

Sara López Magallón. Facultativo Especialista de Área en Ginecología y Obstetricia. Hospital Universitario La Paz

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Fernando Magdaleno Dans. Jefe de Sección de Obstetricia y Ginecología. Hospital Universitario La Paz. Profesor asociado. Universidad Autónoma de Madrid



3.4 Large System Pathologies Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report
2017
2018

Maria Elena Martín Boado. Facultativo Especialista de Área en Ginecología y Obstetricia. Hospital Universitario La Paz

Nuria Martínez Sánchez. Facultativo Especialista de Área en Ginecología y Obstetricia. Hospital Universitario La Paz

Inmaculada Orensanz Fernández. Facultativo Especialista de Área en Ginecología y Obstetricia. Hospital Universitario La Paz

Roberto Rodríguez González. Facultativo Especialista de Área en Ginecología y Obstetricia. Hospital Universitario La Paz

Laura Sotillo Mallo. Facultativo Especialista de Área en Ginecología y Obstetricia. Hospital Universitario La Paz

Strategic Objective

1. To evaluate the involvement of placental energy metabolism in obstetric disorders
2. To find new biomarkers in gestational diabetes mellitus and macrosomia
3. To find new biomarkers of fetal and perinatal neurological damage establishing new prevention strategies
4. To improve our understanding of the pathophysiology fetal heart damage in Anti-Ro positive women and to find new lines of treatment in these cases

Research Lines

- Diabetes mellitus, obesity and metabolic syndrome during pregnancy
- Energy metabolism during pregnancy
- Fetal neurodevelopment
- Inflammation, autoimmunity and pregnancy

Research Activity

Publications

- Barquiel B, Herranz L, Meneses D, Moreno O, Hillman N, Burgos MA, Bartha JL. Optimal gestational weight gain for women with gestational diabetes and morbid obesity. *Matern Child Health J.* 2018; 22(9): 1297-305. Article. IF: 1.736; Q2
- Bugatto F, Quintero-Prado R, Visiedo FM, Vilar-Sánchez JM, Figueroa-Quinones A, López-Tinoco C, Torrejón R, Bartha JL. The influence of lipid and proinflammatory status on maternal uterine blood flow in women with late onset gestational diabetes. *Reprod Sci.* 2018; 25(6): 837-43. Article. IF: 2.559; Q2
- Rostom A, de la Calle M, Bartha JL, Castro A, Lecumberri B. Primary hyperparathyroidism diagnosed and treated surgically during pregnancy. *Endocrinol Diabetes Nutr.* 2018; 65(4): 239-41. Letter. IF: 0.934; Q4

- Díaz-Menéndez M, de la Calle-Prieto F, Montero D, Antolín E, Vázquez A, Arsuaga M, Trigo E, García-Bujalance S, de la Calle M, Seco PS, de Ory F, Arribas JR. Initial experience with imported Zika virus infection in Spain. *Enferm Infec Micr Cl.* 2018; 36(1): 4-8. Article. IF: 1.685; Q4
- de la Calle M, Baquero F, Rodríguez R, González M, Fernández A, Omeñaca F, Bartha JL. Successful treatment of intrauterine cytomegalovirus infection with an intraventricular cyst in a dichorionic diamniotic twin gestation using cytomegalovirus immunoglobulin. *J Matern-Fetal Neo M.* 2018; 31(16): 2226-9. Article. IF: 1.569; Q3
- Revello R, Alcaide MJ, Abesera D, Martín-Camean M, Gomes MSEF, Alonso-Luque B, Bartha JL. Prediction of chorioamnionitis in cases of intraamniotic infection by ureaplasma urealyticum in women with very preterm premature rupture of membranes or preterm labour. *J Matern-Fetal Neo M.* 2018; 31(14): 1839-44. Article. IF: 1.569; Q3
- Boria F, de la Calle M, Cuerva M, Sainz A, Bartha JL. Impact of oocyte donation on obstetric and perinatal complications in twin pregnancies. *J Matern Fetal Neonatal Med.* 2018; 43556. Article. IF: 1.569; Q3
- Sotillo L, de la Calle M, Magdaleno F, Bartha JL. Efficacy of carbetocin for preventing postpartum bleeding after cesarean section in twin pregnancy. *J Matern Fetal Neonatal Med.* 2018; 43586. Article. IF: 1.569; Q3
- Núñez Cerezo V, Romo Muñoz M, Encinas JL, Jiménez J, Elorza Fernández MD, Herrero B, Antolín E, Martínez Martínez L, López Santamaría M. Study of pulmonary hypertension and long-term respiratory clinic in children with congenital diaphragmatic hernia. *Cir Pediatr.* 2018; 31(2): 76-80. Article. Not Indexed
- Núñez V, Romo M, Encinas JL, Bueno A, Herrero B, Antolín E, Parron M, Martínez L, López Santa-maria M. The role of fetal magnetic resonance imaging in the study of congenital diaphragmatic hernia. *Cir Pediatr.* 2018; 31(1): 15-20. Article. Not Indexed

Public projects

Antolín Alvarado E. Desarrollo de métodos predictivos basados en la integración de factores prenatales y postnatales para la detección de neurodesarrollo anómalo de cardiopatías congénitas (PII3/02364). ISCIII. 2014-2018.

Management centre: FIBHULP

Bartha Rasero JL. Aplicación de la biología de sistemas al conocimiento de la fisiopatología e identificación de nuevos biomarcadores de la diabetes gestacional (PII5/01563). ISCIII. 2016-2018.

Management centre: FIBHULP

Private projects

Bartha Rasero JL. II Curso de simulación en emergencias obsetricas formación e investigación. Medical Simulator S.L. 2018-Ongoing.

Management centre: FIBHULP



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

3.4 Large System Pathologies Area

Bartha Rasero JL. Implicación de la oxidación mitocondrial de ácidos grasos placentaria en la patogénesis y clínica de la preeclampsia. Laboratorios Farmacéuticos Rovi S.A. 2016-Ongoing.

Management centre: FIBHULP

Clinical trials

Bartha Rasero JL. Estudio piloto para evaluar el efecto de la cepa Lactobacillus Salivarius PS11610 sobre la microbiota del tracto genital femenino y masculino en parejas con problemas de fecundidad. Type: Estudios, phase Producto Alimentario.

HULP code: PI-3245. Sponsored's protocol code: FEC/18.01.

Sponsored by: Probisearch S.L. Signed date: 12/09/2018

Bartha Rasero JL. Estudio aleatorizado, multicéntrico, doble ciego, controlado con placebo y grupos paralelos para evaluar la efectividad de la cepa Lactobacillus Salivarius V4II-90 en la reducción de la colonización por estreptococos del grupo B (GBS) de mujeres embarazadas. Type: Producto Alimentario.

HULP code: 5120. Sponsored's protocol code: STB/17.02.

Sponsored by: Recordati España S.L. Signed date: 26/10/2018

Bartha Rasero JL. Un estudio de prueba de concepto de fase 2A, doble ciego, de grupo paralelo, aleatorizado y controlado con placebo que evalúa la eficacia, la seguridad y la farmacocinética de OBE022 combinado con Atosiban tras su administración por vía oral a mujeres EMB. Type: Clinical Trial, phase II.

HULP code: 4942. Sponsored's protocol code: 4942 17-OBE022-

003.

Sponsored by: Obseva S.A. Signed date: 24/01/2018

Bartha Rasero JL. Estudio piloto para evaluar el efecto de la cepa Lactobacillus Salivarius PS11610 sobre la microbiota del tracto genital femenino y masculino en parejas con problemas de fecundidad. Type: Producto Alimentario.

HULP code: PI-3245. Sponsored's protocol code: FEC/18.01.

Sponsored by: Probisearch S.L. Signed date: 12/09/2018



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**

2018



3.4 Large System Pathologies Area



Publications: **6**

Impact Factor: **34.395**

QI: **3**

Emergency and Critical Pathology Group

Alejandro Martín Quirós. Facultativo Especialista Urgencias. Hospital Universitario La Paz

Gillermina Bejarano Redondo. Facultativo Especialista Urgencias. Hospital Universitario La Paz

Lubna Dani Ben Abdel-lah. Facultativo Especialista Urgencias. Hospital Universitario La Paz

Guadalupe Buitrago Weiland. Facultativo Especialista de Área en Radiología. Hospital Universitario La Paz

María Elena Calvín García. Facultativo Especialista Urgencias. Hospital Universitario La Paz

Julio Cobo Mora. Jefe de la Unidad de Urgencias. Hospital Universitario La Paz

Isabel Gallego Mínguez. Facultativo Especialista Urgencias. Hospital Universitario La Paz

María de los Ángeles García Martín. Facultativo Especialista de Farmacia Hospitalaria. Hospital Universitario La Paz

Olga González Peña. Facultativo Especialista Urgencias. Hospital Universitario La Paz

Manuel Jesús González Viñolis. Facultativo Especialista Urgencias. Hospital Universitario La Paz

María Milagros Jaén Cañas. Facultativo Especialista Urgencias. Hospital Universitario La Paz

Macarena Lerín Baratas. Facultativo Especialista Urgencias. Hospital Universitario La Paz

Maria Lorena López Corcuera. Facultativo Especialista Urgencias. Hospital Universitario La Paz

Raúl Muñoz Romo. Técnico Superior de Salud Pública. SUMMA 112

Mikel Rico Bríñas. Facultativo Especialista Urgencias. Hospital Universitario La Paz

Paloma Isabel Romero Gallego-Acho. Facultativo Especialista Urgencias. Hospital Universitario La Paz

María José Simón Merlo. Facultativo Especialista de Área en Radiología. Hospital Universitario La Paz

Tomás Villén Villegas. Facultativo Especialista Urgencias. Hospital Universitario La Paz

Yale Tung Chen. Facultativo Especialista Urgencias. Hospital Universitario La Paz

Strategic Objective

Our group will investigate new strategies to address very different pathologies that are presented in our emergency department, national referent in different fields of diagnosis and treatment. This heterogeneous group of specialists, will approach 6 main lines of research, which aim to contribute to the better definition of clinical, diagnostic and treatment strategies.

We collaborate with other research groups, to study clinical and prognostic usefulness tests in cardiology, to develop new strategies for the treatment and diagno-



3.4 Large System Pathologies Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

sis of infectious diseases, and to investigate new antibiotics with the pneumology group.

We develop a new and pioneering line of imagingdiagnostic, with the line of emergency ultrasound, being national referents in research in this field, in which we have the active support of private enterprise.

We will investigate the possibility of supporting us in new technologies that help the clinician in the decisión making in the field of the treatment of the diabetes, impelling global initiatives both at the hospital and the population level.

Finally, we will develop a line of toxicological research, focusing both on the early recognition of the intoxicated patient, as well as their adequate treatment, in collaboration with the clinical toxicology unit (CTU), with the aim of becoming a national reference center in the Management of the intoxicated patient, as well as in the development of protocols of attention to multiple victims of biological attack.

Research Lines

- Integral management of the treatment and follow-up of the diabetic patient
- Emergency ultrasound
- Sepsis
- Care of infectious diseases in the emergency room
- Optimization of the management of the acute intoxicated patient and use of chemical substances for terrorist purposes
- Attention to cardiovascular pathology of emergencies
- Attention to respiratory pathology

Research Activity

Doctoral theses

Tung Chen Y. Utilidad de la ecografía en el manejo de fluidos y la terapia de transfusión en la hemorragia digestiva en el ámbito de urgencias.[dissertation]. Madrid: UAM; 2018(03/12/2018).

Director: Quintana Díaz M, Blancas Gómez Casero R.

Books and book chapters

Calvín García ME, Jaén Cañas MM. Patología biliar aguda. In: Bibiano Guillén C. Manual de Urgencias. Madrid: Saned Grupo, 2018. p.522-29

Publications

- Avendaño-Ortiz J, Maroun-Eid C, Martín-Quirós A, Lozano-Rodríguez R, Llanos-González E, Toledano V, Gómez-Campelo P, Montalbán-Hernández K, Carballo-Cardona C, Aguirre LA, López-Collazo E. Oxygen saturation on admission is a predictive biomarker for PD-L1 expression on circulating monocytes and impaired immune response in patients with sepsis. *Front Immunol.* 2018; 9: 2008. Article. IF: 4.716; Q2
- Avendaño-Ortiz J, Maroun-Eid C, Martín-Quirós A, Toledano V, Cubillos-Zapata C, Gómez-Campelo P, Varela-Serrano A, Casas-Martín J, Llanos-González E, Álvarez E, García-Río F, Aguirre LA, Hernández-Jiménez E, López-Collazo E. PD-L1 overexpression during endotoxin tolerance impairs the adaptive immune response in septic patients via HIF1 alpha. *J Infect Dis.* 2018; 217(3): 393-404. Article. IF: 5.045; Q1
- de la Calle-Prieto F, Martín-Quirós A, Trigo E, Mora-Rillo M, Arsuaga M, Díaz-Menéndez M, Arribas JR. Therapeutic management of Crimean-Congo haemorrhagic fever. *Enferm Infec Micr Cl.* 2018; 36(8): 517-22. Review. IF: 1.685; Q4
- Romo RM, Pérez AMB, Muñoz MA, Cardona CC, Mora JC, Sansuán AJC. Efficient diagnosis and treatment of acute paracetamol poisoning: cost-effectiveness analysis of approaches based on a hospital toxicovigilance program. *Emergencias.* 2018; 30(3): 169-76. Article. IF: 3.35; Q1
- Tung-Chen Y, Arnau MA. Amyloid cardiomyopathy: a hidden heart failure cause that is often misdiagnosed. *Acta Clin Belg.* 2018; 73(6): 460-1. Article. IF: 0.96; Q3
- Zegri-Reiriz I, de Alarcón A, Muñoz P, Selles MM, González-Ramallo V, Miro JM, Falcés C, Rico CG, Urkola XK, Lepe JA, Alvarez RR, Iglesias JMR, Navas E, Domínguez F, García-Pavia P. Infective endocarditis in patients with bicuspid aortic valve or mitral valve prolapse. *J Am Coll Cardiol.* 2018; 71(24): 2731-40. Article. IF: 18.639; DI

Public projects

Carballo Cardona C. Evaluación de la probabilidad clínica pre-test de cardiopatía isquémica en pacientes con DTA en los Servicios de Urgencias. Proyecto Mapacardioc (PI16/01045). ISCIII. 2017-2019.

Management centre: FIBHULP

Private projects

Carballo Cardona C. Ensayo clínico multicéntrico para la validación de la aplicación glikal en la ayuda al manejo de la hiperglucemia en comparación con la práctica clínica habitual. FIBHULP. 2017-Ongoing.

Management centre: FIBHULP

Carballo Cardona C. Sesiones formativas científicas de diabetes en el proyecto de investigación “Hospital sin azúcar”. Astrazeneca Farmaceutica Spain S.A. 2016-On-going.

Management centre: FIBHULP



3.4 Large System Pathologies Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2016
2017
2018



Carballo Cardona C. Adecuación de las dosis de HBPM mediante la monitorización de los niveles de factor anti-xa en pacientes que reciben tromboprofilaxis ampliada desde urgencias. Laboratorios Farmacéuticos Rovi S.A. 2013-Ongoing.

Management centre: FIBHULP

Carballo Cardona C. Revisión de la implantación de la ecografía clínica en un hospital terciario. GE Healthcare. 2017-Ongoing.

Management centre: FIBHULP

Clinical trials

Carballo Cardona C. Ensayo clínico fase IIIB, aleatorizado, abierto, para evaluar el alivio del dolor con Metoxiflurano inhalado, en comparación con el protocolo actual para el tratamiento del dolor de origen traumático, en adultos atendidos en unidades de urgencias españolas. Type: Clinical Trial, phase IIIb.

HULP code: Anexo-I 4803. Sponsored's protocol code: InMEDIATE.

Sponsored by: Mundipharma Pharmaceuticals S.L. Signed date: 19/02/2018

Patents and trademarks

Carballo Cardona C; author; FIBHULP, assignee. Trademark name: Digator. CM15869911, 2016 September 29.

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**

2018

Documents: **191**IF: **980.⁴⁵⁴**Originals: **159**IF: **848.²⁷⁶**DI: **38**QI: **101**

- INGEMM- Institute of Medical and Molecular Genetics Group
- Translational Oncology Group
- Experimental Therapies and Biomarkers in Cancer Group
- Oto-Neurosurgery Research Group
- Cancer Molecular Pathology and Therapeutic Targets Group

3.5 Cancer and Human Molecular Genetics Area

Amparo Cano García

- Mechanisms of Tumour Progression Group
- Animal and Cell Models for Detection and Characterization of Leukemic Stem Cells Group
- Research and Diagnosis of Inherited Metabolic Diseases Group
- Regulation of Ciliary Structure and Function by Phosphoinositides Group
- Onco-Hematology Research Group (HUF)

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018



3.5 Cancer and Human Molecular Genetics Area



Strategic Objectives	Development forecast for the coming years	Actions
<p>Cancer and Medical Genetics area is made up of 10 groups and its objective is to deepen its knowledge in all aspects related to neoplastic disease, including the biology of the tumour, identification of therapeutic targets, development of new treatments, analysis of the efficacy of available treatments, identification of biomarkers and carrying out studies aimed at prevention and early diagnosis. In relation to human and molecular genetics, the aim is to identify genetic alterations related to human diseases in order to make an early diagnosis and prevent the development of pathologies.</p>	<p>Research in the area of cancer and genetics is expanding, both in terms of basic and translational research and clinical research. It is foreseeable that collaboration between groups in the area will continue to increase but also the collaboration with external organisations.</p> <p>In order to facilitate its development, it will be necessary for the Institution to provide sufficient space and adequate common infrastructures</p> <p>It is foreseeable that this expansion will lead to the possibility of applying for European projects and leading consortiums, where once again the support of the Foundation will be essential for their application and management</p>	<ul style="list-style-type: none"> • Facilitate the application request for European projects through the IdiPAZ Internalization Platform • Support researchers to continue being a reference in the international area. • Promote at international level the different research groups of the area, identifying possible synergies between groups and centers, new partners and funding sources, as well as to forge strategic alliances.
		

IdiPAZ

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

3.5 Cancer and Human Molecular Genetics Area



Publications: **31**

Impact Factor: **167.³³⁸**

QI: **18**

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3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

María Palomares Bralo. Bióloga. Hospital Universitario La Paz

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Teresa Ramos Álvarez. Enfermera. Hospital Universitario La Paz

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Víctor Luis Ruiz Pérez. Investigador Científico de OPIs. Jefe de laboratorio. IIB "Alberto Sols"

Carmen Sánchez Gómez. Técnico de Laboratorio. Hospital Universitario La Paz

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Juan Carlos Silla Castro. Bioinformático de Sistemas. Hospital Universitario La Paz

Jesús Solera García. Facultativo Especialista de Área en Análisis Bioquímicos. Hospital Universitario La Paz

Constanza Solís Villa. Farmacéutica Adjunta. Hospital Universitario La Paz

Maria Luisa de Torres Perezhidalgo. Bióloga Adjunto. Hospital Universitario La Paz

Strategic Objective

This is a clinical and basic research team that conducts several lines of research into early diagnosis, disease mechanisms and new therapeutic strategies for genetic diseases, developmental disorders and congenital defects.

It is a heterogeneous group consisting of physicians, pharmacists, molecular biologists, bioinformaticians, technicians and administrative officers.

Research Lines

- Subtelomeric rearrangements in patients with idiopathic mental retardation
- Genetic and functional analysis of the SHOX and SHOX2 genes in human growth
- Overgrowth syndromes. Clinical and molecular analysis
- Genetic aspects of harmonic short stature
- Genetic aspects of monogenic diabetes mellitus
- Genetics of the Ghrelin axis in infantil onset obesity
- SNPs arrays in pharmacogenetics of HIV patients
- CGHarrays and genomic rearrangements in patients with congenital malformations, intellectual disability and tumores
- Molecular genetics of hypertrophic cardiomyopathy
- Functional analysis of CLCN1 mutations in congenital myotonia
- Molecular study of endothelial dysfunction in diabetes and ageing
- Molecular characterization of the 22q11.2 región by MLPA, microsatélites and FISH
- Pharmacogenetics and pharcogenomics

- Autosomal recessive osteogénesis imperfecta
- Genomic tools for diagnosis: BAC, oligos and SNP arrays
- Macrocephaly-capillary malformations and síndromes with macrocephaly
- Next generation sequencing as a new tool in the diagnosis of genetic diseases
- Dravet syndrome

Research Activity

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3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

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3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

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Management centre: FIBHULP

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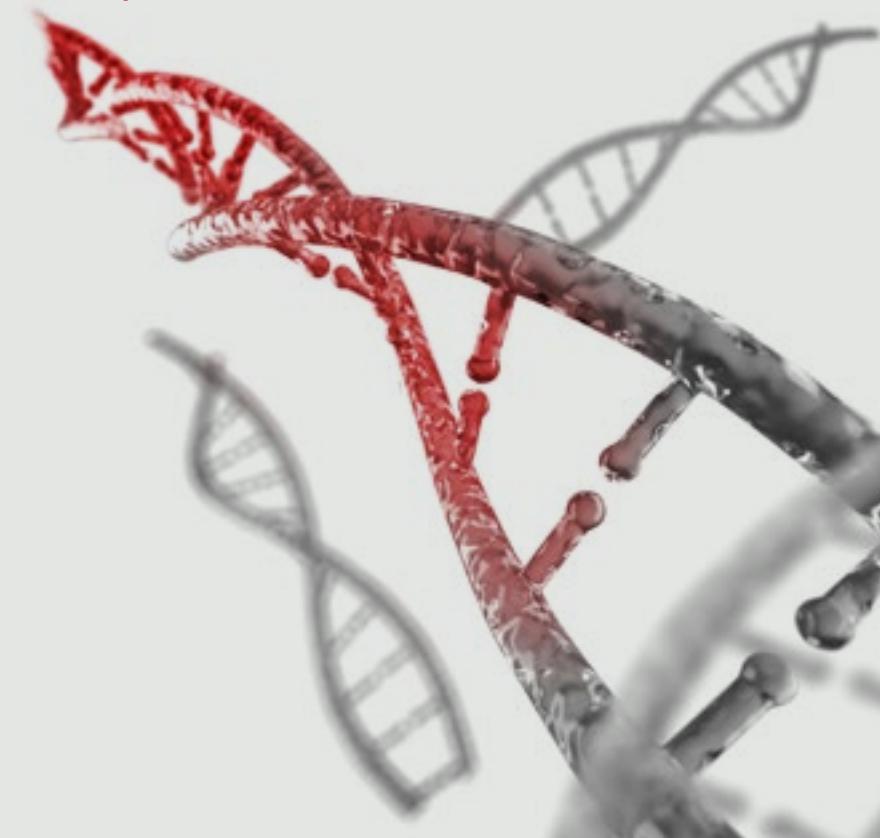
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3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

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Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP

Fernández Elvira M. Contrato de garantía juvenil (PEJ15/BIO/TL-0158). CM. 2016-2018.

Management centre: FIBHULP

Lobato Vidal N. Contrato de garantía juvenil (PEJ15/BIO/AI-0286). CM. 2016-2018.

Management centre: FIBHULP

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Management centre: FIBHULP

Private projects

Lapunzina Badía PD. Estudios citogenéticas y moleculares en población con enfermedades de base genética en el Hospital La Paz. Agilent Technologies Spain S.L. 2007-Ongoing.

Management centre: FIBHULP

Lapunzina Badía PD. Curso de microarrays en genética médica e investigación Dr. Lapunzina. Stakeholders. 2017-Ongoing.

Management centre: FIBHULP

Lapunzina Badía PD. Curso NGS en genética clínica e investigación: preparación de muestras, análisis e interpretación de datos. Stakeholders. 2017-Ongoing.

Management centre: FIBHULP

Campos Barros A. Análisis genético de la deficiencia idiopática de GH y deficiencia primaria de IGF-1 en talla baja. Ipsen Pharma S.P.S. 2012-Ongoing.

Management centre: FIBHULP

Lapunzina Badía PD. Análisis genético y genómico en pacientes afectados por la enfermedad de Gorham-Stout y por anomalías generales. The Lymphatic Malformation Institute. 2012-Ongoing.

Management centre: FIBHULP

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Management centre: FIBHULP

Lapunzina Badía PD. Análisis mutacional del gen SCNA1 en pacientes con diagnóstico clínico de síndrome de Dravet. Abyntek Biopharma S.L. 2011-Ongoing.

Management centre: FIBHULP

Nevado Blanco J. Aproximación genómica en el síndrome de Phelanmc Dermid [síndrome de microdeleción 22q13]: microarrays personalizados de SNPs y evaluación de los genes candidatos. La Asociación Síndrome Phelan-Mcdermid. 2017-Ongoing.

Management centre: FIBHULP

Solera García J. Estudio de microRNAs en pacientes con glucogenosis tipo II (enfermedad de Pompe) como marcadores de diagnóstico, progresión de la enfermedad y respuesta al tratamiento. Fundación Genzyme. 2013-Ongoing.

Management centre: FIBHULP

Lapunzina Badía PD. Screening of high-risk pediatric population using an epilepsy gene panel for early diagnosis of neuronal ceroid lipofuscinosis type 2 (CLN2) disease. Biomarin International Limited. 2017-Ongoing.

Management centre: FIBHULP

Lapunzina Badía PD. Investigar y desarrollar un sistema diagnóstico rápido y eficaz de las patologías de origen genético. Construcción de un centro de excelencia de investigación en bioinformática que permita el desarrollo de la tecnología en proyectos de investigación que mediante la implantación de sistemas de secuenciación de nueva generación que permita proporcionar diagnóstico avanzado a las patologías genéticas. Dravet Syndrome Foundation (Delegación En España). 2012-Ongoing.

Management centre: FIBHULP



3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

Lapunzina Badía PD. Eexomas baleares y extremadura. Sanidad Publica de la Comunidad de Extremadura. 2018-Ongoing.

Management centre: FIBHULP

Lapunzina Badía PD. Análisis genómico global en el síndrome de Invdup(15) [syndrome]: evaluación de la dosis genómica mediante microarrays personalizados de SNPs y estudio de genes candidatos del fenotipo. Fundación Inversión Duplicación del Cromosoma 15. 2017-Ongoing.

Management centre: FIBHULP

Lapunzina Badía PD. Estudio clínico citogenético y molecular del síndrome de microdelección 22q11,2 caracterización molecular de la región. Genycell Biotech. 2013-Ongoing.

Management centre: FIBHULP

Lapunzina Badía PD. Análisis global de la hipofosfatasa: evaluación de la dosis genómica mediante MLPA y estudio del gen ALPL en pacientes con sospecha clínica. Innovaciones Genéticas S.L. 2014-Ongoing.

Management centre: FIBHULP

Heath K. Estudio comprensivo de la genética de las displasias esqueléticas: 1) caracterización de la regulación de Shox en la placa de crecimiento humano, y 2) análisis genético de las displasias esqueléticas mediante ACGH y NGS. Biomarin International Limited. 2012-Ongoing.

Management centre: FIBHULP

Lapunzina Badía PD. Búsqueda de mutaciones en el gen cripak y otros modificadores en pacientes con hipertensión arterial pulmonar. Fundación contra la Hipertensión Pulmonar (FCHP). 2018-Ongoing.

Management centre: FIBHULP

Lapunzina Badía PD. Evaluación genómica en el síndrome de Wolf-Hirschhorn [síndrome 4p]: microarrays personalizados de SNPs y estudio de genes candidatos. Asociación Española del Síndrome de Wolf Hirschhorn. 2017-Ongoing.

Management centre: FIBHULP

Lapunzina Badía PD. Organización jordanadas de investigación: XVII Congreso nacional de la asociación española de genética humana. Tilesa Kenes Spain S.L. 2013-Ongoing.

Management centre: FIBHULP

Lapunzina Badía PD. Estudio genético-molecular de genes candidatos en pacientes con hipertensión pulmonar idiopática. Actelion Pharmaceuticals España. 2011-Ongoing.

Management centre: FIBHULP

Lapunzina Badía PD. Patrocinio Jornadas de DNA day. Stakeholders. 2012-Ongoing.

Management centre: FIBHULP

Martínez González VM. Estudio genético y funcional en pacientes con enfermedades de Gorham-Stout (GSD) y anomalías linfáticas generalizadas (GLA). The Lymphatic Malformation Institute. 2018-Ongoing.

Management centre: FIBHULP

Nevado Blanco J. Curso de análisis bioinformático de datos de secuenciación masiva aplicado al entorno clínico de investigación. Stakeholders. 2017-Ongoing.

Management centre: FIBHULP

Lapunzina Badía PD. Craniofacial microsomia> genetic causes and pathway discovery. Seattle Children's Hospital Research Foundation. 2017-Ongoing.

Management centre: FIBHULP

Rodríguez Novoa SM. Renal tubular and markers of bone turnover in hbx monoinfected patients during long term treatment with entecavir or tenofovir. Bristol-Myers Squibb International Corporation (BMSIC). 2011-Ongoing.

Management centre: FIBHULP

Lapunzina Badía PD. Estudio clínico molecular en pacientes con síndrome de sobrecrecimiento (SSC). Estudio de los genes NSD1, NIZPI, HRAS, CDKN1C, GLP3, y de las regiones cromosómicas 5q35, xq26 y 11p en pacientes con SSC. Eifice Servicios para la Investigación S.L. 2005-Ongoing.

Management centre: FIBHULP

Lapunzina Badía PD. Determinación genómica de muestras del biomarcador del gen KRAS y NRAS. Amgen S.A. 2014-Ongoing.

Management centre: FIBHULP

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Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2016
2017
2018



3.5 Cancer and Human Molecular Genetics Area



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Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**
2017
2018

3.5 Cancer and Human Molecular Genetics Area

 Publications: **39** Impact Factor: **164.487** Q1: **19**

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Jorge Barriuso Feijoó. Facultativo Especialista de Área en Oncología. Hospital Universitario La Paz

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Juan Ángel Fresno Vara. Investigador Senior (Contrato Miguel Servet - I2). Jefe de Laboratorio. Hospital Universitario La Paz

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Juan Carlos Lacal Sanjuán. Profesor de Investigación. IIB "Alberto Sols"

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Rocío López Vacas. Técnico de Laboratorio (Contrato Técnico de Apoyo). Hospital Universitario La Paz

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Nuria Rodríguez Salas. Facultativo Especialista de Área en Oncología. Hospital Universitario La Paz

Pilar Zamora Auñón. Facultativo Especialista de Área en Oncología. Hospital Universitario La Paz. Profesor Asociado. Universidad Autónoma de Madrid

Strategic Objective

The aim of cancer research is to improve understanding of all aspects of the disease, including deepening our understanding of the biology of the tumour, developing new treatments, analysing the efficacy of diagnostic tests and performing studies aimed at prevention and early diagnosis.

The Translational Oncology group's objective is to conduct highly scientific applied research in such a way that basic research can be rapidly translated to clinical practice. In other words, cancer patients at La Paz University Hospital benefit almost immediately from the results of research conducted by their own physicians.



3.5 Cancer and Human Molecular Genetics Area



Although important advances have been made in recent years in our understanding of the origin and evolution of cancer, their implementation in healthcare takes too much time. The Translational Oncology Unit (TOU) was established with the objective of facilitating the incorporation into clinical practice of new advances in molecular biology and the technology developed in this field.

The main lines of study are based on tumours with the greatest incidence and impact on survival, such as lung, colorectal, breast and ovarian cancer, although other types of neoplasms have been incorporated such as gastric and renal cancer. A series of fundamental objectives have been established for these neoplasms that can be summarised as early diagnosis, molecular classification for therapeutic goals and the search for individualised treatments. The majority of TOU projects have as their primary objective the search for predictors of susceptibility or resistance to anticancer agents and the search for prognostic factors related to the evolution of the tumour.

Research Lines

- Identification of prognostic factors Clinical Genomic Proteomic
- Identification of mechanisms of resistance to drugs
- Efficacy and toxicity of antineoplastic therapies
- Palliative care and supportive treatments

Research Activity

Doctoral theses

Cruz Castellanos P. Expresión de genes relacionados con la angiogénesis como predictores de respuesta al tratamiento combinado (cirugía y quimioterapia) en el carcinoma de ovario seroso de alto grado [dissertation]. Madrid: UAM; 2018(19/12/2018).

Directors: Redondo Sánchez A, Mendiola Sabio M.

Martínez del Prado MP. Valor pronóstico del análisis de marcadores moleculares mediante proteómica dirigida en cáncer de mama precoz con receptores hormonales positivos [dissertation]. Madrid: UAM; 2018(22/03/2018).

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3.5 Cancer and Human Molecular Genetics Area



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3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

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Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP

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Private projects

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Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

3.5 Cancer and Human Molecular Genetics Area



Feliú Batlle J. Estudio de biomarcadores pronósticos y predictivos en adenocarcinoma de páncreas. Stakeholders. 2015-Ongoing.

Management centre: FIBHULP

Feliú Batlle J. Estudio de factores predictivos de toxicidad grave (grado 3-4) en anciano. Fundación Pfizer. 2012-Ongoing.

Management centre: FIBHULP

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Management centre: FIBHULP

Feliú Batlle J. Identificación de una huella genética para el pronóstico en pacientes con cáncer de colon en estadio II operados con intención curativa. Stakeholders. 2013-Ongoing.

Management centre: FIBHULP

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Management centre: FIBHULP

Feliú Batlle J. Jornadas científicas sobre investigación y actualización en oncología. Astrazeneca Farmaceutica Spain S.A. 2016-Ongoing.

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Management centre: FIBHULP

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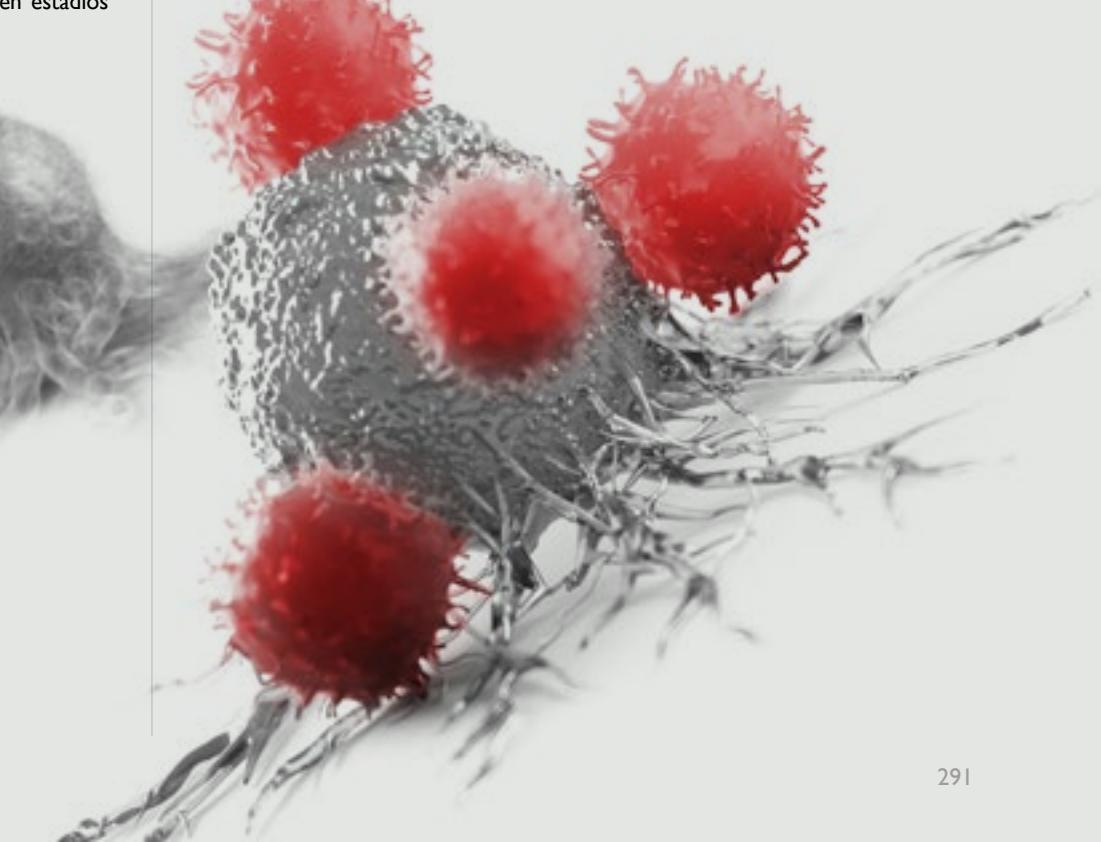
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Management centre: FIBHULP

Feliú Batlle J. Validation of biomarkers to predict response to anti-EGFR therapy identified by shotgun proteomics. FIBHULP. 2018-Ongoing.

