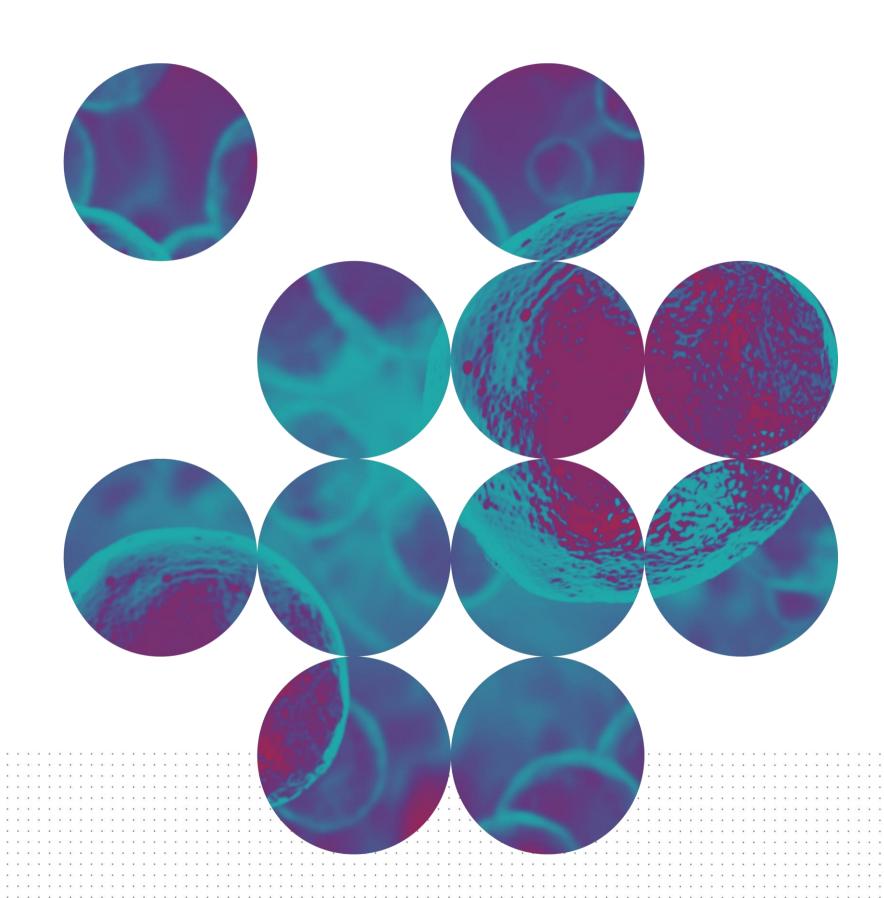


## **HUMAN CELL DESIGN**

**Experts in Diabetes Research and Drug Discovery** 

Hamza OLLEIK, PharmD, PhD

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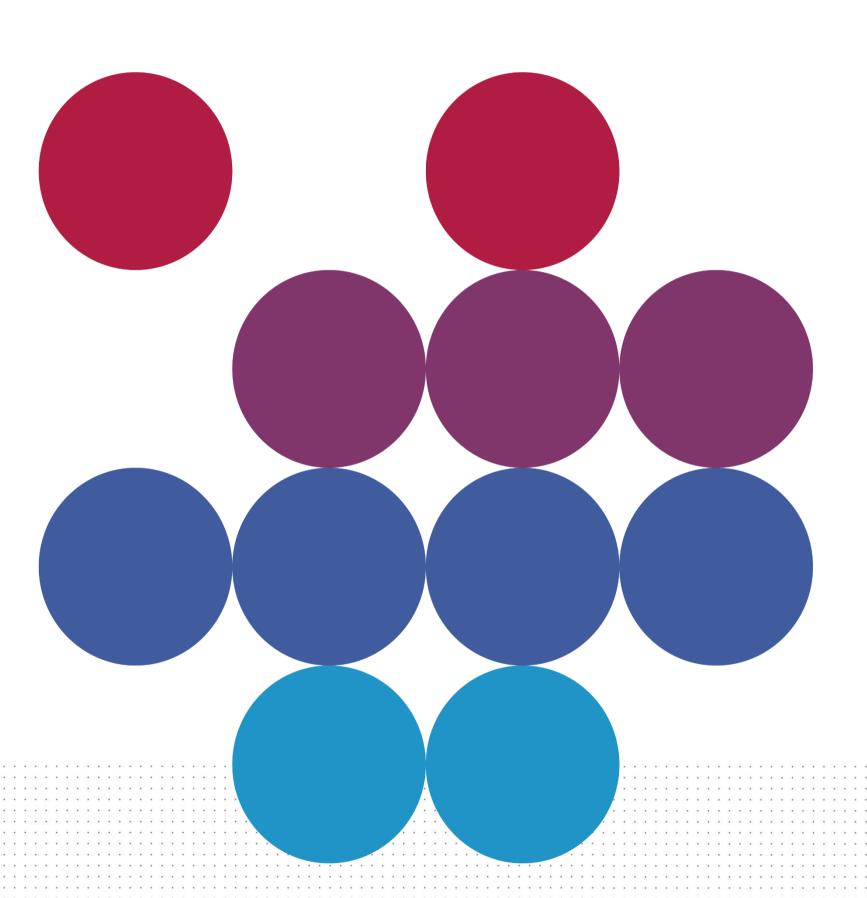




