

LEVICURE

## REVERSE THE IRREVERSIBLE

Proprietary Oral Fixed dose combination  
for Type 1 Diabetes Mellitus (T1D)

Series A

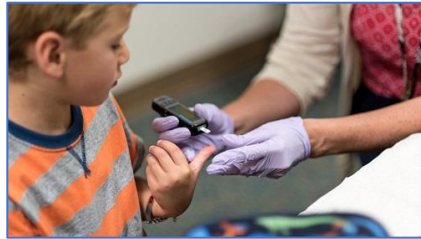
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Type 1 diabetes is a life-threatening chronic disease and huge burden to T1D patients and their families

>4 hours needed daily for diabetes self-care

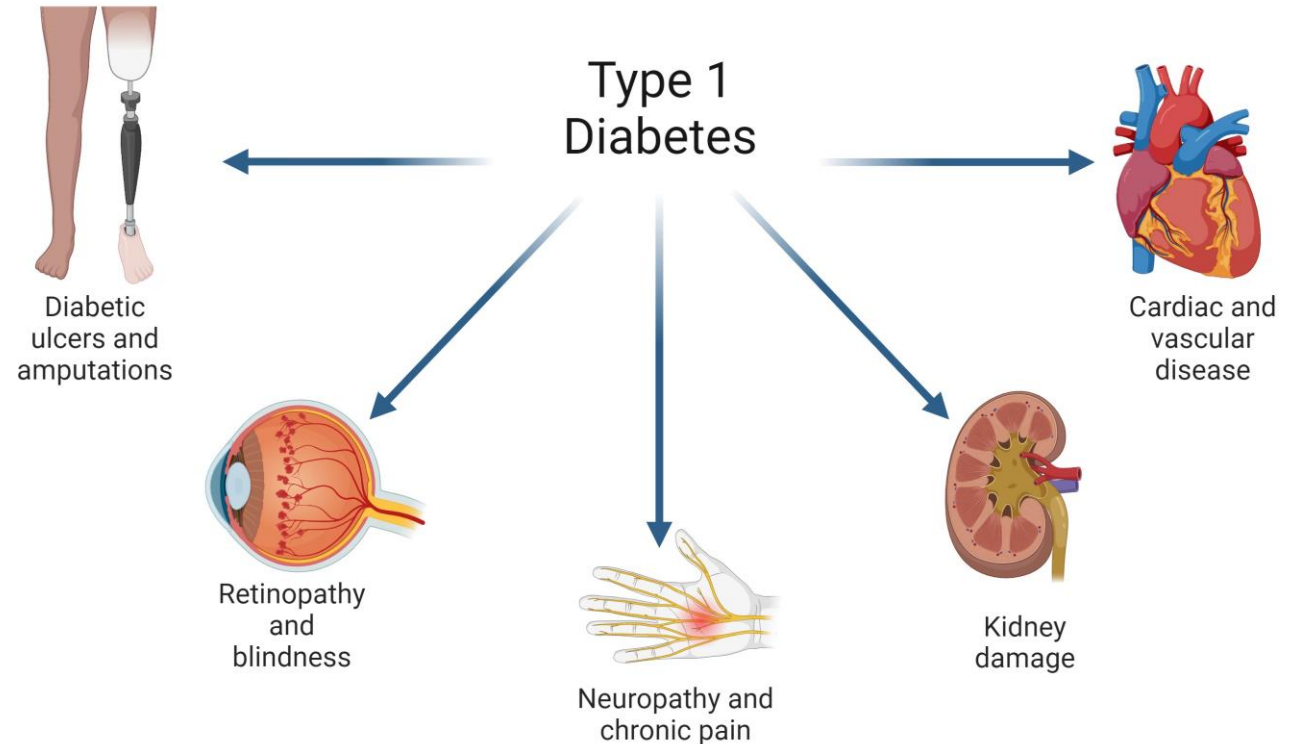


lose 12.2 years of life expectancy

3 times more likely to be hospitalized



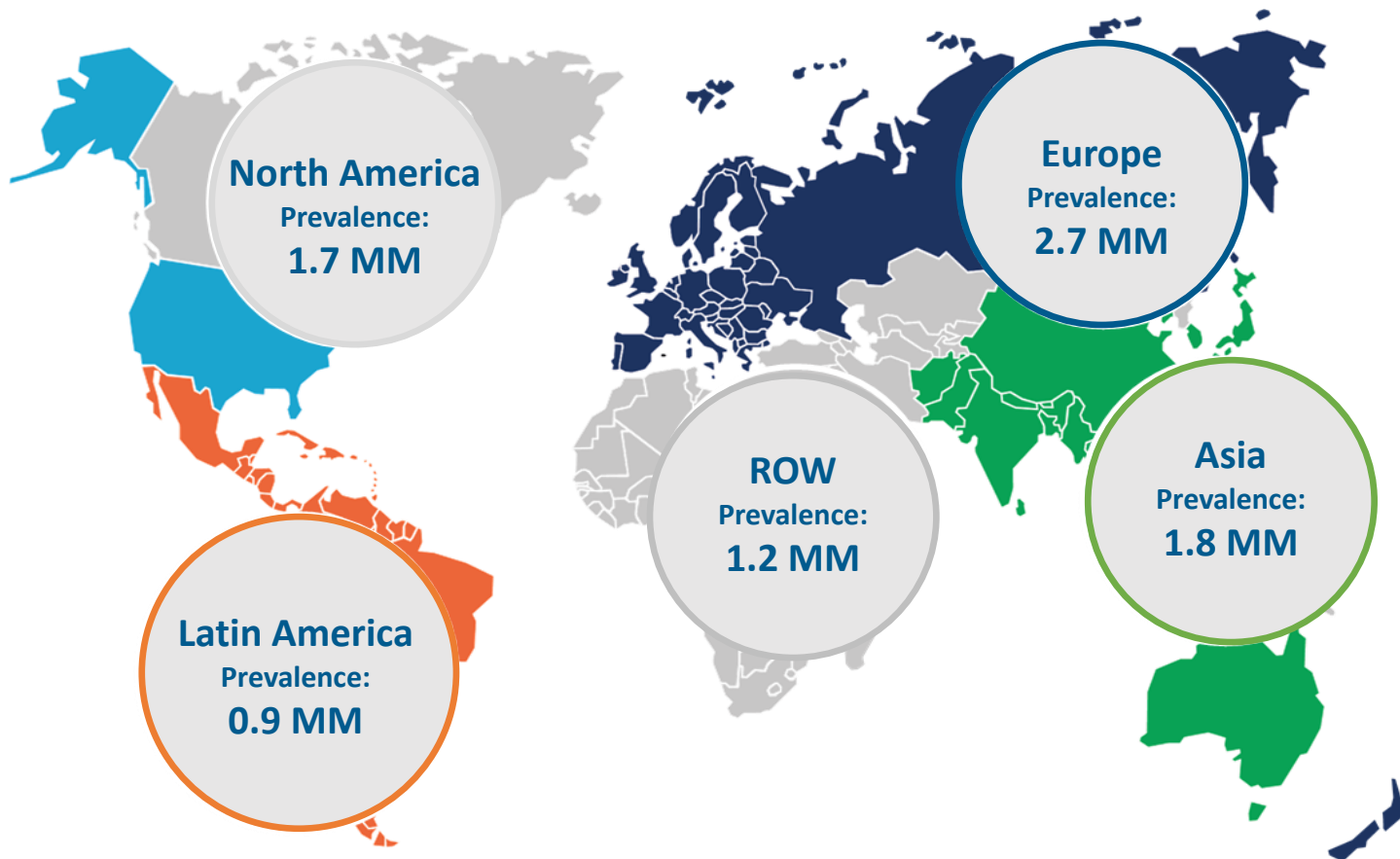
## Complications of Type 1 Diabetes





T1D affects over 8.4M people globally with a tremendous economic burden of \$110 billion/annum

Tremendous economic burden with growth rates exceeding population growth



Worldwide economic burden of type 1 diabetes is **\$110 B**

