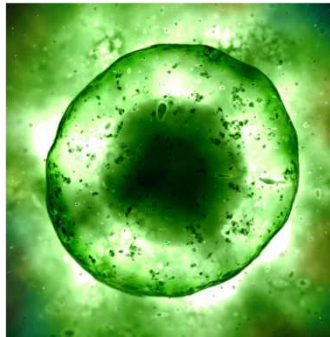




Developing the first tolerogenic vaccine



# Idogen AB

- Founded in 2008 based on research from Lund University
- SME located in Lund, Sweden
- Publicly traded in Stockholm since June 2015
- Development project for hemophilia A in preclinical phase
- First clinical studies planned to start in 2017

# Tolerogenic vaccine

Based on autologous dendritic cells.

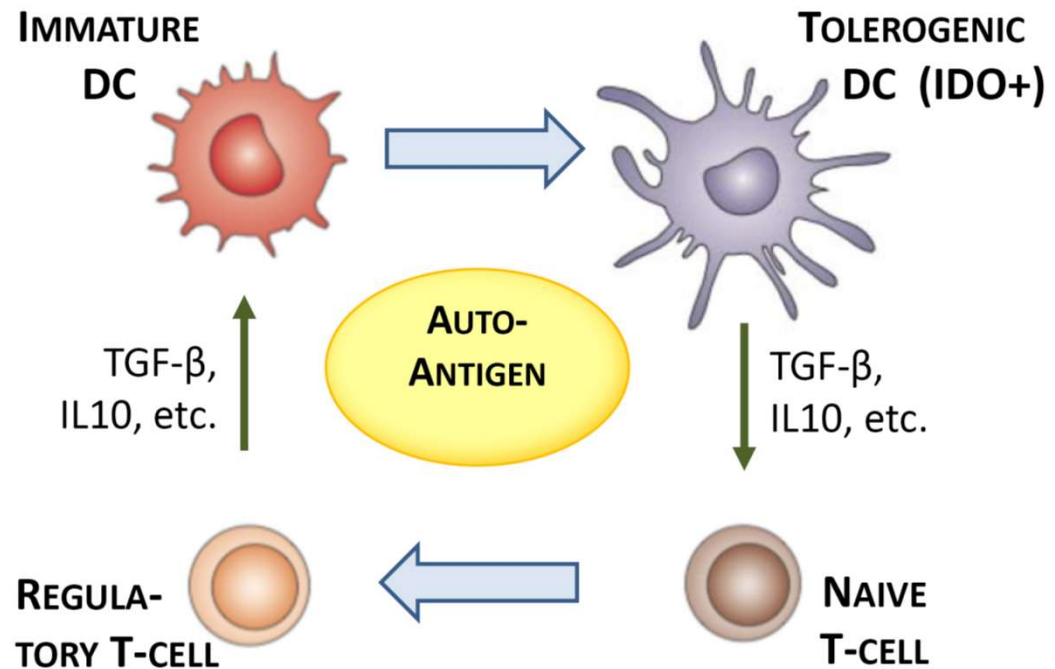


Dendritic cells are key cells in balancing immunity versus tolerance

# The enzyme IDO1

## An essential part of the "language" of the dendritic cell (DC)

- The enzyme IDO1 is expressed by the DCs when immune tolerance is communicated
- Impacts DCs and T-cells in the proximity
- Trp depletion, Trp-catabolites, TGF- $\beta$ , IL10, etc. play a role
- Creates a positive loop