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3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

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Management centre: FIBHULP

Fresno Vara JA. Convocatoria interna Jesús Antolín garciarena 2018. Contrato Andrea Zapater Moros. Fundación para la Investigacion Biomedica Hospital Universitario La Paz. 2018-Ongoing.

Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP

Martínez Marín V. Estudio perfil mutacional e inmunohistoquímico en GIST: búsqueda de factores pronósticos y predictivos. Pfizer S.L.U. 2013-Ongoing.

Management centre: FIBHULP

Pinto Marín A. Evaluación del metaboloma sanguíneo como fuente de biomarcadores para el manejo del paciente con cáncer: el caso del cáncer de próstata metastásico. FIBHULP. 2015-Ongoing.

Management centre: FIBHULP

Redondo Sánchez A. Análisis de expresión de miRNAs relacionados con el proceso angiogénico en cáncer mama. Roche Farma S.A. 2014-Ongoing.

Management centre: FIBHULP

Redondo Sánchez A. Cáncer de mama y angiogénesis: estudio de perfiles de expresión génica en muestras parafinadas. Roche Farma S.A. 2009-Ongoing.

Management centre: FIBHULP

Redondo Sánchez A. Caracterización de la acción de trabectedina y análogos, lurbinectedina y análogos y PM60184 en modelos celulares en dos y tres dimensiones de carcinoma de ovario. Pharmamar S.A. 2016-Ongoing.

Management centre: FIBHULP

Redondo Sánchez A. Caracterización in vitro del efecto antitumoral de eribulina (en monoterapia y en combinación con otros fármacos) en líneas celulares de liposarcoma y leiomiosarcoma. EISAI Farmaceutica S.A. 2018-Ongoing.

Management centre: FIBHULP

Redondo Sánchez A. Estudio in vitro de modelos en tres dimensiones de cáncer de interacción entre las células tumorales y células del microambiente tumoral. Roche Farma S.A. 2017-Ongoing.

Management centre: FIBHULP

Redondo Sánchez A. International sarcoma scientific meeting. EISAI Farmaceutica S.A. 2017-Ongoing.

Management centre: FIBHULP

Zamora Auñon P. Metabolómica y modelización del metabolismo celular del cáncer para la detección de enfermedad mínima residual en pacientes con cáncer de mama. Roche Farma S.A. 2018-Ongoing.

Management centre: FIBHULP

Zamora Auñon P. VII Curso de investigación en diagnóstico y tratamiento del cáncer de mama. Roche Farma S.A. 2014-Ongoing.

Management centre: FIBHULP

Clinical trials

Castelo Fernández B. Estudio en fase 3, aleatorizado, doble ciego sobre Avelumab combinado con la quimiorradioterapia de referencia (Cisplatino más radioterapia definitiva) en comparación con la quimiorradioterapia de referencia en el tratamiento de primera línea de pacientes. Type: Clinical Trial, phase III.

HULP code: Anexo-I 4861. Sponsored's protocol code: 4861 B9991016.

Sponsored by: Pfizer S.L.U. Signed date: 15/06/2018

Castelo Fernández B. A phase II study of Durvalumab (MEDI4736) plus Tremelimumab for the treatment of patients with progressive, refractory advanced thyroid carcinoma-the dutchy trial. Type: Clinical Trial, phase II.

HULP code: 5202. Sponsored's protocol code: GETNE-T1812.

Sponsored by: Grupo Español De Tumores Neuroendocrinos (Getne). Signed date: 17/12/2018

Castelo Fernández B. Ensayo aleatorizado, global, en fase III de Nivolumab con Epacadostat en combinación con quimioterapia (Platino + 5-Fluorouracilo) en comparación con la pauta posológica extreme (Cetuximab + Platino + 5-Fluorouracilo) como tratamiento de primera línea en pacientes con carcinoma de células escamosas de cabeza y cuello (CCECC) recurrente o metastásico. Type: Clinical Trial, phase III.

HULP code: 4987. Sponsored's protocol code: CA209-9NA.

Sponsored by: Incyte Corporation. Signed date: 09/04/2018

Castelo Fernández B. Estudio de calidad de vida en pacientes con dolor irruptivo oncológico atendidos en los servicios de oncología médica. Type: EPA-SP.

HULP code: PI-3018. Sponsored's protocol code: ANG-ANA-2017-01.



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018



3.5 Cancer and Human Molecular Genetics Area

Sponsored by: Angelini Farmacéutica S.A. **Signed date:** 29/01/2018

Castelo Fernández B. Estudio de fase II, aleatorizado, con doble enmascaramiento y controlado con placebo de Cemiplimab en comparación con la combinación de Cemiplimab más ISA101B en el tratamiento de sujetos con cáncer orofaríngeo (COF VPH-16 positivo resistente al platino. Type: Clinical Trial, phase II.

HULP code: 5124. **Sponsored's protocol code:** ISA101B-HN-01-17.

Sponsored by: Isa Therapeutics B.U. **Signed date:** 12/11/2018

Castelo Fernández B. Estudio de fase III, aleatorizado y abierto para evaluar Pembrolizumab como tratamiento neoadyuvante y en combinación con la asistencia habitual como tratamiento adyuvante en el carcinoma epidermoide de cabeza y cuello locorregionalmente avanzado (CECC LA), extirpable, en estadio III-IVA. Type: Clinical Trial, phase III.

HULP code: Anexo-I 4953. **Sponsored's protocol code:** MK-3475-689.

Sponsored by: Merck Sharp & Dhome Corp. **Signed date:** 12/03/2018

Castelo Fernández B. Estudio en fase 3, aleatorizado, doble ciego sobre Avelumab combinado con la quimiorradioterapia de referencia (cisplatino más radioterapia definitiva) en comparación con la quimiorradioterapia de referencia en el tratamiento de primera línea de pacientes con carcinoma epidermoide localmente avanzado de cabeza y cuello. Type: Clinical Trial, phase III.

HULP code: 486 I. **Sponsored's protocol code:** 486 I B9991016.

Sponsored by: Pfizer S.L.U. **Signed date:** 07/02/2018

Castelo Fernández B. Estudio en fase III, aleatorizado, con doble enmascaramiento y controlado con placebo, de Nivolumab o Nivolumab con Cisplatino, en combinación con radioterapia en participantes con carcinoma de células escamosas de cabeza y cuello (CCEC) localmente avanzado elegibles o no para recibir tratamiento con cisplatino. Type: Clinical Trial, phase III.

HULP code: 4975. **Sponsored's protocol code:** CA209-9TM.

Sponsored by: Bristol Myers Squibb International Corporation. **Signed date:** 26/03/2018

Castelo Fernández B. Estudio sin enmascaramiento de fase II sobre Tipifarnib en neoplasias malignas no hematológicas avanzadas con mutaciones hras. Type: Clinical Trial, phase II.

HULP code: 4992. **Sponsored's protocol code:** KO-TIP-001.

Sponsored by: Karma Oncology Ltd. **Signed date:** 05/10/2018

Cruz Castellanos P. Investigación de la mutación T790M en sangre mediante diferentes metodologías. Type: NO-EPA.

HULP code: PI-3106. **Sponsored's protocol code:** RING (GECP 17/03).

Sponsored by: Grupo Español Cáncer Pulmón. **Signed date:** 09/04/2018

Custodio Carretero AB. Ensayo clínico de fase III, aleatorizado, controlado con tra-

tamiento activo, con enmascaramiento parcial y con detección de biomarcadores, de Pembrolizumab en monoterapia y en combinación con Cisplatino + 5-Fluorouracilo frente a placebo + Cisplatino + 5-Fluorouracilo como tratamiento de primera línea en sujetos con adenocarcinoma gástrico o de la unión gastroesofágica (UGE) avanzado. Type: Clinical Trial, phase III.

HULP code: Anexo-I 4689. **Sponsored's protocol code:** MK-3475-062.

Sponsored by: Merck Sharp & Dhome Corp. **Signed date:** 08/11/2018

Custodio Carretero AB. Ensayo clínico de fase III, aleatorizado, doble ciego y controlado con placebo, de Pembrolizumab (MK-3475) en combinación con Cisplatino y 5-Fluorouracilo frente a un placebo en combinación con Cisplatino y 5-Fluorouracilo como tratamiento. Type: Clinical Trial, phase III.

HULP code: Anexo-I 4823. **Sponsored's protocol code:** MK3475-590.

Sponsored by: Merck Sharp & Dhome Corp. **Signed date:** 12/03/2018

Custodio Carretero AB. Ensayo clínico fase 2, aleatorizado, abierto, de Relatlimab (ANTI-LAG-3) más Nivolumab en combinación con quimioterapia frente a Nivolumab en combinación con quimioterapia como tratamiento de primera línea en pacientes con adenocarcinoma gástrico o de la unión gastroesofágica. Type: Clinical Trial, phase II.

HULP code: 5140. **Sponsored's protocol code:** CA224-060.

Sponsored by: Bristol Myers Squibb International Corporation. **Signed date:** 03/10/2018

Custodio Carretero AB. Estudio fase 3 internacional, multicéntrico, doble ciego y aleatorizado, de la eficacia de Zolbetuximab (IMAB362) más Capox, en comparación con placebo más Capox, como tratamiento de primera línea en sujetos con adenocarcinoma gástrico o de la unión gastroesofágica localmente avanzado irresecable o metastásico, Claudin (CLDN)18.2 positivo y HER2 negativo. Type: Clinical Trial, phase III.

HULP code: 5143. **Sponsored's protocol code:** 895 I-CL-0302.

Sponsored by: Astellas Pharma Global Development Inc. **Signed date:** 13/11/2018

Espinosa Arranz E. Ensayo clínico abierto, multicéntrico, de un solo grupo, de Nivolumab (BMS 936558) en sujetos con melanoma en estadio III (Irresecable) o IV confirmado mediante histología, en progresión después de un tratamiento previo con un anticuerpo monoclonal ANTICTLA4. Type: Clinical Trial, phase II.

HULP code: Anexo-II 4239. **Sponsored's protocol code:** CA209-172.

Sponsored by: Bristol Myers Squibb S.L. **Signed date:** 30/08/2018

Espinosa Arranz E. Ensayo de extensión de fase III, abierto y multicéntrico para estudiar la seguridad y eficacia a largo plazo en participantes con tumores avanzados que actualmente están en tratamiento o en seguimiento en un ensayo de Pembrolizumab. Type: Clinical Trial, phase III.



3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

HULP code: 5076. Sponsored's protocol code: MK-3475-587.

Sponsored by: Merck Sharp And Dohme De España, S.A. Signed date: 03/05/2018

Espinosa Arranz E. Ensayo de fase 3, aleatorizado y controlado con placebo para evaluar la seguridad y la eficacia de Pembrolizumab (MK-3475) y Lenvatinib (E7080/MK-7902) en comparación con Pembrolizumab en monoterapia como intervención de primera línea en participantes con melanoma avanzado (LEAP-003). Type: Clinical Trial, phase III.

HULP code: 5198. Sponsored's protocol code: MK-7902-003 (E7080-G000-312).

Sponsored by: Merck Sharp & Dhome Corp. Signed date: 14/11/2018

Espinosa Arranz E. Estudio abierto y multicéntrico en fase II de DS-8201A, un Anti-HER2 conjugado anticuerpo-fármaco (CAF) para sujetos con cáncer de mama HER2 positivo irresecable y/o metastásico que son resistentes o refractarios a T-DMI. Type: Clinical Trial, phase II.

HULP code: Anexo-I 4934. Sponsored's protocol code: DS8201-A-U201.

Sponsored by: Daiichi Sankyo Inc. Signed date: 09/10/2018

Espinosa Arranz E. Estudio abierto y multicéntrico en fase II de DS-8201A, un ANTI-HER2 conjugado anticuerpo-fármaco (CAF) para sujetos con cáncer de mama HER2 positivo irresecable y/o metastásico que son resistentes o refractarios a T-DMI. Type: Clinical Trial, phase II.

HULP code: 4934. Sponsored's protocol code: DS8201-A-U201.

Sponsored by: Daiichi Sankyo Inc. Signed date: 09/03/2018

Espinosa Arranz E. Estudio aleatorizado de fase II, abierto y multicéntrico para evaluar la seguridad y la eficacia de IMCGP100 en comparación con la elección del investigador en pacientes con HLA-A*0201 positivo y que no hayan recibido tratamiento previo para el melanoma maligno uveal avanzado. Type: Clinical Trial, phase II.

HULP code: 5090. Sponsored's protocol code: IMCgp100-202.

Sponsored by: Immunocore Ltd. Signed date: 09/10/2018

Espinosa Arranz E. Estudio de fase 3, abierto y de un solo grupo para evaluar la seguridad y la eficacia de Pembrolizumab (MK-3475) como tratamiento de primera línea en participantes con carcinoma de células de Merkel avanzado (Keynote-913). Type: Clinical Trial, phase III.

HULP code: 5190. Sponsored's protocol code: MK-3475-913.

Sponsored by: Merck Sharp & Dhome Corp. Signed date: 06/11/2018

Espinosa Arranz E. Estudio de fase IB multicéntrico, sin enmascaramiento para evaluar la seguridad y la eficacia de Ipatasertib en combinación con Atezolizumab y Paclitaxel o Nab-Paclitaxel en pacientes con cáncer de mama triple negativo localmente avanzado o metastásico. Type: Clinical Trial, phase I.

HULP code: 5012. Sponsored's protocol code: CO40151.

Sponsored by: F.Hoffmann-La Roche Ltd. Signed date: 26/01/2018

Espinosa Arranz E. Estudio de fase IB multicéntrico, sin enmascaramiento para evaluar la seguridad y la eficacia de Ipatasertib en combinación con Atezolizumab y Paclitaxel o Nab-Paclitaxel en pacientes con cáncer de mama triple negativo localmente avanzado o metastásico. Type: Clinical Trial, phase I.

HULP code: Anexo-I 5012. Sponsored's protocol code: CO40151.

Sponsored by: F.Hoffmann-La Roche Ltd. Signed date: 26/10/2018

Espinosa Arranz E. Estudio en fase I/II, abierto, multicéntrico, de la seguridad y la eficacia de IMCGP100 usando la pauta posológica con aumento intrapaciente en pacientes con melanoma uveal avanzado. Type: Clinical Trial, phase I.

HULP code: 5074. Sponsored's protocol code: IMCGP100-102.

Sponsored by: Immunocore Ltd. Signed date: 11/07/2018

Espinosa Arranz E. Estudio observacional descriptivo sobre las características y evolución del melanoma avanzado y metastásico en España. Type: EPA-SP.

HULP code: PI-3208. Sponsored's protocol code: GEM-IPI-2018-01.

Sponsored by: Grupo Español Multidisciplinar de Melanoma Gem Gem.

Signed date: 25/06/2018

Espinosa Arranz E. Un estudio de fase IB para evaluar el uso de Cobimetinib más Atezolizumab en pacientes con melanoma con BRAFV600 de tipo salvaje avanzado que hayan experimentado progresión. Type: Clinical Trial, phase I.

HULP code: 5040. Sponsored's protocol code: CO39721.

Sponsored by: F.Hoffmann-La Roche Ltd. Signed date: 08/06/2018

Feliú Batlle J. Estudio aleatorizado, multicéntrico, doble ciego, controlado con placebo, de fase 2/3 del inhibidor de la tirosina quinasa de Bruton, Ibrutinib, en combinación con Nab-Paclitaxel y Gemcitabina frente a placebo en combinación con Nab-Paclitaxel y Gemcitab. Type: Clinical Trial, phase II.

HULP code: Anexo-II 4502. Sponsored's protocol code: PCYC-1117-CA.

Sponsored by: Pharmacyclics Llc. Signed date: 22/02/2018

Feliú Batlle J. Estudio de fase 3 aleatorizado para evaluar el uso de Eryaspase en combinación con quimioterapia, comparada con quimioterapia sola como tratamiento de segunda línea en pacientes con adenocarcinoma pancreático. Type: Clinical Trial, phase III.

HULP code: 5105. Sponsored's protocol code: GRASPANC 2018-01.

Sponsored by: Erytech Pharma. Signed date: 05/06/2018

Feliú Batlle J. Estudio de fase III, abierto y aleatorizado de Atezolizumab en combinación con Bevacizumab en comparación con Sorafenib en pacientes con carcinoma hepatocelular localmente avanzado o metastásico no tratado. Type: Clinical Trial, phase III.



3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

HULP code: 4973. Sponsored's protocol code: YO40245.

Sponsored by: F.Hoffmann-La Roche Ltd. Signed date: 13/02/2018

Feliú Batlle J. Estudio en fase II, multicéntrico y abierto, para investigar la eficacia, la seguridad y la farmacocinética del anticuerpo monoclonal ANTI-PD-1,BGB-A317, en pacientes con carcinoma hepatocelular irresecable tratado anteriormente. Type: Clinical Trial, phase II.

HULP code: 4996. Sponsored's protocol code: BGB-A317-208.

Sponsored by: Beigene Ltd. Signed date: 09/05/2018

Feliú Batlle J. Estudio en fase III, aleatorizado, doble ciego y controlado con placebo para evaluar la eficacia y seguridad de GS-5745 en combinación con mFOLFOX6 como tratamiento de primera línea en pacientes con adenocarcinoma gástrico avanzado o de la unión gastroesofágica. Type: Clinical Trial, phase III.

HULP code: Anexo-III 4569. Sponsored's protocol code: GS-US-296-1080.

Sponsored by: Gilead Sciences Inc. Signed date: 13/02/2018

Feliú Batlle J. Estudio fase 1b/2 de BMS-813160 en combinación con quimioterapia o Nivolumab en pacientes con tumores sólidos avanzados. Type: Clinical Trial, phase I.

HULP code: 5169. Sponsored's protocol code: CV202-103.

Sponsored by: Bristol Myers Squibb International Corporation. Signed date: 31/10/2018

Feliú Batlle J. Estudio multicéntrico en adenocarcinoma de páncreas resecable con factores de mal pronóstico sobre la definición de nuevos marcadores de metilación predictivos de respuesta radiológica al tratamiento con Nab-Paclitaxel-Gemcitabina. Correlación Farmacoprot. Type: EPA-AS.

HULP code: PI-3128. Sponsored's protocol code: AVB-NAB-2018-01.

Sponsored by: Complejo Hospitalario de Navarra. Signed date: 12/03/2018

Feliú Batlle J. Refine: estudio observacional de Regorafenib en carcinoma hepatocelular. Type: EPA-LA.

HULP code: PI-3112. Sponsored's protocol code: BAY-REG-2018-01.

Sponsored by: Bayer Hispania S.L. Signed date: 23/05/2018

Gallego Martínez A. Estudio observacional retrospectivo para evaluar las estrategias de tratamiento en práctica clínica y la evolución clínica de los pacientes con cáncer de ovario avanzado en España: Estudio Ovoc (evaluación objetiva del cáncer de ovario). Type: EPA-OD.

HULP code: PI-3330. Sponsored's protocol code: ML40141.

Sponsored by: Roche Farma S.A. Signed date: 24/09/2018

Higuera Gómez O. Evaluación de la calidad de vida de pacientes con estreñimiento inducido por opioides en tratamiento con Naloxegol. Estudio de un año de seguimiento. Type: EPA-SP.

HULP code: PI-2874. Sponsored's protocol code: KYO-NAL-2017-01.

Sponsored by: Kyowa Kirin Farmaceutica S.L.U. Signed date: 10/01/2018

Higuera Gómez O. Paciente frágil con dolor irruptivo: análisis de la práctica clínica. Type: EPA-OD.

HULP code: PI-3343. Sponsored's protocol code: KYO-FRA-2018-01.

Sponsored by: Kyowa Kirin Farmaceutica S.L.U. Signed date: 22/08/2018

Martínez Marín V. Apixabán para el tratamiento del tromboembolismo venoso en pacientes con cáncer: un estudio prospectivo aleatorizado abierto y ciego para el evaluador - el estudio Caravaggio. Type: Clinical Trial, phase III.

HULP code: 5034. Sponsored's protocol code: FADOI.03.2016.

Sponsored by: Exom Group SRL. Signed date: 22/05/2018

Martínez Marín V. Apixabán para el tratamiento del tromboembolismo venoso en pacientes con cáncer: un estudio prospectivo aleatorizado abierto y ciego para el evaluador . El estudio Caravaggio. Type: Clinical Trial, phase III.

HULP code: Anexo-I 5034. Sponsored's protocol code: FADOI.03.2016.

Sponsored by: Exom Group SRL. Signed date: 26/11/2018

Martínez Marín V. Estudio en fase III, internacional, multicéntrico, abierto y aleatorizado de BLU 285 en comparación con Regorafenib en pacientes con tumor del estroma gastrointestinal (GIST) metastásico o irresecable localmente avanzado. Type: Clinical Trial, phase III.

HULP code: 5054. Sponsored's protocol code: BLU-285-1303.

Sponsored by: Blueprint Medicines Corporation. Signed date: 30/07/2018

Martínez Marín V. Estudio en fase III, internacional, multicéntrico, abierto y aleatorizado de BLU 285 en comparación con Regorafenib en pacientes con tumor del estroma gastrointestinal (GIST) metastásico o irresecable localmente avanzado. Type: Clinical Trial, phase III.

HULP code: Anexo-I 5054. Sponsored's protocol code: BLU-285-1303.

Sponsored by: Blueprint Medicines Corporation. Signed date: 04/12/2018

Martínez Marín V. Observational epidemiological study of cancer-associated thrombosis: registry of thrombosis and neoplasia of SEOM./Estudio epidemiológico observacional descriptivo sobre la trombosis asociada al cáncer: registro de trombosis y neoplasias de la SEOM.Type: EPA-SP.

HULP code: PI-3417. Sponsored's protocol code: SEOM-TESEO-2017-01.

Sponsored by: Fundación Seom. Signed date: 07/11/2018

Pinto Marín A. Análisis retrospectivo de factores clínicos asociados a un mayor beneficio con Axitinib en cáncer renal metastásico. Estudio Axilong. Type: EPA-OD.

HULP code: PI-2983. Sponsored's protocol code: PI-2983 EPA-OD.



3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

Sponsored by: Pfizer S.L.U. **Signed date:** 30/01/2018

Pinto Marín A. Estudio de fase II para la evaluación del tratamiento neoadyuvante con Cabozantinib previo a la nefrectomía citorreductora en pacientes con cáncer de células renales localmente avanzado o metastásico. Type: Clinical Trial, phase II.

HULP code: 5136. **Sponsored's protocol code:** CABOPRE.

Sponsored by: Fundación Oncosur. **Signed date:** 01/10/2018

Pinto Marín A. Estudio de fase II, multicéntrico, aleatorizado y abierto para evaluar la seguridad y la eficacia de Avelumab con Gemcitabina/Carboplatino frente a quimioterapia con Gemcitabina/Carboplatino sola, en pacientes con carcinoma urotelial no resecable o metastásico que no hayan recibido terapia sistémica previa y que no sean aptos para la quimioterapia con cisplatino. Type: Clinical Trial, phase II.

HULP code: 4960. **Sponsored's protocol code:** MS100070-0160.

Sponsored by: Associacio Catalana per a La Reserca Oncologica I Les Seves Inpplicaciones Sanitaries I Socials. **Signed date:** 12/03/2018

Pinto Marín A. Estudio en fase III sobre Erdafitinib en comparación con Vinflunina, Docetaxel o Pembrolizumab en sujetos con carcinoma urotelial avanzado y anomalías genéticas seleccionadas en FGFR. Type: Clinical Trial, phase III.

HULP code: 4986. **Sponsored's protocol code:** 42756493BLC3001.

Sponsored by: Janssen Cilag International Nv. **Signed date:** 13/02/2018

Pinto Marín A. Estudio fase II, internacional, multicéntrico, prospectivo para evaluar la eficacia, la seguridad y la calidad de vida de Pazopanib administrado diariamente por vía oral, en pacientes con carcinoma de células renales avanzado y/o metastásico después de terapia previa con tratamiento con agentes inhibidores del control de la inmunidad (Checkpoint Inhibitors). Type: Clinical Trial, phase II.

HULP code: Anexo-I 4877. **Sponsored's protocol code:** CPZP034A2410.

Sponsored by: Novartis Farmaceutica S.A. **Signed date:** 25/07/2018

Pinto Marín A. The dutreneo trial: a prospective study to individualize the approach with Durvalumab (MEDI4736) and Tremelimumab in neoadjuvant bladder cancer patients. Type: Clinical Trial, phase II.

HULP code: 5201. **Sponsored's protocol code:** Dutreneo.

Sponsored by: Fundación Cris contra el Cáncer. **Signed date:** 06/11/2018

Pinto Marín A. Tratamiento adyuvante del cáncer renal con Axitinib: estudio en fase III, aleatorizado y doble ciego del tratamiento adyuvante con Axitinib frente al placebo en sujetos con alto riesgo de CCR recurrente. Type: Clinical Trial, phase III.

HULP code: Anexo-II 4046. **Sponsored's protocol code:** AP311736.

Sponsored by: Sjf Pharma Ltd. Li. **Signed date:** 06/04/2018

Pinto Marín A. Un ensayo multicéntrico, abierto, fase 1B/2 de Lenvatinib (E7080)

más Pembrolizumab en sujetos con tumores sólidos seleccionados. Type: Clinical Trial, phase I.

HULP code: Anexo-I 5046. **Sponsored's protocol code:** E7080-A001-111.

Sponsored by: Eisai Europe Limited. **Signed date:** 24/09/2018

Pinto Marín A. Un ensayo multicéntrico, abierto, fase 1B/2 de Lenvatinib (E7080) más Pembrolizumab en sujetos con tumores sólidos seleccionados. Type: Clinical Trial, phase I.

HULP code: 5046. **Sponsored's protocol code:** E7080-A001-111.

Sponsored by: Eisai Europe Limited. **Signed date:** 30/04/2018

Redondo Sánchez A. Opinión - Estudio en fase IIIB, abierto, de grupo único y multicéntrico de la monoterapia de mantenimiento con Olaparib en pacientes con cáncer de ovario recidivante sin mutación de BRCA en línea germinal y sensible al platino que están en respuesta parcial o completa tras la quimioterapia con platino. Type: Clinical Trial, phase IIIb.

HULP code: 5101. **Sponsored's protocol code:** D0816C00020.

Sponsored by: Astrazeneca Ab. **Signed date:** 15/06/2018

Redondo Sánchez A. Ensayo clínico fase II abierto de Enzalutamida en cáncer de la granulosa ovárica avanzado no resecable o metastásico. Estudio Greko III. Type: Clinical Trial, phase II.

HULP code: 4941. **Sponsored's protocol code:** GETHI 2016-01.

Sponsored by: Grupo Español De Tumores Huérfanos E Infrecuentes.

Signed date: 21/02/2018

Redondo Sánchez A. ensayo de fase I/II, abierto, con varios grupos, para investigar la seguridad, la tolerabilidad, la farmacocinética y la actividad biológica y clínica de AGEN1884 en combinación con AGEN2034 en sujetos con tumores sólidos metastásicos o localmente avanzados. Type: Clinical Trial, phase I.

HULP code: 5060. **Sponsored's protocol code:** C-550-0.

Sponsored by: Agenus Inc. **Signed date:** 12/12/2018"

Redondo Sánchez A. Ensayo fase II de Olaparib de mantenimiento tras la respuesta a Tabectedina y Doxorubicina Liposomal pegilada en cáncer de ovario recurrente. Type: Clinical Trial, phase II.

HULP code: 5037. **Sponsored's protocol code:** Olatra.

Sponsored by: Grupo Español de Investigacion Cáncer de Ovario (GEICO).

Signed date: 17/05/2018

Redondo Sánchez A. Ensayo fase III, aleatorizado y doble ciego de quimioterapia basada en platino con o sin Atezolizumab, seguida de mantenimiento con Niraparib con o sin Atezolizumab, en pacientes con cáncer de ovario, de trompa de falopio o peritoneal recidivante e intervalo libre de tratamiento con platino (ILP) >6 meses. Type: Clinical Trial, phase III.



3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

HULP code: 5112. Sponsored's protocol code: ENGOT-OV41/GEICO69-O.

Sponsored by: Grupo Español de Investigacion Cáncer de Ovario (GEICO).

Signed date: 13/09/2018

Redondo Sánchez A. Ensayo internacional, multicéntrico y con grupo único de Tisotumab Vedotina (Humax®-TF-ADC) en cáncer de cuello de útero tratado con anterioridad, recurrente o metastásico. Type: Clinical Trial, phase II.

HULP code: 5015. Sponsored's protocol code: GCT1015-04.

Sponsored by: Genmab A/S. Signed date: 22/08/2018

Redondo Sánchez A. Estudio aleatorizado fase III de quimioterapia con Platino y Paclitaxel más Bevacizumab y Atezolizumab frente a quimioterapia con Platino y Paclitaxel más Bevacizumab en el carcinoma de cérvix metastásico (estadio IVB), persistente o recurrente. Type: Clinical Trial, phase III.

HULP code: 5088. Sponsored's protocol code: ENGOT-CX10/GEICO68 C/BETAT.

Sponsored by: Grupo Español de Investigacion Cáncer de Ovario (GEICO).

Signed date: 20/07/2018

Redondo Sánchez A. Estudio de combinación en fase IB de Rucaparib (CO-338) y Atezolizumab (MPDL3280A) en pacientes con cánceres avanzados del aparato reproductor femenino y cáncer de mama triple negativo. Type: Clinical Trial, phase I.

HULP code: 4959. Sponsored's protocol code: WO39409.

Sponsored by: F.Hoffmann-La Roche Ltd. Signed date: 01/03/2018

Redondo Sánchez A. Estudio de fase 2 de Prexasertib en cáncer de ovario resistente o recurrente refractario a derivados del platino. Type: Clinical Trial, phase II.

HULP code: Anexo-I 4982. Sponsored's protocol code: I4D-MC-JTJN.

Sponsored by: Lilly S.A. Signed date: 22/08/2018

Redondo Sánchez A. Estudio de fase 2 de Prexasertib en cáncer de ovario resistente o recurrente refractario a derivados del platino. Type: Clinical Trial, phase II.

HULP code: 4982. Sponsored's protocol code: I4D-MC-JTJN.

Sponsored by: Lilly S.A. Signed date: 13/03/2018

Redondo Sánchez A. Estudio en fase III aleatorizado sobre Trabectedina (ET 743) frente a la quimioterapia elegida por el clínico en pacientes con cáncer ovárico, peritoneal primario o tubárico con fenotipo de mutación en BRCA o BRCANESS. Type: Clinical Trial, phase III.

HULP code: 4940. Sponsored's protocol code: MITO-23.

Sponsored by: Grupo Español de Investigacion Cáncer de Ovario (GEICO).

Signed date: 16/02/2018

Redondo Sánchez A. Estudio fase 2 aleatorizado, doble ciego, controlado con placebo para evaluar la eficacia y la seguridad de Farletuzumab (MORAB-003) en combinación con carboplatino más Paclitaxel o Doxorubicina Liposómica Pegilada (PLD) en pacientes con cáncer de ovario . Type: Clinical Trial, phase II.

HULP code: Anexo-I 4403. Sponsored's protocol code: MORAB-003-011.

Sponsored by: Eisai Europe Limited. Signed date: 20/12/2018

Redondo Sánchez A. Phase I dose escalation and cohort expansion study of TSR-042, an ANTI-PD-1 monoclonal antibody, in patients with advanced solid tumors. Type: Clinical Trial, phase I.

HULP code: Anexo-I 4831. Sponsored's protocol code: 4010-01-001.

Sponsored by: Tesaro Inc. Signed date: 06/02/2018

Redondo Sánchez A. Phase ii trial of Pembrolizumab in combination with Doxorubicin in advanced, recurrent or metastatic endometrial cancer: (TOPIC). Type: Clinical Trial, phase II.

HULP code: 4922. Sponsored's protocol code: 2017-002824-26.

Sponsored by: Fundación Hospital Vall D'Hebron. Signed date: 27/04/2018

Redondo Sánchez A. Sarcomas de partes blandas lozalizados de alto riesgo de extremidades y pared de tronco en adultos: un enfoque integrador que incluye quimioterapia estándar vs Histotipo-dirigida neoadyuvante. Type: Clinical Trial, phase III.

HULP code: Anexo-I 3411. Sponsored's protocol code: ISG-Grupo Español de Investigacion en Sarcomas10-01.

Sponsored by: Grupo Español de Investigación en Sarcomas. Signed date: 27/04/2018

Rodríguez Salas N. A single arm phase I-II multicenter trial with avelumab plus autologus dendritic cell vaccine to determine safety and preliminary efficacy of the combination in pre-treated mismatch repair-proficient (MSS) metastatic colorectal cancer patients. Type: Clinical Trial, phase I.

HULP code: 4878. Sponsored's protocol code: GEMCAD 1602.

Sponsored by: Grupo GEMCAD. Signed date: 29/01/2018

Rodríguez Salas N. Determinación del estado mutacional de RAS en biopsias líquidas de sujetos con cáncer colorrectal metastásico ras no mutado en primera línea: estudio observacional, prospectivo y multicéntrico en España. Estudio Perseida. Type: EPA-SP.

HULP code: PI-3166. Sponsored's protocol code: AMG-RAS-2015-01.

Sponsored by: Amgen S.A. Signed date: 13/04/2018

Rodriguez Salas N. Estudio abierto, aleatorizado, fase 2 que compara S95005 con Bevacizumab frente a Capecitabina con Bevacizumab en pacientes con cáncer colorrectal metastásico no tratado previamente que no son candidatos a terapia intensiva. Type: Clinical Trial, phase II.

HULP code: Anexo-II 4580. Sponsored's protocol code: CL2-95005-002.

Sponsored by: Laboratorios Servier S.L. Signed date: 23/07/2018

Rodríguez Salas N. Estudio aleatorizado de fase II para evaluar la eficacia de Folfiri +Panitumumab en el tratamiento en segunda línea de pacientes con cáncer colorrec-



3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

tal metastásico ras no mutado que han recibido Folfox + Panitumumab en primera línea de tratamiento. Type: Clinical Trial, phase II.

HULP code: 4991. Sponsored's protocol code: GEMCAD-17-01(BEYOND).

Sponsored by: Grupo Gemcad. Signed date: 07/05/2018

Rodríguez Salas N. Estudio de fase III, aleatorizado, secuencial y abierto, para evaluar la eficacia de Folfox + Panitumumab seguido por Folfiri + Bevacizumab (secuencia 1) frente a Folfox + Bevacizumab seguido por Folfiri + Panitumumab (secuencia 2) en pacientes con cáncer colorrectal metastásico no resecable, ras nativo, tumor primario en lado izquierdo, no tratado previamente: CR-SEQUENCE. Type: Clinical Trial, phase III.

HULP code: 5095. Sponsored's protocol code: TTD-18-01.

Sponsored by: Grupo Tratamiento Tumores Digestivos (GERCOR). Signed date: 30/07/2018

Zamora Auñón P. Estudio aleatorizado, doble ciego, controlado con placebo, de LEE011 en combinación con Letrozol para el tratamiento de mujeres postmenopáusicas con cáncer de mama avanzado con receptor hormonal positivo, HER2-negativo que no han recibido terapia previa para la enfermedad avanzada. Type: Clinical Trial, phase III.

HULP code: Anexo-II 4070. Sponsored's protocol code: CLEE011A2301.