**0.5%** of the US population diagnosed T1D

**6%** market CAGR 2021-2025

Significant growth in number of patients in the USA in 4 years:

- 2017 - 1.25 million Americans
- 2021 - 1.4 million Americans

Diagnoses occurred most frequently between the ages of 5 and 14:

- Ages 10-14: 33.5%
- Ages 5-9: 27%



100 years since the discovery of insulin and patients are still waiting for a safe and scalable treatment for Type 1 diabetes

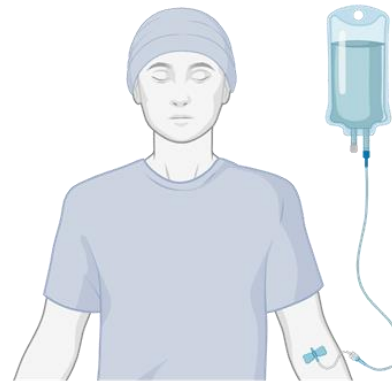
**Insulin is not a cure, it is disease management!**  
 Currently **NO** safe and scalable treatment available for diagnosed T1D patients

**Insulin therapy:  
 Advancement and devices**



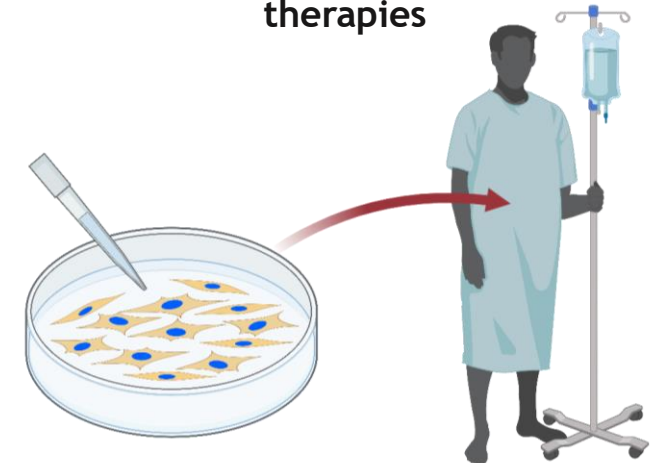
- Disease management
- Not a cure
- Gradual pancreatic deterioration

