Bioengineering of human ossicles as advanced in vivo hematopoietic model

Fact Sheet

Project Information

hOssicle
Grant agreement ID: 948588

Funded under
EXCELLENT SCIENCE - European Research Council (ERC)

DOI
10.3030/948588

Total cost
€ 1 500 000,00

EU contribution
€ 1 500 000,00

Start date
1 May 2021

Coordinated by
LUNDS UNIVERSITET
Sweden

End date
30 April 2026

Project description

In vivo engineering of bone organs to model human hematopoiesis

The EU-funded hOssicle project aims to create miniature human bone organs in mice to be used as models of healthy and malignant human hematopoiesis. The project will be based on the previously developed human mesenchymal lines capable of producing human ossicles by recapitulating the developmental process of bone formation. The ossicles develop subcutaneously in mice and display structure and function similar to mouse bones but rely on human mesenchymal cells reconstituting a bone marrow environment supporting the development of human hematopoiesis. This project proposes an organ engineering approach to hematopoiesis with implications for the identification of key factors controlling the production of blood cell types and for personalised modelling of leukaemia.
Fields of science

medical and health sciences > medical biotechnology > tissue engineering
medical and health sciences > clinical medicine > hematology
medical and health sciences > clinical medicine > oncology > leukemia

Programme(s)

H2020-EU.1.1. - EXCELLENT SCIENCE - European Research Council (ERC)

Topic(s)

ERC-2020-STG - ERC STARTING GRANTS

Call for proposal

ERC-2020-STG

See other projects for this call

Funding Scheme

ERC-STG - Starting Grant

Coordinator

LUNDS UNIVERSITET

Net EU contribution
€ 1 500 000.00

Address
Paradisgatan 5c
22100 Lund
Sweden

Region
Södra Sverige > Sydsverige > Skåne län

Activity type

2 of 4
Beneficiaries (1)

LUNDS UNIVERSITET
Sweden
Net EU contribution
€ 1 500 000,00

Address
Paradisgatan 5c
22100 Lund

Region
Södra Sverige > Sydsverige > Skåne län

Activity type
Higher or Secondary Education Establishments

EC signature date 27 October 2020
Last update: 25 August 2022

Permalink: https://cordis.europa.eu/project/id/948588