Sponsored by: Novartis Farmaceutica S.A. Signed date: 09/04/2018

Zamora Auñón P. Estudio de fase II randomizado, multicéntrico, abierto para evaluar la eficacia y seguridad de Palbociclib en combinación con Fulvestrant o Letrozol en pacientes con cáncer de mama metástasis HER2 negativo, ER+ (Parsifal 1). Type: Clinical Trial, phase II.

HULP code: Anexo-III 4390. Sponsored's protocol code: MEDOPP067.

Sponsored by: Medica Scientia Innovation Research. Signed date: 12/01/2018

Zamora Auñón P. Estudio de fase II, abierto, aleatorizado y multicéntrico, para evaluar la seguridad y la eficacia de agentes dirigidos frente a los mecanismos de reparación del ADN en combinación con Olaparib, en comparación con Olaparib en monoterapia, en el tratamiento de pacientes con cáncer de mama metástasis triple negativo con estratificación en función de sus alteraciones en los genes recombinantes de reparación homóloga (incluido BRCA 1/2) (Violette). Type: Clinical Trial, phase II.

HULP code: 4954. Sponsored's protocol code: D5336C00001.

Sponsored by: AstraZeneca Ab. Signed date: 11/05/2018

Zamora Auñón P. Estudio en fase 3 aleatorizado, abierto, de Abemaciclib en combinación con tratamiento endocrino adyuvante estándar frente a monoterapia con tratamiento endocrino adyuvante estándar, en pacientes con cáncer de mama en estadios iniciales, de alto riesgo, con afectación ganglionar, receptores hormonales positivos, HER2 negativo. Type: Clinical Trial, phase III.

HULP code: 5063. Sponsored's protocol code: I3Y-MC-JPCF.

Sponsored by: Lilly, S.A. Signed date: 03/05/2018

Patents and trademarks

Cejas Guerrero P, Belda Iniesta C, Feliú Batlle J, de Castro Carpeño J, Moreno García V, Burgos Lizalde E, Casado Sáenz E, Sánchez Hernández JJ, inventors; FIBHULP, UAM, Empresa Pública Hospital del Norte, assignees. Genomic fingerprint for predicting the clinical response to an antitumor therapy in colorectal cancer. P201130863, PCT/ES2012/070379; 2011 May 26.

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Espinosa Arranz E, Fresno Vara JA, Gámez Pozo A, López Vacas R, Berges Soria J, inventors; FIBHULP, assignee. Method for tumor subclassification. P201430887, 2014 June 09.

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Miranda Utrera N, Castellano D, Villacampa Aubá F, Fresno Vara JA, Gámez Pozo A, inventors; FIBH12O, FIBHULP, assignees. Prognostic method for determining the risk of relapse in renal cancer patients with a clear cell type of renal carcinoma, stages I and II, and kit for same. P201531360, PCT/EP2016/072723, EP16774644.5, US20180346990, CN108174608; 2015 September 23.

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Redondo Sánchez A, Hardisson Hernández D, Barriuso Feijoo J, Mendiola Sabio M, inventors; FIBHULP, assignee. Method to obtain useful data for the prediction of a patient's clinical response to an anticancer treatment. P200930400; 2009 July 01.

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3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018



Publications: **11**

Impact Factor: **51.456**

QI: **7**

Experimental Therapies and Biomarkers in Cancer Group

María Inmaculada Ibáñez de Cáceres. Investigadora Senior (Contrato Miguel Servet-Tipo 2). Jefe de Laboratorio. Hospital Universitario La Paz

Javier de Castro Carpeño. Jefe de Sección de Oncología. Hospital Universitario La Paz. Profesor Asociado. Universidad Autónoma de Madrid

Patricia Cruz Castellanos. Facultativo Especialista de Área en Oncología Médica. Hospital Universitario La Paz

María Isabel Esteban Rodríguez. Facultativo Especialista de Área en Anatomía Patológica. Hospital Universitario La Paz

Julia Jiménez Hernández. Investigadora Predoctoral. Universidad Autónoma de Madrid

Cristina Manguán García. Investigadora Predoctoral. IIB "Alberto Sols"

Olga Pernía Arias. Técnico de Laboratorio (Contrato PTA). Hospital Universitario La Paz

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Carlos Rodríguez Antolín. Bioinformático Contratado. Hospital Universitario La Paz

Rocío Rosas Alonso. Farmacéutica Interna Residente. Hospital Universitario La Paz

Isabel Sánchez Pérez. Profesora Contratada Doctor. Universidad Autónoma de Madrid

Leandro Sastre Garzón. Investigador Científico. IIB "Alberto Sols"

Olga Vera Puente. Investigadora Predoctoral. Hospital Universitario La Paz

Strategic Objective

Our research is focused on two distinct areas:

1. **Genetic and epigenetic mechanisms involved in the resistance to chemotherapeutic drugs.** Drug resistance is a crucial problem in clinical practice. We have used various strategies to approach this problem, such as identifying new targets involved in drug responses and studying their alterations in human samples. In addition, we have identified genetic and epigenetic changes in tumour suppressor genes, miRNAs and lncRNAs with associated clinical use in diagnosis, prognosis and drug response prediction in solid tumors and in liquid biopsy. Some of these targets preset a strong potential role as therapeutic target in lung and ovarian cancer treatment.
2. **Strategies to reactivate telomerase activity in human cells with defects in telomerase and premature senescence.** We have identified a genetic suppres-



3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

sor element (GSE) termed 24-2 that, once expressed in human cells, is able to recover telomerase activity and promote survival to cisplatin. This GSE corresponds to an internal fragment of dyskerin, a protein that is part of the telomerase complex. Expression of this GSE reactivates telomerase activity in cells with X-linked dyskeratosis congenita, a disease that is characterised by bone marrow failure and several other defects associated with a decrease in telomerase activity.

Research Lines

Translational research:

- Identification of predictive genetic and epigenetic biomarkers in the emergence of resistance in cancer and new therapeutic targets in NSCLC and ovarian cancer
- Identification of novel microRNAs and lncRNAs involved in chemoradiotherapy response in lung and ovarian cancer as well as in rare diseases as biomarkers for clinical use
- Study of the mechanisms of resistance to chemotherapy in cancer: the role of tumour stem cells in the response to chemotherapy in non-small cell lung cancer
- Development of new strategies for the treatment of telomerase defective diseases
- Identification of novel microRNAs and lncRNAs involved in chemoradiotherapy response in lung and ovarian cancer as well as in rare diseases as biomarkers for clinical use
- Study of the mechanisms of resistance to chemotherapy in cancer: the role of tumour stem cells in the response to chemotherapy in non-small cell lung cancer
- Development of new strategies for the treatment of telomerase defective diseases

Research Activity

Doctoral theses

Vera Puente O. Regulación epigenética de la expresión de ARNs no codificantes y su implicación en la respuesta terapéutica en cáncer de pulmón no microcítico y cáncer de ovario [dissertation]. Madrid: UAM; 2018(25/05/2018).



Director: Ibáñez de Cáceres I.

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Public projects

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Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018



3.5 Cancer and Human Molecular Genetics Area

Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: IIB Alberto Sols

Private projects

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Management centre: FIBHULP

de Castro Carpeño J. Determinación mediante inmunohistoquímica de la expresión de PDL-1 en carcinoma de célula no pequeña de pulmón. Stakeholders. 2016-Ongoing.

Management centre: FIBHULP

de Castro Carpeño J. Eeluxa 2: estudio de fase III, abierto, aleatorizado y controlado con producto activo, multicéntrico e internacional, para evaluar la eficacia de BI 1482694 frente a un doblete de quimioterapia estándar que incluye platino en pacientes con cáncer de pulmón no microcítico (CPNM) localmente avanzado o metastásico, con la mutación T790 M, cuya enfermedad ha progresado con el tratamiento previo con un inhibidor de la tirosina cinasa del receptor del factor de crecimiento epidérmico (EGFR-TKI). Parexel International (IRL) Limited. 2016-Ongoing.

Management centre: FIBHULP

de Castro Carpeño J. Oncología translacional y la determinación de traslocaciones de ALK en muestras de tumores sólidos. Pfizer S.L.U. 2011-Ongoing.

Management centre: FIBHULP

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Management centre: FIBHULP

Esteban Rodríguez MI. Proyecto para la evaluación retrospectiva de muestras paradas de biopsia y citología para la detección de reordenamientos de ALK y expresión de PD-L1 en CPNM. Roche Farma S.A. 2017-Ongoing.

Management centre: FIBHULP

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Ibáñez De Cáceres MI. Evaluación del proyecto de investigación: contribución del factor de transcripción RUNX2 en la progresión del cáncer de pulmón. Pontificia Universidad Javeriana. 2016-Ongoing.

Management centre: FIBHULP

Ibáñez de Cáceres MI. Evaluación y puesta a punto del biomarcador epigenético mgmt en biopsia líquida como prueba no invasiva de seguimiento, en pacientes con gliomas. Stakeholders. 2017-Ongoing.

Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP



3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

Ibáñez de Cáceres MI. Papel de los exosomas en la inducción de resistencia a platino en un modelo experimental de líneas celulares de cáncer de pulmón. Roche Farma S.A. 2017-Ongoing.

Management centre: FIBHULP

Clinical trials

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HULP code: 5073. Sponsored's protocol code: 5073 GECP 17/05 (ML40238).

Sponsored by: Fundación GECP. Signed date: 05/06/2018

de Castro Carpeño J. Ensayo fase III, randomizado, doble ciego, controlado con placebo, multicéntrico, internacional con Osimertinib como tratamiento de mantenimiento en pacientes con cáncer de pulmón no microcítico (estadio III) localmente avanzado e irresecable, con mutación. Type: Clinical Trial, phase III.

HULP code: 5104. Sponsored's protocol code: D516C00048.

Sponsored by: AstraZeneca Farmaceutica Spain S.A. Signed date: 30/07/2018

de Castro Carpeño J. Estudio exploratorio de los efectos biológicos y los biomarcadores de Nivolumab en combinación con Ipilimumab en pacientes con cáncer de pulmón no microcítico (CPNM) en estadio IV o recurrente sin tratamiento previo (Checkmate 592: evaluación de la vía del punto de control y de Nivolumab en ensayos clínicos 592). Type: Clinical Trial, phase IV.

HULP code: 5107. Sponsored's protocol code: CA209-592.

Sponsored by: Bristol Myers Squibb International Corporation. Signed date: 15/06/2018

de Castro Carpeño J. Brigatinib en pacientes con cáncer de pulmón de células no pequeñas avanzado con linfoma anaplásico cinásico positivo (ALK+) cuyo cáncer ha progresado durante el tratamiento con Alectinib o Ceritinib. Type: Clinical Trial, phase II.

HULP code: 5111. Sponsored's protocol code: 2002.

Sponsored by: Pharmaceuticals Inc. Signed date: 17/09/2018

de Castro Carpeño J. Estudio abierto y aleatorizado de combinaciones de REGN2810 a dosis estándar y alta (Cemiplimab; anticuerpo ANTI-PD-1) e Ipilimumab (anticuerpo ANTI-CTLA-4) en el tratamiento de segunda línea de pacientes con cáncer de pulmón no microcítico metastásico con tumores que expresan <50 % de PDL1. Type: Clinical Trial, phase II.

HULP code: 5059. Sponsored's protocol code: R2810-ONC-1763.

Sponsored by: Regeneron Pharmaceuticals, Inc. Signed date: 12/07/2018

de Castro Carpeño J. Estudio fase III, aleatorizado, abierto, de Nazartinib en mo-

noterapia frente a fármaco a elección del investigador (Erlotinib o Gefitinib) como tratamiento de primera línea en pacientes con cáncer de pulmón de células no pequeñas localmente avanzado o metastásico con mutaciones activadoras de EGFR. Type: Clinical Trial, phase III.

HULP code: 5066. Sponsored's protocol code: CEGF816A2302.

Sponsored by: Novartis Farmaceutica, S.A. Signed date: 05/06/2018

de Castro Carpeño J. Estudio de fase 3, aleatorizado y controlado con placebo para evaluar la seguridad y la eficacia de Pemetrexed + quimioterapia a base de platino + Pembrolizumab (MK-3475) con o sin Lenvatinib (E7080/MK-7902) como intervención de primera línea en participantes con cáncer de pulmón no microcítico, no epidermoide, metastásico (LEAP-006). Type: Clinical Trial, phase III.

HULP code: 5220. Sponsored's protocol code: MK-7902-006.

Sponsored by: Merck Sharp & Dhome Corp. Signed date: 29/12/2018

de Castro Carpeño J. Estudio en fase III, aleatorizado y abierto de Brigatinib (Alunbrigtm) en comparación con Alectinib (Alecensa®) en pacientes con cáncer de pulmón no microcítico avanzado positivo para cinasa de linfoma anaplásico que han progresado con Crizotinib (XALKORI®). Type: Clinical Trial, phase III.

HULP code: 5149. Sponsored's protocol code: BRIGATINIB-3001.

Sponsored by: Ariad Pharmaceutical Inc. Signed date: 22/11/2018

de Castro Carpeño J. Estudio multicéntrico, abierto y de un solo grupo, del perfil molecular de pacientes con cáncer de pulmón no microcítico con mutación del EGFR localmente avanzado o metastásico, tratados con Osimertinib. Type: Clinical Trial, phase II.

HULP code: 4929. Sponsored's protocol code: D5161C00003.

Sponsored by: AstraZeneca AB. Signed date: 24/04/2018

de Castro Carpeño J. Estudio de extensión y observacional a largo plazo multicéntrico, abierto en pacientes incluidos previamente en un estudio clínico de Atezolizumab promocionado por Genentech y/o F.Hoffmann-la Roche LTD. Type: Clinical Trial, phase III.

HULP code: 5032. Sponsored's protocol code: BO39633.

Sponsored by: F.Hoffmann-La Roche Ltd. Signed date: 31/05/2018

de Castro Carpeño J. Estudio en fase III abierto, multicéntrico de Brigatinib (AP26113) frente a Crizotinib en pacientes con cáncer de pulmón avanzado positivo para ALK positiva. Type: Clinical Trial, phase III.

HULP code: Anexo-II 4698. Sponsored's protocol code: AP26113-13-301.

Sponsored by: Ariad Pharmaceutical Inc. Signed date: 19/07/2018

de Castro Carpeño J. Estudio de práctica clínica en condiciones reales para evaluar la toma de decisiones en el tratamiento de segunda línea conforme a las normas asistenciales y basado en los perfiles de Foundation Medicine® en pacientes con



3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

cáncer de pulmón no microcítico. Type: NO-EPA.

HULP code: PI-3376. Sponsored's protocol code: ML40221.

Sponsored by: Roche Farma S.A. Signed date: 17/09/2018

de Castro Carpeño J. Estudio en fase I, abierto y no aleatorizado para evaluar el efecto de una o varias dosis orales de Osimertinib (Tagrisso™) en la farmacocinética de un fármaco sonda de Glicoproteína P (Fexofenadina) en pacientes con CPNM con EGFRM avanzado que haya progresado en un tratamiento previo con TKI del EGFR. Type: Clinical Trial, phase I.

HULP code: Anexo-I 4774. Sponsored's protocol code: D5160C00036.

Sponsored by: AstraZeneca AB. Signed date: 07/11/2018

de Castro Carpeño J. Estudio en fase I, abierto, no aleatorizado y multicéntrico para evaluar la farmacocinética, la seguridad y la tolerabilidad de Osimertinib tras la administración de una dosis oral única de 80 mg a pacientes con tumores sólidos avanzados y función renal normal o disfunción renal grave. Type: Clinical Trial, phase I.

HULP code: Anexo-I 4775. Sponsored's protocol code: D5160C00035.

Sponsored by: AstraZeneca AB. Signed date: 07/11/2018

de Castro Carpeño J. Ensayo de fase II de un único grupo para investigar Tepotinib en el adenocarcinoma pulmonar en estadio IIIB/IV con alteraciones por omisión del exón 14 de Met (METEX14) tras fallar, como mínimo, un tratamiento activo anterior, incluido uno con doblete de platino. Type: Clinical Trial, phase II.

HULP code: Anexo-I 4657. Sponsored's protocol code: MS200095-022.

Sponsored by: Merck Kgaa. Signed date: 10/01/2018

de Castro Carpeño J. Estudio de fase II/III, aleatorizado, abierto y de dos partes, de Dinutuximab e Irinotecán versus Irinotecán como tratamiento de segunda línea en sujetos con cáncer de pulmón microcítico en recidiva o resistente. Type: Clinical Trial, phase II.

HULP code: Anexo-I 4832. Sponsored's protocol code: DIV-SCLC-301.

Sponsored by: United Therapeutics Corporation. Signed date: 19/03/2018

de Castro Carpeño J. Estudio cesto, abierto, multicéntrico, global, en fase II con Entrectinib para el tratamiento de pacientes con tumores sólidos localmente avanzados o metastásicos que albergan reordenaciones en los genes NTRK1/2/3, ROS1 o ALK. Type: Clinical Trial, phase II.

HULP code: Anexo-II 4648. Sponsored's protocol code: RXDX-101-02.

Sponsored by: Ignyta Inc. Signed date: 21/12/2018

de Castro Carpeño J. Estudio de fase III, multicéntrico, aleatorizado, abierto de LDK378 oral frente a quimioterapia estandar en pacientes adultos con cancer de pulmon de celulas no pequeñas avanzado con reordenamiento de ALK (ALK-positivo) que han sido tratados previamente con quimioterapia. Type: Clinical Trial, phase III.

HULP code: Anexo-I 4022. Sponsored's protocol code: CLDK378A2303.

Sponsored by: Novartis Farmaceutica S.A. Signed date: 08/01/2018

de Castro Carpeño J. Estudio internacional multicéntrico de fase III, aleatorizado, doble ciego, controlado con placebo, de MEDI4736 como tratamiento secuencial en pacientes con cáncer pulmonar de células no pequeñas, localmente avanzado, no resecable (estadio III) que no han progresado después de la terapia de quimiorradiación concurrente definitiva con base de platino (Pacific). Type: Clinical Trial, phase III.

HULP code: Anexo-I 4235. Sponsored's protocol code: D4191C00001.

Sponsored by: AstraZeneca AB. Signed date: 26/11/2018

de Castro Carpeño J. Ensayo clínico de grupos paralelos, aleatorizado, de fase III de OSE2101 como tratamiento de segunda línea o tercera línea en comparación con el tratamiento estándar (Docetaxel o Pemetrexed) en pacientes con HLA-A2 positivo y carcinoma broncopulmonar no microcítico metastásico (IV) o localmente avanzado (IIIB) no apto para radioterapia. Type: Clinical Trial, phase III.

HULP code: Anexo-I 4593. Sponsored's protocol code: OSE2101C301.

Sponsored by: Ose Immunotherapeutics. Signed date: 23/05/2018

de Castro Carpeño J. Estudio de fase III, multicéntrico, aleatorizado, abierto de LDK378 oral frente a quimioterapia estándar en pacientes adultos con cáncer de pulmón de células no pequeñas avanzado con reordenamiento de ALK (ALK-positivo) que han sido tratados previamente con quimioterapia. Type: Clinical Trial, phase III.

HULP code: Anexo-II 4022. Sponsored's protocol code: CLDK378A2303.

Sponsored by: Novartis Farmaceutica S.A. Signed date: 23/11/2018

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3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

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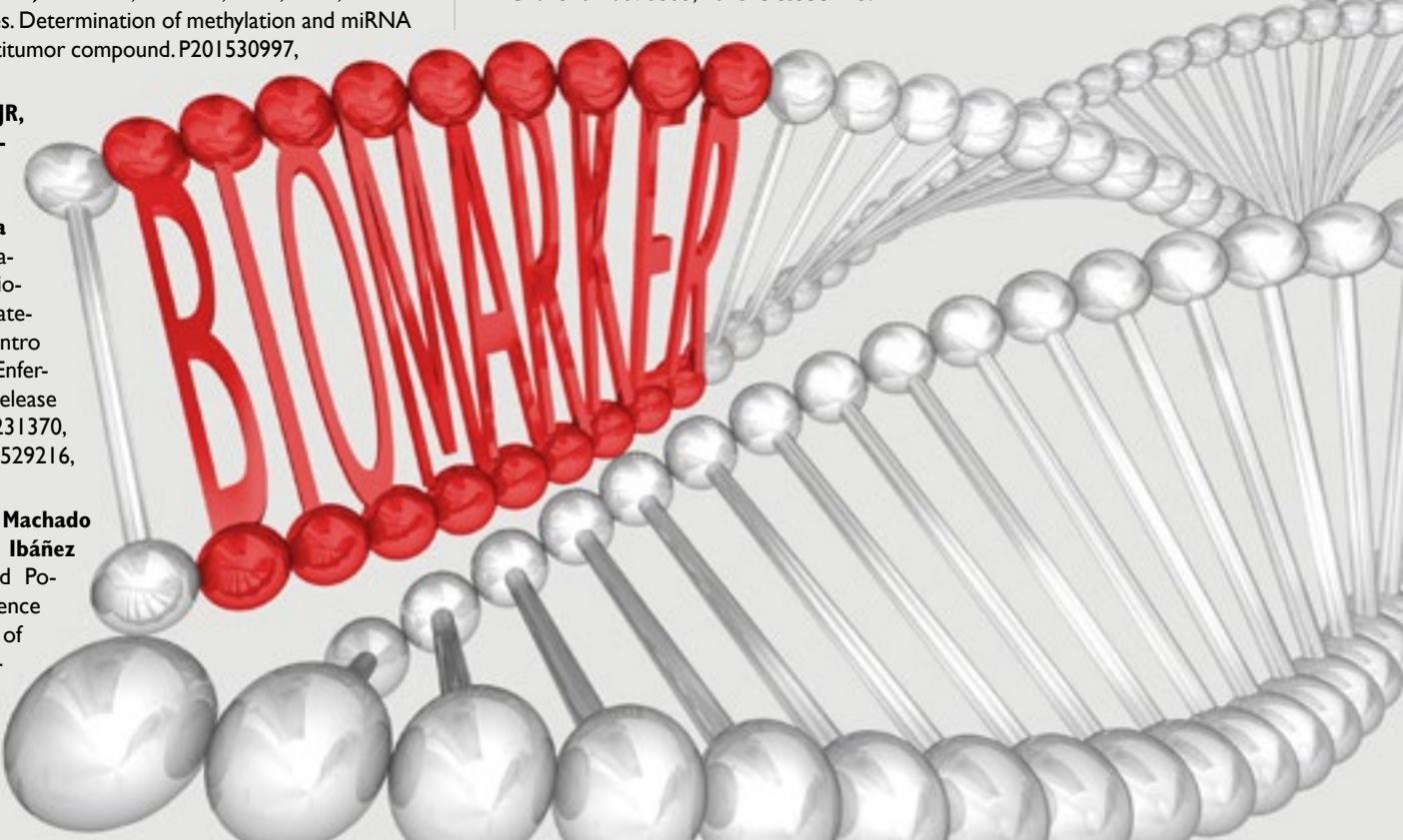
Martínez Máñez R, Murguía Ibáñez JR, Perona Abellón R, Agostini A, Mondragón Martínez L, Moreno Torres M, Manguán García C, Marcos Martínez MD, Soto Camino J, Sancenón Galarza F, inventors; Universidad Politécnica de Valencia, CSIC, Centro de Investigación Biomédica en Red en Bioingeniería, Biomateriales y Nanomedicina (CIBER-BBN), Centro de Investigación Biomédica en Red de Enfermedades Raras (CIBERER), assignees. Release of substances into senescent cells. P201231370, PCT/ES2013/070581, EP2893923, JP2015529216, US2015306037; 2012 September 04.

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Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

3.5 Cancer and Human Molecular Genetics Area



Publications: 19

Impact Factor: 105.³⁶²

QI: 9

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Strategic Objective

The systematic use of magnetic resonance imaging (MRI) has dramatically increased the diagnosis of patients with vestibular schwannoma (VS). The majority of patients with VS complain of hypoacusis or tinnitus, and very few present more debilitating symptoms. Therefore, the approach with a patient with VS is complex because the treatment of the tumour is directed towards avoiding complications arising from its growth and not necessarily towards improving the patient's quality of life. Currently, there are no factors that allow us to predict the growth of vestibular schwannoma.



3.5 Cancer and Human Molecular Genetics Area



Recent advances in the field of oncogenetics have allowed us to better understand the development of VS.

The study of the correlation between clinical variables related to the biological behaviour of VS and its genetic and epigenetic disorders aims to find the factors that predict the behaviour of VS. This will help us identify patients who need active treatment of the tumour and avoid the morbidity associated with the treatment in those who do not need it.

The cochlear implant (CI) is currently the only solution for relieving the condition in patients with severe or profound hypoacusis who do not benefit from a prosthetic adaptation with a conventional hearing aid. It is estimated that there are currently 120,000 adults in Spain with profound sensorineural hypoacusis. In recent years, new hearing implants have been developed including osseointegrated implants and active middle ear implants. Its excellent and often spectacular results and its low rate of complications have transformed CI from an innovative technology in the experimental phase to a routine, safe and effective procedure, capable of returning deaf individuals to the hearing world and ending their isolation, increasing their quality of life. Over the past decade the relationship between hearing loss and cognitive decline in the older population has become the subject of research. We also explore the relationships between the cognitive function and the audiometric performances in patients wearing a CI.

Moderate to severe hypoacusis is one of the most prevalent medical problems. Ciliated sensory cells and neurons do not regenerate in mammals, which is the main cause of sensorineural deafness. Mutations causing deficiencies in the levels of the Insulin like growth factor type I (IGF-I) also cause sensorineural deafness in humans and mice. IGF-I is an essential factor in the postnatal development of mammals, and its level decreases with ageing. We are studying the participation of IGF-I in the development of the inner ear and in the pathophysiology of hearing in adults, as well as, the molecular signalling networks conferring specificity in the otic cellular response to IGF-I. We are studying the signals that regulate otic development and also those involved in otic damage with the objective of identifying the key factors implicated in functional repair and regeneration of inner ear cells. Finally, we are jointly developing an experimental model of damage associated with the cochlear implant to test new molecules with otoprotective potential. In short, our work contributes to the study of auditory pathophysiology, with the ultimate objective of investigating the potential clinical usefulness of IGF-I in human hypoacusis originating in the cochlea.

Research Lines

- Tumors of the CNS: vestibular schwannoma, meningiomas, gliomas, and other surgery, oncogenetics, quality of life, etc

- Auditory implants: cochlear implants, middle ear implants, bone-conduction implants: surgical aspects, telephone use, quality of life, perception of music, cognitive decline, etc
- IGF-I deficiency: a rare syndromic human deafness
- Neurobiology of hearing: molecular and cellular bases of hearing loss of different aetiology (genetic, noise exposure, malnutrition, and ototoxic drugs). Identification of transcriptional networks
- Development of experimental models of deafness (genetic, noise exposure, malnutrition, ototoxic drugs and surgery associated trauma) for pre-clinical studies with potential therapeutic molecules, thus identifying possible therapeutic targets, potential markers for diagnosis and generation of vital guidelines
- Head and Neck tumors and voice pathology
- The role of cellular senescence in the development of the inner ear and the auditory pathology
- Studies on three systems implicated in the development of tumor metastasis: the tyrosine kinase receptors EGFR/ErbB2; the non-receptor tyrosine kinase c-Src; and the adaptor protein Grb7

Research Activity

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Director: Varela Nieto I.

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Director: Lassaletta Atienza L.

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3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

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Management centre: CIBERER

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Management centre: FIBHULP

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Management centre: IIBm (CSIC)



3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

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Management centre: IIBm (CSIC)

Private projects

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Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: CIBERER

International projects

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Management centre: IIBm (CSIC)

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Management centre: IIBm (CSIC)

Patents and trademarks

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3.5 Cancer and Human Molecular Genetics Area



Publications: 21

Impact Factor: 67.083

QI: 9

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Strategic Objective

The fundamental interest of our research group is centered in the study of molecular biomarkers that have a direct implication in the handling of the cancer patients with the last aim to identify and to validate therapeutic targets.

- **Ovarian cancer Research Line**

The ovarian carcinoma is the main cause of gynecological cancer mortality in the western societies. Nevertheless, the classic parameters are imperfect predictors for patients outcome, partly due to the complexity of the molecular genetic events that sublie these tumors and to the fact that they are not totally known. Research on this field could identify more precise markers to correctly stratify the patients according to their probability to recur and response to treatments.



3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

Angiogenesis, epithelial to mesenchymal transition and hypoxia are processes demonstrated to have an important role in the development of these tumors. The main objective of this line of investigation, therefore, is to identify discrete markers or gene expression profiles related to these events, with predictive and prognostic value for ovarian cancer patients.

- **Endometrial cancer Research Line**

Endometrial carcinoma is the fourth most common cancer in women in the developed world. Histomorphologic criteria are not strongly enough tools to distinguish more aggressive tumors. Based on molecular characterization, risk stratification systems could be useful for decision making.

The main objective of this line of investigation, therefore, is to identify molecular markers with predictive and prognostic value for endometrial cancer patients.

- **Breast cancer Research Line**

C-Src is overexpressed and/or hyperactive in breast carcinoma biopsies and their implication in the tumorigenesis has been proved in murine models.

Our studies on genetically modified human breast cancer cells and mice can establish the relevance of the function of scaffolding of SFKs in breast cancer. In addition, our work can lead to the development of new prognosis and therapeutic tools to improve the treatment of the breast cancer.

Angiogenesis and breast cancer. Angiogenesis is a key process in tumor development. Our group has been working for years on the search of biomarkers related to this process. Specifically on breast cancer; it is important to identify patients that will benefit of evacizumab containing regimes.

- **Sarcomas Research Line**

Bone and Soft tissue sarcomas includes a group of heterogeneous pathologies that were traditionally treated in the same way. The clinical investigation has allowed the identification of sub-groups with different response to treatments. The objective of this line of work is to find biomarkers for the best stratification of the patients, as well as to get a better knowledge of the molecular mechanisms for the development of these tumors.

- **Neuroendocrine tumors Research Line**

The neuroendocrine tumors (NET) include heterogeneous neoplasias, regarding morphologic and functional features. They constitute a challenge for the medical management, mainly regarding diagnosis and handling. Although we have improved the knowledge of molecular events related to their development in the last decade, we need to better know these tumors, in order to establish an early detection, that improves the rates of survival.

- **In vitro 2- and 3D cell culture models for functional studies**

The identification of potential markers in different pathologies might be comple-

mented by functional studies, focused on the characterization of cancer and stromal cell features, important for tumor development that it improves the rates of survival.

Research Lines

- Ovarian and endometrial cancer
- Breast cancer
- Sarcomas
- Neuroendocrine tumors
- New in vitro models of disease

Research Activity

Doctoral theses

Cruz Castellanos P. Expresión de genes relacionados con la angiogénesis como predictores de respuesta al tratamiento combinado (cirugía y quimioterapia) en el carcinoma de ovario seroso de alto grado [dissertation]. Madrid: UAM; 2018(19/12/18).

Directors: Mendiola Sabio M, Redondo Sánchez A

Utrilla Contreras MJ. Estudio de las células inmunocompetentes, macrófagos, células cebadas, de la angiogénesis y de la linfangiogénesis en la piel de los bordes quirúrgicos de úlceras por quemaduras [dissertation]. Madrid: UAM; 2018(16/03/18).

Directors: Hardisson Hernaez D, Regadera Gonzalez JF

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3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

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Public projects

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Management centre: FIBHULP

Private projects

Hardisson Hernández D. Actividades y trabajos realizados por el grupo de investigación de oncología traslacional del IdiPAZ. Universidad Europea de Madrid S.L. 2017-Ongoing.

Management centre: FIBHULP



3.5 Cancer and Human Molecular Genetics Area



Mendiola Sabio M. Realización de técnicas de detección de expresión proteica el IGTP. Construcción de matrices tisulares y tinciones con anticuerpos específicos. Fundació Institut D'investigació en Ciències de la Salut Germans Trias i Pujol. 2015-Ongoing.

Management centre: FIBHULP

Mendiola Sabio M. Papel de RANKL en el sarcoma de ewing: un estudio in vitro para la confirmación de una nueva diana terapéutica. Grupo Español de Investigación en Sarcomas. 2012-Ongoing.

Management centre: FIBHULP

Mendiola Sabio M. Caracterización molecular del carcinoma de ovario. Empleo de modelos celulares en tres dimensiones para el estudio del papel central de HIFIA en los fenómenos de hipoxia y transición epitelio mesenquima y su relación con la resistencia al tratamiento. Fundación Mutua Madrileña. 2013-Ongoing.

Management centre: FIBHULP

Mendiola Sabio M. Identificación de perfiles de expresión génica diferencial relacionados con la angiogénesis entre el carcinoma de ovario primario y sus metástasis. Stakeholders. 2012-Ongoing.

Management centre: FIBHULP

Sánchez Méndez JI. 9º Curso de diagnóstico, tratamiento e investigación del cáncer de mama. Astrazeneca Farmaceutica Spain S.A. 2017-On-going.

Management centre: FIBHULP

Clinical trials

Hardisson Hernández D. Ensayo en fase III, aleatorizado y doble ciego para evaluar la eficacia y la seguridad de una dosis diaria de 10 mg de Empagliflozina en comparación con el placebo en pacientes con insuficiencia cardíaca crónica con fracción de eyección reducida (ICC-FER). Type: NO-EPA.

HULP code: PI-3051. Sponsored's protocol code: SYS-OR2-2017-01.
Sponsored by: Sysmex Europe GMBH. Signed date: 12/04/2018





3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

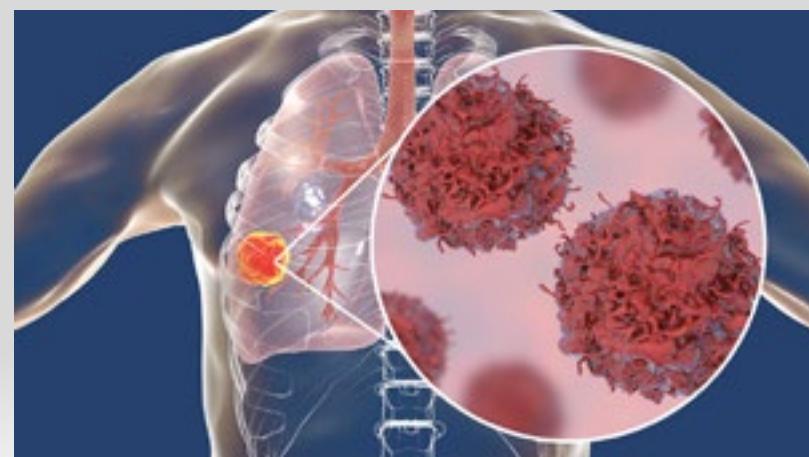
3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018



Publications: 16

Impact Factor: 70.857

QI: 9

Mechanisms of Tumour Progression Group

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Strategic Objective

Metastasis represents the most life-threatening event for cancer patients. Invasion of tumour cells from the primary tumour to adjacent tissues represents the first step in the metastatic cascade for most solid tumours.



3.5 Cancer and Human Molecular Genetics Area



The carcinoma invasion process involves the loss of Ecadherin mediated cell-cell contacts and cell polarity, degradation of the basement membrane, and acquisition of migratory properties. These changes are collectively known as the epithelial-mesenchymal transition (EMT). Presently, EMT is considered a manifestation of the epithelial plasticity of carcinomas. One of the most significant contributions in the last decade has been the identification of mechanisms responsible for EMT induction.

Our previous studies, and those of other groups, led to the identification of several transcription factors from various families such as E-cadherin repressors and EMT inducers (EMT-TFs): Snail (Snail1, Snail2), bHLH (E47, E2-2, Twist) and Zeb (ZEB1/2). The EMT process is regulated by a plethora of signalling pathways at the transcriptional and posttranscriptional level, including TGF- β (one of the most potent EMT inducers), vitamin D (which antagonises Snail1 repression), phosphorylation events and lysyl oxidaseslike 2 (LOXL2). EMT has been recently linked with stemness, opening new avenues for tumour initiation and metastatic dissemination.