**Immune therapies**



- Once-in-life treatment
- Substantial adverse events
- Only delay of the onset

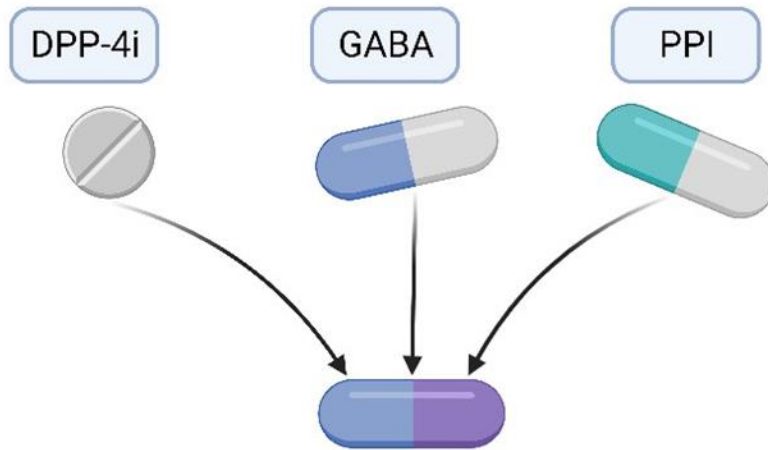
**Beta-cell replacement  
 therapies**



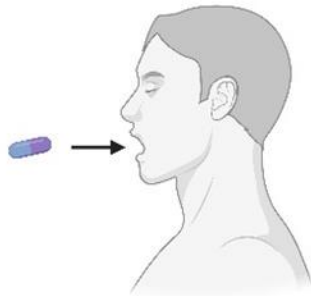
- Invasive treatment
- High risk
- Non-scalable



With a single oral tablet Levicure allows T1D patients to facilitate remission, avoid T1D complications and significantly improve their quality of life!



Fixed dose combination to be taken **orally ONCE a day**



Fixed Dose Combination (FDC) for patient convenience:

### 3-in-1 SINGLE ORAL DOSAGE FORM

- Ensure **therapeutic safety and correct dosage**
- Optimize **convenience, compliance and adherence** for each patient
- **Encourage physicians** to prescribe safe and effective treatment

We help T1D patients regain their normal quality of life!



# Levicure published articles to prove the efficacy of combination treatment in NOD mice and diagnosed T1D patients



**T1D retrospective study in Israeli clinic (19 patients)**



**150 NOD mice**

frontiers | Frontiers in *Endocrinology*

TYPE Original Research  
PUBLISHED 24 May 2023  
DOI 10.3389/fendo.2023.1171886

Check for updates

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RECEIVED 22 February 2023  
ACCEPTED 09 May 2023  
PUBLISHED 24 May 2023

**Efficacy of combination therapy with GABA, a DPP-4i and a PPI as an adjunct to insulin therapy in patients with type 1 diabetes**

Alexander Rabinovitch<sup>1†</sup>, Daniil Koshelev<sup>2,3†</sup>, Francisco Alejandro Lagunas-Rangel<sup>2</sup>, Liudmila Kosheleva<sup>2,3</sup>, Tali Gavra<sup>4</sup>, Helgi B. Schiöth<sup>2\*†</sup> and Shmuel Levit<sup>3,5†</sup>

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TYPE Original Research  
PUBLISHED 21 October 2022  
DOI 10.3389/fendo.2022.1028114

Check for updates

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**Triple drug therapy with GABA, sitagliptin, and omeprazole prevents type 1 diabetes onset and promotes its reversal in non-obese diabetic mice**

Francisco Alejandro Lagunas-Rangel<sup>1†</sup>, Daniil Koshelev<sup>1,2†</sup>, Andrej Nedorubov<sup>1</sup>, Liudmila Kosheleva<sup>1,2</sup>, Vladimir Trukhan<sup>3</sup>, Alexander Rabinovitch<sup>4</sup>, Helgi B. Schiöth<sup>1\*†</sup> and Shmuel Levit<sup>2,5†</sup>

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**Triple combination promotes full remission in 70% of recent diagnosed patients and significantly increases C-peptide by 145%**

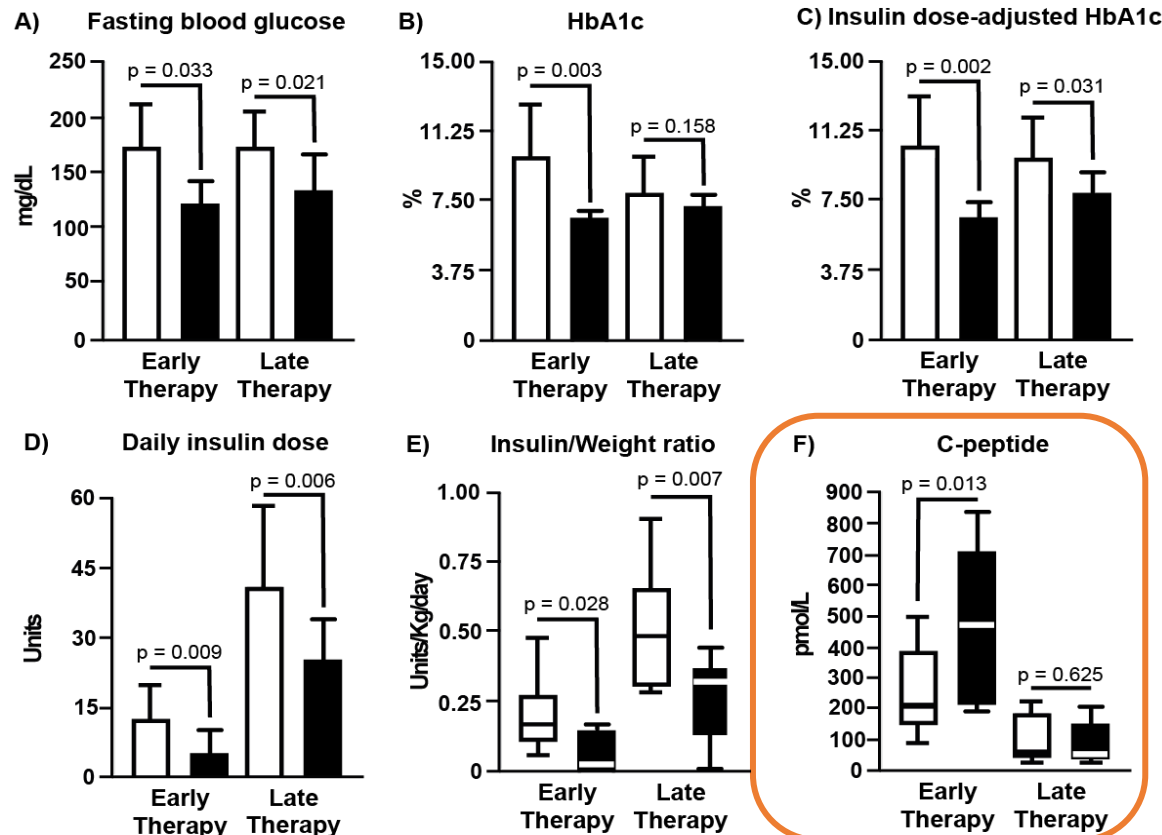
**Triple combination is significantly superior to all double-combinations**