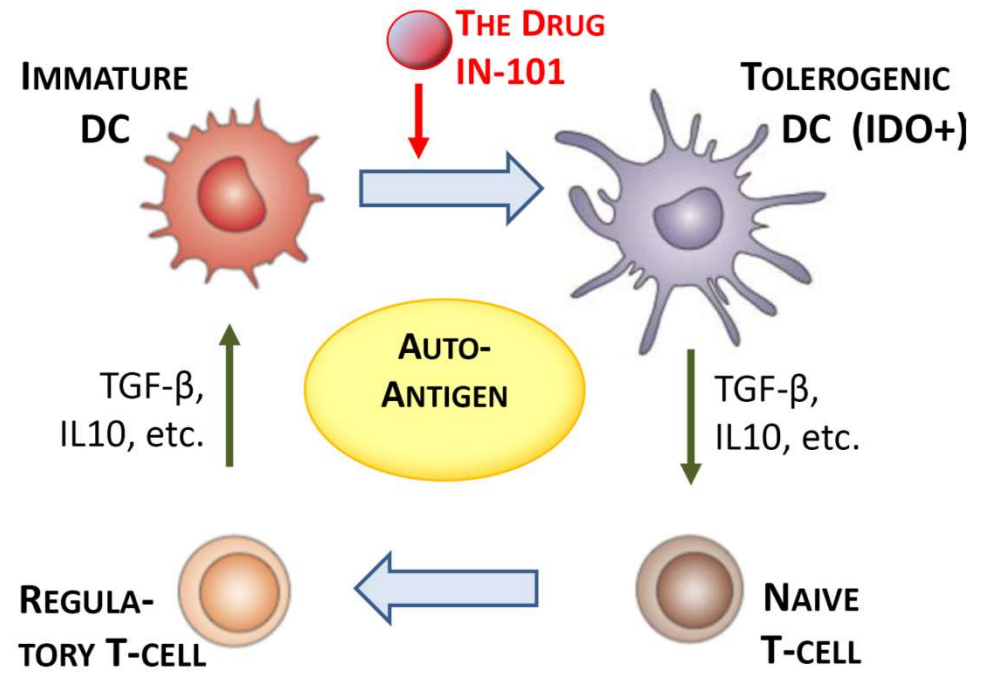


IDO 1= Indoleamine 2,3 dioxygenase 1

# Zebularine upregulates IDO1

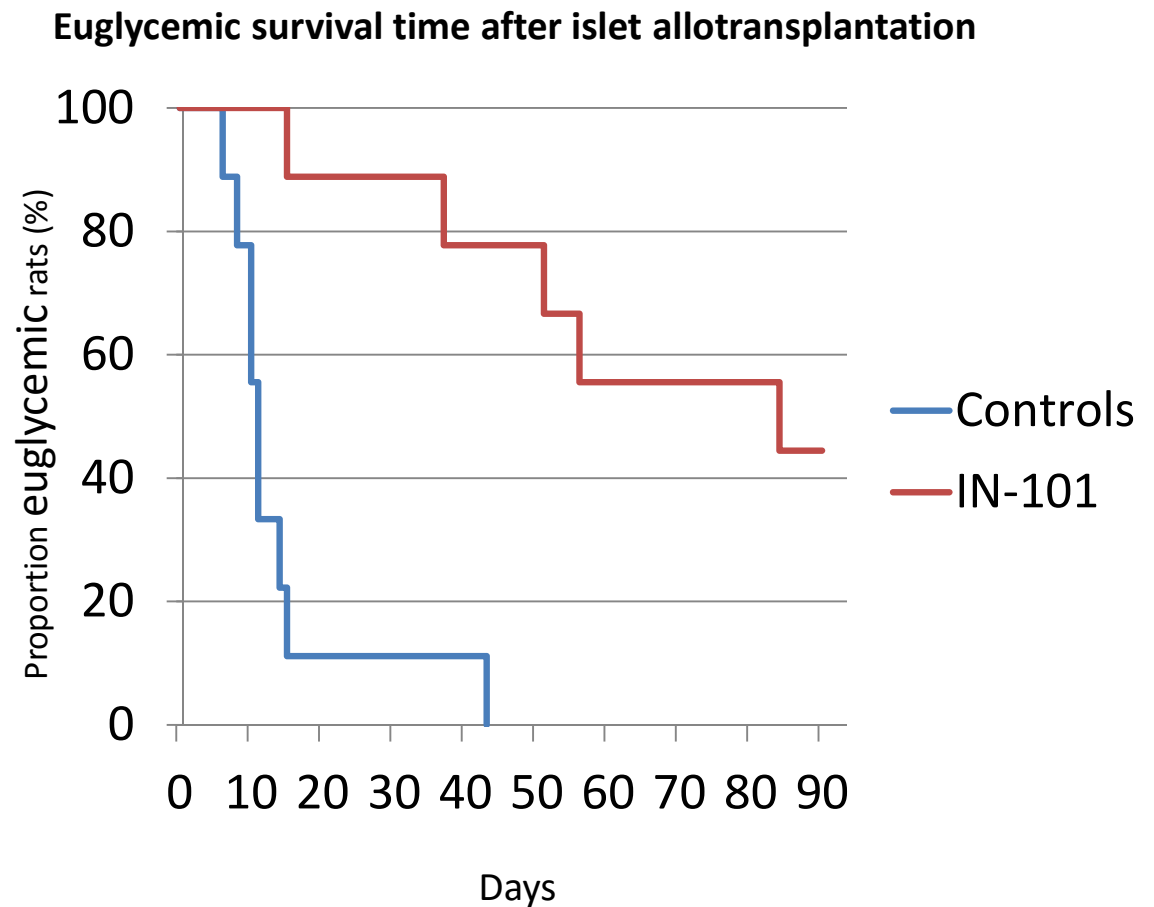
## Our invention

- Zebularine (IN-101) upregulates IDO1
- The mechanism is most likely epigenetic
- Zebularine is a well studied drug candidate (NCI/NIH)



