

INNOVATIVE MULTICOMPONENT DRUG DESIGN TO ENHANCE REGIONAL STRATEGIC ADVANTAGES IN PHARMACEUTICAL AND BIOMEDICAL APPLICATIONS



A PROJECT SUPPORTED BY INTERREG 2 SEAS PROGRAMME 2014-2020 www.interreg2seas.eu



Operator Partners

- LEAD PARTNER



University of Lille (France) www.univ-lille.fr

- PARTNERS



University College London (UK) www.ucl.ac.uk

Ghent University (Belgium)

University of East Anglia (UK)

University of Greenwich (UK)

www.ugent.be

www.uea.ac.uk

www.gre.ac.uk

Eurasanté (France)

www.eurasante.com

ImaBiotech (France)

www.imabiotech.com

GHENT UNIVERSITY





UNIVERSITY of GREENWICH



Ashford and St. Peter's Hospitals

tion Trust WWW.ashfordstpeters.nhs.uk

Roquette Group

www.roquette.com





Cubic Pharmaceuticals Limited (UK) www.cubicpharmaceuticals.co.uk

Research University of London (UK)

Ashford and St. Peter's Hospitals

Institute of Cardiovascular

ROQUETTE Offering the best of nature^w **Project details**

PROJECT START	1 st July 2016
DURATION	60 months
TOTAL COST	€ 5,960,000
ERDF CO-FINANCING RATE	60%
ERDF FUNDING	€ 3,576,036

Further information

NINOVATIVE MULTICOMPONENT DRUG DESIGN

www.project-imode.eu

Contacts

UNIVERSITY OF LILLE



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Challenge

Drug substances can be chemical complex molecules with challenging properties such as poor stability, low water solubility and difficult to crystallize. There is currently increased need for developing pharmaceutical products with:

Improved controlled/immediate release,



solubility and stability

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Novel medicines for pharmaceutical and medical applications

Patients quality of life and adherence to treatment

Consortium

IMODE is a collaboration of academic research groups and SMEs through a transdisciplinary applied research programme in materials science, pharmacy, biology and medicine.

IMODE gathers a cross-border partnership which involves major stakeholders in the field including Universities, small and large enterprises and patients as well as an economic development agency.

The IMODE project strengthens innovation in the 2 Seas Area in order to obtain a strategic advantage for novel pharmaceutical and medical applications bridging the current gap between academia and the private sector.

The IMODE project addresses a key Health societal challenge: to improve healthcare, novel medicine while maintaining low medical costs.

Objectives

The main objective of the European project IMODE is to carry out research for the development of multicomponent systems to:

Accelerate discovery of co-drugs by developing robust prediction tools, reliable screening methods and rapid synthetic technologies providing solutions for formulation of drugs with low water solubility

Produce implantable medical devices to deliver bioactive molecules that respond better to the patient's needs Develop a range of materials, processes and

- personalized medicine including:
- new bio-based excipients
 continuous manufacturing
- pharmacogenetics
- *in vivo/in vitro* validation

Accelerate preclinical validation with Mass Spectrometry Imaging

Design of resorbable stents and nanofibers coated stents (with bioactive compounds)



IMODE AIMS TO ACCELERATE PRODUCT DEVELOPMENT AND MANUFACTURING PROCESSES FOR THE PRODUCTION OF LOW COST, SUSTAINABLE HIGH QUALITY MEDICINES.



The IMODE project strategy is a collaborative transdisciplinary research and development program on multicomponent pharmaceutical products (co-amorphous and co-crystals) and medical devices loaded with bioactive molecules aiming to provide novel and effective solutions for various gastrointestinal and cardiovascular diseases that will improve patients quality of life. These challenging objectives require a cross-border partnership of academic institutions that work closely with industry with a focus on areas of basic research, continuous manufacturing and personalised medicines.



Patient Organizations: Different strokes (UK) DigestScience (FR)