



**DIAMYD**  
MEDICAL

**Founded with the Mission to Cure Type 1 Diabetes**

**April 2025**

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# Precision medicine to prevent and cure Type 1 Diabetes

## Clinically validated and de-risked immunology platform

- **Antigen-specific immunotherapy** targeting genetic subgroups
- **Durable effect and favorable safety profile** based on 16 trials and more than 1,000 treated patients
- Potential to **extend health and life span** by **lowering risk for cardiovascular disease** and other long-term complications

## Precision medicine pipeline spanning prevention and intervention

- **Clinical development program, Diamyd®** (targeting 40 % of Type 1 Diabetes)
  - **Phase 3 program:** Stage 3 Type 1 Diabetes
  - **Phase 2 program:** Stage 1 & 2 Type 1 Diabetes
- **Discovery program** (targeting 50 % of Type 1 Diabetes)
- **Precision medicine ecosystem:** AI driven risk prediction, disease screening, and in-house biologics manufacturing

## Significant commercial potential, strong regulatory alignment, near-term milestones

- **>\$2 billion sales potential** in the US for Diamyd® launch indication
- **Significant upsides:** RoW, adult-onset Type 1 Diabetes, Stage 1 and 2 Type 1 Diabetes
- **FDA Fast Track and Orphan designation**, alignment for an **accelerated approval** pathway
- Phase 3 readout March 2026 to support potential **accelerated BLA**

30+ years of Scientific and Clinical development

# Addressing a significant unmet medical need and economic burden

**>500 000**

new cases of Type 1  
Diabetes annually

**>\$90 USD  
billion**

economic burden

**Life long**

dependence on insulin  
treatment and blood  
glucose measurements

**High risk**

for serious  
complications incl.  
cardiovascular disease

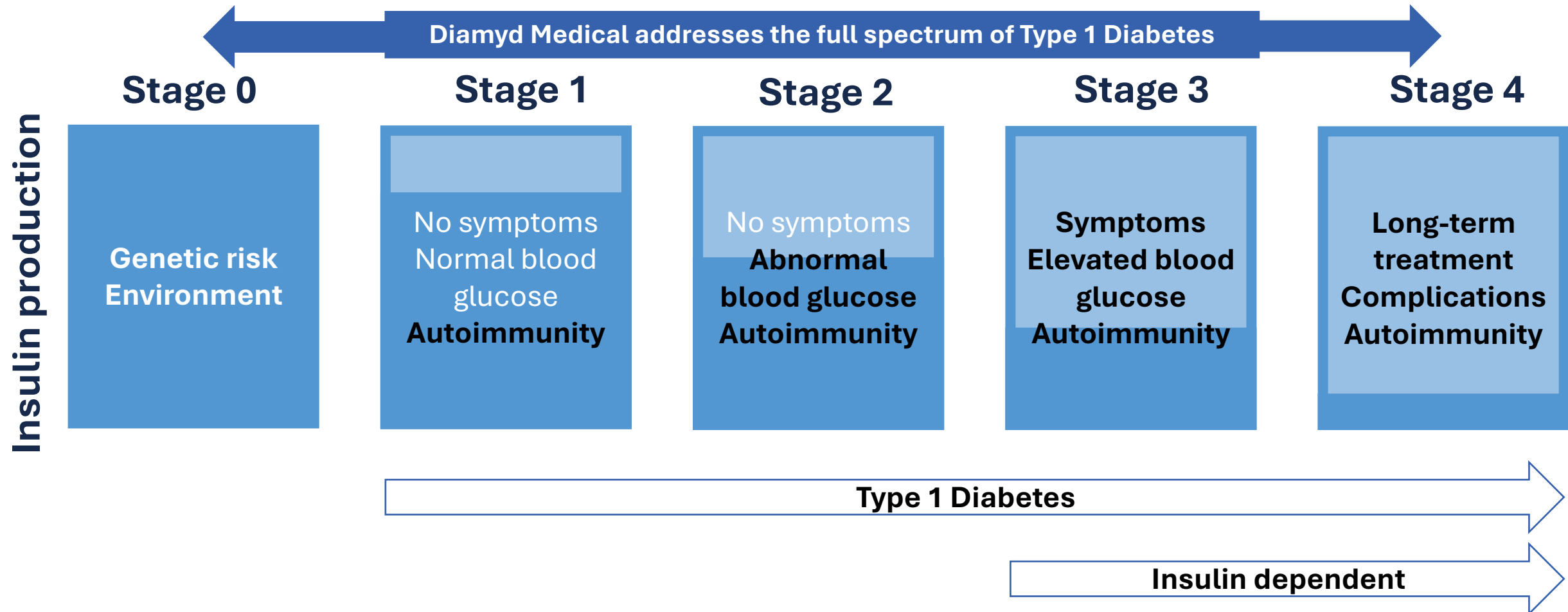
**35 years**

shorter health span

**15 years**

shorter life span

# Type 1 Diabetes – Progressive and irreversible autoimmune destruction of insulin-producing cells



# Pipeline Overview

Targeting full spectrum of autoimmune diabetes through HLA-Specific antigen therapies

	Program	Discovery	Preclinical	Phase 1	Phase 2	Phase 3	Status
<b>Diamyd®</b>	Stage 3 Type 1 Diabetes (HLA DR3-DQ2 positive) Orphan designation; Fast Track designation	DIAGNODE-3					Ongoing in EU & US, early readout March 2026
	Stage 1&2 Type 1 Diabetes (HLA DR3-DQ2 positive) Fast Track designation	DIAPRECISE					Started Q4, 2023
	Adult-onset Type 1 Diabetes / LADA (HLA DR3-DQ2 positive)	GADinLADA					Completed, published in 2023
	Evaluation of booster doses	DIAGNODE-B					Completed, published in 2024
<b>Insulin antigen</b>	Stage 1,2,3 Type 1 Diabetes (HLA DR4-DQ8 positive)						

Global rights available

# Diamyd®

## Recombinant GAD65 Formulated in Alum (rhGAD65/alum)

### Primary Indication (Fast Track and Orphan designation)

*Type 1 Diabetes (Stage 3) with residual beta cell function and HLA type DR3-DQ2*

### Label Expansion

*Type 1 Diabetes prevention (Stage 1 & 2), Fast Track designation*

*Adult-onset Type 1 Diabetes / LADA*

### Mechanism of Action

*Induce immunological tolerance against GAD65*

### Clinical Effect and Benefit

*Preserve endogenous insulin production, delay or prevent disease progression, reduce or prevent short- and long-term complications*

