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Activation of vasculature associated stem cells and muscle stem cells for the repair and maintenance of muscle tissue

Fact Sheet

Project Information

ENDOSTEM

Grant agreement ID: 241440

Project closed

Start date
1 January 2010

End date
31 December 2014

Funded under

Specific Programme "Cooperation": Health

Total cost

€ 16 340 569,28

EU contribution

€ 11 997 580,00

Coordinated by

UNIVERSITE PIERRE ET MARIE
CURIE - PARIS 6

France

This project is featured in...



Shaping the future of air transport

Objective

We propose to develop new strategies to mobilize skeletal muscle tissue-associated stem cells as a tool for efficient tissue repair. This will be combined with exploring novel approaches that limit tissue damage, and will focus on agents that modify muscle and muscle vasculature progenitor cells. These molecules include nitric oxide associated with non-steroidal anti-inflammatory drugs, HMGB1, Cripto, NAC, and present and improved deacetylase inhibitors. Three clinical trials will be run in tandem with efforts to dissect the underlying mechanisms of action. Importantly, we have already initiated a monocentric clinical trial that focuses on the efficacy of NO-donors plus NSAIDs in muscle pathologies. Our efforts will be complemented by novel biodelivery systems for effective targeting. Our efforts will be complemented by novel biodelivery systems for effective targeting. The most promising drugs, used alone or in combination, will be first validated in small and large animal models. Our project brings together leading investigators to examine how vascular and muscle progenitors participate in postnatal growth and muscle tissue repair. A key issue that this project addresses is the tissue environment in which endogenous stem cells are activated. We propose that muscle degeneration and fibrosis provokes altered vascularization and immune responses, which eventually affect negatively stem cell functions. Molecules that can be used to therapeutically target these key cells, and their communication with neighboring vascular, inflammatory and fibrotic cell types, will lead to more effective approaches to muscle regenerative medicine and to novel cures for degenerative diseases, including atherosclerosis, vascular damage in diabetes and in peripheral ischemic vascular disease.

Fields of science (EuroSciVoc)

[medical and health sciences](#) > [clinical medicine](#) > [angiology](#) > [vascular diseases](#)

[medical and health sciences](#) > [clinical medicine](#) > [cardiology](#) > [cardiovascular diseases](#) > [arteriosclerosis](#)

[medical and health sciences](#) > [clinical medicine](#) > [endocrinology](#) > [diabetes](#)

[medical and health sciences](#) > [basic medicine](#) > [immunology](#)

[medical and health sciences](#) > [medical biotechnology](#) > [cells technologies](#) > [stem cells](#)

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Programme(s)

[FP7-HEALTH - Specific Programme "Cooperation": Health](#)

Topic(s)

[HEALTH-2009-1.4-3 - Activation of endogenous cells as an approach to regenerative medicine](#)

Call for proposal

FP7-HEALTH-2009-single-stage

[See other projects for this call](#)

Funding Scheme

[CP-IP - Large-scale integrating project](#)

Coordinator



UNIVERSITE PIERRE ET MARIE CURIE - PARIS 6

EU contribution

€ 1 871 947,44

Total cost

No data

Address

Place Jussieu 4

75252 PARIS

 France 

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation ↗](#) [Website ↗](#)

[Participation in EU R&I programmes ↗](#)

[HORIZON collaboration network ↗](#)

Participants (21)



CONSIGLIO NAZIONALE DELLE RICERCHE

Italy

EU contribution

€ 639 300,00

Address

PIAZZALE ALDO MORO 7

00185 Roma



Region

Centro (IT) > Lazio > Roma

Activity type

Research Organisations

Links

[Contact the organisation ↗](#) [Website ↗](#)

[Participation in EU R&I programmes ↗](#)

[HORIZON collaboration network ↗](#)

Total cost

No data



IRCCS - ASSOCIAZIONE LA NOSTRA FAMIGLIA 'ISTITUTO SCIENTIFICO EUGENIO MEDEA'

