PANBIORA FINAL EVENT

1st December 2021, 09:30 – 13:15 Strasbourg | Online



PANBioRA, "Personalised and generalised integrated biomaterial risk assessment" is a collaborative EU project developing a set of tools composed of protocols and instruments standardising the evaluation of new biomaterials.

The project will end on 31st December 2021, after four years of fruitful research, collaboration, developments and exciting results from 17 project partners across Europe.

Join consortium members and stakeholders in the field of biomaterials safety and risk assessment, to learn more about the project's achievements and main results.

AGENDA

Time	Session
09:30 - 09:40	Welcome session
	Dr. Engin Vrana, Scientific Project Coordinator, CEO Spartha Medical
	Timo Doll, Administrative Coordinator, Project Manager at Steinbeis Europa Zentrum
09:40 - 10:10	PANBioRA Overview and main results
	Dr. Engin Vrana, Scientific Project Coordinator, CEO Spartha Medical
10:10 - 10:40	PANBioRA Prototype: product presentation
	Dr. Harry Esmonde , School of Mechanical & Manufacturing Engineering at Dublin City University
	Adam Foley, Design Engineer at DOLMEN
10:40 - 11:10	PANBioRA Risk Radar and Risk Rating tool
	Dr. Somik Chakravarty, Chief Operation Officer at Steinbeis Advanced Risk Technologies
11:10 - 11:30	Coffee break
11:30 - 12:10	Standards and regulations in PANBioRA framework
	Prof. Dr. Michael Gasik, Professor in Materials processing, AALTO University
12:10 - 12:40	Policy Workshop
	Dr. Thomas Zadrozny, CEO Proactive Sprl.
	Dr. Anthony Bochon, Partner at Gil Robles – San Bartolome & Partners
	Dr. Engin Vrana, Scientific Project Coordinator, CEO Spartha Medical
12:40 - 13:00	PANBioRA clinical impacts
	Dr. Miljana Bacevic, Researcher at Centre Hospitalier Universitaire de Liège
13:00 - 13:15	PANBioRA beyond the project and closing remarks
	Dr. Engin Vrana, Scientific Project Coordinator, CEO Spartha Medical

LOCATION AND CONTACT DETAILS

Live Location

CRBS, Centre de Recherche en Biomédecine de Strasbourg 1 Rue Eugène Boeckel 67000 Strasbourg FRANCE

Online

Via Microsoft Teams link, sent after registration

Contact Details

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REGISTER



ABOUT PANBIORA



The rating system developed within the PANBioRA project allows biomaterial risk assessment at nano-, microand milliscale ranges.

A microfluidic system integration combining several real-time monitoring means (electrochemical sensors, antibody-based cytokine detection, mini-microscopes) and data-fitting will provide more and continuous information using less biomaterial and smaller biological samples.

Beyond the different testing modules, the PANBioRA system includes computer simulations and multiscale modelling supporting the experimental system and contributing to the evaluation of risks that are difficult to be assessed experimentally. Web-based modelling tools will perform the data analysis of the outputs from all modules and simulations.

In a final step, the risk assessment is reinforced by the PANBioRA risk radar, which includes experimental parameters generated by the different modules as well as external risk factors to monitor arising risks. This allows to individually and reliably decide on the implementation of a specific biomaterial.

Following the development and technical validation of the system pre-clinical tests relevant to biomaterial related risks are being performed in order to prove the systems' efficacy.

COMPONENTS OF THE BIOMATERIALS RISK ASSESSMENT SYSTEM

BIOMATERIAL TESTING Biochemical responses of cells to the ORGAN ON A CHIP Real-time electrochemical sensing Respiratory epithelium, gut and liver presence of biomaterials will be will be used to determine the cellular ANTIBODY TESTING tissues will be miniaturized into monitored in real time and by response to a given biomaterial. A set Patient-specific interactions between integrated biosensors. In addition, of cytokines released to the organoids on chip to allow the biomaterials and the immune system will PANBioRA includes cytotoxicity and extracellular environment will be used determination of possible systemic as hinmarkers to assess the cell be assessed using the ground-breaking genotoxicity tests with microscopic and target organ-specific effects in Mimotope Variation Analysis technology. real-time monitoring capacities response to different biomaterials. both healthy and disease conditions. Top entries Front entry Sensors Organ Sensor on a chip MILLISCALE NANOSCALE **MICROSCALE** PANBIORa Risk Rating **SIMULATIONS DATA ANALYSIS RISK RATING** The readouts of the modules will be fed Potential risks that are difficult to assess PANBioRA will develop a risk rating experimentally - such as explosion hazards or system that will display the suitability into a model developed within PANBioRA

within the project.



full-scale biomaterial/microbiota interactions

- will be covered by simulations developed





For further information and to follow our project's progress please visit our social media channels and

www.panbiora.eu

CONSORTIUM

PANBioRA Consortium is formed by 17 partners from 11 EU countries, which are active in academia and science, industry, technology transfer as well as clinical trials.

using known biocompatible and hazardous

materials to provide a quantitative risk



















of the tested biomaterial.













CONTACT

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