### Mode of Administration

*Three targeted intranodal injections one month apart, outpatient treatment*

### Development Status

*Phase 3 – Stage 3 Type 1 Diabetes*

*Phase 2 – Stage 1&2 Type 1 Diabetes*

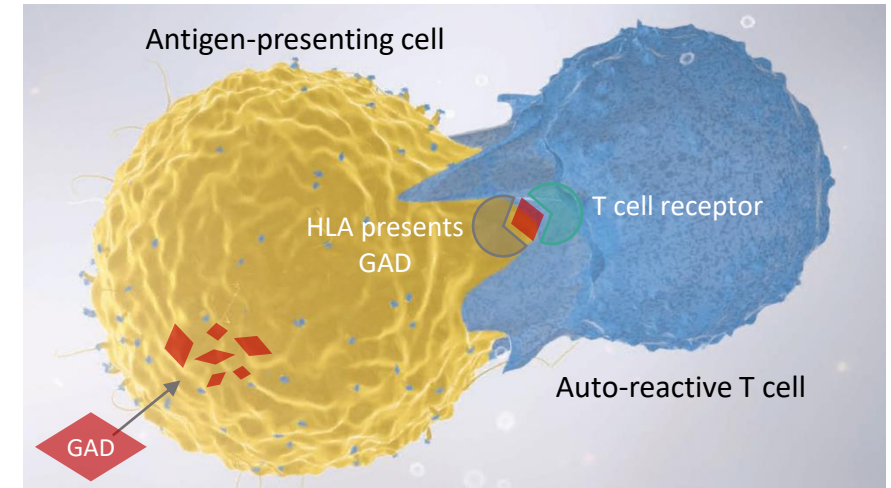
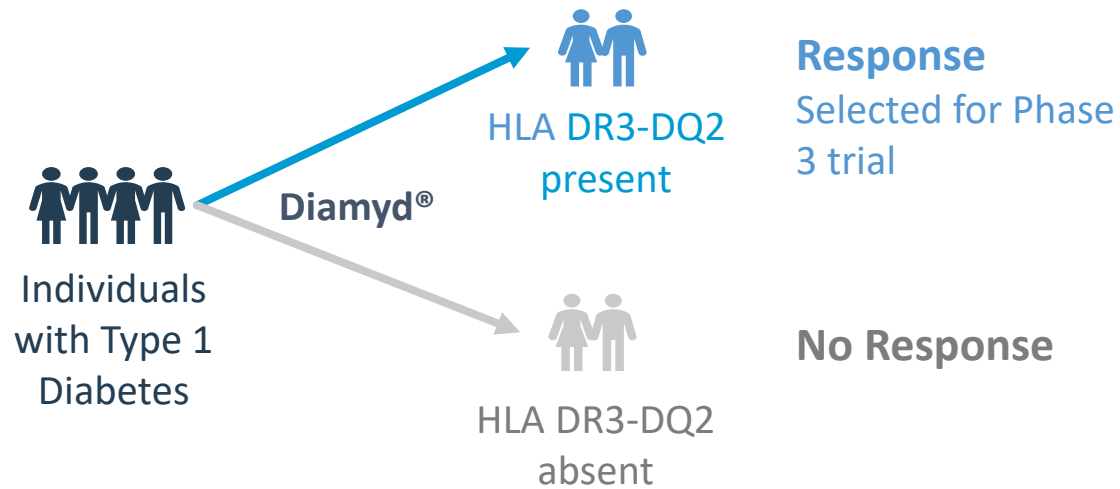
*Phase 2 - Adult-onset Type 1 Diabetes / LADA*

### Licensing Status

*Global rights available*



# Diamyd® targets the GADA-first Type 1 Diabetes endotype with HLA DR3-DQ2 positivity

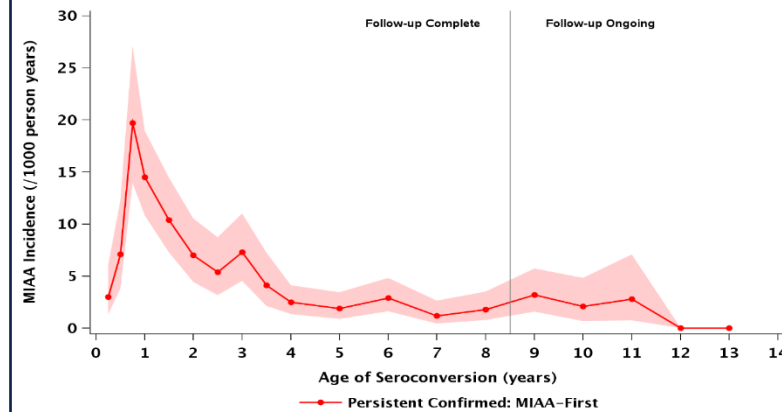
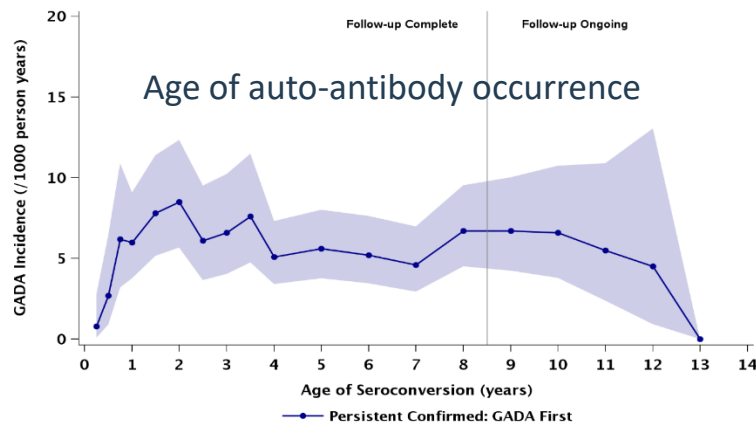


HLA is central to autoimmunity against GAD

## Diamyd® responders

### GADA-first disease

- HLA DR3-DQ2 (40%)
- Adenovirus F
- *BACH2*
- Likely responders to Diamyd®



### IAA-first disease

- HLA DR4-DQ8 (60%)
- Enterovirus B
- *INS*, *PTPN22*, *UBASH3A*
- Likely responders to an insulin-based antigen-specific therapy



# Regulatory and Commercial strategy

# Pathway to market for Diamyd®

## Single pivotal Phase 3 trial (DIAGNODE-3)

- Aligned with both FDA and EMA

## Fast Track designation

- For the treatment of Stage 1, 2 & 3 Type 1 Diabetes with HLA DR3-DQ2

## Orphan designation

- For the treatment of Type 1 Diabetes with residual beta cell function

## Accelerated approval potential

- Alignment with the FDA  
Interim readout to support accelerated BLA planned for March 2026

# Estimated > \$2 Billion Peak Sales in the US Alone

## Diamyd® Launch indication

- 60k+ patients (Stage 3 Type 1 Diabetes with residual beta cell function, HLA DR3-DQ2 positive, Age >= 12)

## US Pricing, formulary status & market share

- WAC (gross) price \$157K/course, grown at 2% p.a.
- Limited Gross-to-Net discounts, max 20%.
- > 80% access (high Type 1 Diabetes insurance coverage and expected high prior authorization)
- At least 30% market penetration

## Significant Upsides

- Ex-US sales (40% of global sales based on Type 2 Diabetes analogs)
- Life Cycle Management – Stage 1,2 Type 1 Diabetes, Adult-onset T1D / LADA, booster courses
- Adult-onset T1D / LADA base case US peak sales estimated at > **\$2 billion**