**SO22 - 472** 

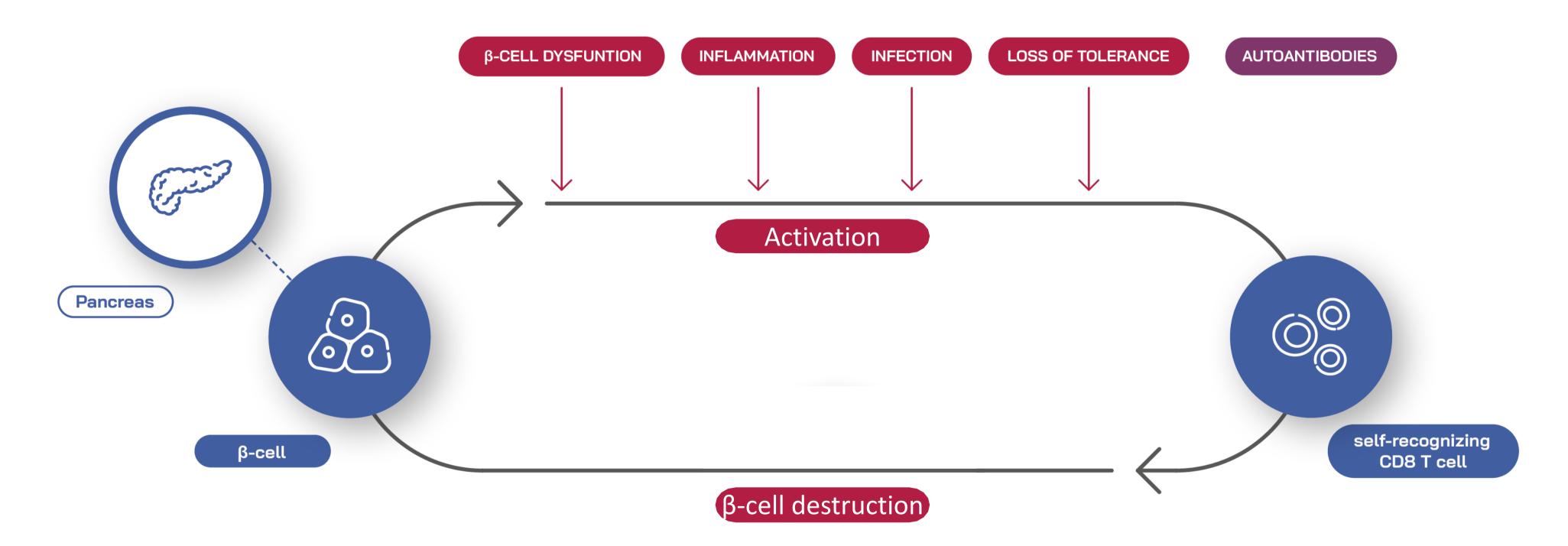
Endoc- $\beta$ H5: a highly functional human pancreatic beta cell that can model type 1 diabetes T-cell mediated beta cell killing