The group is composed of several principal investigators leading specific research lines (see below) related to tumour progression and metastasis. The main objectives of the group are as follows:

1. Establish the role of various EMT-TFs in tumour progression and metastasis
2. Determine the role of LOXL2, LOXL3 and the microenvironment in epithelial plasticity and tumour progression
3. Determine the role of TGF β /endoglin and podoplanin in tumour progression
4. Determine the role of vitamin D in the regulation of EMT and stemness in colorectal tumours
5. Characterise stem cells and their niche in the epidermis and their influence on skin carcinogenesis

Research Lines

- Regulation of cell plasticity and tumour metastasis by EMT factors and lysyl oxidase LOXL2: Studies in mouse models of skin and breast tumorigenesis genetically modified for Loxl2, Snail and E47
- LOXL3 involvement in melanomagenesis: Studies in melanoma cell lines and mouse models genetically modified for Loxl3
- Genetic and molecular studies in breast and gynaecological cancers: Identification of novel predictive biomarkers
- Characterization of novel resistance mechanisms in human cancer using high throughput techniques
- Study of podoplanin role in epidermal homeostasis and skin cancer

- Study of vitamin D effect on normal and cancer-associated fibroblasts and on normal and colon cancer patient-derived tumour organoids
- Determine ANp73 role in tumour progression
- Identify molecular alterations responsible for progression of precancerous colorectal lesions

Research Activity

Books and book chapters

Barbáchano A, Larriba MJ, Ferrer-Mayorga G, González-Sancho JM, Muñoz A. Vitamin D and colon cancer. In: Feldman D, Pike JW, Bouillon R, Giovannucci E, Goltzman D, Hewison M. Vitamin D. Londres: Elsevier - Academic Press, 2018. p.837-62

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- Herrera M, Llorens C, Rodríguez M, Herrera A, Ramos R, Gil B, Candia A, Larriba MJ, Garre P, Earl



3.5 Cancer and Human Molecular Genetics Area



- J. Rodríguez-Garrote M, Caldes T, Bonilla F, Carrato A, García-Barberán V, Pena C. Differential distribution and enrichment of non-coding RNAs in exosomes from normal and Cancer-associated fibroblasts in colorectal cancer. *Mol Cancer*. 2018; 17: 114. Article. IF: 10.679; DI
- Kober KI, Cano A, Geraud C, Sipila K, Mobasseri SA, Philippeos C, Pisco AO, Stannard A, Martín A, Salvador F, Santos V, Boutros M, Rognoni E, Watt FM. Loxl2 is dispensable for dermal development, homeostasis and tumour stroma formation. *Plos One*. 2018; 13(6): e0199679. Article. IF: 2.776; Q2
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Public projects

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Management centre: UAM

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Management centre: UAM

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Management centre: IIB "Alberto Sols"

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Management centre: Fundación MD Anderson



3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

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Management centre: Fundación UAM

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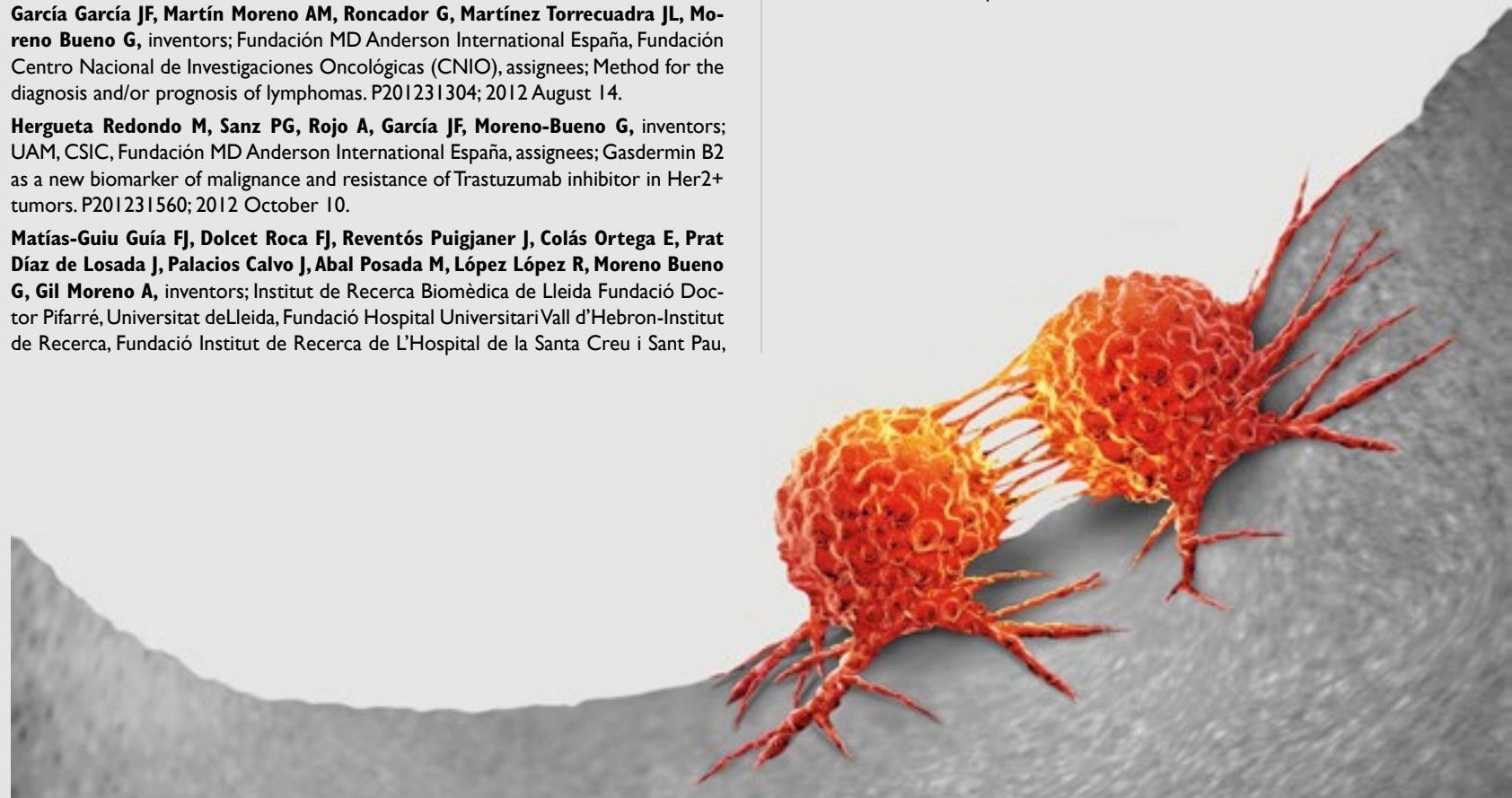
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3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

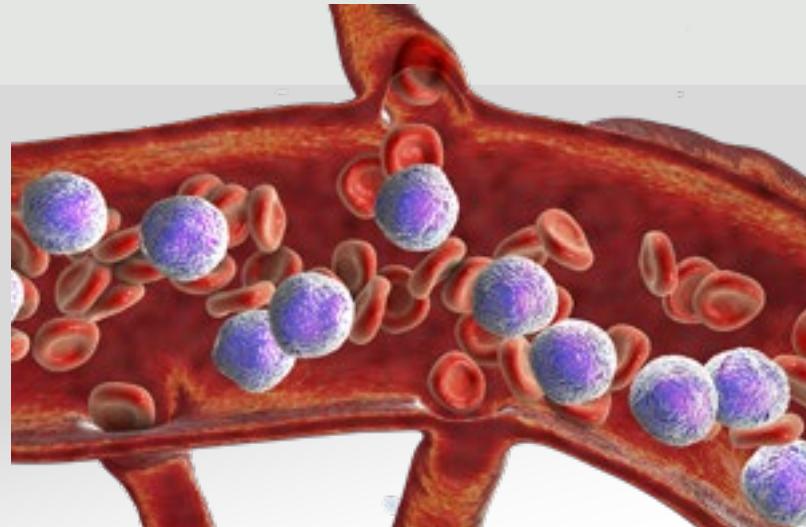
3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**2017
2018Publications: **18**Impact Factor: **143.965**QI: **15**

Animal and Cell Models for Detection and Characterization of Leukemic Stem Cells Group

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Strategic Objective

Proper homeostasis of stem cells and pluripotent progenitor is pivotal to the development of haematopoietic proliferative disorders such as myelodysplastic or myeloproliferative syndromes, leukaemia and lymphoma. It is well known that alterations in transcriptional programs lead to transformed phenotypes, which are at the basis of the insidious acquisition of stem-like phenotypes of immature cells. Our group is interested in the role of transcriptional regulators, global regulators such as c-myc, c-myb, E2F and epigenetic controllers such as Pcg factors in limiting the self-renewal capacity of common myeloid and lymphoid progenitors.

Our group has two main activities: basic research aimed to unravel the molecular mechanisms responsible for the acquisition of malignant haematological phenotypes (mouse models as well as ex vivo cell models to approach the questions outlined above); and research aimed to document clinical parameters and molecular markers that may be of use to a better understanding of the progression and outcome of haematological diseases, mainly myelodysplasia, lymphoma and multiple myeloma.



3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

Research Lines

- Role of epigenetic and transcriptional regulators in myelodysplasia: cellular and animal models
- Molecular and cellular basis of lymphoid neoplasias: non Hodgkin lymphomas and chronic lymphocytic leukaemia
- Molecular markers of haematological malignancies

Research Activity

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3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

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Management centre: FIBHULP

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Management centre: FIBHULP

Clinical trials

Canales Albendea MA. (R-CHP) en comparación con Rituximab y chop (R-CHOP) en pacientes con linfoma difuso de células grandes tipo B no tratado anteriormente. Type: Clinical Trial, phase III.

HULP code: Anexo-I 4956. Sponsored's protocol code: GO39942.

Sponsored by: F.Hoffmann-La Roche Ltd. Signed date: 21/06/2018

Canales Albendea MA. (R-CHP) en comparación con Rituximab y Chop (R-Chop) en pacientes con linfoma difuso de células grandes tipo B no tratado anteriormente. Type: Clinical Trial, phase III.

HULP code: 4956. Sponsored's protocol code: GO39942.

Sponsored by: F.Hoffmann-La Roche Ltd. Signed date: 01/03/2018

Canales Albendea MA. Ensayo de fase I/IB, multicéntrico, sin enmascaramiento para evaluar la seguridad y la farmacocinética de dosis crecientes de BTCT4465A en monoterapia y en combinación con Atezolizumab en pacientes con linfoma no Hodgkiniano de linfocitos B y leucemia linfocítica crónica recidivantes o resistentes. Type: Clinical Trial, phase I.

HULP code: 5151. Sponsored's protocol code: GO29781.

Sponsored by: Genentech Inc. Signed date: 05/12/2018

Canales Albendea MA. Estudio de fase 2B aleatorizado, abierto y de dos grupos, de Selinexor (KPT-330) en asociación con Dexametasona (SEL-DEX) a dosis bajas en pacientes con linfoma difuso de células B grandes (LDCBG). Type: Clinical Trial, phase II.

HULP code: Anexo-I 4305. Sponsored's protocol code: KCP-330-009.

Sponsored by: Karyopharm Therapeutics Inc. Signed date: 26/07/2018

Canales Albendea MA. Estudio de fase IB/II, abierto para evaluar la seguridad y la farmacocinética de GDC-0199 (ABT-199) en combinación con Rituximab (R) o Obinutuzumab (G) más Ciclofosfamida, Doxorubicina, Vincristina y Prednisona (CHOP) en pacientes con linfoma no Hodgkin. Type: Clinical Trial, phase Ib.

HULP code: Anexo-II 4354. Sponsored's protocol code: GO27878.

Sponsored by: Kite Pharma Inc. Signed date: 26/10/2018

Canales Albendea MA. Estudio de fase IB/II para evaluar la seguridad, tolerancia y actividad antitumoral de Polatuzumab Vedotin (DCDS4501A) en combinación con Rituximab (R) u Obinutuzumab (G) más Bendamustina (B), en pacientes con linfoma folicular o linfoma difuso de células. Type: Clinical Trial, phase I.

HULP code: Anexo-I 4456. Sponsored's protocol code: GO29365.

Sponsored by: F.Hoffmann-La Roche Ltd. Signed date: 19/02/2018

Canales Albendea MA. Estudio de fase II, abierto, de 2 cohortes y multicéntrico de INCB050465, un inhibidor de PI3Kδ, en linfoma de células del manto en recidiva o resistente al tratamiento, previamente tratado con o sin un inhibidor de la BTK (Citadel-205). Type: Clinical Trial, phase II.

HULP code: Anexo-I 4949. Sponsored's protocol code: INCB 50465-205.

Sponsored by: Incyte Corporation. Signed date: 16/10/2018

Canales Albendea MA. Estudio de fase II, abierto, de 2 Cohortes y multicéntrico de INCB050465, un inhibidor dePI3Kδ, en linfoma de células del manto en recidiva o resistente al tratamiento, previamente tratado con o sin un inhibidor de la BTK (Citadel-205). Type: Clinical Trial, phase II.

HULP code: 4949. Sponsored's protocol code: INCB 50465-205.

Sponsored by: Incyte Corporation. Signed date: 05/03/2018

Canales Albendea MA. Estudio en fase II de TAK-659 en pacientes con linfoma difuso de células B grandes recidivante o resistente después de dos o más líneas previas de quimioterapia. Type: Clinical Trial, phase II.

HULP code: Anexo-I 4928. Sponsored's protocol code: C34004.

Sponsored by: Millennium Pharmaceuticals Inc. Signed date: 10/04/2018

Canales Albendea MA. Estudio en fase II multicéntrico, estudio abierto de INCB050465, un inhibidor PI3Kδ, en el tratamiento del linfoma folicular recidivante o resistente (CITADEL-203). Type: Clinical Trial, phase II.

HULP code: 4939. Sponsored's protocol code: INCB 50465-203.

Sponsored by: Incyte Corporation. Signed date: 01/03/2018



3.5 Cancer and Human Molecular Genetics Area



de Paz Arias R. Estudio clínico de fase 2, aleatorizado, controlado y abierto para comparar la eficacia y la seguridad de Pevonedistat más Azacitidina frente a Azacitidina en monoterapia en pacientes con síndromes mielodisplásicos de alto riesgo, leucemia mielomonocítica crónica y leucemia mielógena aguda pobre en blastos. Type: Clinical Trial, phase II.

HULP code: Anexo-I 4571. Sponsored's protocol code: Pevonedistat-2001.

Sponsored by: Millennium Pharmaceuticals Inc. Signed date: 14/03/2018

de Paz Arias R. Estudio clínico de fase 3, abierto, aleatorizado y controlado de Pevonedistat más Azacitidina frente a Azacitidina en monoterapia como tratamiento de primera línea en pacientes con síndromes mielodisplásicos de alto riesgo, leucemia mielomonocítica crónica. Type: Clinical Trial, phase III.

HULP code: 4950. Sponsored's protocol code: PEVONEDISTAT-3001.

Sponsored by: Millennium Pharmaceuticals Inc. Signed date: 22/02/2018

de Paz Arias R. Estudio de extensión abierto del tratamiento de Bosutinib para pacientes con leucemia mieloide crónica (LMC) que han participado previamente en los Estudios de Bosutinib B1871006 o B1871008. Type: Clinical Trial, phase III.

HULP code: Anexo-I 3925. Sponsored's protocol code: B1871040.

Sponsored by: Pfizer Inc. Signed date: 19/03/2018

de Paz Arias R. Estudio fase III, prospectivo, aleatorizado, abierto, con dos brazos de tratamiento, para evaluar la tasa de remisión libre de tratamiento (RLT) en pacientes con LMC cromosoma filadelfia positivo, después de dos duraciones distintas de tratamiento de consolidación con Nilotinib 300 mg BID. Type: Clinical Trial, phase III.

HULP code: Anexo-I 3831. Sponsored's protocol code: CAMN107AIC05.

Sponsored by: Novartis Farmaceutica S.A. Signed date: 23/04/2018

de Paz Arias R. Estudio multicéntrico, de un único brazo, de remisión libre de tratamiento de Nilotinib, en pacientes con leucemia mieloide crónica en fase crónica con BCR-ABL1 positivo, que han alcanzado un estado de enfermedad residual mínima (ERM) duradera con tratamiento. Type: Clinical Trial, phase II.

HULP code: Anexo-II 3807. Sponsored's protocol code: CAMN107I2201.

Sponsored by: Novartis Farmacéutica S.A. Signed date: 12/01/2018

Gómez Prieto P. A phase IBIll trial of combined SGN-35 (Brentuximabvedotin) therapy with Cyclophosphamide, Procarbazine, Prednisone, Etoposide and Mitoxantrone (BREPEM) for older patients with untreated Hodgkin lymphoma (HL). Type: Clinical Trial, phase I.

HULP code: 5009. Sponsored's protocol code: BrEPEM-LH-22017.

Sponsored by: Gel-Tamo. Signed date: 01/06/2018

Morado Arias M. Estudio en fase 3, aleatorizado, controlado con placebo y doble ciego para evaluar la eficiencia y la seguridad de AG-348 en sujetos adultos con deficiencia de piruvato cinasa (PK) que no reciben transfusiones periódicamente. Type: Clinical Trial, phase III.

HULP code: 5077. Sponsored's protocol code: AG348-C-006.

Sponsored by: Agios Pharmaceuticals, Inc. Signed date: 04/09/2018

Morado Arias M. Registro longitudinal internacional de deficiencia de piruvato cinasa o piruvato quinasa. Type: EPA-SP.

HULP code: PI-3316. Sponsored's protocol code: AG348-C008.

Sponsored by: Agios Pharmaceuticals, Inc. Signed date: 24/07/2018

Patents and trademarks

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3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018



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Impact Factor: 40.025

QI: 4

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María Lourdes Ruiz Desviat. Profesora Titular. Universidad Autónoma de Madrid. CBM “Severo Ochoa”

Pedro Ruiz Sala. Investigador Postdoctoral. CEDEM

María Paloma Sanz Rebollo. Técnico de Laboratorio. CEDEM

Ana Isabel Vega Pajares. Investigadora Postdoctoral. CEDEM

Strategic Objective

- Development of genomic and metabolomic techniques aimed at improving the diagnosis of hereditary metabolic diseases.
- Study of mitochondrial dysfunction and oxidative stress as a modifier of the clinical phenotype and as a potential therapeutic target in organic acidurias.
- Development of novel therapeutic strategies: antisense therapy and pharmacological chaperon.
- Development of animal and cellular models.
- Registry of patients with hereditary metabolic diseases.



3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

Research Lines

- Improved diagnosis of congenital defects of glycosylation and mitochondrial defects through the application of genomic techniques (RNAseq and DNAseq of exoma and genome) and metabolomics
- Identification of deep intronic mutations in metabolic disorders gene by transcriptional analysis. Functional validation in cellular splicing systems
- Development of antisense therapy and pharmacological chaperones as therapeutic approaches transverse and applicable to numerous EMH
- Study of oxidative stress and evaluation of common signatures of neuropathogenicity and cardiotoxicity in congenital defects of glycosylation, organic acidemias and mitochondrial diseases
- Evaluation of drugs aimed at the recovery of mitochondrial function and biogénesis
- Search for biomarkers as predictors of severity and as systems for the evaluation of pharmacological therapies
- Characterization of pathophysiology in a murine model of propionic acidemia
- Identification of dysregulated miRNA in propionic acidemia and characterization of its association with pathology and its usefulness as biomarkers
- Generation of iPS from patient-derived fibroblast with organic acidemia and congenital defects of glycosylation. Differentiation to hepatocytes, neural progenitors or cardiomyocytes

Research Activity

Books and book chapters

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del Toro Riera M, Couce Pico ML, Aldamiz-Echevarría L, Arranz JA, Pérez-Cerdá C, Sánchez-Valverde F. Protocolo para el diagnóstico y tratamiento de tirosinemia tipo I. In: Cocho JA, Merinero B. Protocolos de diagnóstico y tratamiento de los errores congénitos del metabolismo. Madrid: Ergón, 2018. p.125-34

Pérez-Cerdá C, Vitoria I, García- Cazorla A, Sierra C, Sánchez A, Girós ML. Protocolo de diagnóstico y tratamiento de los trastornos de la biogénesis del peroxisoma

y de su metabolismo. In: Cocho JA, Merinero B. Protocolos de diagnóstico y tratamiento de los errores congénitos del metabolismo . Madrid: Ergón, 2018. p.219-38

García Jiménez MC, Delgado Pecellín C, González-Lamuño D, Ortigoza Escobar JD, Pérez Dueñas B, Pérez-Cerdá C. Protocolo de deficiencias congénitas del metabolismo de vitaminas. Tiamina, riboflavina, pridoxina, biotina, cobalamina, folato. In: Cocho JA, Merinero B. Protocolos de diagnóstico y tratamiento de los errores congénitos del metabolismo . Madrid: Ergón, 2018. p.239-70

Pérez-Cerdá C, Girós ML, Serrano M, Pérez Dueñas B, Ecay MJ, Medrano C, Gort L, Pérez González B. Protocolo de diagnóstico y tratamiento de los defectos congénitos de la glicosilación. In: Cocho JA, Merinero B. Protocolos de diagnóstico y tratamiento de los errores congénitos del metabolismo . Madrid: Ergón, 2018. p.271-90

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- Brasil S, Leal F, Vega A, Navarrete R, Ecay MJ, Desviat LR, Riera C, Padilla N, de la Cruz X, Couce ML, Martín-Hernández E, Morais A, Pedrón C, Peña-Quintana L, Rigolli M, Specola N, de Almeida IT, Vives I, Yahyaoui R, Rodríguez-Pombo P, Ugarte M, Pérez-Cerdá C, Merinero B, Pérez B. Improving the diagnosis of cobalamin and related defects by genomic analysis, plus functional and structural assessment of novel variants. *Orphanet J Rare Dis.* 2018; 13: 125. Article. IF: 3.687; Q2
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- Hamilton V, Santa María L, Fuenzalida K, Morales P, Desviat L R, Ugarte M, Pérez B, Cabello J F, Cornejo V. Characterization of phenylalanine hydroxylase gene mutations in chilean PKU Patients. *JIMD Rep.* 2018; 42: 71-7-. Article. Not Indexed
- Izpe D, Martínez-Monseny AF, Bolasell M, Cuadras D, Velázquez-Fragua R, Gutiérrez-Solana LG, Macaya A, Pérez-Dueñas B, Serrano M. Clinical assessment of dysarthria in children with cerebellar syndrome associated with PMM2-CDG. *Neuropediatrics.* 2018; 49(6): 408-13. Article. IF: 1.654; Q3
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- Klaassen K, Djordjevic M, Skakic A, Desviat LR, Pavlovic S, Pérez B, Stojiljkovic M. Functional characterization of novel phenylalanine hydroxylase p.Gln226Lys mutation revealed its non-responsiveness to tetrahydrobiopterin treatment in hepatoma cellular model. *Biochem Genet.* 2018; 56(5): 533-41. Article. IF: 1.931; Q3



3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

- Martínez-Pizarro A, Dembic M, Pérez B, Andresen BS, Desviat LR. Intronic PAH gene mutations cause a splicing defect by a novel mechanism involving U1snRNP binding downstream of the 5' splice site. *Plos Genet.* 2018; 14(4): e1007360. Article. IF: 5.224; Q1
- Merinero B, Alcaide P, Martín-Hernández E, Morais A, García-Silva MT, Quijada-Fraile P, Pedrón-Giner C, Dulin E, Yahyaoui R, Egea JM, Belanger-Quintana A, Blasco-Alonso J, Ruano MLF, Besga B, Ferrer-López I, Leal F, Ugarte M, Ruiz-Sala P, Pérez B, Pérez-Cerdá C. Four year experience in the diagnosis of very long-chain Acyl-CoA dehydrogenase deficiency in infants detected in three spanish newborn screening centers. *JIMD Rep.* 2018; 39: 63-74. Article. Not Indexed
- Peanne R, de Lonlay P, Foulquier F, Kornak U, Lefeber DJ, Morava E, Pérez B, Seta N, Thiel C, Van Schaftingen E, Matthijs G, Jaeken J. Congenital disorders of glycosylation (CDG): Quo vadis? *Eur J Med Genet.* 2018; 61(1): 643-63. Review. IF: 2.022; Q3
- Pérez B. Novel treatments in neurometabolic diseases: the importance of chaperones. *Rev Neurológia.* 2018; 66: S43-6. Article. IF: 0.485; Q4
- Richard E, Brasil S, Briso-Montiano A, Alonso-Barroso E, Gallardo ME, Merinero B, Ugarte M, Desviat LR, Pérez B. Generation and characterization of two human iPSC lines from patients with methylmalonic aciduria cblB type. *Stem Cell Res.* 2018; 29: 143-7. Editorial Material. IF: 3.929; Q1
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- Rivera-Barahona A, Navarrete R, García-Rodríguez R, Richard E, Ugarte M, Pérez-Cerdá C, Pérez B, Gámez A, Desviat LR. Identification of 34 novel mutations in propionic acidemia: Functional characterization of missense variants and phenotype associations. *Mol Genet Metab.* 2018; 125(3): 266-75. Article. IF: 3.61; Q2

Public projects

Pérez González MB. Enfermedades Neurometabólicas Hereditarias: Avances en el diagnóstico, la patofisiología y desarrollo de terapias dirigidas a estabilizar proteínas (PI16/00573). ISCIII. 2017-2019.

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Management centre: CIBERer

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Management centre: CIBERer

Private projects

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Management centre: UAM

Pérez González MB. Bases moleculares de las enfermedades neurometabólicas y desarrollo de terapias específicas de mutación. Fundación Gemio. 2016-2021.

Management centre: UAM

Ruiz Desviat L. Developing an antisense therapy for a frequent phenylketonuria splicing mutation. Daichi Sankyo. 2017-2019.

Management centre: UAM

Ruiz Desviat L. Effect of compound MIN-102 on redox homeostasis and mitochondrial function in a mouse model of propionic acidemia. Mynoryx Therapeutics. 2018-2018.

Management centre: UAM

International projects

Pérez González MB. European research network directed towards improving diagnosis and treatment of inborn error of glycosylation (E-rare-3 JTC2015). European Union. 2016-2018.

Management centre: UAM

Patents and trademarks

Pérez González B, Ruiz Desviat L, Jorge Finnigan A, Ugarte Pérez M, Martínez Ruiz A, Underhaug J, Barnejee R, inventors; UAM, Universidad de Bergen, Universidad de Michigan, assignees; Compounds useful for the treatment of methylmalonic aciduria. P201330171; 2013 February 11.

Pérez González B, Gámez Abascal A, Yuste Checa P, Arduim Brasil S, Ugarte Pérez M, Martínez Ruiz A, Underhaug J, inventors; UAM, Universidad de Bergen, assignees; Compounds for treating congenital disorders of glycosylation. EP16382373.5; 2016.



3.5 Cancer and Human Molecular Genetics Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018



Publications: 1

Impact Factor: 14.548

QI: 1

Regulation of Ciliary Structure and Function by Phosphoinositides Group

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María Belén Sierra Rodero. Investigadora Predoctoral. Universidad Autónoma de Madrid

Strategic Objective

Cilia play important roles in human health and disease. Our goal is to better understand cilia structure and function, and how they can be manipulated to promote human health.

But what are cilia and why are they important for our health? Cilia are cell membrane protrusions with an endoskeleton consisting of nine microtubule doublets. This basic architecture, shared by both cilia and flagella, is conserved from unicellular organisms to humans. There are two kinds of cilia: motile and immotile (a.k.a. primary). Motile cilia resemble oars, displacing extracellular fluids. This is how we expel mucus from our bronchi and how sperm swim. Instead, primary cilia behave like antennae, detecting optical, mechanical or chemical signals. Our vision, hearing and smell depend on immotile cilia. Primary cilia also monitor

urine flow in the kidney, act as sensors for hunger-controlling hormones in the brain, and control limb and nervous system patterning in the embryo, among many other functions.

Congenital ciliary defects cause ciliopathies, genetically and clinically diverse illnesses whose most common symptoms include mental retardation, retinal degeneration, kidney cysts, polydactyly, obesity, sterility, respiratory infections, and skeletal, heart and brain malformations. Many ciliopathies are rare syndromes (Meckel, Joubert, Bardet-Biedl, Kartagener, etc.), whereas others are more common and affect a single organ (polycystic kidney disease, retinitis pigmentosa).

Ciliopathies are not the only diseases cilia are involved in. Several cancer types, like medulloblastoma and basal cell carcinoma, arise from abnormal activation of Hedgehog signaling, a ciliary pathway essential for embryonic development and adult stem cell function. On the other hand, increasing evidence suggests that cilia modulate the progression of other diseases, such as diabetes and Alzheimer's. Given that ciliary function is critically dependent on their composition, our main strategy consists in understanding the molecular mechanisms underlying: (1) ciliary accumulation of the receptors and transducers that sensitize cilia to external stimuli, and (2) the changes in cilia composition whereby ciliary signals are relayed to the rest of the cell.



3.5 Cancer and Human Molecular Genetics Area

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

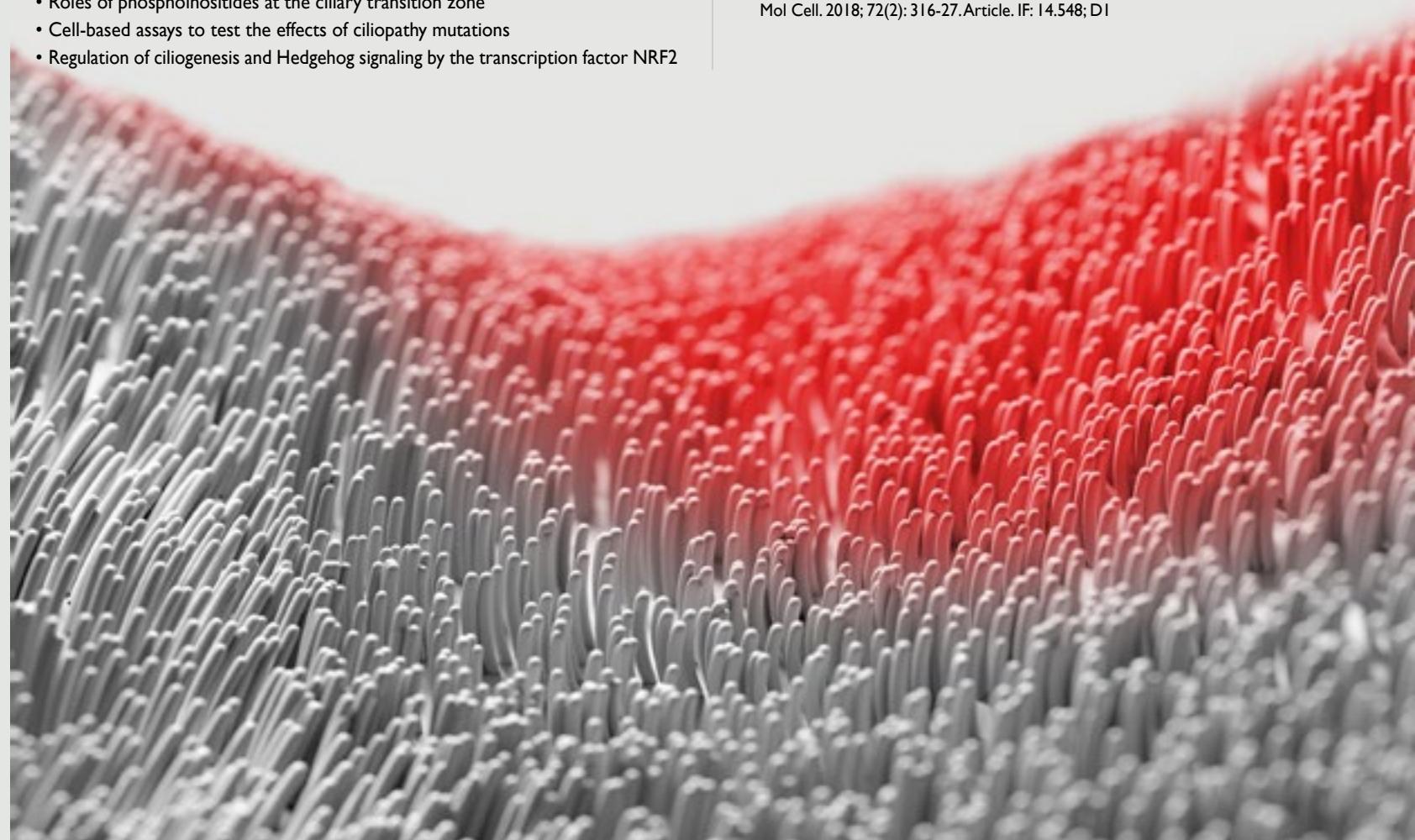
Research Lines

- Factors affecting the ciliary localization of G protein-coupled receptors
- Factors affecting the ciliary localization of INPP5E, a ciliopathy-associated phosphoinositide phosphatase
- Regulation of cilia disassembly by INPP5E and phosphoinositides
- Roles of phosphoinositides at the ciliary transition zone
- Cell-based assays to test the effects of ciliopathy mutations
- Regulation of ciliogenesis and Hedgehog signaling by the transcription factor NRF2

Research Activity

Publications

- Raleigh DR, Sever N, Choksi PK, Sigg MA, Hines KM, Thompson BM, Elnatan D, Jaishankar P, Bisignano P, García-Gonzalo FR, Krup AL, Eberl M, Byrne EFX, Siebold C, Wong SY, Renslo AR, Grabe M, McDonald JG, Xu L, Beachy PA, Reiter JF. Cilia-associated oxysterols activate smoothened. Mol Cell. 2018; 72(2): 316-27. Article. IF: 14.548; DI



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**
2017
2018

3.5 Cancer and Human Molecular Genetics Area



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3.5 Cancer and Human Molecular Genetics Area



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Research Lines

- Integrating Genomics and Avatar Mouse Models to Personalize Pancreatic Cancer Treatment (ERC-2014-ADG; AVATAR)
- Nanomedicine upscaling for early clinical phases of multimodal cancer therapy (H2020; NoCanTher)
- EurOPDX Distributed Infrastructure for Research on patient-derived cancer Xenografts- EdiREX (EU INFRAIA; EdiREX)
- Regulation of PDI/PDLI in response to chronic hypoxia induced by antiangiogenic agents
- Immunotherapy / Immunotherapy Toxicity

Strategic Objective

The main objective of the group is to translate to the clinic new strategies to treat cancer patients. In particular, we envision that an integrated NGS approach coupled with state-of-the-art molecular and cellular technologies along with newly developed mouse models will help improve the outcome of cancer patients. The group is actively involved in the design of precision oncology strategies as well as immuno-oncology approaches. It is also involved in Clinical Trials to support these strategic research programs.