*Note: Base case assumptions informed by US payer and HCP Research Nov-24*

# Strong IP position and regulatory exclusivity

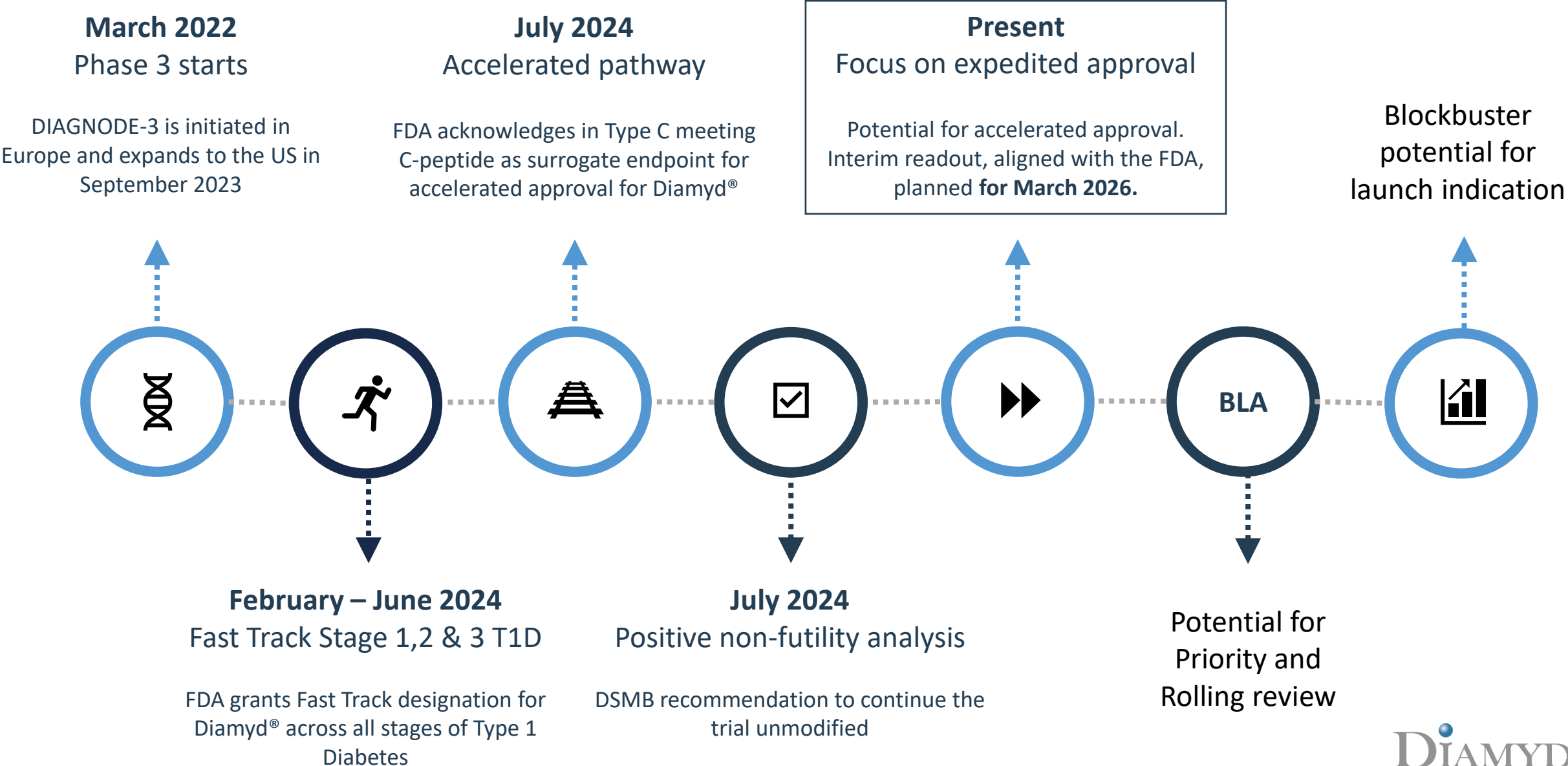
## Core Intellectual Property

- **Substance of matter** in the US until **2032**
- **Intralymphatic administration** of Diamyd® in Europe, Japan, China, Hong Kong, Australia, South Africa, Eurasia and Canada, additional countries pending, expiry **2035**.
- **Intralymphatic administration** of additional betacell antigens (proinsulin, preproinsulin etc) approved in Australia, Israel, Russia, additional countries pending.
- **Treatment/prevention of HLA DR3-DQ2** subgroup with Diamyd® approved in Europe, Eurasia, Israel, Hong Kong, South Africa, Japan, South Korea, expiry **2038**, additional countries pending.
- **Treatment/prevention of HLA DR4-DQ8** with insulin as an antigen approved in South Korea, expiry **2038**, and pending in several territories.

## Regulatory exclusivity

- US BLA approval provides **12 years exclusivity**
- US orphan designation provides **7 years exclusivity**
- European approval provides **10 years of exclusivity**

# Significant momentum paves way for potential Accelerated Approval

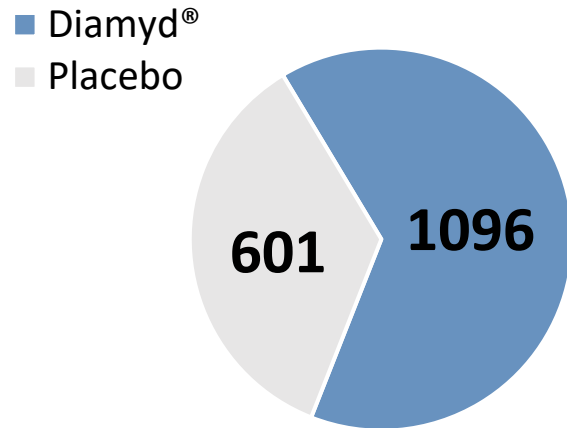


# Clinical Data supporting launch indication for Diamyd®

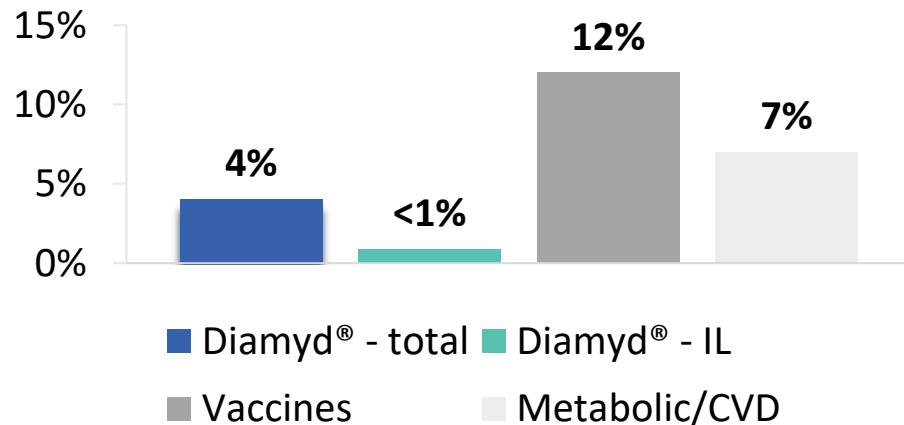
# Favorable safety and tolerability profile

No major safety signals in >1,000 patients exposed to Diamyd®. Drop-out rate <1% in trials with targeted administration (intralymphatic, IL) of Diamyd®.