HLA-A2 EndoC-βH5®



## Beta cell destruction is a central component of Type 1 Diabetes and is mediated by

## **CD8 T cell cytotoxicity**



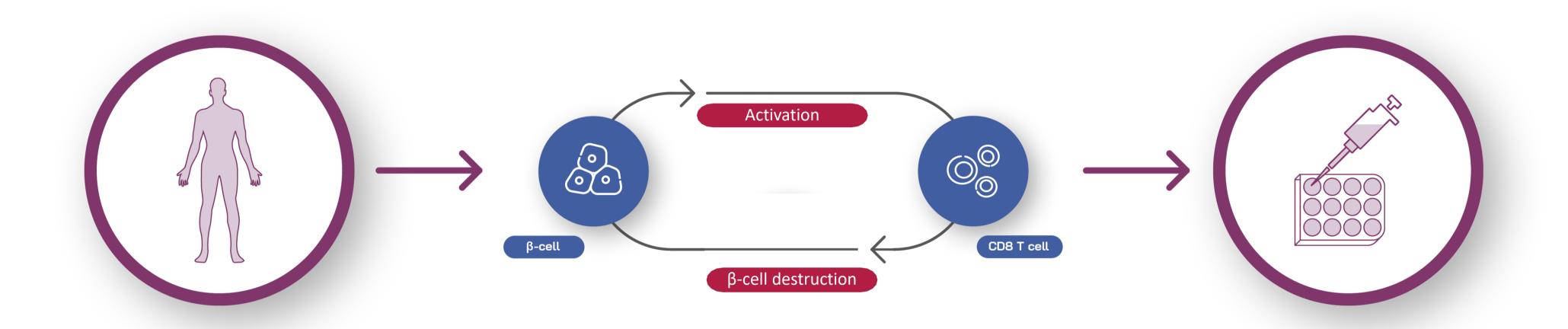


: Hamza:OLLEIK, :PharmD,:PhD :