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**

2018



- Congenital Malformation Surgery Group
- Bone Pathophysiology and Biomaterials Group
- Cellular Engineering Group
- Clinical Pharmacology Group

3.6 Surgery, Transplant and Health Technologies Area

Leopoldo Martínez Martínez

- Osteoarticular Surgery Research – GICOA Group
- Reconstructive and Regenerative Research Group
- Transplant Group
- Rehabilitation - LAMBECOM (HUF)



3.6 Surgery, Transplant and Health Technologies Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

Strategic Objectives	Development forecast for the coming years	Actions
Surgery, Transplant and Health Technologies Area is composed of 8 very heterogeneous groups and the absence of common activities between them make the general objectives equivalent to the sum of the research lines of each of the groups. The main objective of the area is to locate points where synergies between groups can be established.	Cellular and organ engineering, underdeveloped Stem and precursor cells. This is one of the most successful lines and the one that has motivated more collaborations between them. It is certainly one of the possibilities for the future	<ul style="list-style-type: none"> Support researchers to continue being a reference in the national area.
	Animal models. Cellular models. They require personnel trained in cell culture techniques and who masters animal models of human disease	<ul style="list-style-type: none"> Identify and promote at international level the new research lines identifying as innovative and competitive.
	Minimally invasive surgery: one of the most important translational fields in recent years, a permanent demand from the population and an indicator of the quality of healthcare systems	

IdiPAZ





3.6 Surgery, Transplant and Health Technologies Area

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**2017
2018 Publications: **18** Impact Factor: **16.352** QI: **2**

Congenital Malformation Surgery Group

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Mercedes Díaz González. Facultativo Especialista de Área en Cirugía Pediátrica. Hospital Universitario La Paz

José Luis Encinas Hernández. Facultativo Especialista de Área en Cirugía Pediátrica. Hospital Universitario La Paz

Maria Teresa Vallejo Cremades. Investigadora Postdoctoral (Contrato de Estabilización de Técnicos de Apoyo). Jefe de Laboratorio. Hospital Universitario La Paz

Strategic Objective

Paediatric surgery is an independent specialty that deals with all aspects of the surgical diseases of children. Its scope involves a wide range of clinical problems such as trauma, tumours and inflammatory diseases, and, more specifically, malformations. These conditions almost always have essentially unknown origins and are caused by unknown mechanisms. Surgery is required at various times in the life of patients with malformations, ranging from neonatal anatomical and functional reconstruction to replacement of dysfunctional organs later in life.

As a consequence, this line of research has an unusually broad spectrum as it encompasses the study of cellular and molecular mechanisms leading to malformations, the biology of the malformed foetus and embryo, prenatal chances for intervention on the malformations, and postnatal treatments including organ replacement.

Research Lines

- Congenital malformations
- Small bowel transplantation and graft rejection
- Fetal surgery
- Alcohol Fetal Syndrome

Research Activity

Publications

- Aras-López R, Almeida L, Andréu-Fernández V, Tovar J, Martínez L. Anti-oxidants correct disturbance of redox enzymes in the hearts of rat fetuses with congenital diaphragmatic hernia. Pediatr Surg Int. 2018; 34(3): 307-13. Article. IF: 1.397; Q3



3.6 Surgery, Transplant and Health Technologies Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

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Public projects

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Management centre: FIBHULP

Martínez Martínez L. Red de Salud Materno-infantil y del Desarrollo (SAMID) (RD16/0022/0006). ISCIII. 2017-2021.

Management centre: FIBHULP

Vallejo Cremades MT. Contrato de estabilización. ISCIII, CAM. 2008-2018.
Management centre: FIBHULP

Vallejo Cremades MT. Técnico en formación Paula Sánchez Guismera (PEJ16/MED/TL-0746). CM. 2017-2019.

Management centre: FIBHULP

Private projects

Vallejo Cremades MT. Servicios de investigación de la plataforma de apoyo de IdiPAZ, Laboratorio Inmunohistoquímica y Análisis de Imagen. Universidad Complutense de Madrid. 2012-Ongoing.

Management centre: FIBHULP



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

3.6 Surgery, Transplant and Health Technologies Area



Martínez Martínez L. Estudio comparativo del espectro de alcohol fetal segun dos patrones de consumo humano y su prevencion con antioxidantes. Martínez. 2018-Ongoing.

Management centre: FIBHULP

Vallejo Cremades MT. Formación en investigación en anatomía patológica. SYF Galenus Center. 2016-Ongoing.

Management centre: FIBHULP

Encinas Hernandez JL. El estudio del potencial neuroprotector e inmunomodulador local del trasplante de células madre mesenquimales y sus implicaciones en la cirugía fetal de los defectos del tubo neural. Fundación Mutua Madrileña. 2012-Ongoing.

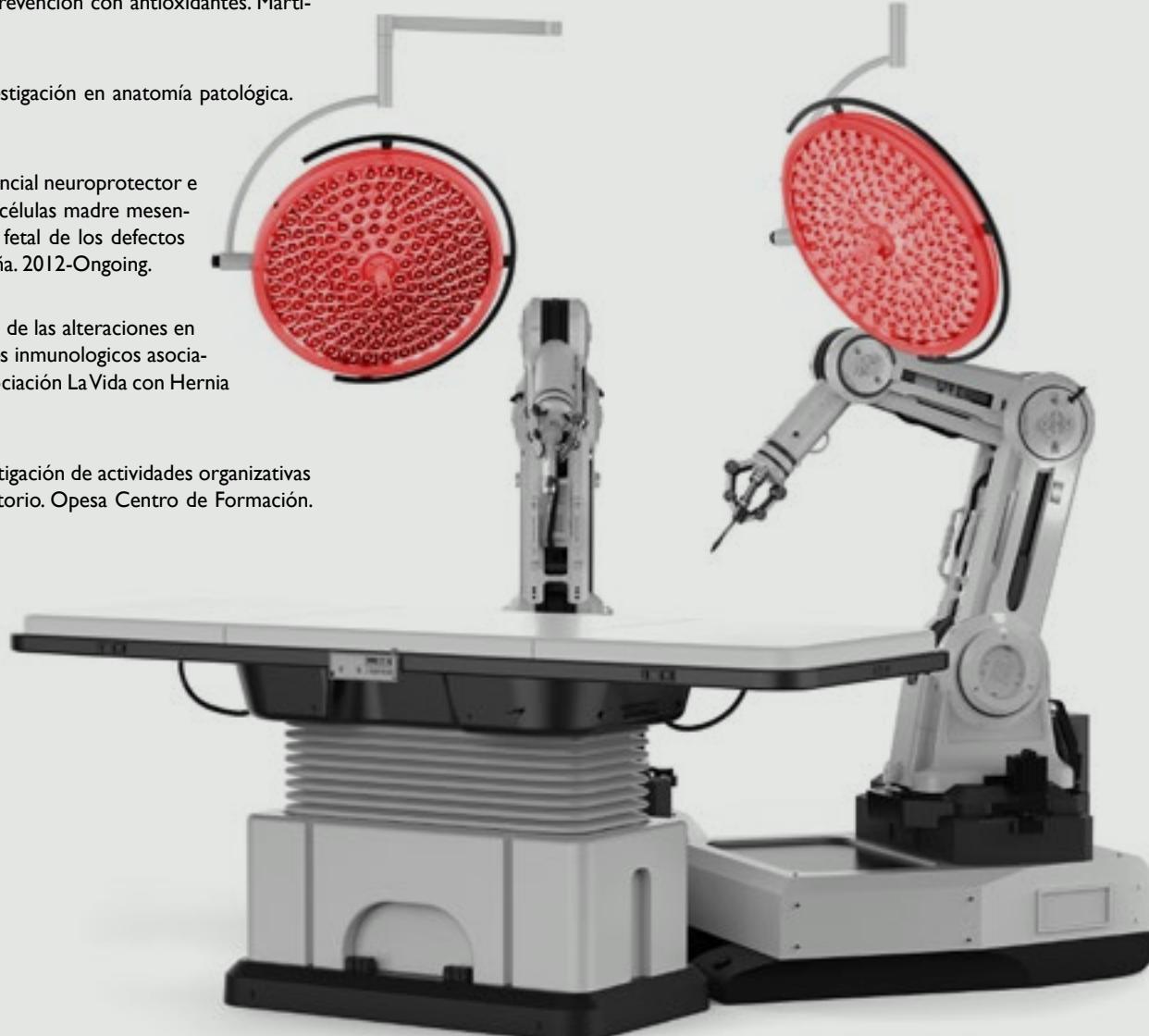
Management centre: FIBHULP

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Management centre: FIBHULP

Vallejo Cremades MT. Formación en investigación de actividades organizativas y de gestión de trabajo técnico en laboratorio. Opesa Centro de Formación. 2015-Ongoing.

Management centre: FIBHULP



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**2017
2018

3.6 Surgery, Transplant and Health Technologies Area



Publications: **7**

Impact Factor: **12.529**

QI: **2**

Bone Pathophysiology and Biomaterials Group

Nuria Elda Vilaboa Díaz. Investigadora Senior (Contrato Miguel Servet - I2). Jefe de Laboratorio. Hospital Universitario La Paz

Fátima Bensiamar Hadia. Técnico de Laboratorio. Hospital Universitario La Paz

Alba Boré Medina. Técnico de Laboratorio. Hospital Universitario La Paz - Ciber BBN

Clara Escudero Duch. Investigadora predoctoral. Hospital Universitario La Paz

Mabel Falguera Uceda. Investigadora predoctoral. Hospital Universitario La Paz

Eduardo García Cimbrelo. Doctor Emérito. Hospital Universitario La Paz. Universidad Autónoma de Madrid

Enrique Gil Garay. Jefe de Servicio de Cirugía Ortopédica y Traumatológica. Hospital Universitario La Paz.

Profesor Titular. Departamento de Cirugía. Facultad de Medicina. Universidad Autónoma de Madrid

Francisco José Mancebo Pascual. Ayudante de Investigación. Hospital Universitario La Paz

Carmen Martín Hervás. Facultativo Especialista de Área en Radiodiagnóstico. Hospital Universitario La Paz. Profesora Asociada. Facultad de Medicina. Universidad Autónoma de Madrid

Francisco Manuel Martín Saavedra. Investigador postdoctoral. Hospital Universitario La Paz

Laura Muñoz Moreno. Investigador postdoctoral. Hospital Universitario La Paz - Ciber BBN

Laura Saldaña Quero. Investigadora Senior (Contrato Miguel Servet-Tipo I). Jefe de Laboratorio. Hospital Universitario La Paz

Silvia Sánchez Casanova. Investigadora predoctoral. Hospital Universitario La Paz

Gema Vallés Pérez. Investigadora Senior. Responsables de Cultivos Celulares y de los Laboratorios Comunes de IdiPAZ. Hospital Universitario La Paz

Strategic Objective

The Bone Physiopathology and Biomaterials group includes basic and clinical researchers from IdiPAZ. The group has broad experience in clinical and basic research on biomaterials for orthopaedic implants and bone tissue engineering. The principal goal of the group is to improve the clinical outcome of orthopaedic surgery through research on implants and biomaterials used for manufacturing prosthetic devices.

The group is also interested in bone tissue engineering applications, developing surgical procedures that make use of allografts, evaluating scaffolds manufactured by collaborative partners, developing novel gene therapy strategies aimed to heal bone defects and studying the interactions of the immune and skeletal systems. Specific areas of clinical research on implants include follow-up studies on various devices in use for osteoarticular surgery.



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report
2017-2018

3.6 Surgery, Transplant and Health Technologies Area



The main areas of interest in basic research on the biocompatibility of materials include:

- a) understanding the influence of the surface biomaterial properties on the behaviour of bone-related cells
- b) the study of cell reactions occurring in the vicinity of implanted materials caused by wear particles
- c) the deliberate manipulation of cell responses after exposure to nanoparticles designed for gene delivery and optical hyperthermia applications.

The team is also interested in the development of transcriptional targeting strategies to ensure tight control of the expression of therapeutic proteins and their potential application in inducing an orchestrated expression of growth factors involved in bone healing.

Research Lines

- Clinical research in implants for bone repair
- Biocompatibility of new materials for potential use in implants for bone repair: cell and surface interactions, cell and particle interactions
- Study of the interactions between the immune and skeletal systems
- Control of the expression of therapeutic genes using gene circuits

Research Activity

Publications

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- Fernández-Fernández R, Martínez-Miranda JM, Gil-Garay E. Comparison of an uncemented tapered stem design in cobalt-chrome vs titanium at 15-year follow-up. *J Arthroplasty*. 2018; 33(4): 1139-43. Article. IF: 3.524; Q1
- Gómez-Álvarez J, González-Escobar S, Gil-Garay E. Clinical assessment of patients with isolated hip fractures associated with an upper limb fracture. *Rev Esp Cir Ortop Traumatol*. 2018; 62(3): 222-7-. Article. Not Indexed
- Martín-Saavedra F, Escudero-Duch C, Prieto M, Sánchez-Casanova S, López D, Arruebo M, Voellmy R, Santamaría J, Vilaboa N. Pro-angiogenic near infrared-responsive hydrogels for deliberate transgene expression. *Acta Biomater*. 2018; 78: 123-36. Article. IF: 6.638; DI
- Rey DM, Martín SD, Hernando AS, Gamarra CM, Álvarez-Escola C, Ferrer PL, Vicandi B, Martín-Hervas C. Thyroid nodules: Too many fine needle biopsies? *Curr Med Imaging Rev*. 2018; 14(5): 725-31. Article. IF: 0.533; Q4

- Rubio-Suárez JC, Carbonell-Escobar R, Rodríguez-Merchán EC, Ibarzábal-Gil A, Gil-Garay E. Fractures of the tibial pilon treated by open reduction and internal fixation (locking compression plate-less invasive stabilising system): Complications and sequelae. *Injury*. 2018; 49: S60-4. Article. IF: 1.834; Q2
- Saez-López P, González-Montalvo JL, Ojeda-Thies C, Mora-Fernández J, Muñoz-Pascual A, Cancio J M, Tarazona F J, Pareja T, Gómez-Campelo P, Montero-Fernández N, Alarcón T, Mesa-Lampré P, Larrainzar-Gar R, Duaso E, Gil-Garay E, Diez-Pérez A, Prieto-Alhambra D, Queipo-Matas R, Otero-Puime A. Spanish National Hip Fracture Registry (SNHFR): a description of its objectives, methodology and implementation. *Rev Esp Geriatr Gerontol*. 2018; 53(4): 188-95. Article. Not Indexed

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Aguilar de Armas MR, Ramírez R, Vilaboa Díaz N. Preparation and application of eardrops for the inhibition of sensorineural hearing loss (NADEAFNESS). CIBER-BBN. 2017-2019.

Management centre: CIBER-BBN

Escudero Duch C. Contrato predoctoral (FI14/00447). ISCIII. 2015-2018.

Management centre: FIBHULP

Saldaña Quero L. Contrato Miguel Servet Tipo II (CPII16/00038). CM. 2017-2019.

Management centre: FIBHULP

Saldaña Quero L. Pre-acondicionamiento inflamatorio de células madre mesenquimales para su aplicación en terapias avanzadas de regeneración ósea mediante ingeniería de tejidos (PI15/00752). ISCIII. 2016-2018.

Management centre: FIBHULP

Sánchez Casanova S. Contrato ayuda investigación (PEJ15/BIO/AI-0250). CM. 2016-2018.

Management centre: FIBHULP

Santamaría J, Vilaboa Díaz N. Bone substitutes based on hydrogels responsive to near infrared light for the generation of therapeutic hyperthermia (NIRHYD). CIBER-BBN. 2018-2020.

Management centre: CIBER-BBN

Vilaboa Díaz NE. Contrato de estabilización I2. CM. 2013-2025.

Management centre: FIBHULP

Vilaboa Díaz NE. Hacia una terapia avanzada de regeneración ósea: intermedios tisulares activables mediante energía infrarroja para la expresión controlada de factores ontogénicos y antigenéticos (PI15/01118). ISCIII. 2016-2018.

Management centre: FIBHULP



3.6 Surgery, Transplant and Health Technologies Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

Vilaboa Díaz NE. MULTIMAT - Materiales multifuncionales para los retos de la sociedad (S2013/MIT-2862). CM. 2014-2018.

Management centre: FIBHULP

Private projects

San Roman del Barrio J, Vilaboa Díaz N. Caracterización y evaluación de biomateriales de aplicación dental. J Ripoll S.L. 2017-2018.

Management centre: CIBER-BBN

Vilaboa Díaz NE. Detección de activación de HSF parte II. HSF Pharmacéutica. 2004-Ongoing.

Management centre: FIBHULP

Vilaboa Díaz NE. Estudio de actividad osteoblástica de dos sustancias: ranelato de estroncio y LA16034. Lacer S.A. 2011-Ongoing.

Management centre: FIBHULP

Vilaboa Díaz NE. Animal model of bone regeneration induced by tissue intermediates responsive to near-infrared light. Roche Farma S.A. 2016-Ongoing.

Management centre: FIBHULP

Vilaboa Díaz NE. Desarrollo de fluidos que potencien o favorezcan la osteointegración de los implantes ante distintas situaciones. Mozo-Grau S.A. 2017-Ongoing.

Management centre: FIBHULP

Clinical trials

Gil Garay E. Artroplastia total de cadera con el vástago femoral alteon™ Tapered Wedge de Exactech®. Type: EPA-SP.

HULP code: PI-2913. Sponsored's protocol code: CR14-001.

Sponsored by: Exactech International Operation AG. Signed date: 09/02/2018

Patents and trademarks

Fabilli M, Wilson C, Padilla F, Martín Saavedra FM, inventors; The regents of the University of Michigan, assignee. Ultrasound-triggerable agents for tissue engineering; PCT/US2013/044817, US2013/0330389; 2012 June 08.

González Carrasco JL, Benavente Castro R, Cifuentes Cuellar SC, Lieblich Rodríguez M, Olalde Graells B, Atorrasagasti Goyalde G, Argarate Madariaga N, Pacha Olivenza MA, Fernández Calderón MC, Saldaña Quero L, González Martín ML, Pérez Giraldo C, Gallardo Moreno AM, inventors; CSIC, Fundación Tecnalia Research & Innovation, FIBHULP, Universidad de Extremadura, Centro de Investigación Biomédica en Red (CIBER). Moldable, biodegradable, biocompatible and bioresorbable implant material, method for its preparation and uses thereof. P201530683; 2015 May 18.

Martín Saavedra FM, Vilaboa Díaz NE, Cebrián Hernando V, Arruebo Gordo M, Santamaría Ramiro J, Gómez Navascués L, inventors; FIBHULP, CIBER-BBN, Universidad de Zaragoza, assignees. Fibrin hydrogel with plasmonic nanoparticles; P201330894, PCT/ES2014/070484; 2013 June 14.

Vilaboa Díaz NE, Calzado Martín A, Crespo García L, Saldaña Quero L, Moreo Calvo P, Alastrué Vera V, inventors; FIBHULP, CIBER-BBN, assignees. Chamber device for dynamic cell culture on biomaterials; P201330040, PCT/ES2013/070819; 2013 January 16.

Vilaboa Díaz NE, González Carrasco JL, Multigner Domínguez M, Lieblich Rodríguez M, Muñoz Hernández M, Frutos Torres E, Saldaña Quero L, inventors; FIBHULP, CSIC, CIBER-BBN, Universidad Alfonso X El Sabio, assignees. Magnesium/polymer composite biomaterial for biomedical applications; P201030950, PCT/ES2011/070440; 2010 June 21.

Vilaboa Díaz NE, González Carrasco JL, Saldaña Quero L, Frutos Torres E. inventors; FIBHULP, CSIC, CIBER-BBN, assignees. Method to obtain a metallic-coated biomaterial; P201030949, PCT/ES2011/070400; 2010 June 21.

Voellmy R, Vilaboa Díaz NE, inventors; HSF Pharmaceuticals S.A., assignee. Inhibitors of heat shock factor I and uses thereof. US 62/495,501; 2016 September 16.

Voellmy R, Vilaboa Díaz NE. Inventors; HSF Pharmaceuticals SA. Assignees. Compounds that induce protein unfolding and a mitigated response thereto, and methods of use thereof. US 62/764,569. 2018 August 08

Voellmy R, Vilaboa Díaz NE. Inventors; HSF Pharmaceuticals SA. Assignees. Inhibitors of heat shock factors and uses thereof. US62/499,650. 2017 February 17

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**2017
2018

3.6 Surgery, Transplant and Health Technologies Area



Publications: **6**

Impact Factor: **16.²³⁹**

QI: **1**

María Paz de Miguel González. Investigadora Senior (Contrato Miguel Servet - I2). Jefe de Laboratorio. Hospital Universitario La Paz

Marta Cadenas Martín. Investigadora Predoctoral. Hospital Universitario La Paz

María Pilar González-Peramato Gutiérrez. Facultativo Especialista de Área en Anatomía Patológica. Hospital Universitario La Paz

Adrián Moratilla Riofrío. Ayudante de Laboratorio. Hospital Universitario La Paz

Manuel Nistal Martín de Serrano. Catedrático Departamento de Histología y Neurociencia. Facultativo de Medicina. Universidad Autónoma de Madrid

Javier Francisco Regadera González. Catedrático. Departamento de Histología y Neurociencia. Facultad de Medicina. Universidad Autónoma de Madrid

Strategic Objective

To ascertain the mechanisms responsible for converting a differentiated cell into a pluripotent cell and at the same time how these establish a relationship between cellular reprogramming and oncogenic transformation, in order to use divergent pathways governing these processes as clinical early diagnostic tools and therapeutic targets for clinical intervention.

Cellular Engineering Group

To develop new cell therapy approaches in diverse organs transplants.

Research Lines

- Molecular mechanisms of cellular reprogramming in normal and neoplastic environments
- New techniques and therapies in transplants

Research Activity

Books and book chapters

de Miguel MP, Alcaina Y, Sainz de la Maza D. Primordial germ cell reprogramming. In: Ahmed RG. Germ Cell. Londres: IntechOpen publishing, 2018. p.43-72

de Miguel MP, González-Peramato P, Nistal M. Morphological bases of human Leydig cell dysfunction. In: M Estrada. Advances in testosterone action. Londres: IntechOpen publishing, 2018. p.1-23



3.6 Surgery, Transplant and Health Technologies Area



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

Publications

- Corvillo F, Aparicio V, López-Lera A, Garrido S, Araujo-Vilar D, de Miguel MP, López-Trascasa M. Autoantibodies against perilipin 1 as a cause of acquired generalized lipodystrophy. *Front Immunol.* 2018; 9: 2142. Article. IF: 4.716; Q2
- Mojena M, Povo-Retana A, González-Ramos S, Fernández-García V, Regadera J, Zazpe A, Artaiz I, Martín-Sanz P, Ledo F, Boscá L. Benzylamine and phenylamine derived drugs induce apoptosis and reduce proliferation, migration and metastasis formation in melanoma cells. *Front Oncol.* 2018; 8: 328. Article. IF: 4.137; Q2
- Jiménez-Heffernan JA, Muñoz-Hernández P, Velasco AC, Fraih AF, Cuesta J, González-Peramato P, Olivier-García C, Vicandi B. Fine needle aspiration cytology of the normal kidney: A cytohistological and immunocytochemical correlation study. *Diagn Cytopathol.* 2018; 46(6): 482-8. Article. IF: 1.402; Q2
- Muñoz MIR, Cerezo VN, Reyes MD, Sánchez AV, González-Peramato P, Pereira PL, Urrutia MJM. Testicular tumours in children: Indications for testis-sparing surgery. *An Pediatr.* 2018; 88(5): 253-8. Article. IF: 1.166; Q3
- Rivas JG, Alonso-Dorrego JM, Carrión DM, Robalino MV, González-Peramato P. Pseudomyxoma peritonei: a case report and review of the literature. *Arch Esp Urol.* 2018; 71(2): 208-11. Article. IF: 0.335; Q4
- del Barrio JLA, El Zarif M, Azaar A, Makdissi N, Khalil C, Harb W, El Achkar I, Jawad ZA, de Miguel MP, Alio JL. Corneal stroma enhancement with decellularized stromal laminas with or without stem cell recellularization for advanced keratoconus. *Am J Ophthalmol.* 2018; 186: 47-58. Article. IF: 4.483; Q1

Public projects

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Management centre: FIBHULP

Private projects

- de Miguel González MP.** Bio-ingeniería de tejido corneal para trasplante endotelial: desarrollo de láminas ultrafinas de cornea decelularizada colonizadas por endotelio corneal humano expandido en cultivo. Roche Farma S.A. 2016-Ongoing.

Management centre: FIBHULP

- de Miguel González MP.** Contribución de la modificación metabólica a la reprogramación celular y la transformación oncoatómica. Fundación Domingo Martínez. 2017-Ongoing.

Management centre: FIBHULP

- de Miguel González MP.** Contribución de la modificación metabólica a la reprogramación celular y la transformación oncoatómica. Fundación para la Investigación Biomédica Hospital Universitario La Paz. 2018-Ongoing.

Management centre: FIBHULP

- de Miguel González MP.** Evaluación histopatológica de la biointegración de diversos pigmentos minerales micronizados inyectados en el estroma corneal de 56 ojos de cerdo. Evaluación histopatológica de 11 corneas irradiadas con laser femtosegundo. Vissum Corporación Oftalmológica. 2011-Ongoing.

Management centre: FIBHULP

- de Miguel González MP.** La terapia celular en la superficie ocular: función y aplicaciones biosubstitutivas de las células madre adultas mesenquimales para la regeneración corneal. Fundació Marató TV3. 2012-Ongoing.

Management centre: FIBHULP

- de Miguel González MP.** Mecanismos moleculares implicados en la reprogramación celular por medio de modificación metabólica. Stakeholders. 2014-Ongoing.

Management centre: FIBHULP

- de Miguel González MP.** Proveer del conocimiento técnico necesario para la implantación de láminas corneales decelularizadas y colonizadas o no con células madre mesenquimales derivadas de tejido adiposo para su uso en enfermedades corneales que involucren el estroma corneal. Optica General SARL. 2015-Ongoing.

Management centre: FIBHULP

Patents and trademarks

- de Miguel González MP, Arnalich Montiel F, Royuela MM,** inventors; FIBHULP, Fundación para la Investigación Biomédica del Hospital Universitario Ramón y Cajal, Universidad de Alcalá, assignees. Corneal endothelium injector; P201131222, PCT/ES2012/070543; 2011 July 18.

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**
2017
2018

3.6 Surgery, Transplant and Health Technologies Area



Publications: **8**

Impact Factor: **27.441**

QI: **3**

Clinical Pharmacology Group

Jesús Frías Iniesta. Jefe de Servicio de Farmacología Clínica. Hospital Universitario La Paz. Catedrático. Facultad de Medicina. Universidad Autónoma de Madrid

Alberto Borobia Pérez. Facultativo Especialista de Área en Farmacología Clínica. Hospital Universitario La Paz

Antonio Javier Carcas Sansuán. Facultativo Especialista de Área en Farmacología Clínica. Hospital Universitario La Paz. Profesor Titular. Facultad de Medicina. Universidad Autónoma de Madrid

Alberto García Bartolomé. Investigador Postdoctoral. Hospital Universitario La Paz

José Carlos Martínez Ávila. Investigador Postdoctoral. Hospital Universitario La Paz

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Hoi Yan Tong. Responsable de Farmacovigilancia. Hospital Universitario La Paz

Strategic Objective

Clinical pharmacology, as a scientific and professional discipline, has the objective of achieving an effective, efficacious and efficient use of drugs, at both the individual and group level. This means that Clinical Pharmacology is a cross-sectional discipline that must establish collaborations with numerous other disciplines and health professionals.

In this context and in the field of clinical research, the interests of our group are focused on two fundamental aspects:

1. Customisation of drug treatments: research and development of techniques and methods that individualise the use of drugs, improve their efficacy and reduce their risks.
2. The improvement of treatment by obtaining high quality evidence on the efficacy of clinical trials, strategies of identification, evaluation and prevention of adverse reactions to medication (pharmacovigilance programmes) and evaluation of the suitability of their use and effectiveness (studies on the use of medication).

Research Lines

- Therapeutic drug monitoring (TDM) - Development of individualised therapeutic drug monitoring programmes and pharmacogenetics
- Getting quality evidences for the establishment of drug efficacy, safety and adequate use of medicines in humans



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2017
2018

3.6 Surgery, Transplant and Health Technologies Area



Research Activity

Publications

- Almeida-Paulo GN, García ID, Lubomirov R, Borobia AM, Alonso-Sánchez NL, Espinosa L, Carcas-Sansuán AJ. Weight of ABCB1 and POR genes on oral tacrolimus exposure in CYP3A5 non-expressor pediatric patients with stable kidney transplant. *Pharmacogenomics J.* 2018; 18(1): 180-6. Article. IF: 3.503; Q2
- Borobia AM, Dapia I, Tong HY, Arias P, Muñoz M, Tenorio J, Hernández R, García IG, Gordo G, Ramírez E, Frías J, Lapunzina P, Carcas AJ. Clinical implementation of pharmacogenetic testing in a hospital of the Spanish National Health System: Strategy and experience over 3 years. *CTS-Clin Transl Sci.* 2018; 11(2): 189-99. Article. IF: 3.989; Q2
- Cabañas R, Calderón O, Ramírez E, Fiandor A, Caballero T, Heredia R, Herranz P, Madero R, Quirce S, Bellón T. Sensitivity and specificity of the lymphocyte transformation test in drug reaction with eosinophilia and systemic symptoms causality assessment. *Clin Exp Allergy.* 2018; 48(3): 325-33. Article. IF: 4.471; Q2
- Koller D, Belmonte C, Lubomirov R, Saiz-Rodríguez M, Zubiaur P, Román M, Ochoa D, Carcas A, Wojnicz A, Abad-Santos F. Effects of aripiprazole on pupillometric parameters related to pharmacokinetics and pharmacogenetics after single oral administration to healthy subjects. *J Psychopharmacol.* 2018; 32(11): 1212. Article. IF: 4.221; Q1
- Martínez-Ávila JC, García-Bartolome A, García I, Dapia I, Tong HY, Díaz L, Guerra P, Frías J, Sansuán AJ, Borobia AM. Pharmacometabolomics applied to zonisamide pharmacokinetic parameter prediction. *Metabolomics.* 2018; 14(5): 70. Article. IF: 3.167; Q2
- Ramírez E, Martín A, Villán Y, Lorente M, Ojeda J, Moro M, Vara C, Avenza M, Domingo MJ, Alonso P, Asensio MJ, Blázquez JA, Hernández R, Frías J, Frank A. Effectiveness and limitations of an incident-reporting system analyzed by local clinical safety leaders in a tertiary hospital Prospective evaluation through real-time observations of patient safety incidents. *Medicine.* 2018; 97(38): e12509. Article. IF: 1.87; Q2
- Rodríguez-Martín S, Martín-Merino E, Lerma V, Rodríguez-Miguel A, González O, González-Herrada C, Ramírez E, Bellón T, de Abajo FJ. Active surveillance of severe cutaneous adverse reactions: A case-population approach using a registry and a health care database. *Pharmacoepidem Dr S.* 2018; 27(9): 1042-50. Article. IF: 2.87; Q1
- Romo RM, Pérez AMB, Muñoz MA, Cardona CC, Mora JC, Sansuán AJC. Efficient diagnosis and treatment of acute paracetamol poisoning: cost-effectiveness analysis of approaches based on a hospital toxicovigilance program. *Emergencias.* 2018; 30(3): 169-76. Article. IF: 3.35; Q1

Public projects

Carcas Sansuán A. Optimización cinética-dinámica de la dosificación de amikacina en pacientes en hemodiálisis convencional: ensayo clínico aleatorizado de dos pautas de administración (PII3/01530). ISCIII. 2014-2018.

Management centre: FIBHULP

Frías Iniesta J. Desarrollo de especialidades farmacéuticas genéricas antivirales para el tratamiento de hepatitis B y VIH (RTC-2015-4250-1). MINECO. 2015-2018.

Management centre: UAM

Frías Iniesta J. Plataforma de Unidades de Investigación Clínica y Ensayos Clínicos (PTI3/0002/0015). ISCIII. 2014-2018.

Management centre: FIBHULP

Frías Iniesta J. Plataforma de Unidades de Investigación Clínica y Ensayos Clínicos (PTI7/0017/0013). ISCIII. 2018-2020.

Management centre: FIBHULP

García Bartolomé A. Contrato postdoctoral (PEJD-2016/SAL-3247). CM. 2017-2019.

Management centre: FIBHULP

Private projects

Borobia Pérez A. Puesta en marcha y realización del ensayo clínico-Proyecto Acanto y Proyecto Facet. Fundación para la Investigación Biomédica Hosopital Universitario de Getafe. 2018-Ongoing.

Management centre: FIBHULP

Borobia Pérez A. Registro de pacientes atendidos en la Unidad de Farmacogenética del Hospital La Paz y análisis de la actividad realizada desde su creación. Stakeholders. 2017-Ongoing.

Management centre: FIBHULP

Borobia Pérez A. Tareas necesarias para la puesta en marcha y realización del ensayo clínico Treatment of high grade non-muscle invasive urothelial carcinoma of the bladder by standard number and dose of intravesical bcg instillations versus reduced number of intravesical instillations with standard dose of bcg, a european association of urology research foundation randomised phase III clinical trial - Nimbus. Fundación para la Investigación de la Asociación Europea de Urología. 2017-Ongoing.

Management centre: FIBHULP

Borobia Pérez A. Tareas necesarias para la puesta en marcha y realización del estudio observacional Estudio de evaluación y manejo del dolor agudo en servicios de urgencias hospitalarias e intervención educativa: Estudio Edurg17. Laboratorio Menarini S.A. 2018-Ongoing.

Management centre: FIBHULP

Frías Iniesta J. Unidad Clínica de Investigación y Control de Ensayos Clínicos. Ferring S.A.U. 2011-Ongoing.

Management centre: FIBHULP

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2013



3.6 Surgery, Transplant and Health Technologies Area



Ramírez García E. Estudio farmacoepidemiológico para evaluar los eventos tromboembólicos de las inmunoglobulinas inespecíficas. Características diferenciales de los eventos arteriales y venosos. Terumo BCT Europe N.V. 2013-Ongoing.

Management centre: FIBHULP

Clinical trials

Borobia Pérez A. Ensayo clínico, piloto, doble ciego, aleatorizado, controlado con placebo para evaluar la eficacia comparada de Ibuprofeno combinado con diferentes dosis de Tramadol y Tramadol 100 mg por vía intravenosa en pacientes con dolor moderado a intenso tras cirugía. Type: Clinical Trial, phase III.

HULP code: 5080. Sponsored's protocol code: FMLD-FEBETRADI-PILOT-43. Sponsored by:

Farmalider S.A. Signed date: 01/08/2018

Patents and trademarks

Carcas Sansuán AJ, author; Carcas Sansuán AJ, assignee. Brand name: IBJ IberoAmerican Journals. ESM 3.063.048; 2013 February 12.



Carcas Sansuán AJ, author; Carcas Sansuán AJ, assignee Brand name: IberoAmerican Journals Plus. ESM 3.063.052; 2013 February 12.



Carcas Sansuán AJ, author; Carcas Sansuán AJ, assignee Brand name: IberoAmerican Journals Clinical Pharmacology. ESM 3.063.053; 2013 February 12.



Carcas Sansuán AJ, author; Carcas Sansuán AJ, assignee Brand name: IberoAmerican Journals Medicine. ESM 3.063.049; 2013 February 12.



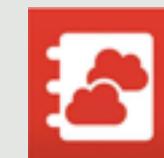
Lapunzina Badía P, Borobia Pérez AM, Carcas Sansuán AJ, Tenorio Castaño JA, Arias Lajara P, Lubomirov Jristov R, authors; FIBHULP, UAM, assignees. Brand name: PharmArray. USM 86.004.412, CM 11.608.403; 2013 July 08, 2013 February 27.



Herrero Ambrosio A, Ramírez García E, Ojeda Feo JJ, Pérez Rodríguez J, Asensio Martín MJ, González Sánchez ML, Moro Agud M, Lorente Romeo M, López Nieto M, Gómez Rioja R, authors; FIBHULP, assignee. Brand name: SINOIRES. CM 13.080.056; 2014 July 14.



Carcas Sansuán AJ, Borobia Pérez AM, authors; FIBHULP, assignee. Brand name: CRDataX. CM 13.681.614; 2015 May 28.



Lapunzina Badía PD, Borobia Pérez AM, Carcas Sansuán AJ, Tenorio Castaño JA, Arias Lajara P, Frías Iniesta J, Dapia García I, Muñoz M, authors; FIBHULP, UAM, assignees. Brand name: ClinPharmarray. CM 15489511; 2016 May 31, 2016 September 07.