## Total patient exposure in 16 trials



## Patient drop-out rate in clinical trials



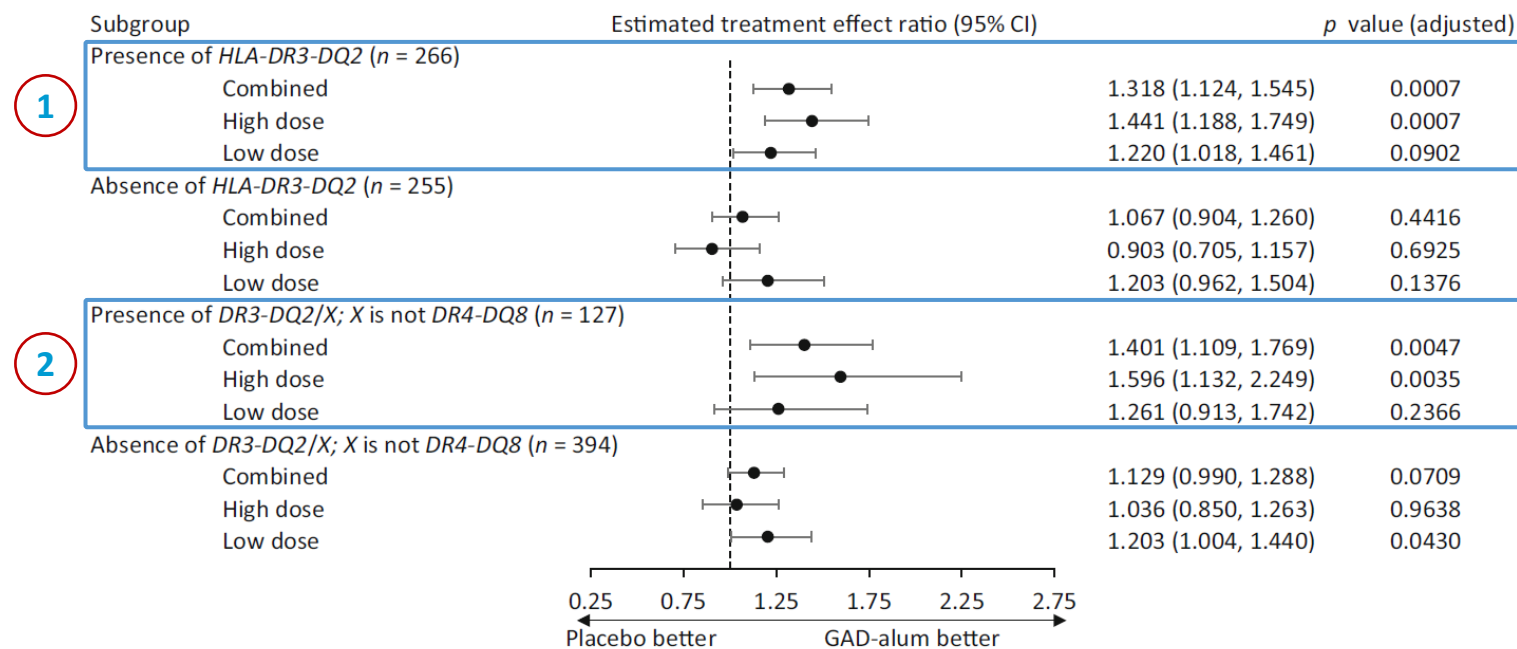
## Summary of clinical safety data

- Most **common adverse events**: transient tenderness at injection site, injection site edema, mild injection site pain and injection site reaction (< 7 days)
- **No major safety signals**
- **No drug-related SAEs** in intralymphatic (IL) program (1 in total, LADA population)
- **<1% subject drop-out rate** in IL program
- Safety assessed in persons aged 4 – 70 years, with Stage 1 to Stage 3 Type 1 Diabetes or Adult-onset Type 1 Diabetes / LADA

# Meta-analysis of 3 pre-2014 trials identified responder patients

Meta-analysis of 3 randomized controlled clinical trials with subcutaneous Diamyd® conducted before 2014 with >500 individuals identified patients carrying HLA DR3-DQ2 gene as responders

## Mixed meal tolerance test (MMTT) stimulated C-peptide



High dose = 3 or 4 injections; Low dose = 2 injections; Combined = 2, 3 or 4 injections

## 44% reduction in C-peptide decline

from Baseline to Month 15 compared to placebo in patients carrying the HLA DR3-DQ2 gene who received 3 or 4 injections of Diamyd®

**1** Significant treatment effect in subgroup of patients positive for HLA DR3-DQ2 gene (responder patients)

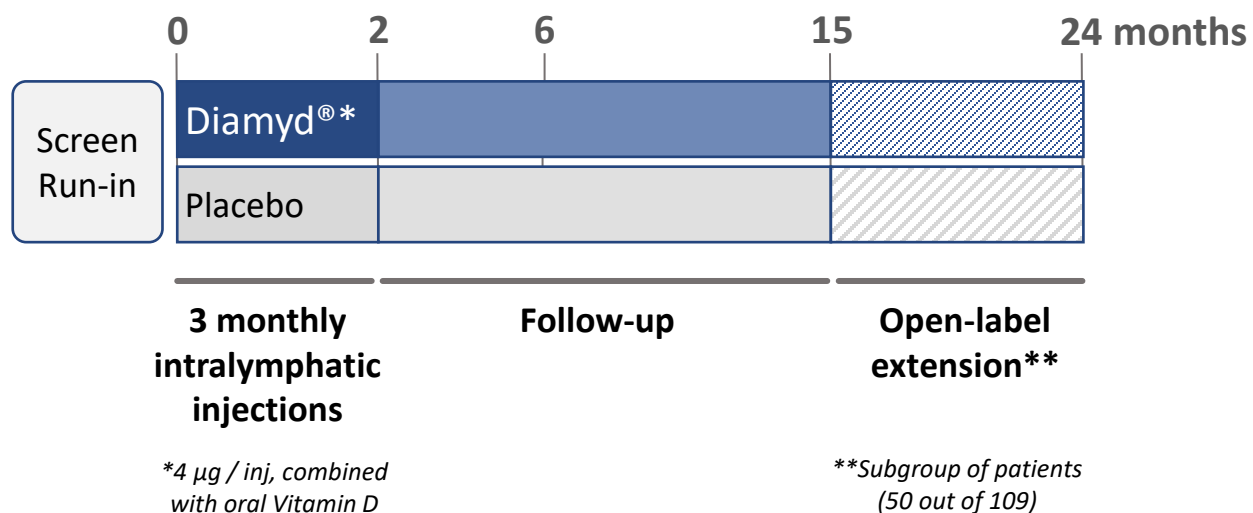
**2** Even larger treatment effect in ca. 50% of responder patients with HLA DR3-DQ2 who lack the HLA DR4-DQ8 gene (super responder patients)



# DIAGNODE-2 Phase 2b Trial Confirmed Responder Patients

European, multinational, randomized, placebo-controlled, 2-arm trial assessing 3 targeted injections of Diamyd® given on top of standard of care

## DIAGNODE-2 DIABETES TRIAL



### Primary Endpoint

- Change from Baseline to Month 15 in Mixed Meal Tolerance Test (MMTT) stimulated C-peptide Area under the Curve

### Key Secondary Endpoint

- Change in Hemoglobin A1c (HbA1c) between baseline and Month 15
- Change in insulin-dose-adjusted HbA1c (IDAA1c) between Baseline and Month 15
- Change in daily exogenous insulin consumption between Baseline and Month 15

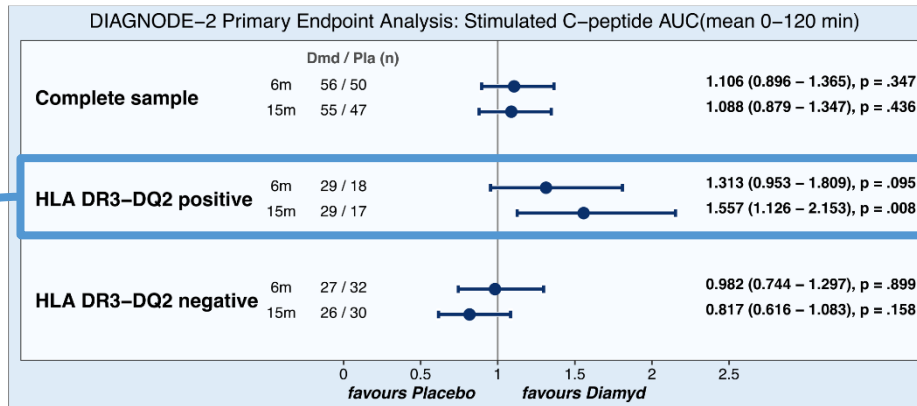
### Population

- Persons diagnosed with Type 1 Diabetes less than 6 months ago aged 12-24 years and positive for GAD antibodies
- Residual beta cell function: fasting C-peptide  $\geq 0.12$  nmol/L
- Pre-specified subgroup added to topline readout before database lock: responder patients with HLA DR3-DQ2 genotype