In collaboration with Uppsala University and Assuta Medical Centers

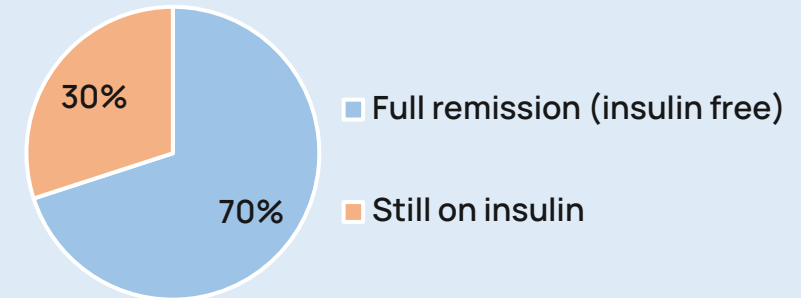


Triple Therapy proof-of-concept in patients showed significant reduction in insulin demands, HbA1c levels and increase of fasting C-peptide resulting in 70% of patients in recent onset group becoming insulin

Outcomes of adjunct combination drug therapy with GABA, a DPP-4i and a PPI in patients with type 1 diabetes after 32 weeks



Share of patients in full remission in recent onset group (%)



Recent onset T1D group (10 patients)

- Reduced FBG by 25%
- Reduced HbA1C by 38%
- Reduced insulin demands by 69%
- Increased C-peptide by 145%

Advanced T1D group (9 patients)

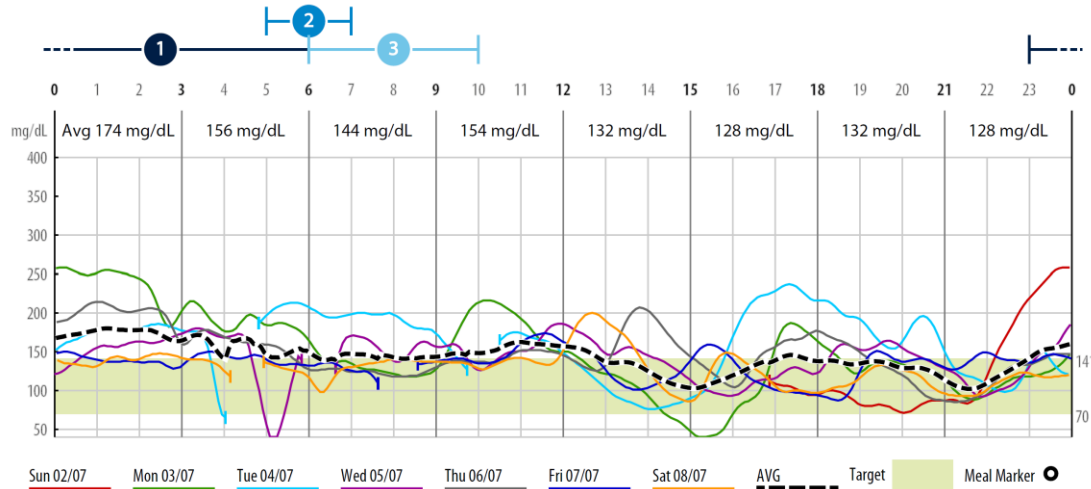
- Reduced FBG by 19%
- Reduced insulin demands by 38%