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**
2017
2018

3.6 Surgery, Transplant and Health Technologies Area

 Publications: **28** Impact Factor: **40.4** QI: **3**

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Juan Carlos Rubio Suárez. Jefe de Sección en Cirugía Ortopédica y Traumatología. Hospital Universitario La Paz

Pablo Hernández Esteban. Facultativo Especialista de Área en Cirugía Ortopédica y Traumatología. Hospital Universitario La Paz

Strategic Objective

Orthopaedic implant studies are required to assess the results of implants, detect the causes of failure, and deepen our understanding of the prevention and solution of these failures. The medical, social, and economic relevance of orthopaedic implants, and their influence on quality of life, place this technology in the centre of translational research in orthopaedic surgery. Reconstruction based on biological strategies and biomaterials is rapidly evolving, and cutting edge research on these topics may offer an advantage in clinical translational research. The group has also developed studies on sports medicine and ligament reconstruction, with various



3.6 Surgery, Transplant and Health Technologies Area

outcome approaches and devices that may enhance surgical results. In this context, a multidisciplinary clinical and basic research group on orthopaedic surgery deepens our understanding of a wide variety of current research topics in the field and provides further progress towards clinical translation.

In order to contribute to new advances in the field, our main clinical and experimental objectives are addressed by a joint research line that covers issues related to bone and joint reconstruction. These issues include the following:

- Failed hip and knee prostheses, including the material, biological, and clinical mechanisms of failure. This research may lead to proposals for materials and design modifications in orthopaedic implants and reconstructive devices and techniques. Functional recovery of the patient is the ultimate goal, considering various scenarios from an experimental and clinical point of view.
- Regenerative medicine approaches to bone and joint reconstruction, to generate preclinical and clinical proposals for bone and joint regeneration and repair, both in traumatic and non-traumatic bone and soft-tissue injuries.

Research Lines

- Clinical and basic research in Orthopaedics implants, and in bone and joint reconstruction

Research Activity

Publications

- Cordero-Ampuero J, García-Rey E, García-Cimbrelo E. Proximal femoral bone regeneration after an un cemented hydroxyapatite-coated long-stem in revision Hip Surgery. *Open Orthop J.* 2018; 12: 125-33. Article. Not Indexed
- Dale TM, Saucedo JM, Rodríguez-Merchán EC. Total elbow arthroplasty in haemophilia. *Haemophilia.* 2018; 24(4): 548-56. Review. IF: 3.59; Q2
- de la Corte-Rodríguez H, Rodríguez-Merchán EC, Álvarez-Román MT, Martín-Salces M, Martí-noli C, Jiménez-Yuste V. The value of HEAD-US system in detecting subclinical abnormalities in joints of patients with hemophilia. *Expert Rev Hematol.* 2018; 11(3): 253-61. Review. IF: 2.505; Q3
- de la Corte-Rodríguez H, Rodríguez-Merchán EC, Jiménez-Yuste V. Point-of-care ultrasonography in orthopedic management of hemophilia: Multiple uses of an effective tool. *HSS J.* 2018; 14(3): 307-13. Review. Not Indexed
- Encinas-Ullán CA, Rodríguez-Merchán EC. Isolated medial collateral ligament tears: an update on management. *Efort Open Rev.* 2018; 3(7): 398-407. Article. Not Indexed
- Escobar MA, Brewer A, Caviglia H, Forsyth A, Jiménez-Yuste V, Laudenbach L, Lobet S, McLaughlin P, Oyesiku JOO, Rodríguez-Merchán EC, Shapiro A, Solimeno LP. Recommendations on multidisci-
- plinary management of elective surgery in people with haemophilia. *Haemophilia.* 2018; 24(5): 693-702. Review. IF: 3.59; Q2
- Gómez-Barrena E, Padilla-Eguiluz NG, Avendano-Sola C, Payares-Herrera C, Velasco-Iglesias A, Torres F, Rosset P, Gebhard F, Baldini N, Rubio-Suárez JC, García-Rey E, Cordero-Ampuero J, Vaquero-Martín J, Chana F, Marco F, García-Coiradas J, Caba-Dessoux P, de la Cuadra P, Hernigou P, Flouzat-Lachaniette CH, Gouin F, Mainard D, Laffosse JM, Kalbitz M, Marzi I, Sudkamp N, Stockle U, Ciapetti G, Donati DM, Zagra L, Pazzaglia U, Zarattini G, Capanna R, Catani F. A Multicentric, open-label, randomized, comparative clinical trial of two different doses of expanded hBM-MSCs plus biomaterial versus iliac crest autograft, for bone healing in nonunions after long bone fractures: Study protocol. *Stem Cells Int.* 2018; 6025918. Article. IF: 3.902; Q2
- López-Franco M, Gómez-Barrena E. Cellular and molecular meniscal changes in the degenerative knee: a review. *J Exp Orthop.* 2018; 5(1): 11. Review. Not Indexed
- Rodríguez-Merchán EC, García-Ramos JA, Padilla-Eguiluz NG, Gómez-Barrena E. Arthroscopic partial meniscectomy for painful degenerative meniscal tears in the presence of knee osteoarthritis in patients older than 50 years of age: Predictors of an early (1 to 5 years) total knee replacement. *Arch Bone Jt Surg.* 2018; 6(3): 203-11. Article. Not Indexed
- Rodríguez-Merchán EC, Gómez-Cardero P. Unicompartimental knee arthroplasty: current indications, technical issues and results. *Efort Open Rev.* 2018; 3(6): 363-73. Article. Not Indexed
- Rodríguez-Merchán EC, Valentino LA. Joint lavage followed by intra-articular injection of hyaluronic acid and/or corticosteroids in patients with severe hemophilic arthropathy of the knee: Is this intervention really effective? *Expert Rev Hematol.* 2018; 11(6): 449-54. Review. IF: 2.505; Q3
- Rodríguez-Merchán EC. Does a previous high tibial osteotomy (HTO) influence the long-term function or survival of a total knee arthroplasty (TKA)? *Arch Bone Jt Surg.* 2018; 6(1): 19-22. Review. Not Indexed
- Rodríguez-Merchán EC. Hemophilic arthropathy: current treatment challenges and future prospects. *Expert Opin Orphan Drugs.* 2018; 6(8): 477-83. Article. IF: 0.763; Q4
- Rodríguez-Merchán EC. Intra-articular corticosteroid injections in hemophilic arthropathy: are they recommended? *Hosp Pract (1995).* 2018; 46(1): 43556. Review. Not Indexed
- Rodríguez-Merchán EC. Preoperative Aspiration Culture (PAC) for the diagnosis of infection in a prosthetic knee joint. *Arch Bone Jt Surg.* 2018; 6(5): 342-5. Review. Not Indexed
- Rodríguez-Merchán EC. Response to: missing angiogenic factors in hemophilic arthropathy. *Expert Rev Hematol.* 2018; 11(1): 3. Letter. IF: 2.505; Q3
- Rodríguez-Merchán EC. Single local infiltration analgesia (LIA) AIDS early pain management after total knee replacement (TKR): An evidence-based review and commentary. *HSS J.* 2018; 14(1): 47-9. Review. Not Indexed
- Rodríguez-Merchán EC. The importance of smoking in orthopedic surgery. *Hosp Pract (1995).* 2018; 46(4): 175-82. Review. Not Indexed
- Rodríguez-Merchán EC. Topical therapies for knee osteoarthritis. *Postgrad Med.* 2018; 130(7): 607-12. Review. IF: 2.237; Q2
- Rodríguez-Merchán EC. Treatment of chronic articular pain in adult people with hemophilia. *Cardiovasc Hematol Disord Drug Targets.* 2018; 18(3): 182-6. Review. Not Indexed



3.6 Surgery, Transplant and Health Technologies Area



- Rodríguez-Merchán EC. Treatment of musculo-skeletal pain in haemophilia. *Blood Rev.* 2018; 32(2): 116-21. Review. IF: 6.125; Q1
- Rodríguez-Merchán EC. What's new in gene therapy of hemophilia. *Curr Gene Ther.* 2018; 18(2): 107-14. Review. IF: 2.218; Q3
- Rodríguez-Merchán EC. What's new in orthopedic surgery for people with hemophilia. *Arch Bone Jt Surg.* 2018; 6(3): 157-60. Editorial Material. Not Indexed
- Román-Belmonte JM, de la Corte-Rodríguez H, Rodríguez-Merchán EC. How blockchain technology can change medicine. *Postgrad Med.* 2018; 130(4): 420-7. Review. IF: 2.237; Q2
- Rubio-Suárez JC, Carbonell-Escobar R, Rodríguez-Merchán EC, Ibarzábal-Gil A, Gil-Garay E. Fractures of the tibial pilon treated by open reduction and internal fixation (locking compression plate-less invasive stabilising system): Complications and sequelae. *Injury.* 2018; 49:S60-4. Article. IF: 1.834; Q2
- Vaquero-Picado A, de Armas JN, Antuña S, Barco R. Morphometry of the radiocapitellar joint: is humeral condyle diameter a reliable predictor of the size of the radial head prosthesis? *J Shoulder Elb Surg.* 2018; 27(6): 1092-6. Article. IF: 2.865; Q1
- Vaquero-Picador A, Rodríguez-Merchán EC. Arthroscopic repair of the meniscus: surgical management and clinical outcomes. *Efort Open Rev.* 2018; 3(1): 584-94. Article. Not Indexed
- White CJ, Palmer AJR, Rodríguez-Merchán EC. External fixation vs intramedullary nailing for knee arthrodesis after failed infected total knee arthroplasty: A systematic review and meta-analysis. *J Arthroplasty.* 2018; 33(4): 1288-95. Review. IF: 3.524; Q1

Public projects

Gómez Barrena E. ORTHO-3: Uso de células mesenquimales de donante expandidas para la regeneración ósea en osteonecrosis de cabeza femoral desarrollada tras trasplante de médula ósea (PI17/01844). ISCIII. 2018-2020.

Management centre: FIBHULP

Private projects

Barco Laakso R. Morfología radiocapitelar - un estudio anatómico. Acumed Llc. 2018-Ongoing.

Management centre: FIBHULP

Barco Laakso R. Artroplastia de cabeza radial anatómica versus espaciador de metal de vástago liso para traumatismo de codo. Medical Simulator S.L. 2018-Ongoing.

Management centre: FIBHULP

Antuña Antuña S. Convenio para un proyecto de investigación. Sociedad Española de Cirugía Ortopédica y Traumatología. 2008-Ongoing.

Management centre: FIBHULP

Barco Laakso R. Terapia celular con células troncales derivadas del tejido adiposo

(ASC) para mejorar el proceso de reparación en suturas tendinosas. Unión tendón-hueso (roturas del manguito rotador); unión tendón-músculo (roturas del tendón de aquiles). Sociedad Española de Cirugía Ortopédica y Traumatología. 2009-On-going.

Management centre: FIBHULP

Antuña Antuña S. Terapia celular con células troncales del tejido adiposo en roturas del manguito rotador. Medcomtech S.A. 2015-Ongoing.

Management centre: FIBHULP

International projects

Gómez Barrena E. ORTHOpedic randomized clinical trial with expanded bone marrow MSC and bioceramics versus autograft in long bone nonUNIONS (ORTHO UNION). UE. 2017-2021.

Management centre: FIBHULP

Clinical trials

Gómez Barrena E. Estudio prospectivo, multicéntrico para evaluar la eficacia y la seguridad de una inyección única de Hialuronato Sódico en pacientes con artrosis de rodilla. Type: Estudios, phase Producto Sanitario.

HULP code: 5175. Sponsored's protocol code: TM-SH2%301.

Sponsored by: Tedec-Meiji Farma, S.A. Signed date: 24/09/2018

Gómez Barrena E. Evaluation of safety, feasibility and preliminary efficacy of MSCs from third party donors in the treatment of patients with osteonecrosis of the femoral head after allogeneic stem cell transplantation. Type: Clinical Trial, phase II.

HULP code: 5016. Sponsored's protocol code: ALOFEM.

Sponsored by: Fundación Para La Investigación Biomédica Hospital Universitario La Paz. Signed date: 19/12/2018

Gómez Barrena E. Ensayo clínico fase II para evaluar el efecto del HC-SVT-1001 (células mesenquimales troncales adultas autólogas de tejido adiposo expandidas e incluidas en biomaterial de fosfato trícálico) en el tratamiento quirúrgico de pseudoadartrosis atróficas de huesos largos. Type: Clinical Trial, phase II.

HULP code: Anexo-III 4278. Sponsored's protocol code: STEMQUIRI/12ES01.

Sponsored by: Salvat S.A. Signed date: 22/06/2018

Gómez Barrena E. A post-market domestic (US) and international data collection to assess the Optetrak® knee system. Type: EPA-SP.

HULP code: PI-3335. Sponsored's protocol code: CR5-007.

Sponsored by: Exactech International Operation AG. Signed date: 30/10/2018

Rubio Suárez JC. Fracturas extracapsulares del tercio proximal de fémur con ines-



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018

3.6 Surgery, Transplant and Health Technologies Area

tabilidad rotacional. Estudio comparativo de la eficiencia de diferentes sistemas para incrementar la estabilidad. Type: Producto Sanitario.

HULP code: PI-3134. Sponsored's protocol code: ICSCYL-HURH-GAMMAUrb.

Sponsored by: Fundación Instituto de Estudios de Ciencias de la Salud de Castilla y León. Signed date: 08/05/2018

Patents and trademarks

Arenas Vara MA, Conde del Campo A, De Damborenea González JJ, Matykina E, Esteban Moreno J, Gómez Barrena E, Pérez-Jorge Peremach C, Pérez Tanoira R, inventors; CSIC, Instituto de Investigación Sanitaria Fundación Jiménez Díaz, assignees. Titanium materials anodised with fluorine. P201030720, PCT/ES2011/070342; 2010 May 14





3.6 Surgery, Transplant and Health Technologies Area



Luis Landín Jarillo. Facultativo Especialista de Área en Cirugía Plástica. Hospital Universitario La Paz

Sergio Álvarez García-Peña. Médico Interno Residente en Cirugía Plástica y Reparadora. Hospital Universitario La Paz

Jorge Bonastre Juliá. Facultativo Especialista de Área en Cirugía Plástica. Hospital Universitario La Paz

Elena Bravo Brañas. Facultativo Especialista de Área en Cirugía Plástica. Hospital Universitario La Paz

César Casado Sánchez. Facultativo Especialista de Área en Cirugía Plástica. Hospital Universitario La Paz

Marta García Redondo. Investigadora Postdoctoral. Hospital Universitario La Paz

Álvaro González Miranda. Facultativo Especialista de Área en Cirugía Plástica. Hospital Universitario La Paz

Carmen Iglesias Urraca. Facultativo Especialista de Área en Cirugía Plástica. Hospital Universitario La Paz

José Ramón Martínez Méndez. Facultativo Especialista de Área en Cirugía Plástica. Hospital Universitario La Paz

Strategic Objective

The objective of the Reconstructive and Regenerative Traslational Research Group is to apply knowledge in basic science to improve health in a clinical context through research techniques, focusing on the treatment and functional improve-

Reconstructive and Regenerative Research Group

ment of patients presenting oncological, traumatic, and congenital or burns that limit autonomy of the patients.

Research Lines

- Research in Regenerative Medicine
- Research in alterations of the healing processes
- Research on burned
- Research in post-oncological reconstruction
- Research on posttraumatic reconstruction
- Research in transplants

Research Activity

Books and book chapters

Landín L. Trasplante facial. In: Casado Sánchez C, Leyva Rodríguez F. Manual de cirugía Vasculo-Nerviosa. Madrid:Tebar Flores, 2018.



3.6 Surgery, Transplant and Health Technologies Area

Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

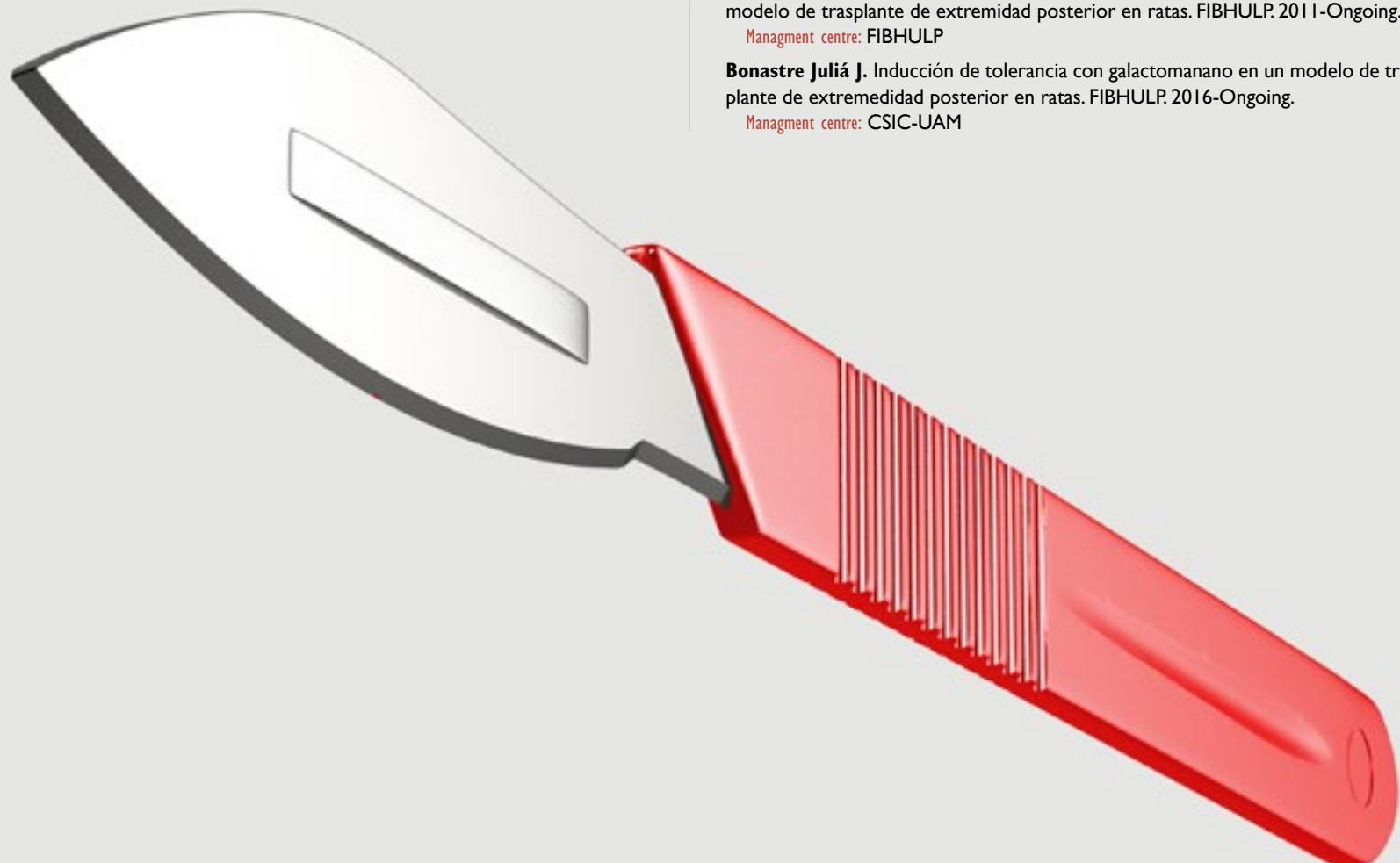
Scientific Report

2017
2016
2018

Casado C. Ergonomía y buenos hábitos quirúrgicos. In: Casado Sánchez C, Leyva Rodríguez F. Manual de cirugía Vasculo-Nerviosa. Madrid:Tebar Flores, 2018.

Casado C. Microcirugía y Cirugía Plástica. Generalidades. In: Casado Sánchez C, Leyva Rodríguez F. Manual de cirugía Vasculo-Nerviosa. Madrid:Tebar Flores, 2018.

Casado C. Reconstrucción de miembro superior. In: Casado Sánchez C, Leyva Rodríguez F. Manual de cirugía Vasculo-Nerviosa. Madrid:Tebar Flores, 2018.



Private projects

Landín Jarillo L. Protocolo de inmunosupresión reducida tras condicionamiento con precursores hematopoyéticos en trasplante de tejidos compuesto. Cortes. 2015-Ongoing.

Management centre: FIBHULP

Landín Jarillo L. Efecto de la preservación en frío sobre el rechazo crónico en el modelo de trasplante de extremidad posterior en ratas. FIBHULP. 2011-Ongoing.

Management centre: FIBHULP

Bonastre Juliá J. Inducción de tolerancia con galactomanano en un modelo de trasplante de extremidad posterior en ratas. FIBHULP. 2016-Ongoing.

Management centre: CSIC-UAM



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**
2017
2018

3.6 Surgery, Transplant and Health Technologies Area

 Publications: **18** Impact Factor: **25.572** QI: **2**

Transplant Group

Francisco Hernández Oliveros. Facultativo Especialista de Área en Cirugía Pediátrica. Hospital Universitario La Paz**Virginia Amnesty Morello.** Facultativo Especialista de Área en Cirugía Pediátrica. Hospital Universitario La Paz**Ane Miren Andrés Moreno.** Facultativo Especialista de Área en Cirugía Pediátrica. Hospital Universitario La Paz. Pediátrica Profesor Asociado. Universidad Autónoma de Madrid**Carlos Andrés de la Torre Ramos.** Facultativo Especialista de Área en Cirugía Pediátrica. Hospital Universitario La Paz**Nidia de Montserrat Arreola Gutiérrez.** Investigadora Predoctoral. Hospital Universitario La Paz**Jesús Carlos de Vicente Sánchez.** Facultativo Especialista de Área en Anestesiología. Hospital Universitario La Paz**María Isabel del Barrio Gómez de Agüero.** Jefe de Sección de Neumología Pediátrica. Hospital Universitario La Paz**Álvaro Gonzalez Rocafort.** Facultativo Especialista de Área del Servicio de Cirugía Cardiovascular Infantil. Hospital Universitario La Paz**Manuel Molina Arias.** Médico Adjunto en Gastroenterología y Nutrición Infantil. Hospital Universitario La Paz**Rodrigo Papa Gobbi.** Investigador Postdoctoral. Hospital Universitario La Paz**María Jesús Pascau González Garzón.** Supervisora de la Unidad de Trasplante Pediátrico. Hospital Universitario La Paz**Antonio Pérez Ferrer.** Facultativo Especialista de Área en el servicio de Anestesiología y Reanimación. Hospital Universitario La Paz. Profesor Colaborador. Universidad Autónoma de Madrid**Esther Ramos Boluda.** Facultativo Especialista de Área en Servicio de Gastroenterología y Nutrición Pediátrica. Hospital Universitario La Paz**Fernando Reinoso Barbero.** Jefe de Servicio de Anestesia, Reanimación y Dolor Infantil. Hospital Universitario La Paz

Strategic Objective

- a. To establish a reliable model of multivisceral transplantation in rodents.
- b. To establish the intestinal transplant model in mice, this objective is meant to take advantage of the immunological reactive panel available in mice, wider than this in rats.
- c. To establish an experimental model of organ perfusion aiming to perform studies in CCD donor organs and ischemia reperfusion phenomena.



3.6 Surgery, Transplant and Health Technologies Area



- d. To develop safe and effective techniques of blood-saving in our practice.
- e. To establish guidelines for the transition from child to adult life in transplanted children.

Research Lines

- Experimental models in solid organ transplantation including cellular therapy
- Clinical research in paediatric solid organ transplantation
- Health related quality of life of transplanted patients
- Graft optimization strategies
- Blood-saving techniques in solid organ transplantation
- Intestinal barrier failure in children undergoing transplantation (SOT/HSCP)
- Prothrombotic states in transplanted patients
- Antibiotics optimization program in transplanted children

Research Activity

Doctoral theses

Hernández Oliveros F. Estudio clínico experimental del papel del bazo en la prevención de la enfermedad de injerto contra huésped en el trasplante intestinal [dissertation]. Madrid: UAM; 2018(16/02/2018).

Directors: López Santamaría M, Tovar Larrucea JA.

Publications

- Dore M, Junco PT, Bret M, Cervantes MG, Romo MM, Gómez JJ, Vigara AP, Pajares MP, Encinas JL, Hernández F, Martínez L, Santamaría ML, de la Torre C. Advantages of cardiac magnetic resonance imaging for severe pectus excavatum assessment in children. *Eur J Pediatr Surg.* 2018; 28(1): 34-8. Article. IF: 1.148; Q4
- Doré M, Junco PT, Galán AS, Prieto G, Ramos E, Romo MM, Cervantes MG, Hernández F, Martínez L, Santamaría ML. Pitfalls in diagnosis of early-onset inflammatory bowel disease. *Eur J Pediatr Surg.* 2018; 28(1): 39-43. Article. IF: 1.148; Q4
- de Lucas CL, Rodríguez LT, García LNM, Nodal EMO, Boluda ER. Severe diarrhoea due to autoimmune enteropathy: Treatment and outcomes. *An Pediatr.* 2018; 88(6): 350-1. Letter. IF: 1.166; Q3
- Rodríguez LT, de Lucas CL, García LNM, Nodal EMO, Boluda ER. Eosinophilic gastroenteropathy and digestive obstruction. *An Pediatr.* 2018; 88(5): 280-1. Letter. IF: 1.166; Q3
- de Lucas CL, Rodríguez LT, García LNM, Nodal EMO, Boluda ER. Collagenous gastritis: An unusual atypical form in a male infant. *An Pediatr.* 2018; 88(4): 225-6. Letter. IF: 1.166; Q3
- Rodríguez LT, de Lucas CL, García LNM, Nodal EMO, Boluda ER. Management and prognosis of

- intestinal epithelial dysplasia. *An Pediatr.* 2018; 88(1) :48-9. Letter. IF: 1.166; Q3
- Morales JM, Serrano M, Martínez-Flores JA, Gainza FJ, Marcen R, Arias M, Escuín F, Pérez D, Andrés A, Martínez MA, Maruri N, Álvarez E, Castaner JL, López-Hoyos M, Serrano A. Pretransplant IgA-anti-Beta 2 glycoprotein I antibodies as a predictor of early graft thrombosis after renal transplantation in the clinical practice: A multicenter and prospective study. *Front Immunol.* 2018; 9: 468. Article. IF: 4.716; Q2
- Delgado JL, Carretero PS, la Fuente PD, Rocafort AG, Parga LC, Barbero FR. Cardiac arrest related to anaesthesia in Williams-Beuren syndrome. *Rev Esp Anestesiol Reanim.* 2018; 65(4): 234-7. Article. Not Indexed
- Matcan S, Carretero PS, Rojo MG, Parga LC, Reinoso-Barbero F. The importance of bilateral monitoring of cerebral oxygenation (NIRS): Clinical case of asymmetry during cardiopulmonary bypass secondary to previous cerebral infarction. *Rev Esp Anestesiol Reanim.* 2018; 65(3): 165-9. Article. Not Indexed
- Doré M, Junco PT, de la Torre C, Vilanova-Sánchez A, Bret M, González G, Cerezo VN, Gómez JJ, Encinas JL, Hernández F, Martínez LM, Santamaría ML. Nuss procedure for a patient with negative haller index. *European J Pediatr Surg Rep.* 2018; 6(1): e18-22. Article. Not Indexed
- Triana Junco P, de la Torre C, Barrio M I, de la Serna O, Doré Reyes M, Núñez V, Jiménez J, Martínez Martínez L, Madero R, Encinas J L, Hernández Oliveros F, López Santamaría M. Pulmonary lobectomy in children: the sooner the better? *Cir Pediatr.* 2018; 31(2): 71-5. Article. Not Indexed
- Gómez Cervantes M, de la Torre Ramos C A, Jiménez Gómez J, Encinas Hernández J L, Hernández Oliveros F, Doré Reyes M, Serradilla Rodríguez J, Núñez Cerezo V, López Santamaría M. Management of suspected foreign body aspiration in children. 10-year experience in a single center. *Cir Pediatr.* 2018; 31(2): 81-4. Article. Not Indexed
- Vilanova A, de la Torre C A, Sánchez-Galán A, Hernández Oliveros F, Encinas J L, Ortiz R, Núñez Cerezo V, de la Serna O, Barrio M I, Castro L, Builes L, Verdú C, López Santamaría M. Long-term results of the early endoscopic treatment of acquired tracheal-subglottic stenosis: 10 years of experience. *Cir Pediatr.* 2018; 31(1):41852. Article. Not Indexed
- Talayero P, Boluda ER, Massa EG, Panete MJ, Bozano GP, Oliveros FH, Santamaría ML, Pulido JC, Paz-Artal E, Mancebo E. Donor-specific antibodies in pediatric intestinal and multivisceral transplantation: The role of liver and human leukocyte antigen mismatching. *Liver Transplant.* 2018; 24(12): 1726-35. Article. IF: 4.159; DI
- Norsa L, Gupte G, Ramos Boluda E, Joly F, Corcos O, Pirenne J, Herlenius G, Lacaille F. Life of patients 10 years after a successful pediatric intestinal transplantation in Europe. *Am J Transplant.* 2018; 18(6): 1489-93. Article. IF: 7.163; DI
- Hernández F, Andrés AM, López-Santamaría M. Long-term results of surgery for bowel lengthening: how many transplants are avoided, for which patients? *Curr Opin Organ Tran.* 2018; 23(2): 207-11. Review. IF: 2.574; Q3
- Bouza MG, López MLP, Rocafort AG, Zurita MB. The traveller amplatzer: Surgical removal after device migration to the ventricle. *Ann Pediatr Cardiol.* 2018; 11(1): 113-4. Letter. Not Indexed
- Monteagudo-Vela M, Aroca-Peinado A, Polo-López L, González-Rocafort A, Sánchez-Pérez R, Rey-Lois J. Is it really worthy an early repair in a Fallot situation? *Cir Cardiovasc.* 2018; 25(1): 12-6. Article. Not Indexed



Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4

Scientific Report

2018
2017
2016

3.6 Surgery, Transplant and Health Technologies Area



Private projects

Pérez Ferrer A. Evaluación in vitro mediante tromboelastografía de la eficacia de la transfusión de plaquetas congeladas. Abbvie Spain S.L.U. 2013-Ongoing.

Management centre: FIBHULP

Hernández Oliveros F. Evaluación del galactomanano como estrategia para atenuar la lesión por isquemia reperfusión intestinal. Nupa (Asociación Española de la Ayuda a Niños con Transplante Multibisceral y Afectados de Fallo Intestinal y Nutrición). 2017-Ongoing.

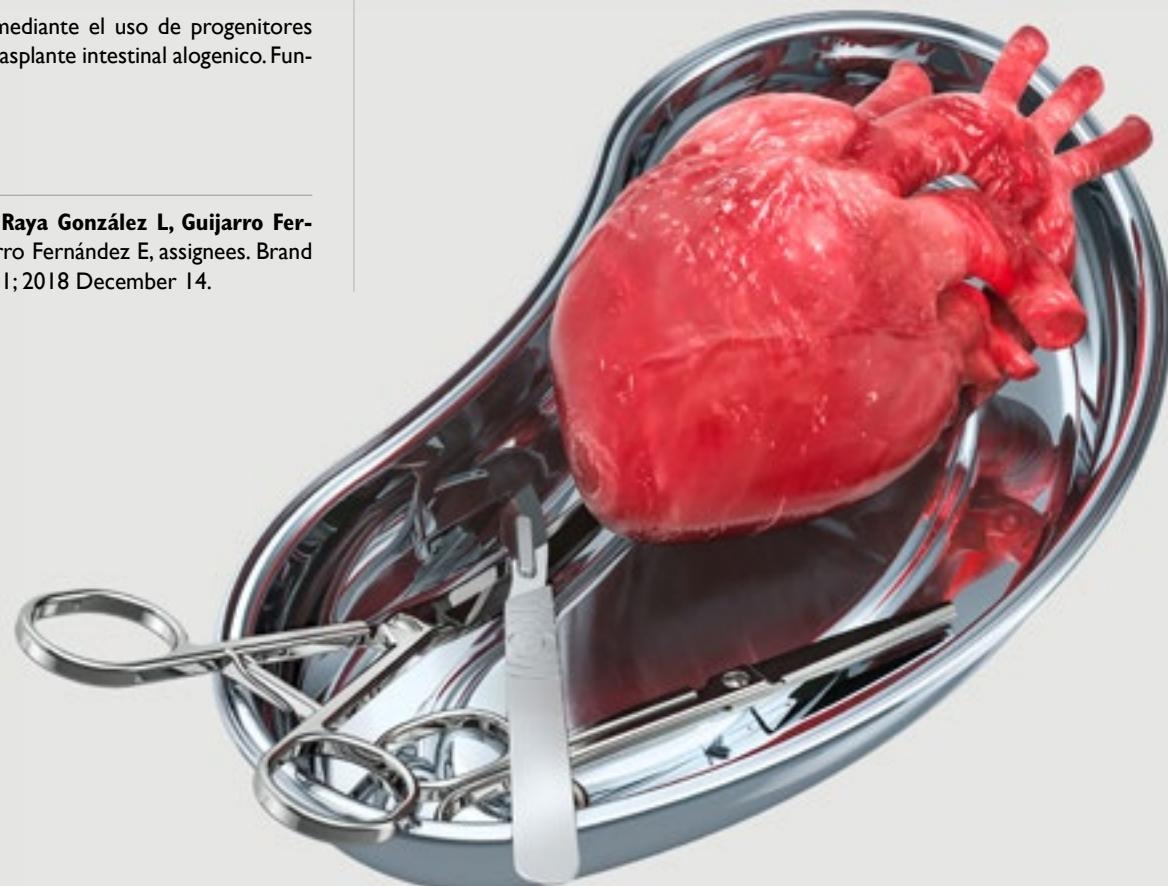
Management centre: FIBHULP

Hernández Oliveros F. Inducción de tolerancia mediante el uso de progenitores hematopoyéticos en un modelo experimental de trasplante intestinal alógenico. Fundación Mutua Madrileña. 2017-Ongoing.

Management centre: FIBHULP

Patents and trademarks

Hernández Oliveros F, Nana Gómez Mayoral N, Raya González L, Guijarro Fernández E, authors; FIBHULP, HePA, U-TAD, Guijarro Fernández E, assignees. Brand name: VTR Virtual Transplant Reality; CM 18.000.131; 2018 December 14.