# DIAGNODE-2 Phase 2b trial confirmed responder patients

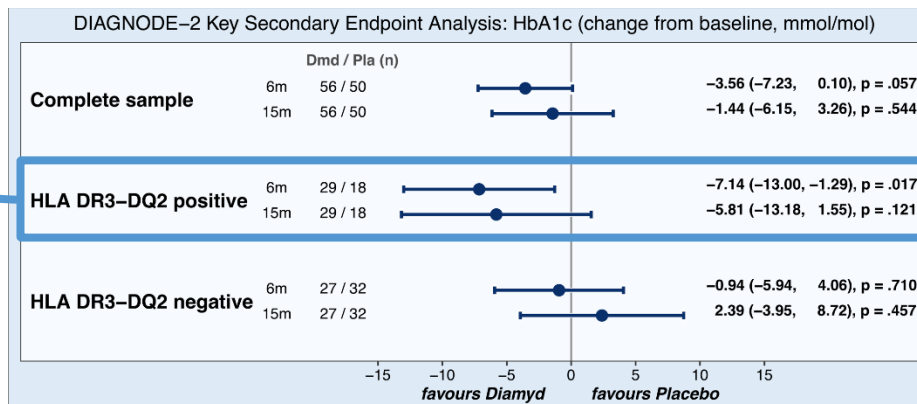
Diamyd® achieved statistically significant preservation of C-peptide secretion, numerical improvement in HbA1c compared to placebo at Month 15 in patients with HLA DR3-DQ2

## Mixed meal tolerance test (MMTT) stimulated C-peptide



Pre-specified subgroup of patients positive for HLA DR3-DQ2 gene

## Glycated haemoglobin (HbA1c)

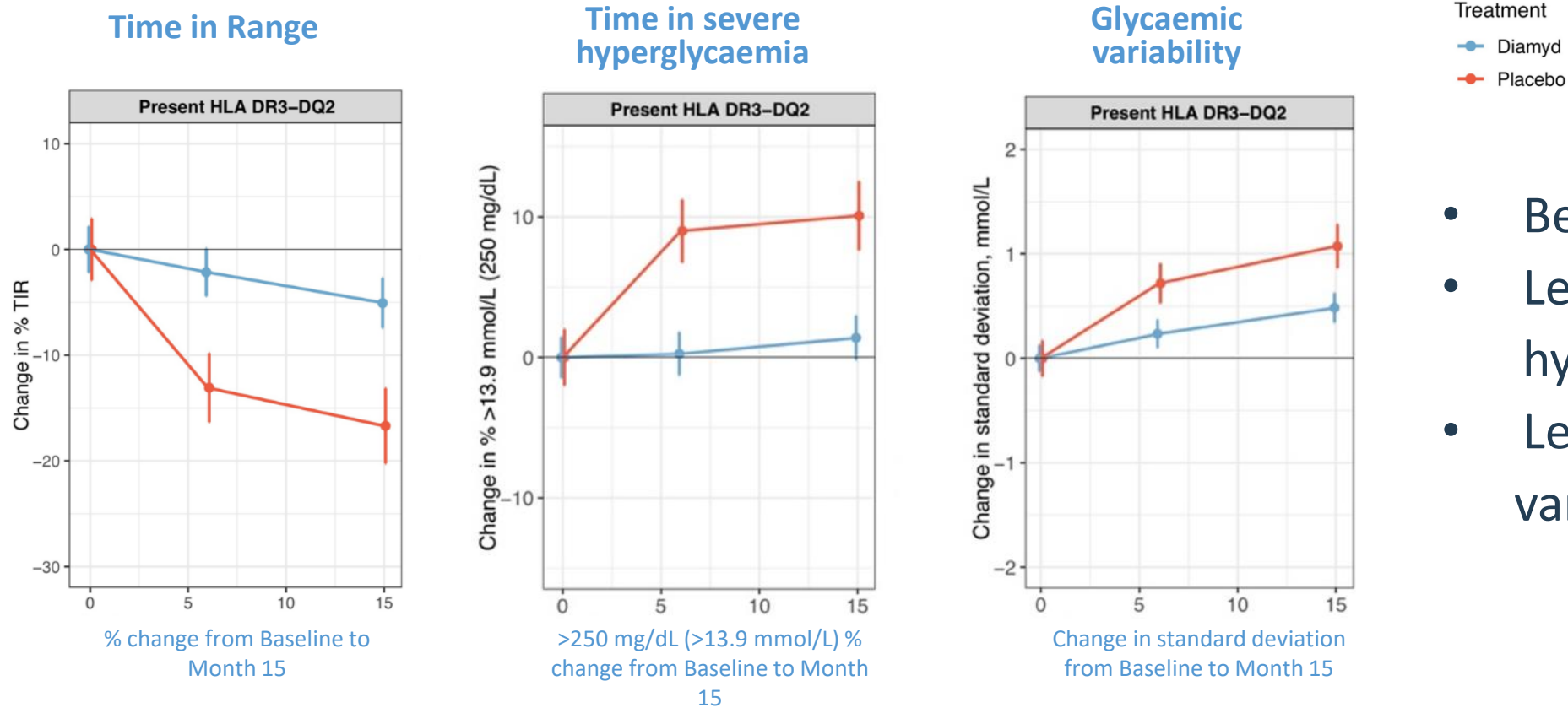


**56% reduction in C-peptide decline**

**from Baseline to Month 15 compared to placebo treatment in patients carrying the HLA DR3-DQ2 gene**

# DIAGNODE-2 Phase 2b Trial confirmed responder patients

In exploratory analyses, Diamyd® achieved statistically significant benefit on Continuous Glucose Monitoring (CGM) outcomes in patients carrying the HLA DR3-DQ2 responder gene



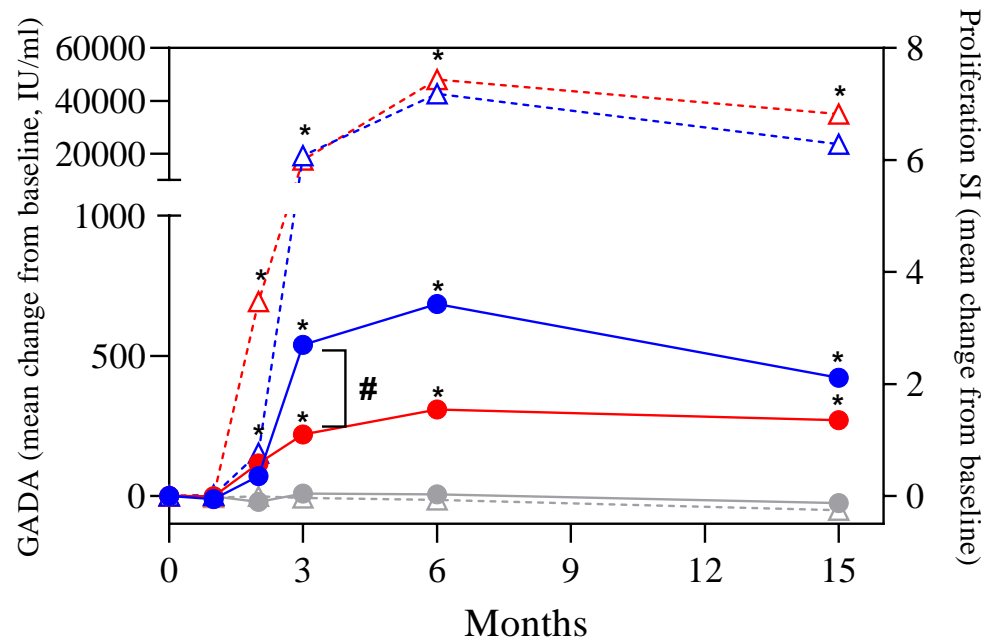
- Better Time in Range
- Less time in severe hyperglycaemia
- Less glycaemic variability