Early therapy - 10 patients; Late therapy - 9 patients



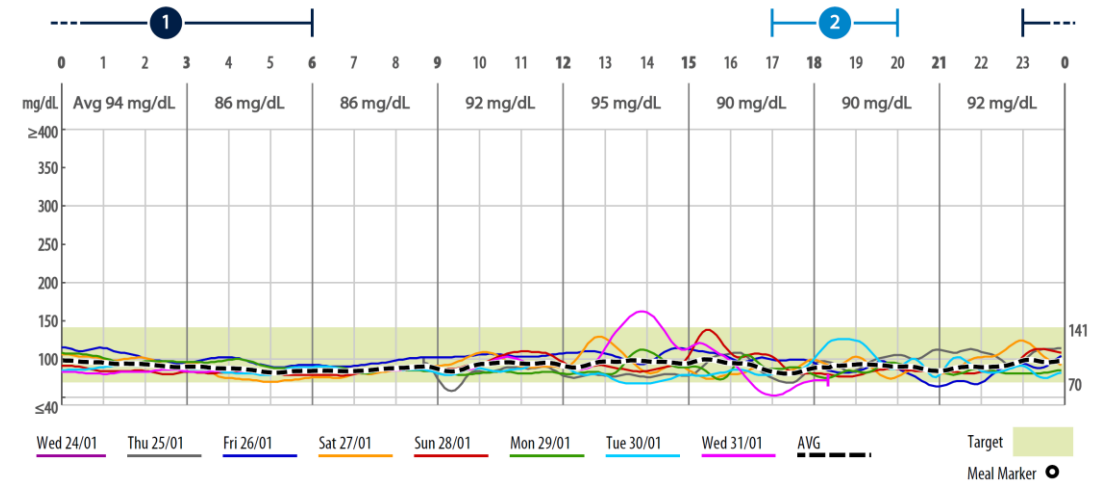
# Example of successful patient results after 29 weeks of treatment

## Before therapy



**Insulin = 12 units**  
**HbA1c = 8.5%**  
**Fasting BG = 130 (mg/dl)**

## After 29 weeks of TT

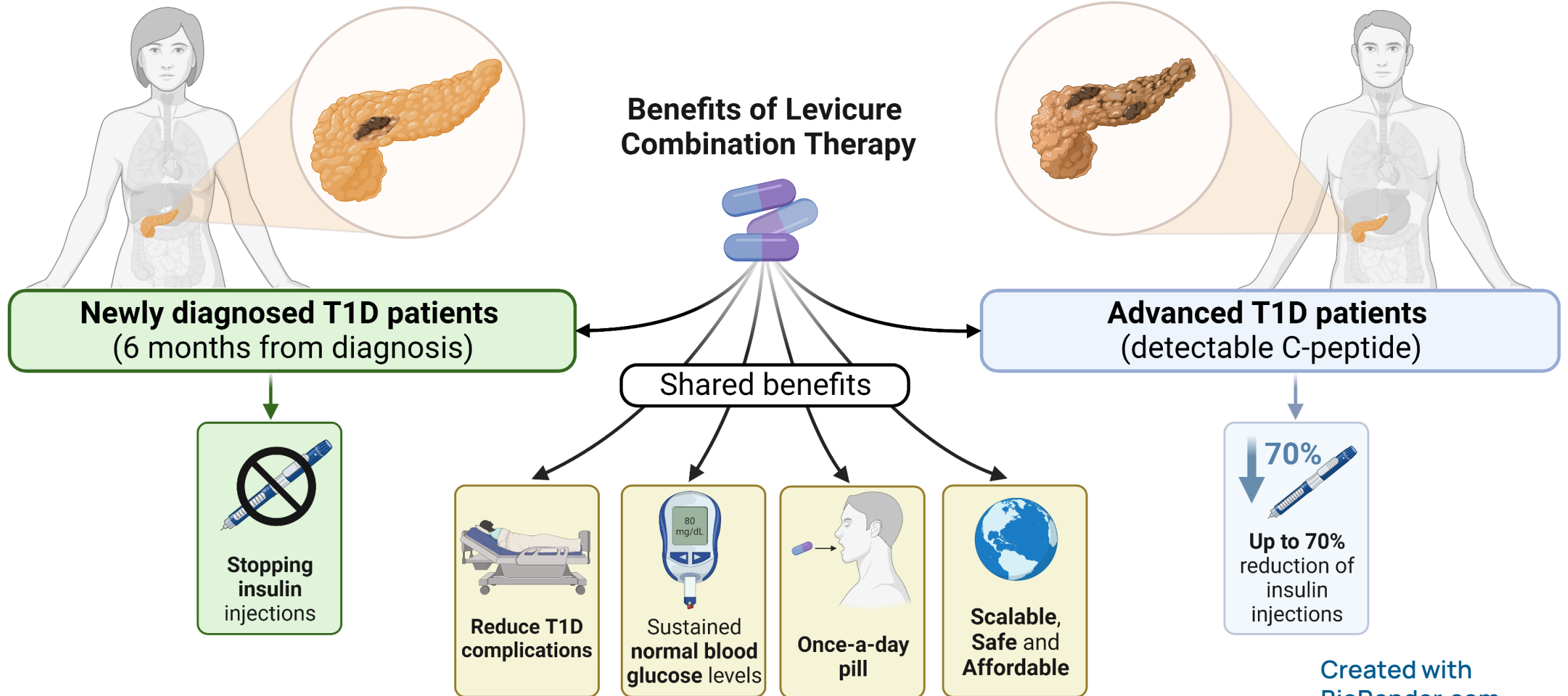


**Insulin = 0 units**  
**HbA1c = 5.2%**  
**Fasting BG = 100 (mg/dl)**





Levicure combination therapy has multiple benefits for newly diagnosed and established T1D patients





We secured triple combination patents in the USA and Europe and have eligibility for extensive additional IP protection exclusivities available.