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3

## Researchers need translational tools that physiologically model human T1D pathogenesis



**HUMAN DISEASE** 

DISEASE MECHANISM

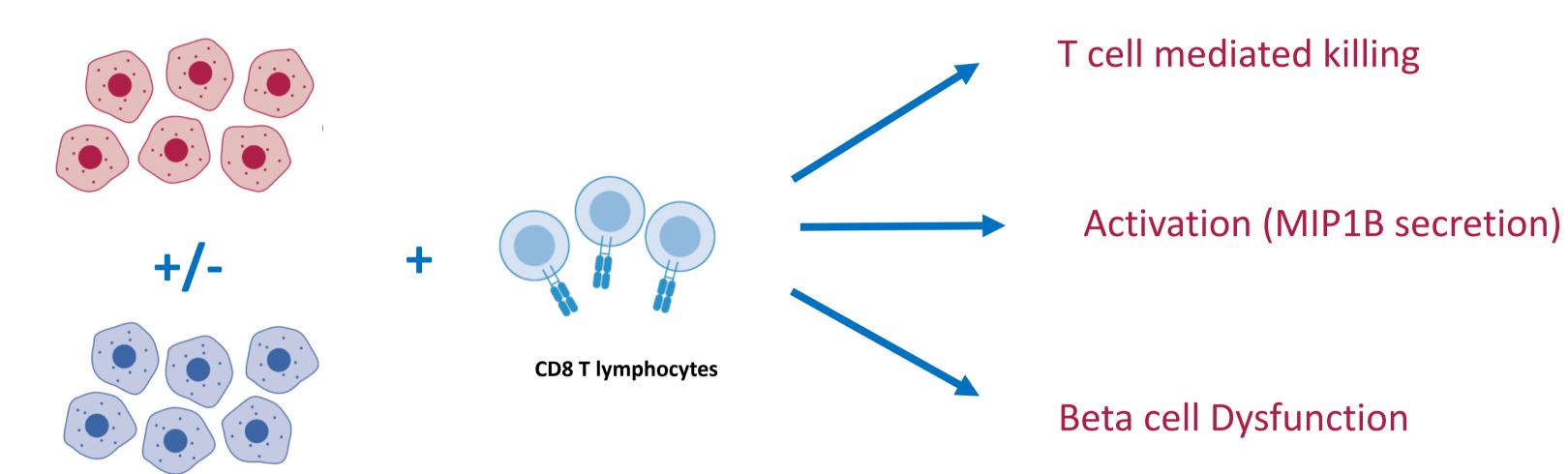
IN VITRO MODELING



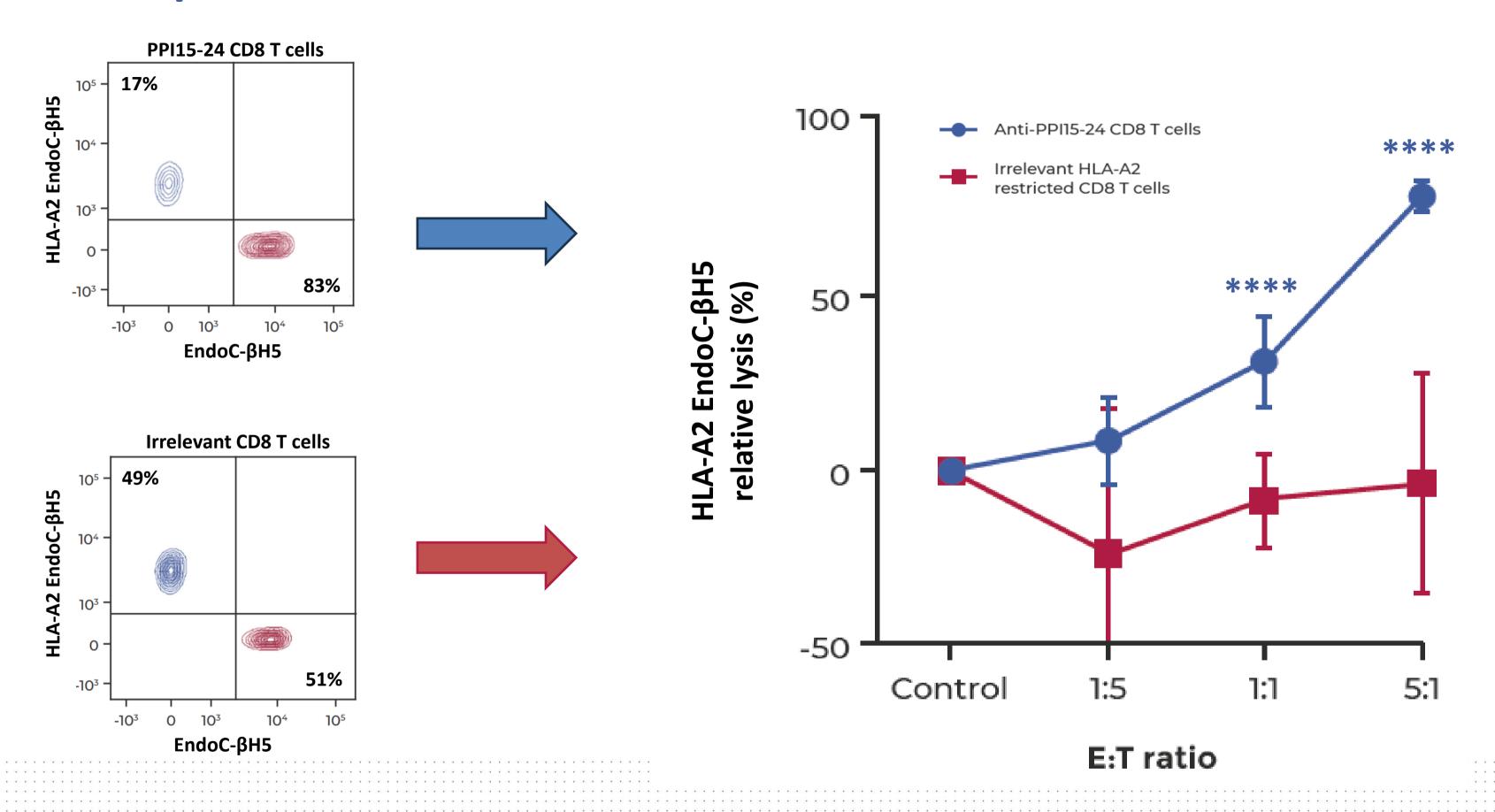
## HLA-A2 EndoC-βH5® and HLA-A2 restricted CD8 T lymphocytes: a translational tool for T1D auto-immune