Nowak et al. JCEM 2022

Independent Commentary by Lunati & Fiorina, JCEM 2022

# DIAGNODE-2 Phase 2b trial biomarker data support HLA-specific response

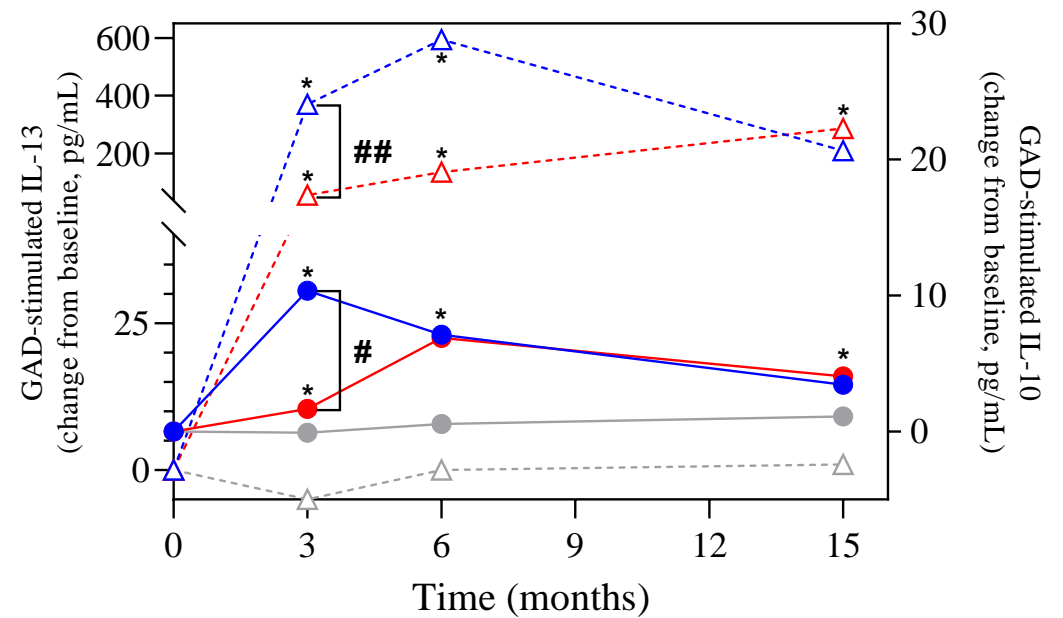
GAD-specific immune response differentiates responders from non-responders



- △-△- GADA GAD-alum DR3-DQ2 (n=29)
- △-△- GADA GAD-alum Not DR3-DQ2 (n=27)
- △-△- GADA Placebo (n=52)
- Pr SI GAD-alum DR3-DQ2 (n=29)
- Pr SI GAD-alum Not DR3-DQ2 (n=27)
- Pr SI Placebo (n=52)

\* p<0.001 for difference to Placebo

# p=0.0210 for difference between DR3-DQ2 and Not DR3-DQ2 groups



- △-△- IL13 GAD-alum DR3-DQ2 (n=29)
- △-△- IL13 GAD-alum Not DR3-DQ2 (n=27)
- △-△- IL13 Placebo (n=52)
- IL10 GAD-alum DR3-DQ2 (n=29)
- IL10 GAD-alum Not DR3-DQ2 (n=27)
- IL10 Placebo (n=52)

\* p<0.0001 for difference to Placebo

# p=0.0095 for difference between DR3-DQ2 and Not DR3-DQ2 groups

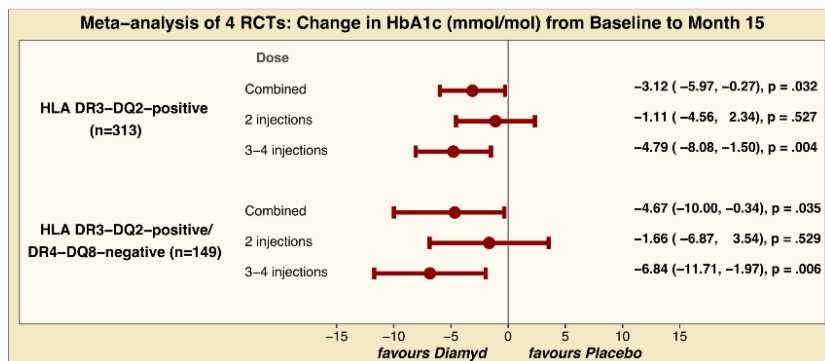
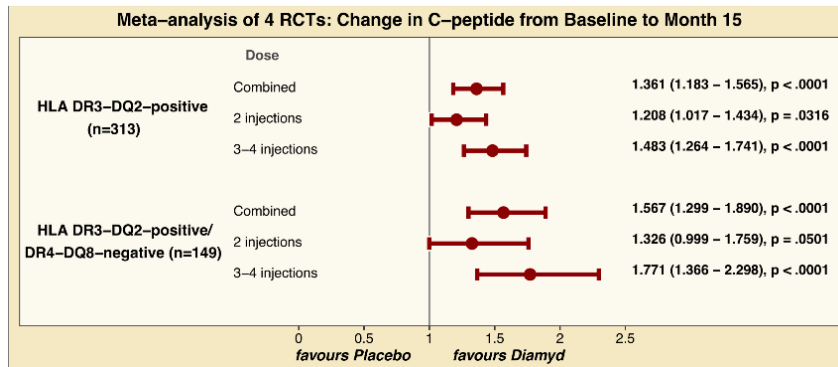
## p=0.0080 for difference between DR3-DQ2 and Not DR3-DQ2 groups

Median change from baseline of anti-GAD65 antibodies (GADA) and Proliferation of PMBC (Stimulation Index, SI) (A), and GAD-stimulated secretion by PBMC of IL-10 and IL-13 levels (B) for GAD-alum treated subjects with and without the DR3-DQ2 haplotype Placebo treatment subjects.

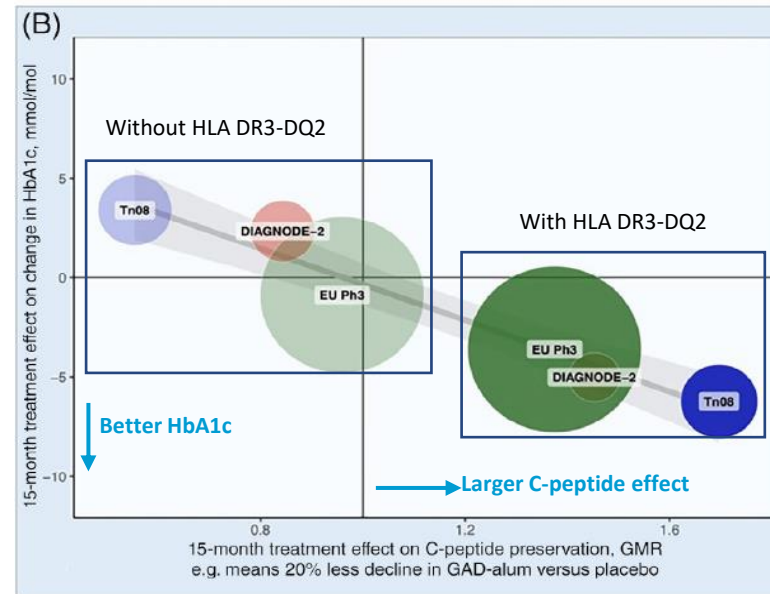
P values, Wilcoxon test, are indicated.