# Proof of principle in model of transplantation

- Transplantation of allogeneic islet cells to diabetic rats, 9 valid animals in each group
- 2 weeks treatment with zebularine (IN-101) given i.p. from day 6
- Highly significant statistical difference ( $p < 0,001$ ) between the groups
- Study completed day 90



Nittby *et al.* 2013

# Project pipeline

Indication	In vitro research	In vivo research	Preclinical development	Phase I/II development	Phase III development
<b>Hemophilia A</b> Inhibiting antibodies towards factor VIII					
<b>Reumatoid arthritis</b>					
<b>Transplantation</b>					
<b>Undisclosed indications</b>					

# The team behind Idogen

## **Lars Hedbys, CEO**

Ph D. 25 years experience from senior and executive positions in life science industry, co-founder of Idogen

## **Per-Ola Forsberg, CFO**

MBA with over 20 years experience from senior and executive positions in life science, both private and listed companies

## **Peter Ericsson, CSO**

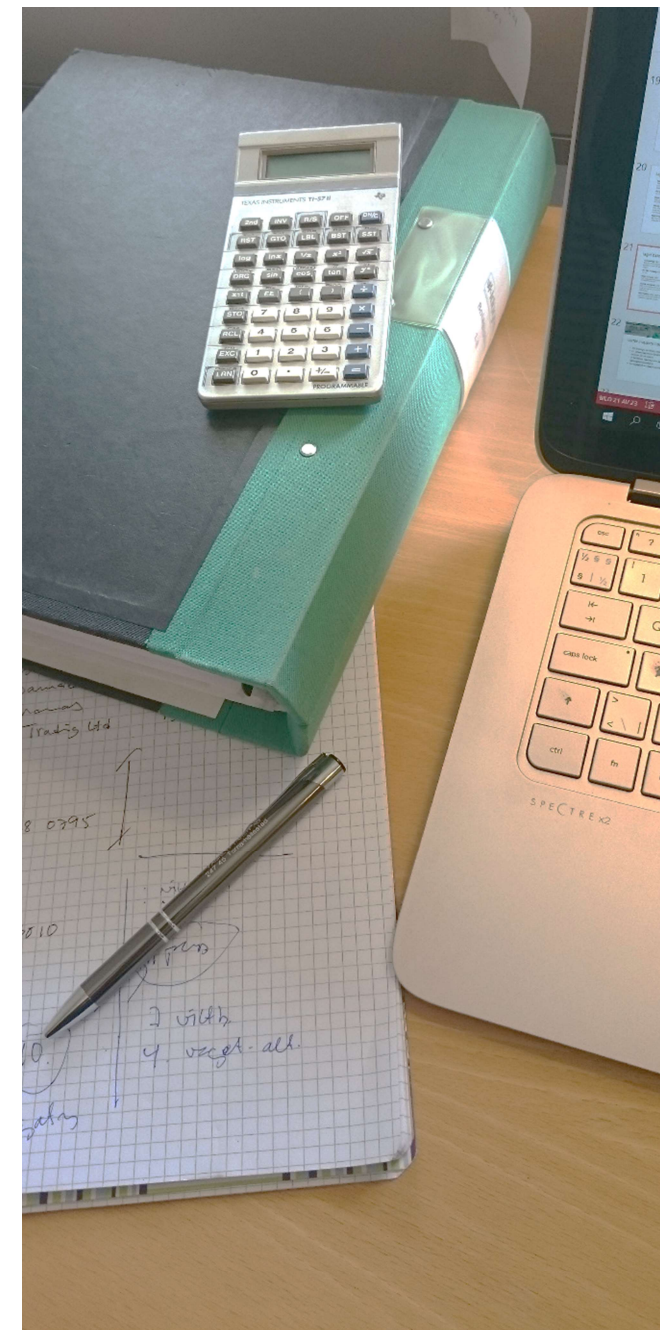
PhD in pharmacology, Laboratory director of the Rausing laboratory at Lund University

## **Dennis Henriksen, CTO**

PhD, 20 years experience from senior and executive positions in life science with focus on GMP manufacturing of biologics

## **Neil Thomas, CBO, Head of IPR strategy**

Adj. Prof. 15 years experience from IPR and venture capital within life science







[www.Idogen.com](http://www.Idogen.com)