enterprise europe network

Partnering Opportunity

Profile status : Published

Research Development Request

H2020 - A Turkish company experienced in additive manufacturing and medical 3D printing based on custom made implant production, is looking for partners for a Eurostars project

Summary

An innovative Turkish company specialized in additive manufacturing and medical 3D printing focuses on custom made implant production for craniomaxillofacial patients. Using custom made implants creates biodegradable alternatives that can deliver benefits in a more controlled fashion at the defect site. The company is looking for partners to submit a proposal for the Eurostars programme.

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Details

Description

An innovative Turkish company founded in 2013 and operated in Ankara, focuses on additive manufacturing and 3D printing technologies as a result of its no geometry boundaries philosophy. The company aims to replace metal or polymeric implants with biodegradable alternatives that also have the ability to deliver drugs in a controlled fashion at the defect site. Many patients need craniomaxillofacial implants as a result of work accidents, congenital

deficiencies and diseases like cancer. Craniomaxillofacial bone loss cases are primarily operated with custom made implants which are made from metal or plastic material. However, none of the metal or plastic implants can be applied to patients before the age of 20. These patients are currently treated with either using patients own bone or using a highly customized implant made from metals or plastic. However, using patients own bone and using metal or plastic implants has two major downsides. These techniques cannot be applied to children since their pediatric development still continues and treatments with these techniques have the risk of infections. With the biodegradability that company offers, craniomaxillofacial surgery is made possible for children and it improves healing progress with bioactive agents that deliver through controlled release mechanisms. This alternative approach with a scale-up potential became possible with the advancements in 3D printing due to its groundbreaking properties in terms of customization capabilities and ease of logistics with the use of digital 3D models. For their custom made implants, the company is looking for reliable R&D partners such as institutes and universities experienced on custom made implants; additive manufacturing process development; preclinical/clinical trial evaluation of the medical devices; medical device directive (MDD) and/or medical device regulation (MDR); know-how on tissue engineering and/or orthopaedics and also for commercialization stages of a Eurostars project proposal on custom made biodegradable craniomaxillofacial implants. Project duration will be 104 weeks, the deadline for expression of interest is 03/07/2020 and the deadline for the call is 03/09/2020.

Advantages and innovations

- Having a professional team that has experience heavily on medical solutions and custom made implants.
- Technology offers shortened surgery duration by 70% and also decreases treatment costs by 30%.
- The biodegradable implant makes surgery possible for young pediatric patients and improves healing duration by delivering proper medicine.
- Opportunities to recover any bone loss with an implant that will turn into patients own bone tissue is the main innovation that the company offers. This innovation will also prevent infection risks and accelerate the recovery periods.

Technical Specification or Expertise Sought

The company expects to find partners that have experience in any of the below to share the work packages of the projects:
- Selective laser sintering (additive manufacturing) process development
- Preclinical/clinical trial evaluation of the medical devices
- Experience on medical device directive (MDD) and/or medical device regulation (MDR)
- Know-how on tissue engineering and/or orthopaedics

Stage of development

Under development/lab tested

IPR Status

Patents granted

Keywords

Technology

06001013	Medical Technology / Biomedical Engineering
06001017	Surgery
06001020	Physiotherapy, Orthopaedic Technology

Market

05003003	Surgical implants
05005015	Orthopaedics

NACE

C.32.5.0	Manufacture of medical and dental instruments and supplies

Network Contact

Issuing Partner

ZACHODNIOPOMORSKI UNIWERSYTET TECHNOLOGICZNY W SZCZECINIE

Contact Person

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Open for EOI: Yes

Dissemination

Relevant sector groups

Healthcare

Client

Type and Size of Organisation Behind the Profile

Industry SME 11-49

Year Established

2013

Turnover

<1M

Already Engaged in Trans-National Cooperation

No

Certifications Standards

ISO 13485

Languages Spoken

Turkish
English

Client Country

Turkey

Partner Sought

Type and Role of Partner Sought

Company is looking for reliable R&D partners (possible future business partners) such as SMEs, institutes and universities. These partners would have a focus on any of the below:
- Custom made implants,
- Additive manufacturing process development
- Preclinical/clinical trial evaluation of the medical devices
- Medical device directive (MDD) and/or medical device regulation (MDR)
- Tissue engineering
- Orthopaedics

Type and Size of Partner Sought

SME 11-50,University,R&D Institution,SME <10,SME 51-250

Type of Partnership Considered

Research cooperation agreement

Program - Call

Framework Program

H2020

Call title and identifier

Eurostars, co-funded by Eureka Secretariat - member countries and the European Union Horizon 2020 Framework Programme, the only European funding programme to be specifically dedicated to support SMEs in their innovative R&D projects.

Submission and evaluation scheme

The Eurostars programme follows a structure that guides you from the conception of your project to after its completion. This is divided into three parts: the application, the evaluation and the monitoring of successful projects.

Coordinator required

No

Duration

104 days

Deadline for EOI

03 Jul 2020

Deadline of the Call

03 Sep 2020

Weblink to the call

https://www.eurostars-eureka.eu/

Attachments