

# HORIZON 2020

## HEALTH PARTNERING DAY 2017

HEALTH, DEMOGRAPHIC CHANGE & WELLBEING



7 DECEMBER 2017, BRUSSELS

### **Better Health and Care Session**

Topic 1: Advanced therapy of type 1 diabetes  
(SC1-BHC-09-2018 )

Topic 2: New testing and screening methods to identify  
endocrine disrupting chemicals  
(SC1-BHC-27-2018)

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# BioTalentum Ltd

## Company expertise



- BioTalentum Ltd (BIOT) is a RTD intensive SME, focusing on human induced pluripotent stem cell (iPSC) derived technology platforms for medical solutions (disease models and regenerative medicine) and *in vitro* toxicology.
- We have excellent technology for patient-specific iPSC generation, gene editing (eg. CRISPR/Cas9), 2D and 3D (organoid) differentiation into neuronal, beta-cell, MSC etc. directions.
- BIOT scientifically coordinated 9 FP7 projects. Currently involved in 9 H2020 projects, coordinating one RIA. BIOT has a Consulting Branch specialized on professional support of H2020 project submissions and management.

# Project idea 1: Advanced therapy of Type 1 Diabetes by Xeno- and hiPSC-derived Islet Transplantation.



*Call: Innovation platforms for advanced therapies of the future SC1-BHC-09-2018*

- BioTalentum coordinates the „iNanoBIT” RIA project on Type 1 diabetes treatment with xenoislets and human iPSC-derived beta-cells, use of nano-markers for non-invasive imaging after transplantation into pig models.
- The objective of the current proposal is to overcome bottlenecks of the current transplantation technologies by extending the survival of the transplanted islets and scaling up the production of differentiated cells.
- The core consortium exist for porcine models and islet production, and we are seeking additional partners for cell encapsulation, 3D printing and scaled-up hiPSC and organoid differentiation areas.

## Topic 2: New testing and screening methods to identify endocrine disrupting chemicals (call: SC1-BHC-27-2018)

- BioTalentum Participates the EuToxRisk H2020 flagship project, to replace animal testing toxicology methods with *in silico* and *in vitro* methods.
- The objective of the current proposal is the development of novel *in silico* and *in vitro* testing and screening methods to identify endocrine disrupting chemicals, focusing on the Thyroid axis, developmental neurotoxicity, metabolic disorders, female reproduction, non-genotoxic carcinogenicity.
- The core consortium exist and we are seeking additional partners for ED epidemiological and field monitoring data, effects on the thyroid axis and non-genotoxic carcinogenicity areas, using *in vitro* and *in silico* methods.

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