Introduction

1

Executive summary

2

Information Groups by Area

3

3.1 Neuroscience Area

3.2 Cardiovascular Area

3.3 Infectious Diseases and Immunity Area

3.4 Large System Pathologies Area

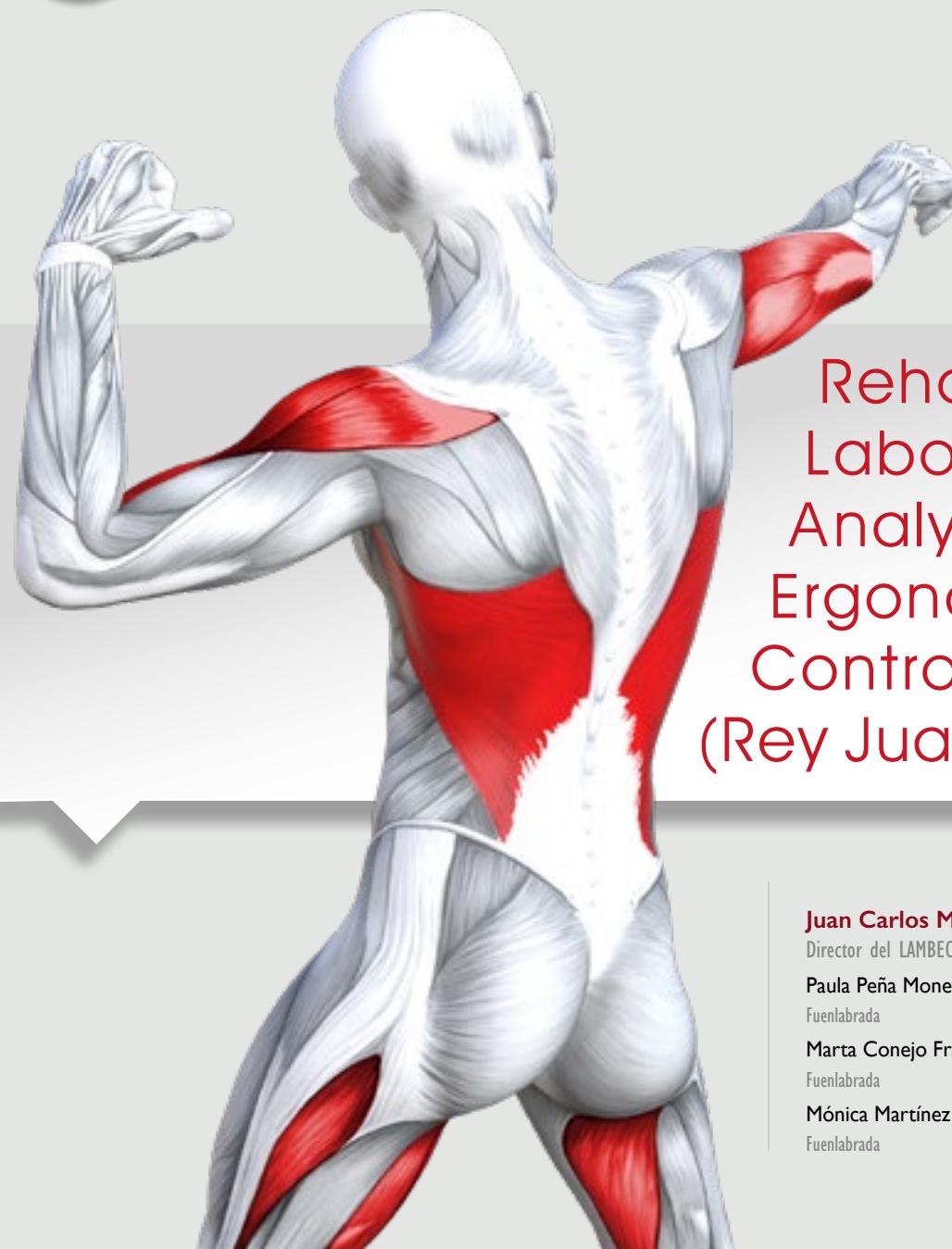
3.5 Cancer and Human Molecular Genetics Area

3.6 Surgery, Transplant and Health Technologies Area

Associated Clinicians

4**Scientific Report**2016
2017
2018

3.6 Surgery, Transplant and Health Technologies Area



Rehabilitation HUF - Laboratory of Motion Analysis, Biomechanics, Ergonomics and Motor Control. LAMBECOM (Rey Juan Carlos University)

Juan Carlos Miangolarra Page. Responsable del Servicio Clínico de Rehabilitación.

Director del LAMBECOM. Hospital Universitario de Fuenlabrada

Paula Peña Moneva. Médico Especialista en Medicina Física y Rehabilitación. Hospital Universitario de Fuenlabrada

Marta Conejo Fraile. Médico Especialista en Medicina Física y Rehabilitación. Hospital Universitario de Fuenlabrada

Mónica Martínez Maside. Médico Especialista en Medicina Física y Rehabilitación. Hospital Universitario de Fuenlabrada



3.6 Surgery, Transplant and Health Technologies Area

Isabel O'Mullony Muñoz. Médico Especialista en Medicina Física y Rehabilitación. Hospital Universitario de Fuenlabrada

Montserrat Molina Guerrero. Médico Especialista en Medicina Física y Rehabilitación. Hospital Universitario de Fuenlabrada

María Pilar Valverde Mateos. Médico Especialista en Medicina Física y Rehabilitación. Hospital Universitario de Fuenlabrada

María Carratalá Tejada. Profesor Contratado Doctor. Fisioterapeuta. Universidad Rey Juan Carlos

Francisco Molina Rueda. Profesor Visitante. Fisioterapeuta. Universidad Rey Juan Carlos

Roberto Cano Cuerda. Profesor Contratado Doctor. Fisioterapeuta. Universidad Rey Juan Carlos

Isabel Alguacil Diego. Profesor Contratado Doctor. Médico especialista en Medicina Física y Rehabilitación. Universidad Rey Juan Carlos

Marta Pérez de Heredia Torres. Profesor Titular. Terapeuta Ocupacional. Universidad Rey Juan Carlos

Susana Collado Vázquez. Profesor Contratado Doctor. Universidad Rey Juan Carlos

Alicia Cuesta Gómez. Profesor Visitante. Fisioterapeuta. Universidad Rey Juan Carlos

Esther Monge Pereira. Profesor Visitante. Fisioterapeuta. Universidad Rey Juan Carlos

Patricia Sánchez-Herrera Baeza. Profesor Visitante Lector. Terapeuta Ocupacional. Universidad Rey Juan Carlos

Aikaterini Koutsou. Investigadora. Ingeniera Industrial. Universidad Rey Juan Carlos

Pilar Fernández González. Ayudante de investigación. Fisioterapeuta. Universidad Rey Juan Carlos

María Dolores Vialás González. Técnico de Laboratorio. Universidad Rey Juan Carlos

Strategic Objective

- Clinical rehabilitation - neurorehabilitation
- Clinical biomechanics
- Neurosciences

Research Lines

- Motion analysis in subjects with neurological pathology: unexpected brain damage (acute stroke/Ictus, cranioencephalic trauma, etc.), Cerebral Palsy, degenerative movement disorder (Parkinson's disease, Multiple Sclerosis).
- Motion analysis in musculoskeletal pathology: upper and lower limbs. Degenerative pathology (pre and post-surgical): coxarthrosis, gonarthrosis, pathology of the ankle and foot. Vascular and diabetic-origin peripheral neuropathy, including lower limb amputation/dysgenesis, fibromyalgia syndrome.
- Applicability and study of the functionality of orthotic devices, prosthetics and support products.
- Diagnosis of balance disorders.
- Balance analysis.
- Assessment of body damage and disability (expert reports on occupational accidents, traffic accidents, assaults in criminal acts, civil liability, disabilities, social services, professional negligence).
- Occupational and ergonomic evaluation.
- Evaluation of work performance, collaboration, neuro-muscular response. Isokinetic response. Detection of simulators / psychogenic disorders
- Detection of fall risks
- Electromyographic records. Evaluation and study of muscle strength.
- Evaluation of the effectiveness of training programs, rehabilitation and any medical or surgical therapeutic intervention. Pre- and post-botulinum toxin, neuromotor, reconstructive, functional and functional orthopedic surgery and arthroplasties.
- Rehabilitation robotics
- Brain-computer interface (BCI) in Neurological Rehabilitation.
- Functional electrical stimulation (FES).

Introduction

1

Executive
summary

2

Information
Groups
by Area

3



4

Associated Clinicians



- Angiology and Vascular Surgery Group
- Biostatistics Group
- Cardiovascular Surgery Group
- Molecular Hepatology Group
- NutrINVEST Group
- Ophtalmology Group
- Orthopedic Surgery and Traumatology Group
- Pediatric Nephrology Group
- Pediatric Surgery Group
- Preventive Care Group

Scientific
Report

2016
2017
2018

Introduction

1

Executive summary

2

Information Groups by Area

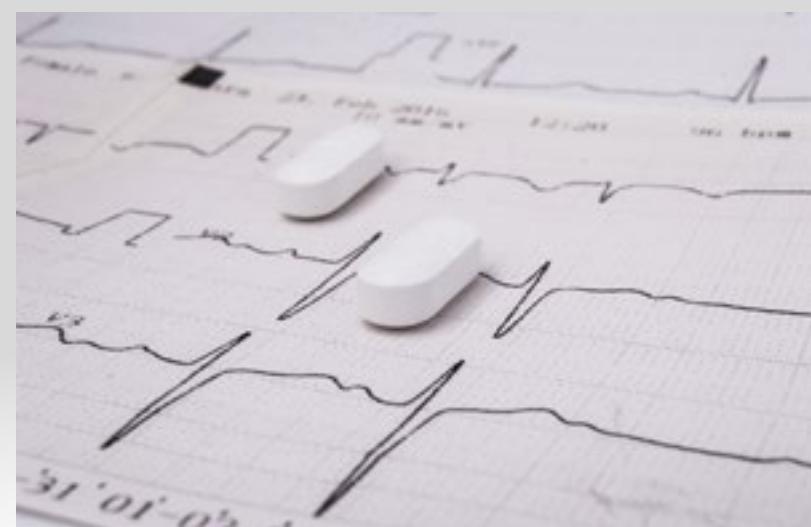
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Associated Clinicians

4

Scientific Report

2016
2017
2018



Angiology and Vascular Surgery Group



Group Leader
Álvaro Fernández Heredero

Composition

Marta Gutiérrez Nistal
Israel Leblíc Ramírez
Covadonga Mendieta Azcona
Elena Marín Manzano
Stefan Stefanov Kiuri
Leticia Cuervo Vidal
Nieves Aleicel
Concepción Rodríguez

Research Areas

- Cardiovascular



Introduction

1

Executive summary

2

Information Groups by Area

3

Associated Clinicians

4Publications: **14**Impact Factor: **30.⁵⁶**Q1: **3**

Biostatistics Group

Group Leader

Mariana Díaz Almirón

Composition

Jesús Díez Sebastián
Itxaso Losantos García

Research Areas

- Surgery, Transplantation and Health Technology

Research Activity

Books and book chapters

Díaz-Almirón M. Estadística básica en oncología ginecológica. In: Padilla Iserete P. Ginecología oncológica: manual práctico: Editorial Médica Panamericana, 2018.

Publications

- Bazán AA, Dorrego JMA, Linares E, Díez J, Quintana LM, Pineiro LM. Kidney cancer stage pT3a: Fat invasion versus renal vein invasion. *Arch Esp Urol.* 2018; 71(5): 474-9. Article. IF: 0.335; Q4
- Brogly N, Guasch E, Alsina E, García C, Puertas L, Domínguez A, Díez J, Gómez J, Gilsanz F. Epidural space identification with loss of resistance technique for epidural analgesia during labor: A randomized controlled study using air or saline-new arguments for an old controversy. *Anesth Analg.* 2018; 126(2): 532-6. Article. IF: 3.489; Q2
- Escudero A, Martínez-Romera I, Fernández L, Valentín J, González-Vicent M, Vicario JL, Madero-Jarabo R, Díaz MA, Pérez-Martínez A. Donor KIR genotype impacts on clinical outcome after T cell-depleted HLA matched related allogeneic transplantation for high-risk pediatric leukemia patients. *Biol Blood Marrow Tr.* 2018; 24(12): 2493-500. Article. IF: 3.599; Q2
- Fernández L, Leivas A, Valentín J, Escudero A, Corral D, de Paz R, Vela M, Bueno D, Rodríguez R, Torres JM, Díaz-Almirón M, López-Collazo E, Martínez-López J, Pérez-Martínez A. How do we manufacture clinical-grade interleukin-15-stimulated natural killer cell products for cancer treatment? *Transfusion.* 2018; 58(6): 1340-7. Article. IF: 3.111; Q2
- Martín-Buitrago MP, Pizones J, Pérez-Grueso FJS, Almirón MD, Vila-Casademunt A, Obeid I, Alanay A, Kleinstuck F, Acaroglu ER, Pellise F. Impact of iliac instrumentation on the quality of life of



Introduction

1

Executive summary

2

Information Groups by Area

3

Associated Clinicians

4

Scientific Report

2018

- patients with adult spine deformity. *Spine*. 2018; 43(13): 913-8. Article. IF: 2.903; Q1
- Martínez B, Cánsel E, Alonso A, Alonso E, Gredilla E, Díez J, Gilsanz F. Postdural puncture headache and epidural blood patch in a large obstetric anaesthesia population. *Asian J Anesthesiol*. 2018; 56(1): 23-32. Article. Not Indexed
- Mediero S, de los Bueis A, Spiess K, Díaz-Almirón M, Zarzuelo AD, Rodés IV, Perea AG. Clinical and microbiological profile of infectious keratitis in an area of Madrid, Spain. *Enferm Infec Micr Cl*. 2018; 36(7): 409-16. Article. IF: 1.685; Q4
- Moral-Cuesta D, Rodríguez-Sánchez I, Menéndez-Colino R, Díaz-Sebastián J, Alarcón T, Martín Maestre I, González-Montalvo JI. Functional consequences of fragile pelvis fracture. Description of several cases attended by a consultation Geriatrics team. *Rev Esp Geriatr Gerontol*. 2018; 53(2): 81-4. Article. Not Indexed
- Orejón RU, Torres EM, Martínez IH, Escudero CJ, Rivas JG, Sebastián JD, Tolsada MDU. Application of ERAS (Enhanced Recovery After Surgery) and laparoscopic surgery in the management of patients with bladder cancer. *Arch Esp Urol*. 2018; 71(2): 178-86. Article. IF: 0.335; Q4
- Rivas JG, Cabañas J, Eguíbar A, Sebastián JD, de Bethencourt FR, Aguilera A, Martínez-Piñeiro L. Evolution of radical prostatectomy in the Autonomous Community of Madrid. *Arch Esp Urol*. 2018; 71(5): 466-73. Article. IF: 0.335; Q4
- Sellers M, Udaondo C, Moreno B, Martínez-Alés G, Díez J, Martínez L, de Ceano-Vivasa M. Hirschsprung-associated enterocolitis: Observational study in a paediatric emergency care unit. *An Pediatr*. 2018; 88(6): 329-34. Article. IF: 1.166; Q3
- Trilla-Fuertes L, Gámez-Pozo A, Arevalillo JM, Díaz-Almirón M, Prado-Vázquez G, Zapater-Moros A, Navarro H, Aras-López R, Dapia I, López-Vacas R, Nanni P, Llorente-Armijo S, Arias P, Borobia AM, Main P, Feliu J, Espinosa E, Fresno Vara JA. Molecular characterization of breast cancer cell response to metabolic drugs. *Oncotarget*. 2018; 9(11): 9645-60. Article. IF: 5.168; Q1
- Vlagea A, Pascual-Salcedo D, Doforno RA, Lavilla P, Díez J, Merlano BP, Cuesta MV, Gil A. IgA anti-beta 2 glycoprotein I antibodies: Experience from a large center. *Thromb Res*. 2018; 162: 38-43. Article. IF: 3.266; Q2
- Zapater-Moros A, Gámez-Pozo A, Prado-Vázquez G, Trilla-Fuertes L, Arevalillo JM, Díaz-Almirón M, Navarro H, Main P, Feliu J, Zamora P, Espinosa E, Fresno Vara JA. Probabilistic graphical models relate immune status with response to neoadjuvant chemotherapy in breast cancer. *Oncotarget*. 2018; 9(45): 27586-94. Article. IF: 5.168; Q1

Private projects

Díaz Almirón M. Ayuda a grupos emergentes. FIBHULP. 2007-Ongoing.

Management centre: FIBHULP

Díaz Almirón M. Plataforma bioestadística. Fundación de la Sociedad Española de Alergología e Inmunología Clínica. 2017-Ongoing.

Management centre: FIBHULP





Introduction

1

Executive summary

2

Information Groups by Area

3

Associated Clinicians

4 Publications: **3** Impact Factor: **1.87** QI: **0**

Cardiovascular Surgery Group

Group Leader

José María Mesa García

Composition

José Antonio Blázquez González

Ulises Ramírez Valdiris

Elkin González Villegas

Omar Al Razzo

Ali Ayaon Albarrán

Carlos Nieto Moral

Rim Chaara

María Victoria Boglione,

Ignacio José Juárez del Río

Research Areas

- Cardiovascular

Research Activity

Publications

- Albarrán AA, González JAB, García JMM. Malignant chronic constrictive pericarditis. Eurasian J Med. 2018; 50(2): 140. Editorial Material. Not Indexed
- Albarrán AA, González JAB, Valdiris UR, García JMM. Late presentation of an unruptured and calcified pseudoaneurysm of the atrioventricular groove. Eurasian J Med. 2018; 50(1):59. Editorial Material. Not Indexed
- Ramírez E, Martín A, Villán Y, Lorente M, Ojeda J, Moro M, Vara C, Avenza M, Domingo MJ, Alonso P, Asensio MJ, Blázquez JA, Hernández R, Frías J, Frank A. Effectiveness and limitations of an incident-reporting system analyzed by local clinical safety leaders in a tertiary hospital Prospective evaluation through real-time observations of patient safety incidents. Medicine. 2018; 97(38): e12509. Article. IF: 1.87; Q2



Introduction

1

Executive summary

2

Information Groups by Area

3

Associated Clinicians

4

Scientific Report

2011
2012
2013
2014

Private projects

Mesa García JM. Jornada científica Evolución y resultados de la investigación sobre prótesis transcatéter. Edwards Lifesciences S.L. 2015-Ongoing.

Management centre: FIBHULP

Mesa García JM. Jornada científica Actualización de los resultados de la investigación realizada sobre el programa Tavi. Edwards Lifesciences S.L. 2016-Ongoing.

Management centre: FIBHULP

Mesa García JM. Programa de formación en investigación en el área de investigación de la estimulación cardíaca. Baxter S.L. 2013-Ongoing.

Management centre: FIBHULP

Mesa García JM. Resultados de la investigación realizada sobre el manejo de la estenosis aórtica severa sintomática en pacientes de alto riesgo quirúrgico. Edwards Lifesciences S.L. 2013-Ongoing.

Management centre: FIBHULP

González Villegas E. Implante de electrodos epicárdicos con adhesivos tisulares. Medtronic Iberica S.A. 2009-Ongoing.

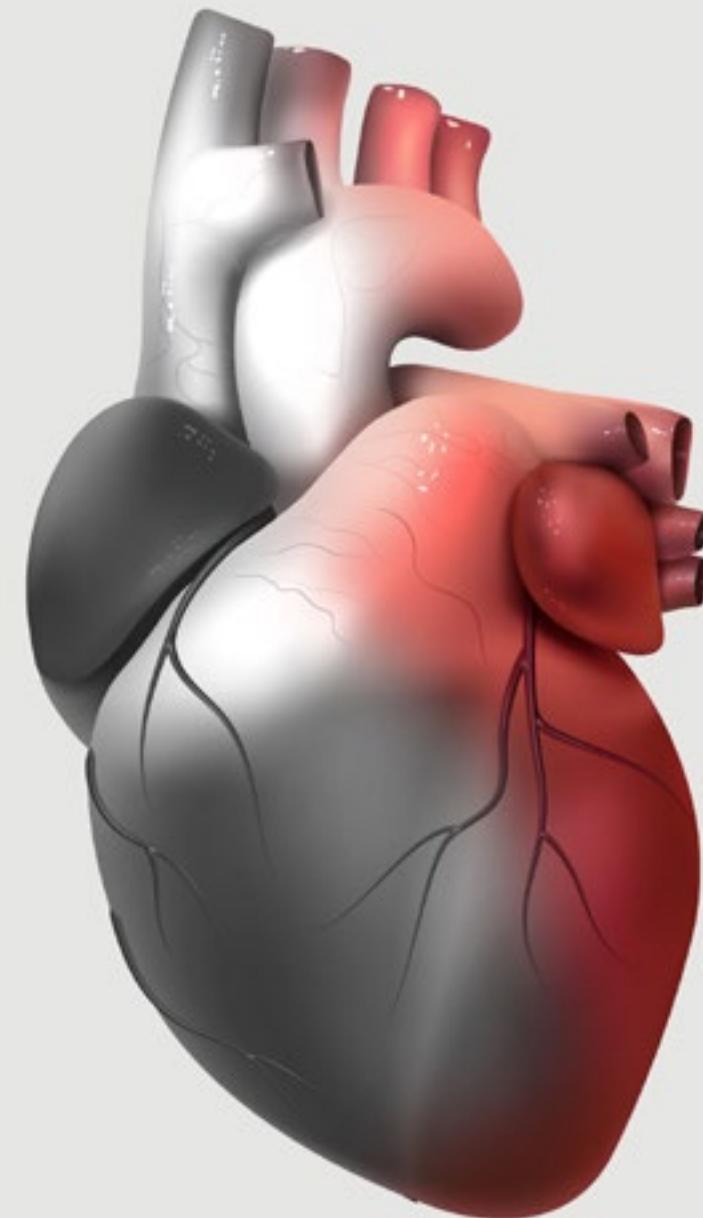
Management centre: FIBHULP

Al Razo Hameed O. Proyecto de evaluación de seguimiento remoto de marcapasos para anticipar las decisiones clínicas y técnicas. Medtronic Iberica S.A. 2008-Ongoing.

Management centre: FIBHULP

Al Razo Hameed O. Evaluación del impacto de una intervención educacional sobre el personal en el proceso pre y post implante valvular percutáneo trascateter (Tavi). Edwards Lifesciences S.A. 2017-Ongoing.

Management centre: FIBHULP



Introduction

1

Executive summary

2

Information Groups by Area

3

Associated Clinicians

4Publications: **9**Impact Factor: **64.575**QI: **7**

Molecular Hepatology Group

Group Leader

Javier García-Samaniego Rey

Composition

Mirá Romero Portales
 Araceli García Sánchez
 Antonio Olveira Martín
 José Carlos Erdozaín
 Pilar Castillo Grau
 Raul Honrubia
 Antonio Madejón Seiz
 Irene Francisco Recuero
 Ana Isabel Gil García

Research Areas

- Large system pathology

Research Activity

Doctoral theses

Francisco Recuero I. Papel de la Aurora quinasa B en la regulación epigenética inducida por el virus de la hepatitis C [dissertation]. Madrid: UAM; 2018(25/10/2018).
 Director: García-Samaniego J

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- Ampuero J, Aller R, Gallego-Durán R, Banales JM, Crespo J, García-Monzón C, Pareja MJ, Vilar-Gómez E, Caballería J, Escudero-García D, Gómez-Camarero J, Calleja JL, Latorre M, Albillas A, Salmerón J, Aspichueta P, Lo Iacono O, Francés R, Benlloch S, Fernández-Rodríguez C, García-Samaniego J, Estévez P, Andrade RJ, Turnes J, Romero-Gómez M. The effects of metabolic status



Introduction 1

Executive summary 2

Information Groups by Area 3

Associated Clinicians 4

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- Dauden E, Blasco AJ, Bonanad C, Botella R, Carrascosa JM, González-Parra E, Jodar E, Joven B, Lázaro P, Olveira A, Quintero J, Rivera R. Position statement for the management of comorbidities in psoriasis. *J Eur Acad Dermatol.* 2018; 32(12):2058-73. Article. IF: 5.113; D1
 - Libre A, Shimakawa Y, Mottez E, Ainsworth S, Buivan TP, Firth R, Harrison E, Rosenberg AR, Merittet JF, Fontanet A, Castan P, Madejón A, Laverick M, Glass A, Viana R, Pol S, McClure CP, Irving WL, Miele G, Albert ML, Duffy D. Development and clinical validation of the Genedrive point-of-care test for qualitative detection of hepatitis C virus. *Gut.* 2018; 67(11):2017-24. Article. IF: 17.943; D1
 - Medina-Cáliz I, García-Cortes M, González-Jiménez A, Cabello MR, Robles-Díaz M, Sanabria-Cabrera J, Sanjuán-Jiménez R, Ortega-Alonso A, García-Muñoz B, Moreno I, Jiménez-Pérez M, Fernández MC, Gines P, Prieto M, Conde I, Hallal H, Soriano G, Román E, Castilla A, Blanco-Reina E, Montes MR, Quirós-Cano M, Martín-Reyes F, Lucena MI, Andrade RJ. Herbal and dietary supplement-induced liver injuries in the spanish DILI registry. *Clin Gastroenterol H.* 2018; 16(9): 1495-502. Article. IF: 7.958; D1
 - Moreno-Cubero E, Subira D, Sanz-de-Villalobos E, Parra-Cid T, Madejón A, Miquel J, Olveira A, González-Praetorius A, García-Samaniego J, Larrubia JR. According to hepatitis C virus (HCV) infection stage, interleukin-7 plus 4-IBB triggering alone or combined with PD-1 blockade increases TRAF1 (low) HCV-specific CD8(+) cell reactivity. *J Virol.* 2018; 92(2): e01443-17. Article. IF: 4.324; Q1
 - Olveira A, Domínguez L, Troya J, Arias A, Pulido F, Ryan P, Benítez LM, González-García J, Montes ML. Persistently altered liver test results in hepatitis C patients after sustained virological response with direct-acting antivirals. *J Viral Hepatitis.* 2018; 25(7): 818-24. Article. IF: 4.016; Q1
 - Rallón N, García M, García-Sarnaniego J, Cabello A, Álvarez B, Restrepo C, Nistal S, Górgolas M, Benito JM. Expression of PD-1 and Tim-3 markers of T-cell exhaustion is associated with CD4 dynamics during the course of untreated and treated HIV infection. *Plos One.* 2018; 13(3): e0193829. Article. IF: 2.776; Q2
 - Razavi-Shearer D, Gamkrelidze I, Nguyen MH, Chen DS, Van Damme P, Abbas Z, Abdulla M, Abou Rached A, Adda D, Aho I, Akarca U, Al Ali FH, Al Lawati F, Al Naamani K, Alashgar HI, Alavian SM, Alawadhi S, Albillios A, Al-Busafi SA, Aleman S, Alfaleh FZ, Aljumah AA, Anand AC, Anh NT, Arends JE, Arkkila P, Athanasisakis K, Bane A, Ben-Ari Z, Berg T, Bizri AR, Blach S, Mello CEB, Brandon SM, Bright B, Bruggmann P, Brunetto M, Buti M, Chan HLY, Chaudhry A, Chien RN, Choi MS, Christensen PB, Chuang WL, Chulanov V, Clausen MR, Colombo M, Cornberg M, Cowie B, Craxi A, Croes EA, Cuellar DA, Cunningham C, Desalegn H, Drazilova S, Duberg AS, Egeonu SS, El-Sayed MH, Estes C, Falconer K, Ferraz MLG, Ferreira PR, Flisiak R, Frankova S, Gaeta GB, García-Samaniego J, Genov J, Gerstoft J, Goldis A, Gountas I, Gray R, Pessoa MG, Hajarizadeh B, Hatzakis A, Hezode C, Himatt SM, Hoepelman A, Hristic I, Hui YTT, Husa P, Jahis R, Janjua NZ, Jarcuska P, Jaroszewicz J, Kaymakoglu S, Kershenbich D, Kondili LA, Konysbekova A, Krajden M, Kristian P, Laleman W, Lao WCC, Layden J, Lazarus JV, Lee MH, Liakina V, Lim YSS, Loo CKK, Luksic B, Malekzadeh R, Malu AO, Mamakulov A, Manns M, Marinho RT, Maticic M, Mauss S, Memon MS, Correa MCM, Méndez-Sánchez N, Merat S, Metwally AM, Mohamed R, Mokhbat JE, Moreno C, Mossong J, Mourad FH, Mullhaupt B, Murphy K, Musabaev E, Nawaz A, Nde HM, Negro F, Nersesov A, Nguyen VTT, Njouom R, Ntagirabiri R, Nurmatov Z, Obekpa S, Ocama P, Oguche S, Omede O, Omuemu C, Opare-Sem O, Opio CK, Ormeci N, Papatheodoridis G, Pasini K, Pimenov N, Poustchi H, Quang TD, Qureshi H, Ramji A, Razavi-Shearer K, Redae B, Reesink HW, Rios CY, Rjaskova G, Robbins S, Roberts LR, Roberts SK, Ryder SD, Safadi R, Sagalova O, Salupere R, Sanai FM, Sánchez-Avila JF, Saraswat V, Sarrazin C, Schmelzer JD, Schreter I, Scott J, Seguin-Devaux C, Shah SR, Sharara AI, Sharma M, Shiha GE, Shin T, Sievert VV, Sperl J, Starkel P, Stedman C, Sypsa V, Tacke F, Tan SS, Tanaka J, Tomasiewicz K, Urbanek P, van der Meer AJ, Van Vlierberghe H, Vella S, Vince A, Waheed Y, Waked I, Walsh N, Weis N, Wong VW, Woodring J, Yaghi C, Yang HI, Yang CL, Yesmembetov K, Yosry A, Yuen MF, Yusuf MAM, Zeuzem S, Razavi H. Global prevalence, treatment, and prevention of hepatitis B virus infection in 2016: a modelling study. *Lancet Gastroenterol Hepatol.* 2018; 3(6): 383-403. Article. IF: 12.856; D1
 - Sánchez-Azofra M, Romero-Portales M, Tortajada-Laureiro L, García-Samaniego J, Mora-Sanz P. Hepatitis E virus in neurological disorders: a case of Parsonage-Turner syndrome. *Rev Esp Enferm Dig.* 2018; 110(6): 402-3. Article. IF: 1.858; Q4

Research projects

Castillo Grau P. Estudio, mediante ecografía abdominal, de la incidencia de hepatocarcinoma en pacientes con hepatitis crónica C y fibrosis estadio 3 con respuesta virológica sostenida tras tratamiento con antivirales de acción directa. Asociación Médicos Especialistas en Gastroenterología Área-5. 2017-Ongoing.

Management centre: FIBHULP

García-Samaniego Rey J. Identificación, en plasma y PBMCs, de variantes de resistencia a tratamiento con telaprevir o boceprevir frente al VHC mediante cold-PCR. Uso en monitorización de respuesta a tratamiento. Roche Farma S.A. 2013-Ongoing.

Management centre: FIBHULP

García-Samaniego Rey J. Massive HCV screening using serological tests at the points of care (POCTS) in the metropolitan area of Madrid. An approach for local elimination strategies. Gilead Sciences S.L. 2018-Ongoing.

Management centre: FIBHULP

Madejón Seiz A. Análisis genético y epigenético del VHB en pacientes portado. Gilead Sciences, S.L. 2013-Ongoing.

Management centre: FIBHULP

Madejón Seiz A. Development of a detection system of genetic modifications with clinical implication in the development of human liver cancer. ARCIS Biotechnology Ltd. 2018-2019.

Management centre: CIBERehd

Madejón Seiz A. Identification of genes related with recurrence of human liver cancer in anti-HCV treatment responder patients. ARCIS Biotechnology Ltd. 2018-2019.

Management centre: CIBERehd



Introduction

1

Executive summary

2

Information Groups by Area

3

Associated Clinicians

4

Clinical trials

Castillo Grau P. Estudio de fase 3, aleatorizado, controlado con placebo, de 52 semanas de duración, para evaluar la seguridad y la eficacia de Seladelpar en sujetos con colangitis biliar primaria (CBP) y una respuesta insuficiente o intolerancia al ácido ursodesoxicólico. Type: Clinical Trial, phase III.

HULP code: 5148. Sponsored's protocol code: CB8025-31735.

Sponsored by: Cymabay Therapeutics Inc. Signed date: 16/11/2018

Castillo Grau P. Recogida de muestras de sangre para la evaluación de biomarcadores en el carcinoma hepatocelular. Type: NO-EPA.

HULP code: PI-3289. Sponsored's protocol code: 2017-01.

Sponsored by: Exact Sciences Corporation. Signed date: 13/12/2018

García Sánchez A. Estudio clínico de fase 3, multicéntrico, aleatorizado, doble ciego y controlado con tratamiento activo para evaluar la seguridad y la eficacia de Lenvatinib (E7080/MK-7902) en combinación con Pembrolizumab (MK-3475) frente a Lenvatinib en el tratamiento. Type: Clinical Trial, phase III.

HULP code: 5194. Sponsored's protocol code: MK7902-002.

Sponsored by: Merck Sharp & Dhome Corp. Signed date: 06/11/2018

García-Samaniego Rey J. Estudio clínico de fase III, aleatorizado, doble ciego, controlado con placebo para evaluar la seguridad y eficacia de Selonsertib en pacientes con esteatohepatitis no alcohólica (EHNA) y fibrosis en puentes (F3). Type: Clinical Trial, phase III.

HULP code: Anexo-II 4785. Sponsored's protocol code: GS-US-384-1943.

Sponsored by: Gilead Sciences Inc. Signed date: 27/08/2018

García-Samaniego Rey J. Estudio en fase III, aleatorizado, doble ciego y controlado con placebo para evaluar la seguridad y la eficacia de Selonsertib en pacientes con cirrosis compensada debida a esteatohepatitis no alcohólica (EHNA). Type: Clinical Trial, phase III.

HULP code: Anexo-II 4786. Sponsored's protocol code: GS-US-384-1944.

Sponsored by: Gilead Sciences Inc. Signed date: 27/08/2018

Olveira Martín A. Estudio multicéntrico de fase III, doble ciego, aleatorizado, a largo plazo y controlado con placebo para evaluar la seguridad y la eficacia del ácido obéticólico en sujetos con esteatohepatitis no alcohólica. Type: Clinical Trial, phase III.

HULP code: 4999. Sponsored's protocol code: 747-304.