# Correlated Diamyd® treatment effects on C-peptide and HbA1c

Updated meta-analysis including the Phase 2b trial shows correlated treatment effects on C-peptide and HbA1c – the two co-primary endpoints of the Phase 3 trial



## 3 or 4 doses of Diamyd® vs placebo

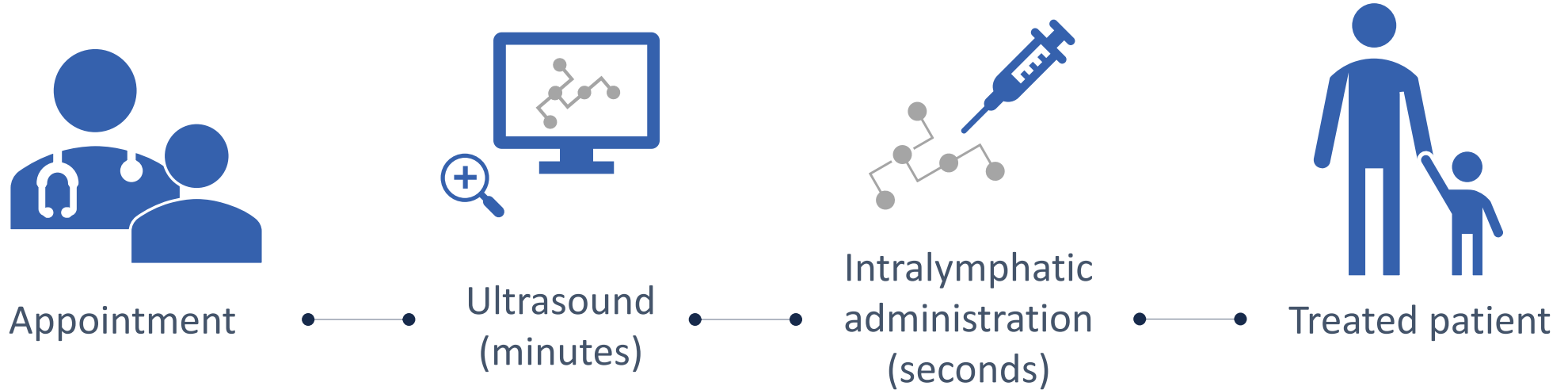


**48% reduction in C-peptide decline, 4.8 mmol/mol (0.5% DCCT units) lower HbA1c**

**from Baseline to Month 15 compared to placebo in patients carrying the HLA DR3-DQ2 gene who received 3 or 4 injections of Diamyd®**

# Ultrasound-guided targeted injection

Quick, low-key outpatient procedure with discomfort comparable to venepuncture. Targets superficial lymphnode to enhance immunological response.



- Procedure performed by a **radiologist** or **endocrinologist** with ultrasound training
- Pain level equal to taking a blood sample
- No pre-medication (only local anesthetic)



Intralymphatic (IL)-injection with needle placed in plan with the ultrasound probe

Monitoring of IL injection using ultrasound

# The first ever precision medicine Phase 3 trial in Type 1 Diabetes

Diamyd® in individuals recently diagnosed with Stage 3 type 1-diabetes and positive for the HLA DR3-DQ2 haplotype



**Breakthrough T1D™** Partner since 2023

Formerly JDRF

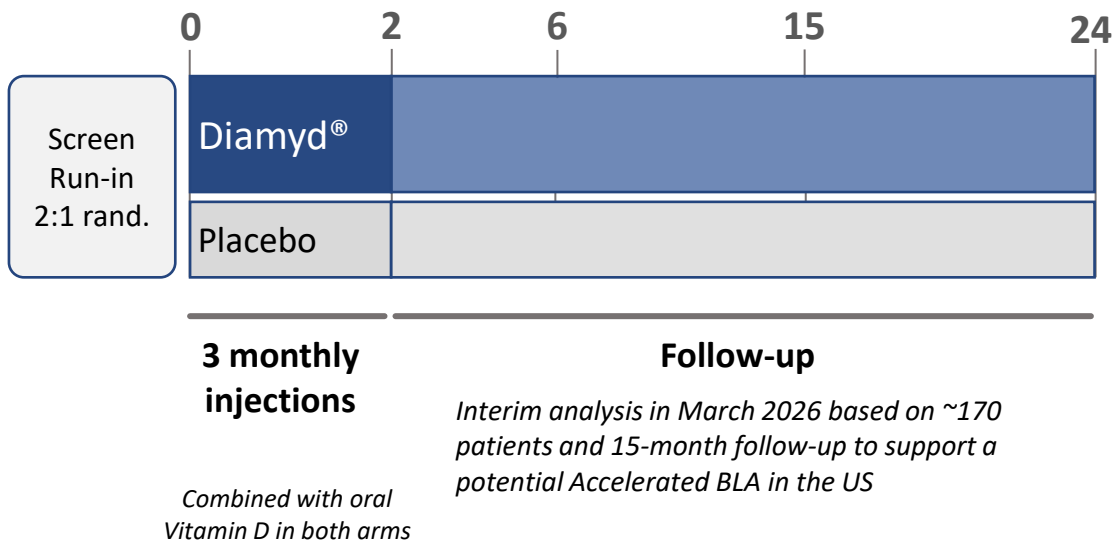
**Diagnode-3**  
*study*

[www.diagnode-3.com](http://www.diagnode-3.com)

# DIAGNODE-3 Single Pivotal Precision Medicine Phase 3 trial

Aligned with the FDA and EMA. 60 clinics in the United States and Europe.

Randomized, placebo-controlled, 2-arm trial to confirm the effect and safety of 3 targeted injections of Diamyd® given on top of standard of care.



## Co-Primary Endpoints

- Stimulated C-peptide area under the curve, change from Baseline to Month 24 in Mixed Meal Tolerance Test (MMTT)
- HbA1c, change from Baseline to Month 24

## Key Secondary Endpoint

- Time in glycemic target range 3.9-10 mmol/L (70-180 mg/dL) assessed by CGM, change from Baseline to Month 24
- Proportion of patients with insulin dose-adjusted HbA1c (IDAA1c)  $\leq 9$  (partial remission) at Month 24
- Number of episodes per patient of severe hypoglycemia between Baseline and Month 24
- Number of episodes per patient of diabetic ketoacidosis (DKA) between Baseline and Month 24

## Population

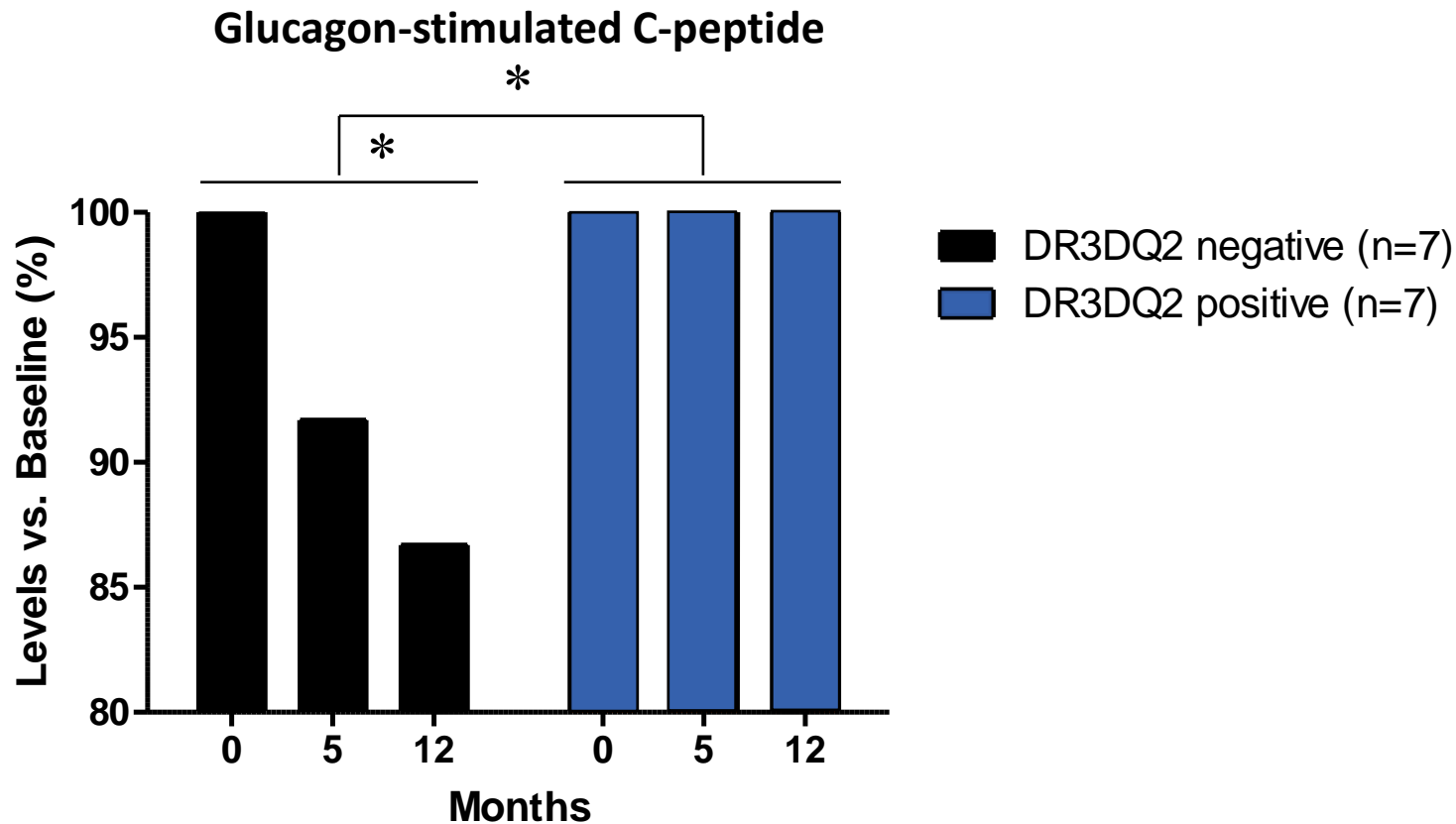
- Persons diagnosed with T1D less than 6 months ago aged 12-29 years who are positive for GAD antibodies and positive for HLA DR3-DQ2
- Residual beta cell function: fasting C-peptide  $\geq 0.12$  nmol/L



