

Device for measuring and cutting ostomy applications (OSTOCUTTER).

Device and App for cutting ostomy discs to facilitate the management of stomas and the occurrence of the most common colostomy associated complications in ostomized patients.

Description and main features

Ostomized patients go through physical changes, a loss of voluntary control of defecation, and need using collecting bags for faeces. Apart from the psychological and social burden resulting from colostomies, these patients deal with frequent medical complications (at least 50 % of patients suffer complications). The most common issues found in these individuals are infections, hernias, necrosis, dehiscence or skin alterations in or around the stoma. Skin alterations are the most frequent reason for consultations, and they are mostly caused by a bad fitting of the disc, which results in the exposure of peristomal skin to the effluent fluid, causing injuries that may range from contact dermatitis to fungal infection (*Candida*) or skin necrosis with ulcers. The most simple and effective preventive care actions that may be performed to avoid skin alteration are to ensure a good management of stomas and a tight fitting of ostomy discs, especially after ileostomies, where the effluent fluid is too alkaline.

OstoCutter is an automated cutter for ostomy bags that is able to scan and recognize the profile of the stoma and produce an accurate trim so that the bag can fit the stomatic edges. It may soak the disc to the precise size and shape of the stoma, preventing the most common problem found in peristomal area, the chemical dermatitis caused by contact with effluents, occurring when the disc is not well adjusted and gets irritated by exposure to faeces and urine.

Competitive advantages

1. The algorithm underneath this technology reproduces the shape of the stoma accurately and provides helpful information to guide patients in their daily life after being ostomized.
2. This tool can be easily integrated into the healthcare system and provide relevant information to the ostomy therapist.
3. The machine learning algorithms can provide data about the clinical evolution of the stomatic contour, colour and texture, tracking the evolution and changes experienced by the individual patient.
4. It is compatible with every model of ostomy bags.
5. The device will allow that dependent ostomised patients are not longer in the need to be assisted

by a caregiver to measure and cut the disc, and will provide them with more self-sufficiency and quality of life.

Kind of collaboration sought

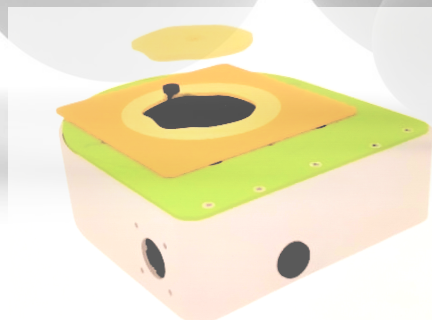
Cooperation is sought with any Party interested in partnering, licensing or investing in the technology, whether it be an investor to fund the project, a partner interested in getting involved in any of the various phases until its placement on the market, a patent licensee, etc. Organisations potentially interested in this technology are those within the pharmaceutical area (ostomy care, medical devices, etc.)

Current stage of development

We have developed the first operable prototype of this technology.

Current state of intellectual/industrial property

European patent application 16382413.9, filed in September 2016.



For further information, please contact

Innovation Unit
Foundation for Biomedical Research of La Paz University
Hospital (FIBHULP)-IdiPAZ
Telephone number: +34 91 207 12 34
e-mail: innovacion@idipaz.es
Web: www.idipaz.es