Sponsored by: Intercept Pharmaceuticals Inc. Signed date: 24/08/2018



Introduction

1

Executive summary

2

Information Groups by Area

3

Associated Clinicians

4 Publications: **11** Impact Factor: **18.026** QI: **3**

NutrINVEST Group

Group Leader
Carmen Gómez Candela

Composition

Bricia López Plaza

Samara Palma Milla

Cristina Santurino Fontecha

Natalia García Vázquez

Edwin Fernández Cruz

Marlyn Valero Pérez

Marina Morato Martínez

Research Areas

- Surgery, Transplantation and Health Technology

Research Activity

Books and book chapters

Alarcón T, Valero Pérez M, Calvo C, Bermejo LM, López Plaza B, Gómez Candela C. Nutrición y geriatría. In: Gómez Candela C, Palma Milla S, García Vázquez N, Calvo Bruzos C. Manual de nutrición clínica Hospital Universitario La Paz. Madrid: Publicaciones UNED, 2018. p.279-98

Calso González M, del Gallo Errea D, Martín Laredo P, Crespo Plaza A, Morato Martínez M, Ruiz Garrido M, Gómez Candela C. Dietoterapia y el servicio de alimentación hospitalaria. In: Gómez Candela C, Palma Milla S, García Vázquez N, Calvo Bruzos C. Manual de nutrición clínica Hospital Universitario La Paz. Madrid: Publicaciones UNED, 2018. p.97-120

Chu Montiel D, Gomes Porras M, Repilado Alonso N, Pulido Vega M, Palma Milla S, Gómez Candela C. Soporte nutricional en fallo intestinal. In: Gómez Candela C, Palma Milla S, García Vázquez N, Calvo Bruzos C. Manual de nutrición clínica Hospital Universitario La Paz. Madrid: Publicaciones UNED, 2018. p.445-61



Introduction

1

Executive summary

2

Information Groups by Area

3

Associated Clinicians

4

Scientific Report

2018

Chu Montiel D, Palma Milla S, Pulido Vega M, Alonso Babarro A, Pérez Manrique T, Gómez Candela C. Nutrición parenteral domiciliaria. In: Gómez Candela C, Palma Milla S, García Vázquez N, Calvo Bruzos C. Manual de nutrición clínica Hospital Universitario La Paz. Madrid: Publicaciones UNED, 2018. p.463-80

Meneses González D, Moreno Domínguez Ó, Gomes Porras M, Pelegrina Cortés B, Palma Milla S, Gómez-Candela C. Prevención y tratamiento del síndrome de realimentación. In: Gómez Candela C, Palma Milla S, García Vázquez N, Calvo Bruzos C. Manual de nutrición clínica Hospital Universitario La Paz. Madrid: Publicaciones UNED, 2018. p.245-52

Fernández Cagigao Y, Lisbona Catalán A, Moreno Domínguez O, Meneses González D, Palma Milla S, Gómez-Candela C. Soporte nutricional en el paciente diabético o con hiperglucemia. In: Gómez Candela C, Palma Milla S, García Vázquez N, Calvo Bruzos C. Manual de nutrición clínica Hospital Universitario La Paz. Madrid: Publicaciones UNED, 2018. p.395-409

García Vázquez N, Gomes Porras M, Agrifoglio Rotaeché A, Suárez Gonzalo L, Pérez Robledo JP, Gómez Candela C. La hidratación en el paciente hospitalizado. In: Gómez Candela C, Palma Milla S, García Vázquez N, Calvo Bruzos C. Manual de nutrición clínica Hospital Universitario La Paz. Madrid: Publicaciones UNED, 2018. p.81-96

García Vázquez N, Pérez Robledo JP, Suárez Gonzalo L, Corripio Sánchez R, Palma Milla S, Gómez-Candela C. Nutrición parenteral central y periférica. In: Gómez Candela C, Palma Milla S, García Vázquez N, Calvo Bruzos C. Manual de nutrición clínica Hospital Universitario La Paz. Madrid: Publicaciones UNED, 2018. p.167-99

Gómez Candela C, Bermejo LM, López Plaza B, Santurino C, Calvo Bruzos C, Palma Milla S. Principios de la nutrición clínica. In: Gómez Candela C, Palma Milla S, García Vázquez N, Calvo Bruzos C. Manual de nutrición clínica Hospital Universitario La Paz. Madrid: Publicaciones UNED, 2018. p.7-31

Gómez Candela C, Palma Milla S, García Vázquez N, Calvo Bruzos C. Manual de nutrición clínica Hospital Universitario La Paz. Madrid: Publicaciones UNED, 2018. p.1-480

Lisbona Catalán A, Pulido Vega M, Pelegrina Cortés B, García Vázquez N, Palma Milla S, Gómez-Candela C. Nutrición enteral hospitalaria. In: Gómez Candela C, Palma Milla S, García Vázquez N, Calvo Bruzos C. Manual de nutrición clínica Hospital Universitario La Paz. Madrid: Publicaciones UNED, 2018. p.137-57

Morato Martínez M, Pulido Vega M, Lisbona Catalán A, Ramírez Rodríguez Y, García Concejero V, Castro Calvo A, Arrebola Vivas E, Julián Viñals R, Gómez Candela C. Enfoque multidisciplinar de la disfagia en el hospital la paz y coordinación con atención primaria. In: Gómez Candela C, Palma Milla S, García Vázquez N, Calvo

Bruzos C. Manual de nutrición clínica Hospital Universitario La Paz. Madrid: Publicaciones UNED, 2018. p.253-78

Moreno Domínguez O, Pelegrina Cortés B, Meneses D, Gomes Porras M, Lisbona Catalán A, Palma Milla S, Gómez-Candela C. Soporte nutricional en enfermedades neurológicas. In: Gómez Candela C, Palma Milla S, García Vázquez N, Calvo Bruzos C. Manual de nutrición clínica Hospital Universitario La Paz. Madrid: Publicaciones UNED, 2018. p.375-93

Palma Milla S, Morato Martínez M, Repilado Alonso N, Castelo Fernández B, Escribano Uzcudún A, Gómez Candela C. Soporte nutricional en el paciente oncológico. In: Gómez Candela C, Palma Milla S, García Vázquez N, Calvo Bruzos C. Manual de nutrición clínica Hospital Universitario La Paz. Madrid: Publicaciones UNED, 2018. p.299-321

Palma Milla S, Parra Ramírez P, Lisbona Catalán A, Pelegrina Cortés B, Moreno Domínguez O, Gómez-Candela C. Indicaciones del soporte nutricional basado en la evidencia científica y en guías clínica. In: Gómez Candela C, Palma Milla S, García Vázquez N, Calvo Bruzos C. Manual de nutrición clínica Hospital Universitario La Paz. Madrid: Publicaciones UNED, 2018. p.199-244

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Parra Ramírez P, Gómez-Candela C, Pelegrina Cortés B, Lisbona Catalán A, Barbadillo Cano A, Palma Milla S. Soporte nutricional en fallo intestinal. In: Gómez Candela C, Palma Milla S, García Vázquez N, Calvo Bruzos C. Manual de nutrición clínica Hospital Universitario La Paz. Madrid: Publicaciones UNED, 2018. p.429-43

Pelegrina Cortés B, Morato Martínez M, Arcos Castellano I, Lechón Alonso MD, Alarcón Alarcón M, Poderoso Bueno MG, Castelo Fernández B, Pérez Manrique MT, García Vázquez N, Gómez-Candela C. Alimentación adaptada y recomendaciones de consumo de los suplementos nutricionales orales en nuestro hospital. In: Gómez Candela C, Palma Milla S, García Vázquez N, Calvo Bruzos C. Manual de nutrición clínica Hospital Universitario La Paz. Madrid: Publicaciones UNED, 2018. p.121-36

Pelegrina Cortés B, Vega Cabrera C, Morato Martínez M, Chu Montiel D, Palma Milla S, Gómez Candela C. Soporte nutricional en el paciente con insuficiencia renal. In: Gómez Candela C, Palma Milla S, García Vázquez N, Calvo Bruzos C. Manual de nutrición clínica Hospital Universitario La Paz. Madrid: Publicaciones UNED, 2018. p.411-28

Valero Pérez M, Calso González M, Arcos Castellanos L, Ariza Astolfi MJ, Palma



Introduction

1

Executive summary

2

Information Groups by Area

3

Associated Clinicians

4

Scientific Report
2017
2018

Milla S, Gómez Candela C. Costes de la desnutrición relacionada con la enfermedad y nuestro método de cribado. In: Gómez Candela C, Palma Milla S, García Vázquez N, Calvo Bruzos C. Manual de nutrición clínica Hospital Universitario La Paz. Madrid: Publicaciones UNED, 2018. p.33-56

Publications

- Bermejo LM, Gómez-Candela C, Dahdouh S, López-Plaza B. Bioactive food compounds as adjuvants to breast cancer treatment: vitamin D and omega-3. *Nutr Hosp.* 2018; 35: 64-9. Article. IF: 0.759; Q4
- Gómez-Candela C, Milla SP, Miján-de-la-Torre A, Ortega PR, Martín PM, Kohen VL, Campos del Portillo R, Casas MNV, Olmos MAM, Álvarez MTM, Alija MJC, Martín-Palmero A. Consensus on the evaluation and nutritional treatment of eating disorders: anorexia nervosa. *Nutr Hosp.* 2018; 35: 11-48. Article. IF: 0.759; Q4
- Gómez-Candela C, Milla SP, Miján-de-la-Torre A, Ortega PR, Martín PM, Kohen VL, Campos del Portillo R, Casas MNV, Olmos MAM, Álvarez MTM, Alija MJC, Martín-Palmero A. Consensus on the evaluation and nutritional treatment of eating disorders: bulimia nervosa, binge eating disorder and others. *Nutr Hosp.* 2018; 35: 49-97. Article. IF: 0.759; Q4
- Gómez-Candela C, Milla SP, Miján-de-la-Torre A, Ortega PR, Martín PM, Kohen VL, Campos del Portillo R, Casas MNV, Olmos MAM, Álvarez MTM, Alija MJC, Martín-Palmero A. Executive summary "consensus on the evaluation and nutritional treatment of eating disorders: anorexia nervosa, bulimia nervosa, binge eating disorder and others". *Nutr Hosp.* 2018; 35: 1-9. Article. IF: 0.759; Q4
- Gómez-Candela C, Milla SP, Miján-de-la-Torre A, Ortega PR, Martín PM, Kohen VL, del Portillo RC, Casas MNV, Olmos MAM, Álvarez MTM, Alija MJC, Martín-Palmero A. Consensus document about the nutritional evaluation and management of eating disorders: anorexia nervosa, bulimia nervosa, binge eating disorder, and others. Executive abstract. *Nutr Hosp.* 2018; 35(2): 489-94. Article. IF: 0.759; Q4.
- Milla SP, Meneses D, Valero M, Calso M, Vázquez NG, Garrido MR, Martín-Vega A, Gómez-Candela C. Costs associated to disease-related malnutrition and treatment: a literature review. *Nutr Hosp.* 2018; 35(2): 442-60. Review. IF: 0.759; Q4
- Palma-Milla S, López-Plaza B, Santamaría B, de Arriba-Sánchez A, Bermejo LM, Gómez-Candela C. New, immunomodulatory, oral nutrition formula for use prior to surgery in patients with head and neck cancer: An exploratory study. *JPEN-Parenter Enter.* 2018; 42(2): 371-9. Article. IF: 3.612; Q1
- Pelegrina-Cortés B, Bermejo LM, López-Plaza B, Palma-Milla S, García-Vázquez N, Gómez-Candela C. Nutri-

tional composition assessment of 3000 individualized parenteral nutrition bags in a tertiary referral hospital: Current prescribing patterns. *nutrients.* 2018; 10(8): 1079. Article. IF: 4.171; Q1

- Sánchez JGR, Milla SP, Cortés BP, Plaza BL, López LMB, Gómez-Candela C. A global vision of adverse reactions to foods: food allergy and food intolerance. *Nutr Hosp.* 2018; 35: 102-8. Article. IF: 0.759; Q4
- Serra-Majem L, Raposo A, Aranceta-Bartrina J, Varela-Moreiras G, Logue C, Laviada H, Socolovsky S, Pérez-Rodrigo C, Aldrete-Velasco JA, Sierra EM, López-García R, Ortiz-Andrelluccchi A, Gómez-Candela C, Abreu R, Alexanderson E, Álvarez-Álvarez RJ, Falcón ALA, Anadón A, Bellisle F, Beristain-Navarrete IA, Redondo RB, Bochicchio T, Camolas J, Cardini FG, Carocho M, Costa MD, Drewnowski A, Durán S, Faundes V, Fernández-Condori R, García-Luna PP, Garnica JC, González-Gross M, La Vecchia C, Leis R, López-Sobaler AM, Madero MA, Marcos A, Ramírez LAM, Martín DM, Mistura L, Rojas RM, Villares JMM, Niño-Cruz JA, Oliveira MBPP, Gil-Antunano NP, Pérez-Castells L, Ribas-Barba L, Pedrero RR, Riobo P, Medina JR, de Faria CT, Valdes-Ramos R, Vasco E, Wac SN, Wakida G, Wanden-Berghe C, Díaz LX, Zúñiga-Guajardo S, Pyrogianni V, de Sousa SCV. Ibero-American consensus on low- and no-calorie sweeteners: Safety, nutritional aspects and benefits in food and beverages. *Nutrients.* 2018; 10(7): 818. Review. IF: 4.171; Q1
- Wanden-Berghe C, Cunill JLP, Compes CC, Boluda ER, Jiménez MIM, Candela CG, Casas NV, Peláez RB, de la Cruz AP, Lázaro MAP, Martos EAS, Román DAD, Faedo CM, Fontalba MDM, Hernández JA, Martín PM, Guardiola PD, Pérez FC, París AS, Orbaiz CG, Burdiel OSV, Folgueras TM,





Introduction

1

Executive summary

2

Information Groups by Area

3

Associated Clinicians

4

Palmero MAM, Pérez LML, Murillo AZ, Costa CM, Llanos JPS, Pérez CT, Rocamora JA, Irigoyen CA, Delgado YG, Martín CC, González MAP, Roca SM, Zafra MVG, López JMM, Baeza BM, Marín MG, Ortiz CJ, de la Maza BP, Martínez MCG, Santaliestra MJ, Visa MDF, Celaya AA, Sánchez RS, Planella JRU. Home and ambulatory artificial nutrition (NADYA) report. Home parenteral nutrition in Spain, 2017. Nutr hosp. 2018; 35 (6): 1491-6. Article. IF: 0.759: Q4

Private projects

Gómez Candela C. Plan de sustentación científica de la eficacia de probióticos en homeostasis inmune. Creaciones Aromáticas Industriales S.A. 2010-Ongoing.

Management centre: FIBHULP

Gómez Candela C. Perspectivas de la actividad investigadora de la unidad de nutrición clínica y dietética. Abbott Laboratories S.A. 2008-Ongoing.

Management centre: FIBHULP

Gómez Candela C. Satisfood: desarrollo y validación de alimentos saciantes mediante la integración de las señales pre y postingestivas. Creaciones Aromáticas Industriales S.A. 2017-Ongoing.

Management centre: FIBHULP

Gómez Candela C. Estudio observacional para el conocimiento de los factores de riesgo asociados al cáncer de mama en mujeres de reciente diagnóstico de la enfermedad en la Comunidad de Madrid. Linical Spain S.L.U. 2017-Ongoing.

Management centre: FIBHULP

Gómez Candela C. Desarrollo de nuevos alimentos nutricional y sensorialmente adecuados para pacientes oncológicos (Alisenoc17). Adventia Pharma S.L. 2017-Ongoing.

Management centre: FIBHULP

Gómez Candela C. Ensayo clínico para evaluar el efecto del consumo de dos microalgas unicelulares sobre biomarcadores del síndrome metabólico en sujetos con sobrepeso/obesidad y el perfil lipídico alterado. Anfaco-Cecopesca. 2018-Ongoing.

Management centre: FIBHULP

Gómez Candela C. Formación orientada a la investigación en el área de la nutrición y dietética. Paxvax Spain S.L. 2017-Ongoing.

Management centre: FIBHULP

Gómez Candela C. Prestación del servicio de realización de un ensayo clínico para el establecimiento de relaciones de causa efecto en humanos de un extracto fúngico. Universidad Autónoma de Madrid. 2018-Ongoing.

Management centre: FIBHULP

Gómez Candela C. Perspectivas de la unidad investigadora de la unidad de nutrición clínica y dietética. Nestle Healthcare Nutrition, S.A. 2009-Ongoing.

Management centre: FIBHULP

Clinical trials

Gómez Candela C. Estudio clínico nutricional en agudo para evaluar el efecto sobre la saciedad de una goma con aroma encapsulado en un colectivo de personas sanas. Type: Producto Alimentario.

HULP code: 5003. Sponsored's protocol code: GOMINOLA.

Sponsored by: Creaciones Aromáticas Industriales S.A. Signed date: 03/04/2018

Gómez Candela C. Estudio clínico nutricional para evaluar el efecto sobre la saciedad y el perfil lipídico del consumo habitual de un preparado de miel rico en fibra y Polifenoles en un colectivo de personas con sobrepeso/obesidad. Type: Producto Alimentario.

HULP code: 5049. Sponsored's protocol code: Estudio clínico nutricional para evaluar el efecto sobre la saciedad y el perfil lipídico del consumo habitual de un preparado de miel rico en fibra y polifenoles en un colectivo de personas con sobrepeso/obesidad.

Sponsored by: Primo Mendoza S.L. Signed date: 09/08/2018

Gómez Candela C. Estudio clínico-nutricional cruzado y aleatorizado con 3 brazos de estudio (yogur rico en fibra (dextrina, harina de avena integral y salvado de trigo); yogur rico en proteína (proteína de guisante); yogur control), para evaluar las propiedades saciantes. Type: Producto Alimentario.

HULP code: 5007. Sponsored's protocol code: 5007.

Sponsored by: Go Fruselva. Signed date: 01/06/2018

Gómez Candela C. Estudio de intervención nutricional para evaluar el efecto sobre la saciedad de una conserva de bonito en aceite de oliva enriquecida en fibra o polifenoles de un colectivo de personas sanas con sobrepeso. Type: Producto Alimentario.

HULP code: 5048. Sponsored's protocol code: 5048.

Sponsored by: Friobas Basilio S.L. Signed date: 13/06/2018

Gómez Candela C. Estudio prospectivo, observacional de una alimentación por sonda con alto contenido calórico y proteico, con carbohidratos de liberación lenta y ácidos grasos monoinsaturados (AGMI) en una población malnutrida con diabetes. Type: NO-EPA.

HULP code: PI-3167. Sponsored's protocol code: DA14.

Sponsored by: Abbott Laboratories S.A. Signed date: 05/06/2018

Gómez Candela C. Tolerancia y eficacia de una fórmula de nutrición enteral polimérica hiperproteica/hipercalórica, enriquecida en fibra, aceite de oliva virgen extra y omega 3 en pacientes hospitalizados. Type: Producto Alimentario.

HULP code: 5005. Sponsored's protocol code: 5005.

Sponsored by: Adventia Pharma S.L. Signed date: 20/03/2018



Introduction

1

Executive summary

2

Information Groups by Area

3

Associated Clinicians

4 Publications: **4** Impact Factor: **4.759** QI: **0**

Ophtalmology Group

Group Leader
Félix Armadá Maresca

Composition

Gloria Amorena Santisteban
 Mónica Asencio Duran
 Beatriz Manzano Muñoz
 Pino Cidad Betegón
 Irene Rosa Pérez
 Javier Coca Robinot
 Oriana D'Anna Mardero
 Armelle Schlincker Giraud
 Ventura Hidalgo Barrero
 Ana Boto de los Bueys
 Almudena del Hierro Zarzuelo

Paola Vázquez Colomo
 Rosa Langa Hontoria
 Rosa Cordero Ros
 Cosme Lavín Dapena
 Ana Ramos Castrillo
 Álvaro Arbizu Duralde
 Margarita Sánchez-Orgaz,
 Ricardo Romero Martín
 Jesús Peralta Calvo
 Carmen Ramos Plaza
 María Granados Fernández
 Sofía de Manuel Triantafilo

Research Areas

- Neuroscience



Research Activity

Doctoral theses

Bravo Lubjetic L. Experiencia en el manejo del rabdomiosarcoma orbitalio en el hospital universitario La Paz, 1982-2015[dissertation]. Madrid: UAM; 2018(15/06/2018).

Director: Peralta Calvo J.

Books and book chapters

Armadá F, Coca J, Cebrián JL, Arbizu A. Nuevas tecnologías en trauma ocular. In: García Arumí J, Fernández-Vega Sanz A. Traumatología ocular. Madrid: Sociedad Española de Oftalmología, 2018.

Asencio Durán M, Vicandi Plaza B, Viguer García-Moreno JM. Biopsias intraoculares. Intraocular biopsies. In: Comunicació Digital Solicitada Societat Catalana d'Oftalmologia. Barcelona:Annals d'Oftalmología , 2018. p.222-9

Asencio Durán M. Retina y tumores intraoculares. In: Prácticum: taller de preguntas en Oftalmología. Madrid: Glosa SL, 2018. p.77-101

del Hierro Zarzuelo A. Queratitis Infecciosas en niños. In: Pérez-Santonja J, Celis Sánchez J, Hervás Hernandis JM. Actualización en infecciones de la córnea. Métodos de diagnóstico y tratamiento. Madrid: Sociedad Española de Cirugía Ocular Implanto-Refractiva, 2018.

Publications

- Recine MAH, Lima KSM, García EV, García-Miñaur S, del Castillo JMB, de los Bueis AB. Heredity and in vivo confocal microscopy of punctiform and polychromatic pre-Descemet dystrophy. *Graef Arch Clin Exp.* 2018; 256(9): 1661-7. Article. IF: 2.25; Q2
- Pérez-Sarriegui A, Muñoz-Negrrete FJ, Noval S, de Juan V, Rebolleda G. Automated evaluation of choroidal thickness and minimum rim width thickness in nonarteritic anterior ischemic optic neuropathy. *J Neuro-Ophthalmol.* 2018; 38(1): 7-12. Article. IF: 2.509; Q2
- Toledo JJ, Asencio M, García JR, Morales LA, Tomkinson C, Cajigal C. OCT Angiography: Imaging

of choroidal and retinal tumors. *Ophthalmol Retina.* 2018; 2(6): 613-22-. Article. Not Indexed

- Jiménez-Rolando B, Noval S, Rosa-Pérez I, Mata Díaz E, del Pozo A, Ibáñez C, Silla J C, Montano VE F, Martín-Arenas R, Vallespín E. Next generation sequencing in the diagnosis of Stargardt's disease. *Arch Soc Esp Oftalmol.* 2018; 93(3): 119-25. Article. Not Indexed

Public projects

Armadá Maresca F. NEUROCENTRO-CM Centro tecnológico para el estudio y tratamiento integrado de los desórdenes neurológicos (S2017/BMD-3760). CM. 2018-2020.

Management centre: FIBHULP

Private projects

Boto de los Bueis A. Sesiones del programa actualización en oftalmología 2009. Bioftalmik S.L. 2009-Ongoing.

Management centre: FIBHULP

Clinical trials

Armada Maresca F. Influencia de factores clínicos y genéticos en la evolución funcional y anatómica a largo plazo en una cohorte de pacientes con DMAE húmeda tratados según práctica clínica habitual. Type: EPA-AS.

HULP code: PI-2825. Sponsored's protocol code: CUN-RAN-2016-01.

Sponsored by: Universidad de Navarra-Clínica Universidad de Navarra.

Signed date: 25/01/2018

Asencio Durán M. Estudio de fase III multicéntrico, randomizado, con doble enmascaramiento, controlado, con comparador activo para evaluar la eficacia y seguridad de RO6867461 en pacientes con edema macular diabético (Rhine). Type: Clinical Trial, phase III.

HULP code: 5116. Sponsored's protocol code: GR40398.

Sponsored by: F. Hoffmann-La Roche Ltd. Signed date: 16/10/2018

Introduction

1

Executive summary

2

Information Groups by Area

3

Associated Clinicians

4Publications: **13**Impact Factor: **13.595**QI: **3**

Orthopedic Surgery and Traumatology Group

Group Leader

Francisco Javier Sánchez Pérez-Gruesso

Composition

Alfonso Vaquero Picado
 Eloy Dario Tabeayo Alvarez
 Luis Rodrigo Merino Rueda.
 Jose Miguel Sánchez Márquez
 Gaspar González Morán
 Manuel Peleteiro Pensado
 Eduardo Ortiz Cruz
 Irene Barrientos Ruiz
 Rafael Carbonell Escobar
 Juan Cabello Blanco
 Francisco Javier Pizones Arce

Research Areas

- Surgery, Transplantation and Health Technology

Research Activity

Books and book chapters

- Armadá F, Coca J, Cebrián JL, Arbizu A.** Nuevas tecnologías en trauma ocular. In: García Arumí J, Fernández-Vega Sanz A. Traumatología ocular. Madrid: Sociedad Española de Oftalmología, 2018.
- Asencio Durán M, Vicandi Plaza B, Viguer García-Moreno JM.** Biopsias intraoculares. Intraocular biopsies. In: Comunicació Digital Solicitada Societat Catalana d'Oftalmologia. Barcelona: Annals d'Oftalmologia , 2018. p.222-9
- Asencio Durán M.** Retina y tumores intraoculares. In: Prácticum: taller de preguntas en Oftalmología. Madrid: Glosa SL, 2018. p.77-101
- del Hierro Zarzuelo A.** Queratitis Infecciosas en niños. In: Pérez-Santonja J, Celis



Introduction

1

Executive summary

2

Information Groups by Area

3

Associated Clinicians

4

Scientific Report

2018

Sánchez J, Hervás Hernandis JM. Actualización en infecciones de la córnea. Métodos de diagnóstico y tratamiento. Madrid: Sociedad Española de Cirugía Ocular Implanto-Refractiva, 2018.

Publications

- Doré M, Junco PT, de la Torre C, Vilanova-Sánchez A, Bret M, González G, Cerezo VN, Gómez JJ, Encinas JL, Hernández F, Martínez LM, Santamaría ML. Nuss procedure for a patient with negative haller index. European J Pediatr Surg Rep. 2018; 6(1): e18-e22. Article. Not Indexed
- Encinas-Ullán CA, Rodríguez-Merchán EC. Isolated medial collateral ligament tears: an update on management. Efort Open Rev. 2018; 3(7): 398-407. Article. Not Indexed
- Fernández-Fernández R, Martínez-Miranda JM, Gil-Garay E. Comparison of an uncemented tapered stem design in cobalt-chrome vs titanium at 15-year follow-up. J Arthroplasty. 2018; 33(4): 1139-43. Article. IF: 3.524; Q1
- Gómez-Álvarez J, González-Escobar S, Gil-Garay E. Clinical assessment of patients with isolated hip fractures associated with an upper limb fracture. Rev Esp Cir Ortop Traumatol. 2018; 62(3):222-7. Article. Not Indexed
- Martín-Buitrago MP, Pizones J, Pérez-Grueso FJS, Almirón MD, Vila-Casademunt A, Obeid I, Alanay A, Kleinstuck F, Acaroglu ER, Pellise F. Impact of iliac instrumentation on the quality of life of patients with adult spine deformity. Spine. 2018; 43(13): 913-8. Article. IF: 2.903; Q1
- Pizones J, Martín-Buitrago MP, Sánchez Márquez J, Fernández-Baillo M, Baldan-Martín M, Sánchez Pérez-Grueso FJ. Decision making of graduation in patients with early-onset scoliosis at the end of distraction-based programs: Risks and benefits of definitive fusion. Spine Deform. 2018; 6(3): 308-13. Article. Not Indexed
- Prieto-Alhambra D, Reyes C, Sainz MS, González-Macías J, Delgado LG, Bouzon CA, Ganan SM, Miedes DM, Vaquero-Cervino E, Bardaji MFB, Herrando LE, Bartzán FB, Ferrer BL, Pérez-Coto I, Bueno GA, Mora-Fernández J, Donate TE, Blasco JMI, Aguado-Maestro I, Sáez-López P, Domenech MS, Climent-Peris V, Rodríguez AD, Sardinas HK, Gómez OT, Serra JT, Caeiro-Rey JR, Cano IA, Carsi MB, Etxebarria-Foronda I, Hernández JDA, Solis JR, Suau OT, Nogués X, Herrera A, Díez-Pérez A. In-hospital care, complications, and 4-month mortality following a hip or proximal femur fracture: the Spanish registry of osteoporotic femur fractures prospective cohort study. Arch Osteoporos. 2018; 13(1): 96. Article. IF: 2.469; Q2
- Rodríguez-Merchán EC, García-Ramos JA, Padilla-Eguiluz NG, Gómez-Barrena E. Arthroscopic

partial meniscectomy for painful degenerative meniscal tears in the presence of knee osteoarthritis in patients older than 50 years of age: Predictors of an early (1 to 5 years) total knee replacement. Arch Bone Jt Surg. 2018; 6(3): 203-11. Article. Not Indexed

- Rodríguez-Merchán EC, Gómez-Cardero P. Unicompartmental knee arthroplasty: current indications, technical issues and results. Efort Open Rev. 2018; 3(6): 363-73. Article. Not Indexed
- Rubio-Suárez JC, Carbonell-Escobar R, Rodríguez-Merchán EC, Ibarzábal-Gil A, Gil-Garay E. Fractures of the tibial pilon treated by open reduction and internal fixation (locking compression plate-less invasive stabilising system): Complications and sequelae. Injury. 2018; 49: S60-4. Article. IF: 1.834; Q2
- Vaquero-Picado A, de Armas JN, Antuña S, Barco R. Morphometry of the radiocapitellar joint: is humeral condyle diameter a reliable predictor of the size of the radial head prosthesis? J Shoulder Elb Surg. 2018; 27(6): 1092-96. Article. IF: 2.865; Q1
- Vaquero-Picado A, González-Morán G, Moraleda L. Management of supracondylar fractures of the humerus in children. Efort Open Rev. 2018; 3(10): 526-40. Article. Not Indexed
- Vaquero-Picado A, Rodríguez-Merchán EC. Arthroscopic repair of the meniscus: surgical management and clinical outcomes. Efort Open Rev. 2018 ;3(11): 584-94. Article. Not Indexed

Private projects

Barrientos Ruiz, Irene. Ensayo clínico aleatorizado, doble ciego, 3 brazos, para evaluar el impacto de la perdida sanguínea tras la administración de tres pautas de ácido tranexámico en pacientes intervenidos por sarcomas óseos o de partes blandas. Fundación Sociedad Española de Cirugía Ortopédica y Traumatología. 2016-Ongoing.

Management centre: FIBHULP

Pizones Arce, Francisco Javier. Clinical outcomes following conservatives and surgical treatment of adult spine deformity. Fundació Hospital Vall D'Hebron. 2012-On-going.

Management centre: FIBHULP

Sanchez Marquez, Jose Miguel. Corrección gradual de escoliosis experimental en minicerdos mediante la utilización de metales con memoria de forma. Sociedad Para El Estudio de Las Enfermedades del Raquis. 2014-Ongoing.

Management centre: FIBHULP

Introduction

1

Executive summary

2

Information Groups by Area

3

Associated Clinicians

4

Pediatric Nephrology Group

Group Leader

Ángel Alonso Melgar

Composition

Carlota Fernández Cambor

Juan Bravo Feito

Alejandro Zarauza Santoveña

Ángel Alonso Melgar

Research Areas

- Large System Pathology

Research Activity

Books and book chapters

Zarauza A, Espinosa L, Navarro M. Síndrome nefrótico congénito. In: Saieh C, Escala JM. Manual de Nefrología Pediátrica: Editorial Mediterráneo, 2018. p.139-48

Fernández C. Tratamiento conservador de la enfermedad renal crónica en sus distintos estadios. In: Florentin de Merech L, Flores J, Ferrari J. Guía de trasplante renal pediátrico: Editorial EFACIM, 2018. p.51-81

Alonso A, Zarauza A. Complicaciones médicas del trasplante renal pediátrico. In: Florentin de Merech L, Flores J, Ferrari J. Guía de trasplante renal pediátrico: Editorial EFACIM, 2018. p.415-61

Espinosa L. Resultados y pronóstico del paciente pediátrico con trasplante renal. In: Florentin de Merech L, Flores J, Ferrari J. Guía de trasplante renal pediátrico: Editorial EFACIM, 2018. p.517-34

Clinical trials

Alonso Melgar A. Estudio en fase III multicéntrico y abierto de ALXN1210 en niños y adolescentes con síndrome hemolítico urinémico atípico (SHUA). Type: Clinical Trial, phase III.

HULP code: Anexo-I 4796. Sponsored's protocol code: ALXN1210-Ahus-312.

Sponsored by: Alexion Pharmaceutical Inc. Signed date: 10/12/2018



Introduction

1

Executive summary

2

Information Groups by Area

3

Associated Clinicians

4 Publications: **39** Impact Factor: **76.4¹¹** QI: **8**

Pediatric Surgery Group

Group Leader

Manuel López Santamaría

Composition

Juan José Vázquez Estévez
 Juan Carlos López Gutiérrez
 María José Martínez Urrutia
 Manuel Gámez Arance
 Francisco J. Murcia Zorita
 Nuria Leal Hernando
 Saturnino Barrena Delfa
 Alejandra Vilanova Sánchez
 Miriam Miguel Ferrero
 Paloma E. Triana Junco
 Vanessa Núñez Cerezo

Research Areas

- Surgery, Transplantation and Health Technology

Research Activity

Doctoral theses

Hernández Oliveros F. Estudio clínico experimental del papel del bazo en la prevención de la enfermedad de injerto contra huésped en el trasplante intestinal [dissertation]. Madrid: UAM: 2018(16/02/2018).

Director: López Santamaría M, Tovar Larrucea JA

Ponce Dorrego MD. Tratamiento endovascular de los shunts portosistémicos congénitos [dissertation]. Madrid: UAM: 2018(16/10/2018).

Director: Álvarez-Sala Walther R, Garzón Moll G.

Vega Mata N. Diagnóstico molecular de las anomalías vasculares congénitas y su repercusión terapéutica [dissertation]. Oviedo: Universidad de Oviedo: 2018(12/04/18).

Director: López Gutiérrez JC.



Introduction

1

Executive summary

2

Information Groups by Area

3

Associated Clinicians

4

Scientific Report
2017
2018

Publications

- Alegre-Sánchez A, Bernárdez C, Fonda-Pascual P, Moreno-Arrones OM, López-Gutiérrez JC, Jaén-Olasolo P, Boixeda P. Videodermoscopy and doppler-ultrasound in spider naevi: towards a new classification? *J Eur Acad Dermatol.* 2018; 32(1): 156-9. Article. IF: 5.113; D1
- Barrena Delfa S, Rubio Aparicio P, Martínez Martínez L. Neuroblastoma. Neuroblastoma. 2018; 31(2): 57-65. Article. Not Indexed
- Baselga E, Dembowska-Baginska B, Przewratil P, González-Ensenat MA, Wyrzykowski D, Torrelo A, Gutiérrez JCL, Rychlowska-Pruszynska M, de Lucas-Laguna R, Estévez-Martínez A, Roe E, Zaim M, Menon Y, Gautier S, Lebbe G, Bouroubi A, Delarue A, Voisard JJ. Efficacy of propranolol between 6 and 12 months of age in high-risk infantile hemangioma. *Pediatrics.* 2018; 142(3): e20173866. Article. IF: 5.401; D1
- Brandigi E, Torino G, Messina M, Molinaro F, Mazzei O, Matucci T, Gutiérrez JCL. Combined capillary-venous-lymphatic malformations without overgrowth in patients with Klippel-Trenaunay syndrome. *J Vasc Surg Venous Lymphat Disord.* 2018; 6(2): 230-6. Article. IF: 2.696; Q2
- Carrio M, Gel B, Terribas E, Zucchiatti AC, Moline T, Rosas I, Teule A, Cajal SRY, López-Gutiérrez JC, Blanco I, Castellanos E, Lázaro C, Stemmer-Rachamimov A, Romagosa C, Serra E. Analysis of intratumor heterogeneity in Neurofibromatosis type 1 plexiform neurofibromas and neurofibromas with atypical features: Correlating histological and genomic findings. *Hum Mutat.* 2018; 39(8): 1112-25. Article. IF: 4.453; Q1
- Doré M, Junco PT, Bret M, Cervantes MG, Romo MM, Gómez JJ, Vigara AP, Pajares MP, Encinas JL, Hernández F, Martínez L, Santamaría ML, de la Torre C. Advantages of cardiac magnetic resonance imaging for severe pectus excavatum assessment in children. *Eur J Pediatr Surg.* 2018; 28(1): 34-8. Article. IF: 1.148; Q4
- Doré M, Junco PT, de la Torre C, Vilanova-Sánchez A, Bret M, González G, Cerezo VN, Gómez JJ, Encinas JL, Hernández F, Martínez LM, Santamaría ML. Nuss procedure for a patient with negative haller index. *European J Pediatr Surg Rep.* 2018; 6(1): e18-22. Article. Not Indexed
- Doré M, Junco PT, Galán AS, Prieto G, Ramos E, Romo MM, Cervantes MG, Hernández F, Martínez L, Santamaría ML. Pitfalls in diagnosis of early-onset inflammatory bowel disease. *Eur J Pediatr Surg.* 2018; 28(1): 39-43. Article. IF: 1.148; Q4
- Downey C, López-Gutiérrez JC, Roe-Crespo E, Puig L, Baselga E. Lower lip capillary malformation associated with lymphatic malformation without overgrowth: Part of the spectrum of CLAPO syndrome. *Pediatr Dermatol.* 2018; 35(4): E243-4. Article. IF: 1.178; Q3
- Feito-Rodríguez M, Sánchez-Orta A, de Lucas R, López-Gutiérrez JC, Ruiz-Bravo E, Baselga E, Victoria AM, Hernández-Martín A, Campos-Domínguez M, Frohner BB, Garnacho-Saucedo G, Casano AV, Villa AV, Bernabéu-Wittel J, Kutzner H, Requena L. Congenital tufted angioma: A multicenter retrospective study of 30 cases. *Pediatr Dermatol.* 2018; 35(6): 808-16. Article. IF: 1.178; Q3
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Introduction

1

Executive summary

2

Information Groups by Area

3

Associated Clinicians

4

Scientific Report

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Management centre: FIBHULP

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Management centre: FIBHULP

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Management centre: FIBHULP

Vázquez Estévez JJ. Jornada científica: cirugía de control de daños en pediatría. Caragu Servicios Quirúrgicos. 2016-Ongoing.

Management centre: FIBHULP

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Introduction

1

Executive summary

2

Information Groups by Area

3

Associated Clinicians

4

Scientific Report

2018
2017
2016

Publications: 1

Impact Factor: 2.047

QI: 0

Preventive Care Group

Group Leader

Ana Robustillo Rodela

Composition

Verónica Pérez Blanco
Nicolás García-Arenzana Les
Isabel San Juan Sanz
Almudena Quintás Viqueira

Research Areas

- Infectious diseases and immunity

Research Activity

Publications

- Pérez-Blanco V, Redondo-Bravo L, Ruiz-Carrascoso G, Paño-Pardo JR, Gómez-Gil R, Robustillo-Rodela A, García-Rodríguez J, Mingorance J, Herruzo R. Epidemiology and control measures of an OXA-48-producing Enterobacteriaceae hospital-wide oligoclonal outbreak. *Epidemiol Infect.* 2018; 146(5): 656-62. Article. IF: 2.047; Q2



Scientific Report

2016
2017
2018

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