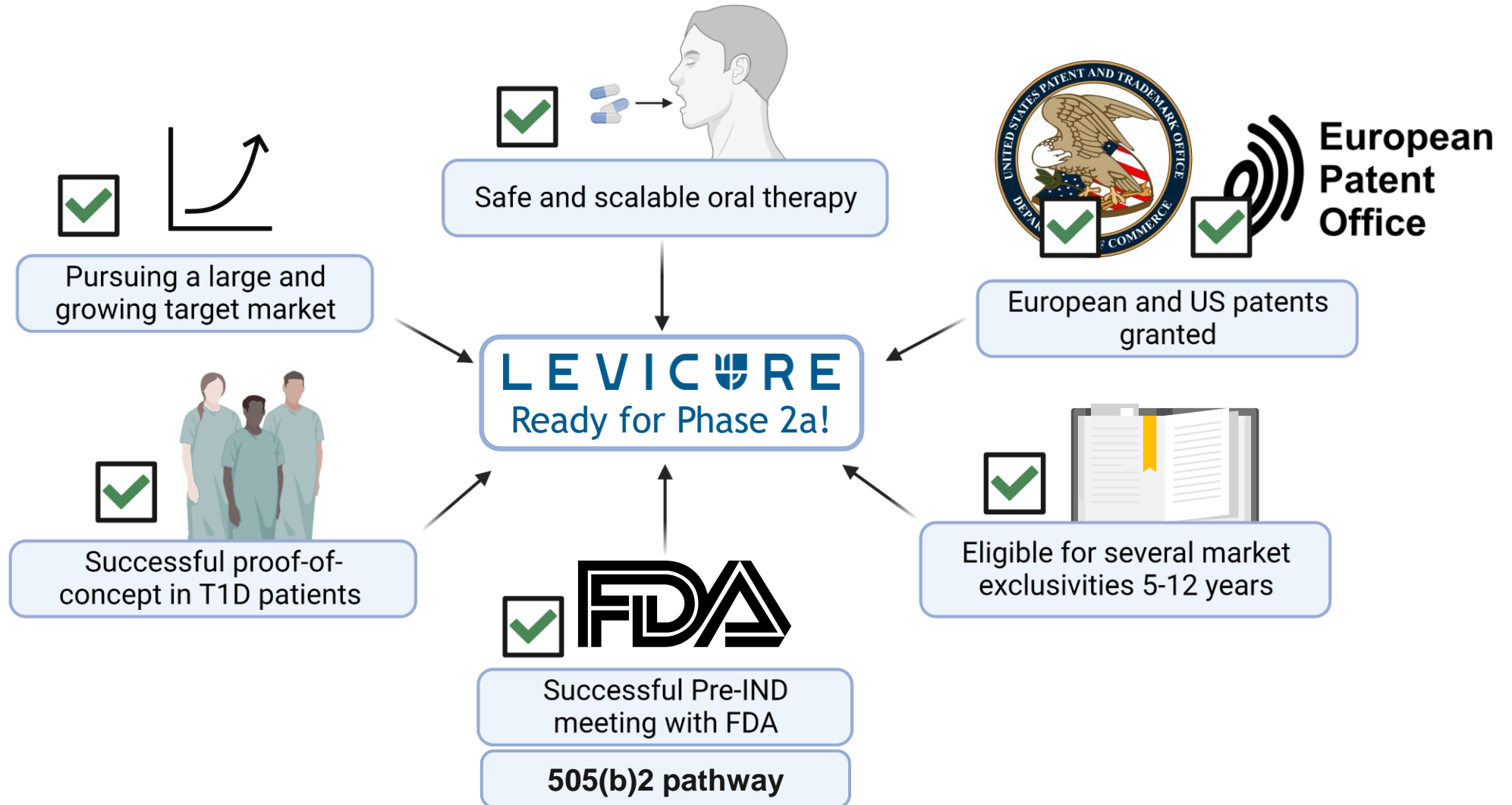


**Strong additional protection with mandatory exclusivities**

USA		Europe
5 years	New Chemical Entity/Data exclusivity	10 (+1) years
7 years	Orphan Drug Exclusivity	10 (+2) years
+ 6 months	Pediatric Exclusivity	+ 6 months



LEVICURE - a company ready to bring a breakthrough therapy to T1D community.





LEVICURE has an experienced team to bring our new, safe and scalable therapy to T1D patients worldwide

**MANAGEMENT TEAM**



**SHMUEL LEVIT**

**Founder & CMO, MD, PhD**

- Over 35 years clinical practice
- Head of Endocrinology, Diabetes & Metabolism Institute, Assuta Medical Centers



**MIKE TEILER**

**Chief Pharmaceutical Officer**

- Former VP Generic R&D, Teva
- Former Group VP, Taro
- Former VP Project Management Sun Pharma
- 35 years pharma experience



**DANIIL KOSHELEV**

**CEO & co-Founder**

- Former CEO in biotech start-up
- 12 years executive and business development



**YAFIT STARK**

**Head of Clinical Development, PhD**

- Former VP Head of Global Clinical Development, Teva
- Former CCO of Innovative R&D, Teva
- 34 years Teva clinical development experience



**LUCY KOSHELEVA**

**General Counsel & co-Founder**

- Former VP Investor relationship and legal (12-year experience)
- Uppsala researcher



**VALENTINE SUKHOVEEVA**

**CFO & Investor Relations**

- Former investment director at private equity fund
- 10+ years of project management roles



**OLGA KARPINCHYK**

**Accounts & Operations**

- Executive at private medical center
- Accounts and operational

**ADVISORY PANEL**



**AMOS ANATOT**

**Strategic and Executive Advisor,**

Former CEO/COO in Global Food and Pharma

- Former VP, Teva Europe
- Former Executive VP, Frutarom
- 30 years top executive experience



