

**Acronym**

APRICOT

Full Title

Anatomically Precise Revolutionary Implant for bone Conserving Osteoarthritis Treatment

Programme

Horizon 2020/FETOPEN-2018-2020

Contract Number

863183

Project Aim

This project aims to develop APRICOT, a novel, extremely thin, self-lubricated compliant implant that is placed between the articulating surfaces of small osteoarthritis affected joints.

Abstract

Small joint arthritis presents a large societal burden throughout Europe. The largest pan-European study on osteoarthritis of the hand has observed an average incidence of 16.3%. An ageing population is experiencing osteoarthritis as a result of increased levels of obesity, and due to people remaining active later in life, imposing long term loading on their joints. The rise of technology also has the potential to increase the incidence of finger joint arthritis in young adults through the use of hand held electronic devices.

APRICOT thus aims at developing a radically new type of implant for the treatment of osteoarthritis of small joints in the hand. It aims to be minimally invasive, with minimal removal of healthy tissue, restore natural motion, be suitable for patients of all ages, and not require the use of general anaesthetics.

Objectives:

- Determine the mechanical, geometric and biological implant design requirements
- Design an extremely thin, self-lubricated compliant implant and required fixation scheme
- Develop an implantation strategy
- Establish the manufacturing process and automation thereof
- Develop appropriate test protocols and test subcomponent and full implant models

Duration

48 months (01/10/2019 - 30/09/2023)

Project Funding

3.253.045,00€



Coordinator

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Partners

- University of Southampton, UK
- Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.V., Germany
- AURORA Medical LTD, UK
- Technische Universität München, Germany
- EURICE - European Research and Project Office GmbH, Germany
- Universiteit Twente, Netherlands
- Goeteborgs Universitet, Sweden

Project Website:

<https://www.apricot-project.eu/>