### disease modelling

#### EndoC-βH5



HLA-A2 EndoC-βH5

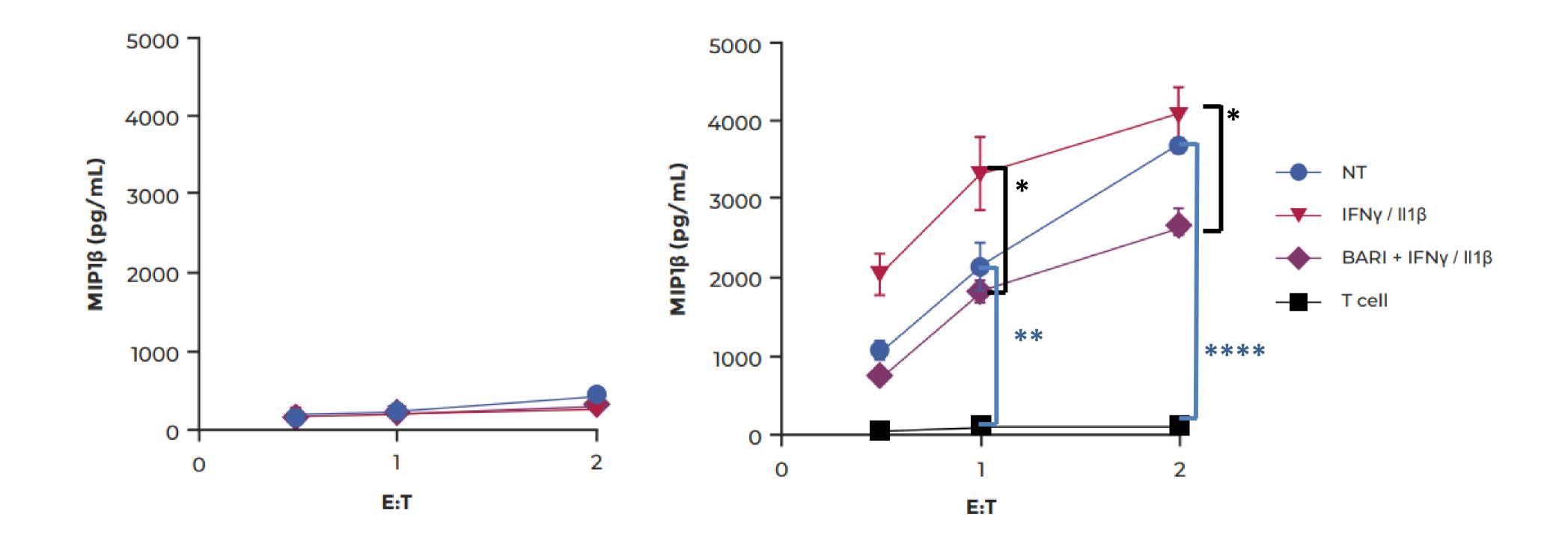


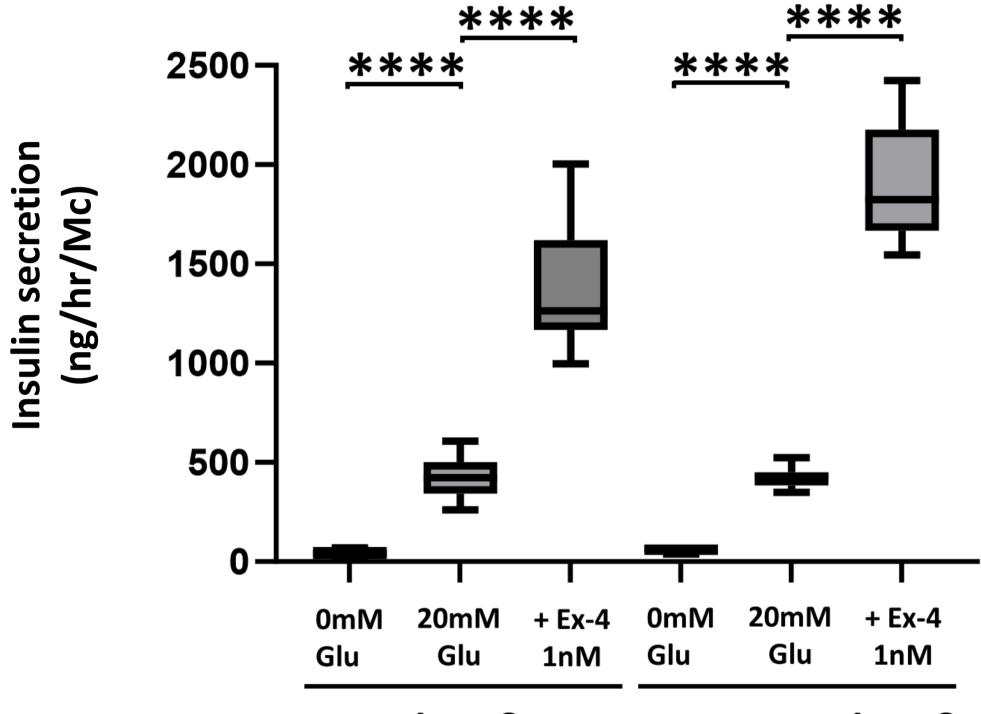


ENDOC-BH CELLS

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EndoC-βH5 HLA-A2 EndoC-βH5



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## EndoC- βH5®:

- Relevant primary like human beta cell models (Insulin secretion)