**ALEX RABINOVITCH**

**Scientific Advisor, MD, PhD**

- Former Prof. of Medicine and Director of the Diabetes Research at the University of Alberta
- Honored with the Excellence in Clinical Research Award from JDRF, 140+ scientific articles



**ALEXANDER FLEMING**

**Scientific/Regulatory Advisor, MD, PhD**

- Founder of Kinexum, a multi-faceted, strategic advisory firm, who led landmark FDA approvals of the first statin, insulin analog, metformin and other novel therapies
- Represented FDA at ICH, WHO, and other initiatives



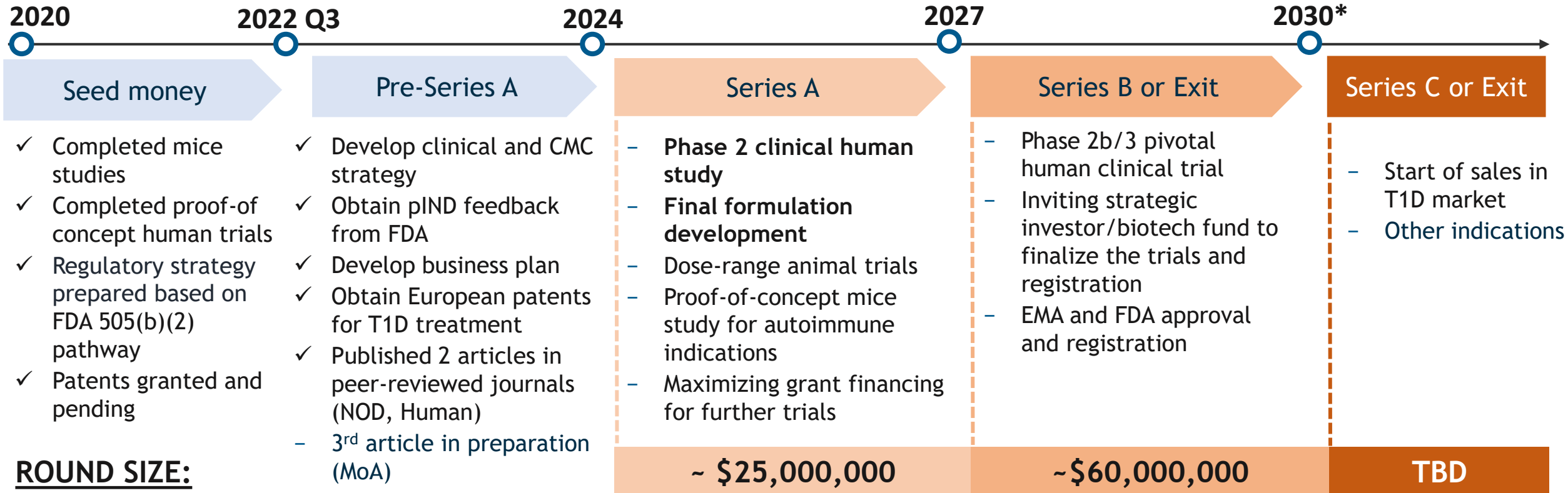
**NAUM TORBAN**

**Clinical Advisor, MD (Endocrinologist)**

- 15 years experience as investigator - clinical trials Eli Lilly, Novartis, BMS and others
- Over 45 years clinical practice



We aim to raise \$25 million in Series A fundraising round



**ROUND SIZE:**

\*Potential for Breakthrough designation will bring us to the market 1 year sooner

Provention Bio (Teplizumab) sale to Sanofi - \$2.9 billion

Thanks for you attention!  
Questions?

LEVICURE

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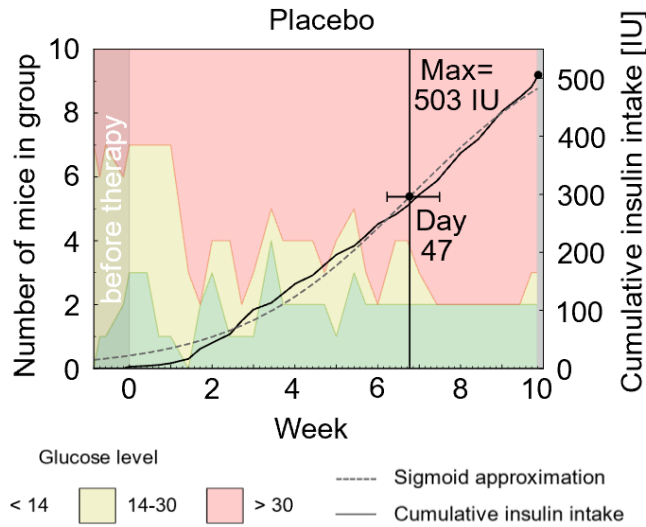
## Glossary

