



Ca' Foscari  
University  
of Venice

**PROJECT ACRONYM AND TITLE:** BIORIMA- BIOMaterial Risk MAnagement

**FUNDING PROGRAMME:** HORIZON 2020

**CALL:** H2020-NMBP-2016-2017

**SCIENTIFIC FIELD:** Biomaterials

**HOST DEPARTMENT/CENTRE:** INSTITUTE OF OCCUPATIONAL MEDICINE (IOM), UK

**SCIENTIFIC RESPONSIBLE:** Antonio Marcomini

**FINANCIAL DATA:**

Project total costs	Overall funding assigned to UNIVE
€ 7.999.981,25	€ 195387,50

**ABSTRACT:**

BIORIMA stands for Biomaterial Risk Management. BIORIMA aims to develop an integrated risk management (IRM) framework for nano-biomaterials (NBM) used in Advanced Therapeutic Medicinal Products (ATMP) and Medical Devices (MD). The BIORIMA RM framework is a structure upon which the validated tools and methods for materials, exposure, hazard and risk identification/assessment and management are allocated plus a rationale for selecting and using them to manage and reduce the risk for specific NBM used in ATMP and MD. Specifically, the IRM framework will consist of: (i) Risk Management strategies and systems, based on validated methodologies, tools, and guidance, for monitoring and reducing the risks together with methods for evaluating them; (ii) Validated methodologies and tools to identify the potential Exposure and Hazard posed by NBM to humans and the environment; (iii) A strategy for Intelligent Testing (ITS) and Tiered Risk Assessment for NBM used in ATMP and MD. BIORIMA workplan consists of 7 workpackages covering the major themes: Materials, Exposure, Hazard and Risk. BIORIMA will generate methods and tools for these themes for use in risk evaluation and reduction. The BIORIMA toolbox will consist of validated methods/tools for materials synthesis; reference materials bank; methods for human/environment exposure assessment and monitoring; (eco)-toxicology testing protocols; methods for prevention of accidental risks – massive release or explosion – A tiered risk assessment method for humans/environment; An intelligent testing strategy for NBM and risk reduction measures, including the safer-by-design approach. BIORIMA will deliver a web-based Decision Support System to help users, especially SME, evaluate the risk/benefit profile of their NBM products and help to shorten the time to market for NBM products.

Planned Start date	Planned End date
November 1th, 2017	October 31th, 2021

**PARTNERSHIP:**

1. INSTITUTE OF OCCUPATIONAL MEDICINE (IOM)	UK	COORDINATOR
2. UNIVERSITA CA' FOSCARI VENEZIA (UNIVE)	IT	PARTNER
3. AARHUS UNIVERSITET (AU)	DK	PARTNER
4. EUROPEAN RESEARCH SERVICES GMBH (ERS),	DE	PARTNER
5. REUTHER RUDOLF (ENAS)	DE	PARTNER
6. CONSIGLIO NAZIONALE DELLE RICERCHE (ISTEC CNR)	IT	PARTNER
7. AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES	PARTNER
8. THE UNIVERSITY OF MANCHESTER (UNIMAN)	UK	PARTNER
9. WESTFAELISCHE WILHELMS-UNIVERSITAET MUENSTER (WWU)	DE	PARTNER
10. KAROLINSKA INSTITUTET (KI)	S	PARTNER
11. UNIVERSITA DEGLI STUDI DI TORINO (UNITO)	IT	PARTNER
12. EIDGENOSSISCHE MATERIALPRUFUNGS- UND FORSCHUNGSANSTALT (EMPA),	CH	PARTNER
13. UNIVERSITA DEGLI STUDI DI ROMA TOR VERGATA (URTV)	IT	PARTNER
14. HERIOT-WATT UNIVERSITY (HWU)	UK	PARTNER
15. UNIVERSITE PARIS DIDEROT - PARIS 7 (UPDiderot)	FR	PARTNER
16. THE PROVOST, FELLOWS, FOUNDATION SCHOLARS & THE OTHER MEMBERS OF BOARD OF THE COLLEGE OF THE HOLY & UNDIVIDED TRINITY OF QUEEN ELIZABETH NEAR DUBLIN (TCD)	IRL	PARTNER
17. EDINBURGH NAPIER UNIVERSITY (NAPIER)	UK	PARTNER
18. WAGENINGEN UNIVERSITY (WU)	NL	PARTNER
19. INSTITUTO NACIONAL DE INVESTIGACIONY TECHNOLOGIA AGRARIA Y ALIMENTARIA OA MP (INIA)	ES	PARTNER
19. UNIVERSIDADE DE AVEIRO (UAVR)	P	PARTNER
20. FRAUNHOFER GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FOR FORSCHUNG E.V. (Fraunhofer)	DE	PARTNER
21. NATIONAL TECHNICAL UNIVERSITY OF ATHENS - NTUA (NTUA)	GR	PARTNER
22. INSTITUT NATIONAL DE L ENVIRONNEMENT ET DES RISQUES INERIS (INERIS)	FR	PARTNER
24. UNIVERSITY OF LEEDS (LEEDS)	UK	PARTNER
25. WARRANT GROUP SRL (WG)	IT	PARTNER
26. BIONANONET FORSCHUNGSGESELLSCHAFT MBH (BNN)	A	PARTNER
27. INSTITUTO TECNOLOGICO DEL EMBALAJE, TRANSPORTE Y LOGISTICA (ITENE)	ES	PARTNER
28. INNOVATION IN RESEARCH & ENGINEERING SOLUTIONS (IRES)	B	PARTNER
29. ASOCIACION CENTRO DE INVESTIGACION COOPERATIVA EN BIOMATERIALES- CIC biomagune (CIC)	ES	PARTNER
30. NANOVECTOR SRL (NAV)	IT	PARTNER
31. COLOROBIA CONSULTING SRL (COL)	IT	PARTNER
32. FIN-CERAMICA FAENZA SPA (FCF)	IT	PARTNER
33. INSTITUT FUR ENERGIE UND UMWELTTECHNIK EV - IUTA (IUTA)	DE	PARTNER
34. ROYAL COLLEGE OF SURGEONS IN IRELAND (RCSI)	IRL	PARTNER
35. THE ELECTROSPINNING COMPANY LTD (TECL)	UK	PARTNER
36. COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES (CEA)	FR	PARTNER
37. JOANNEUM RESEARCH FORSCHUNGSGESELLSCHAFT MBH (JRF)	A	PARTNER
38. GREENDECISION SRL (GD)	IT	PARTNER
39. TOKYO UNIVERSITY OF SCIENCE FOUNDATION (TUS)	J	PARTNER
40. Hong Kong University of Science and Technology (HKUST)	HK	PARTNER
41. Zhejiang University (ZJU)	PRC	PARTNER