- Unlimited access
- Large scale
- Batch to Batch reproducibility

## Type 1 Diabetes Assay using HLA-A2 EndoC-βH5®:

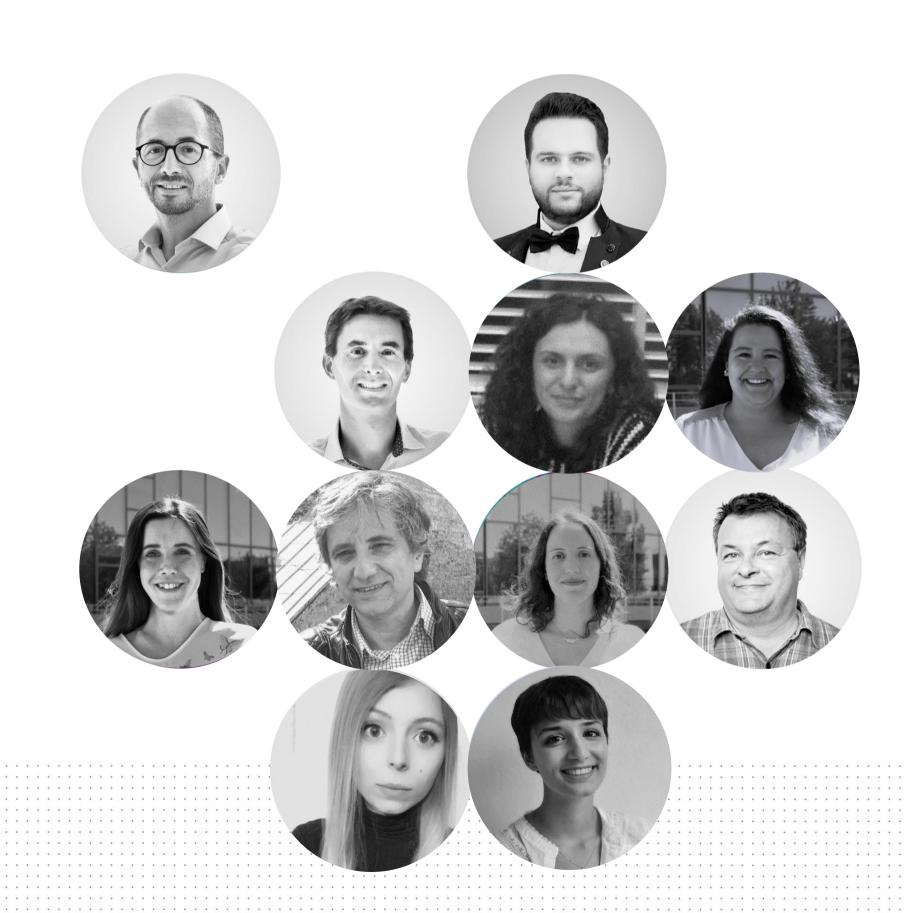
- Robust human T1D assay
- Physiological model (disease relevant TCR, endogenous peptide presentation)
- Reproducible data
- Flexibility





# Our Team

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