Term	Definition
<b>Type 1 diabetes mellitus (T1D)</b>	An <u>autoimmune disease</u> that originates when insulin producing $\beta$ -cells of the pancreatic islets are destroyed by the <u>immune system</u> , resulting in the inability of body tissues to absorb glucose from the blood to use as energy.
<b>Insulin T1D therapy</b>	The mainstay of type 1 diabetes treatment is the regular injection of insulin to manage hyperglycemia.
<b>GABA</b>	Gamma-aminobutyric acid is the chief <u>inhibitory neurotransmitter</u> in the developmentally mature <u>mammalian central nervous system</u> . Its principal role is reducing <u>neuronal excitability</u> throughout the <u>nervous system</u> . GABA is sold as a <u>dietary supplement</u> in many countries.
<b>DPP4i</b>	Inhibitors of the enzyme dipeptidyl peptidase 4, e.g., sitagliptin approved for use since 2006 in the treatment of type 2 diabetes
<b>PPI</b>	Proton-pump inhibitors (PPIs) are a class of <u>medications</u> that cause a profound and prolonged reduction of <u>stomach acid</u> production. They do so by irreversibly inhibiting the stomach's <u>H<sup>+</sup>/K<sup>+</sup> ATPase proton pump</u>
<b>GLP1 RA</b>	Agonists of the GLP-1 receptor. This class of medications is used for the treatment of type 2 diabetes.
<b>Clinical trials</b>	<u>Pre-clinical- animal tests</u> to provide proof-of concept and initial safety for a drug or therapy. <u>Phase 1</u> - the first step in testing a new treatment in humans. A phase I clinical trial tests the safety, side effects, best dose, and timing of a new treatment. <u>Phase 2</u> - conducted to evaluate the effectiveness and safety of a new drug or drug combination for a particular indication. <u>Phase 3</u> - demonstrates and confirms the preliminary evidence gathered in the previous trials that the drug is, a safe, beneficial and effective treatment for the intended indication. MA (market authorization) - receiving permissions/required registrations to market the therapy.

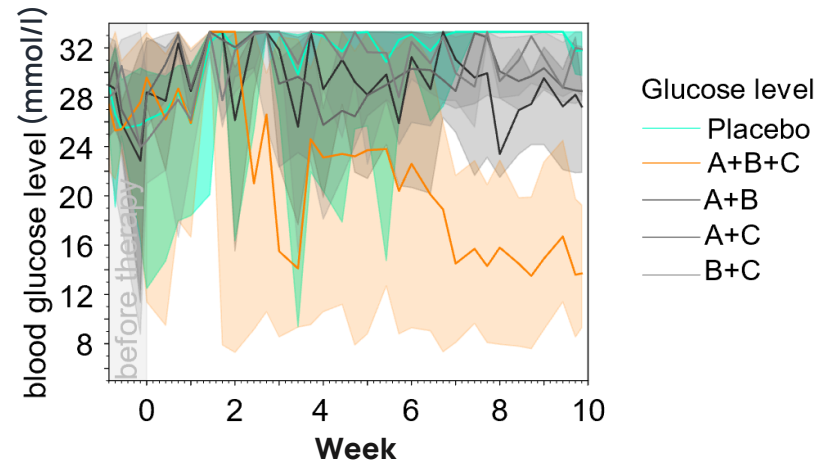


# Triple Therapy (A+B+C) in NOD mice significantly reduced blood glucose and increased C-peptide and own insulin in blood plasma levels in comparison with placebo and all double combinations

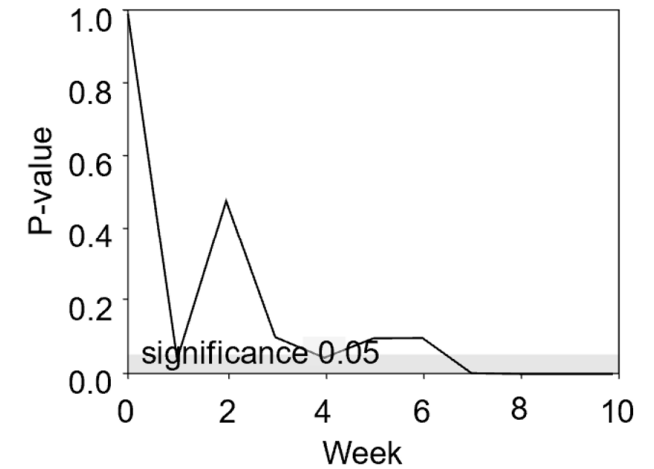
**Cumulative exogenous insulin demands (IU) and number of mice by glucose level**



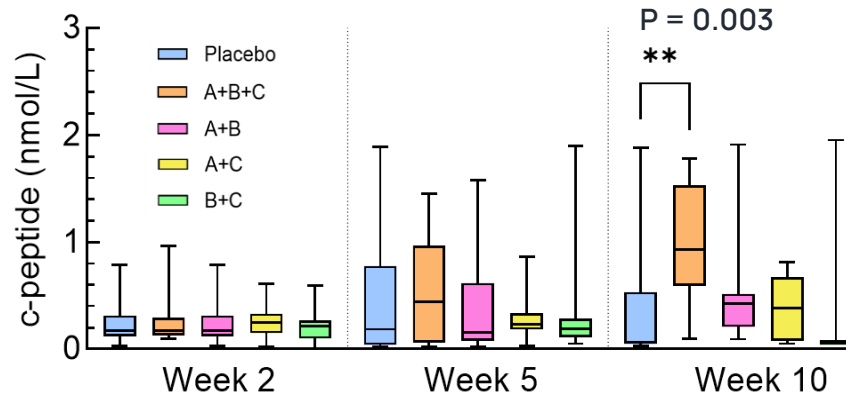
**Blood glucose level (mmol/l)**



**Kruskal Wallis test - Blood glucose level**



**Dynamic changes of C-peptide levels (nmol/l)**



**Dynamic changes of own insulin in blood plasma (nmol/l)**