Italy

EU contribution

€ 750 200,00

Address

VIA DON LUIGI MONZA 1

22037 Ponte Lambro



Region

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE

 Switzerland

EU contribution

€ 490 500,00

Address

BATIMENT CE 3316 STATION 1

1015 Lausanne 

Region

Schweiz/Suisse/Svizzera > Région lémanique > Vaud

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



EUROPEAN MOLECULAR BIOLOGY LABORATORY

 Germany

EU contribution

€ 513 300,00

Address

Meyerhofstrasse 1
69117 Heidelberg 

Region

Baden-Württemberg > Karlsruhe > Heidelberg, Stadtkreis

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



NOVARTIS PHARMA AG

 Switzerland

EU contribution

€ 259 100,00

Address

LICHTSTRASSE 35

4056 Basel 

Region

Schweiz/Suisse/Svizzera > Nordwestschweiz > Basel-Stadt

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



FONDAZIONE CENTRO SAN RAFFAELE DEL MONTE TABOR

 Italy

EU contribution

No data

Address

Via Olgettina 60
20132 MILANO 

Region

Nord-Ovest > Lombardia > Milano

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



IFOM-ISTITUTO FONDAZIONE DI ONCOLOGIA MOLECOLARE ETS

 Italy

EU contribution

€ 463 700,00

Address

VIA ADAMELLO 16
20139 Milano 

Region

Nord-Ovest > Lombardia > Milano

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



FONDAZIONE TELETHON ETS



Italy

EU contribution

€ 278 077,20

Address

VIA VARESE 16/B

00185 Roma



Region

Centro (IT) > Lazio > Roma

Activity type

Research Organisations

Links

[Contact the organisation](#) [Website](#)

[Participation in EU R&I programmes](#)

[HORIZON collaboration network](#)

Total cost

No data



UNIVERSIDAD POMPEU FABRA



Spain

EU contribution

€ 751 300,00

Address

PLACA DE LA MERCE, 10-12

08002 Barcelona



Region

Este > Cataluña > Barcelona

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#) [Website](#)

[Participation in EU R&I programmes](#)

[HORIZON collaboration network](#)

Total cost

No data



JOHANN WOLFGANG GOETHE-UNIVERSITAET FRANKFURT AM MAIN

Germany

EU contribution

€ 489 300,00

Address

THEODOR W ADORNO PLATZ 1

60323 Frankfurt Am Main

Region

Hessen > Darmstadt > Frankfurt am Main, Kreisfreie Stadt

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#) [Website](#)

[Participation in EU R&I programmes](#)

[HORIZON collaboration network](#)

Total cost

No data



HMGBIOTECH SRL

Italy

EU contribution

€ 552 500,00

Address

PIAZZALE GORINI PAOLO 8

20133 Milano

Region

Nord-Ovest > Lombardia > Milano

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#) [Website](#)

[Participation in EU R&I programmes](#)

[HORIZON collaboration network](#)

Total cost

No data



CORETHERAPIX S.L. 

 Spain

EU contribution

No data

Address

PLAZA DE LA ENCINA 10 NUCLEO 1 PLANTA 3

28760 MADRID 

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



DANDO WEISS & COLUCCI LIMITED 

 United Kingdom

EU contribution

€ 299 524,17

Address

LOWER BRISTOL ROAD MINERVA HOUSE

BA2 9ER BATH 

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



ACCELERON MEDICINES LTD i

United Kingdom

EU contribution

No data

Address

NEW STREET SQUARE 5

EC4A 3TW London

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#)

[Participation in EU R&I programmes](#)

[HORIZON collaboration network](#)

Total cost

No data



LIVERPOOL JOHN MOORES UNIVERSITY i

United Kingdom

EU contribution

€ 256 248,00

Address

RODNEY STREET 2 EGERTON COURT

L3 5UX Liverpool

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#) [Website](#)

[Participation in EU R&I programmes](#)

[HORIZON collaboration network](#)

Total cost

No data



ITALFARMACO SPA

 Italy

EU contribution

€ 683 400,00

Address

VIALE FULVIO TESTI 330

20126 Milano 

Region

Nord-Ovest > Lombardia > Milano

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



SANTHERA PHARMACEUTICALS (SCHWEIZ) AG

 Switzerland

EU contribution

€ 748 800,00

Address

HAMMERSTRASSE 49

4410 Liestal 

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE

France

EU contribution

€ 1 850 008,40

Address

RUE DE TOLBIAC 101

75654 Paris 

Region

Ile-de-France > Ile-de-France > Paris

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



KING'S COLLEGE LONDON

United Kingdom

EU contribution

€ 452 289,04

Address

STRAND

WC2R 2LS London 

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



FONDAZIONE SANTA LUCIA

 Italy

EU contribution

€ 164 385,75

Address

VIA ARDEATINA 306

00179 Roma



Region

Centro (IT) > Lazio > Roma

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



FONDAZIONE CENTRO SAN RAFFAELE

 Italy

EU contribution

€ 483 700,00

Address

VIA OLGETTINA 60

20132 Milano



Region

Nord-Ovest > Lombardia > Milano

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data

Last update: 16 July 2019

Permalink: <https://cordis.europa.eu/project/id/241440>

European Union, 2025