Supportive clinical data in Stage 1 & 2  
Type 1 Diabetes & Adult-onset Type 1  
Diabetes (LADA)

# Phase 2 trial with Diamyd in up to 70 year-old LADA patients

1-year pilot study of targeted injections of Diamyd® in individuals with adult-onset Type 1 Diabetes (latent autoimmune diabetes in adults (LADA)) . No safety concerns.



**Unchanged glucagon-stimulated C-peptide levels**

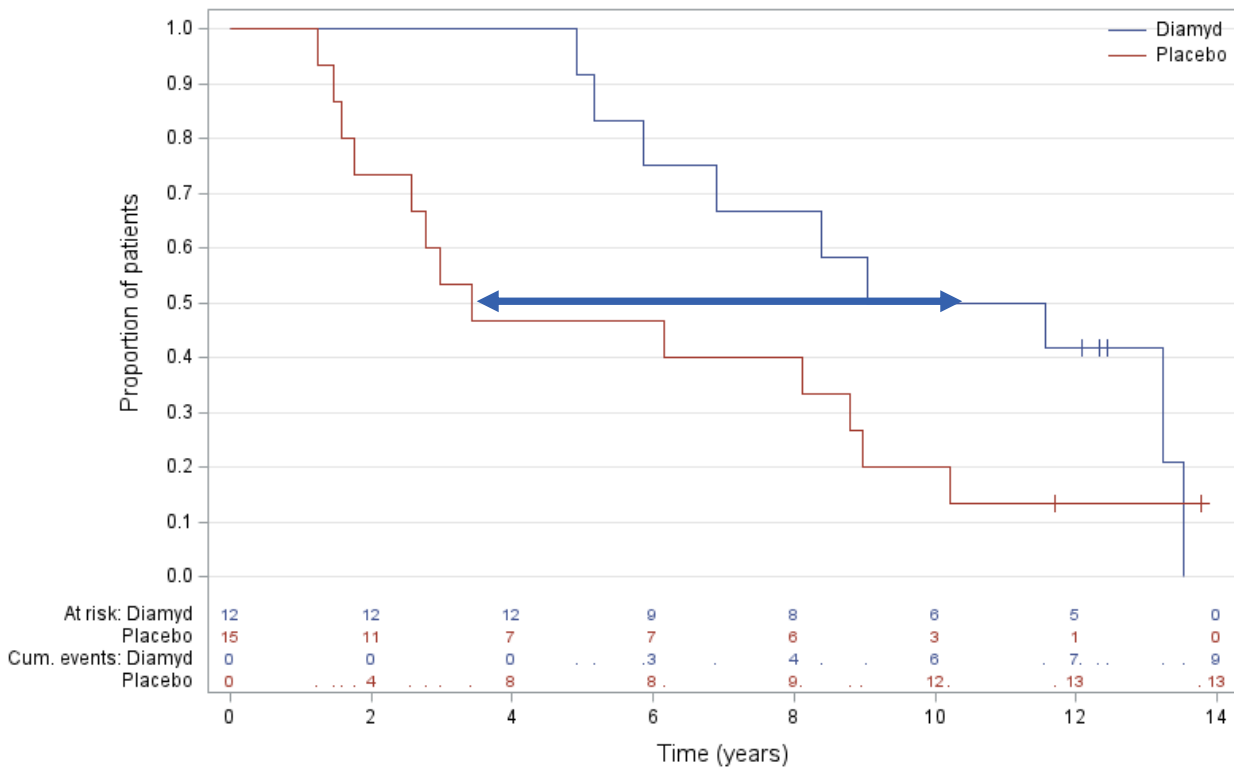
at 12 months vs Baseline (0 months) in the HLA DR3-DQ2 positive subgroup.

\*p < 0.03 for median 13.3% reduction at 12 months vs. Baseline (0 months) in the DR3DQ2 negative subgroup (n=7).

\*p < 0.04 for difference between HLA subgroups in change at 12 months vs. Baseline (0 months).

# Clinical Data in Stage 1/ Stage 2 Type 1 Diabetes

Long-Term follow-up of DiAPREV-IT shows that two subcutaneous injections of Diamyd® may delay Type 1 Diabetes onset by nearly 7 years



Analysis shows that 2 subcutaneous injections of Diamyd® may delay Type 1 Diabetes onset by nearly 7 years in children with the HLA DR3-DQ2 genotype – reinforcing its preventive potential and precision medicine approach.

**DiAPREV-IT:** 2 subcutaneous injections of Diamyd® in 50 children positive for two or more islet autoantibodies.

KM plot of time to Type 1 Diabetes in HLA DR3-DQ2 (Diamyd® n=12, Placebo n=15). The arrow highlights the difference in median time to stage 3 Type 1 Diabetes.

Performed in 2024 based on data from the Swedish National Diabetes Registry combined with phone interviews. The study was performed by Prof. Helena Elding Larsson, Lund University.

# DIAMYD MEDICAL COORDINATES THE ASSET MILIEU

A Type 1 Diabetes Forum to drive precision medicine, prevention and screening

Contact with Type 1 Diabetes  
research community

Aim for a European-level  
contact network

Partnerships in  
developing AI algorithms

Discuss best practices for  
screening programs

Integration of data from  
different cohort studies



**ASSET**

[www.asset.healthcare](http://www.asset.healthcare)

**DIAMYD**  
MEDICAL

# Manufacturing of Diamyd®

Wholly-owned biomanufacturing plant



# Diamyd Medical has established a biomanufacturing plant for GMP commercial scale production of recombinant GAD65



Commercial-scale production of rhGAD65 planned to be ready for BLA/MAA and market entry



- 24,000 square feet facility in Umeå, Northern Sweden, comprising clean rooms, laboratory facilities and office space
- Manufacturing facility property fully acquired in 2021
- Full control over the manufacturing of recombinant GAD65
  - Independence from CDMOs, third parties
  - In control of costs and resource allocation
  - Potential beyond GAD manufacturing

# Full Control and Predictability of the Manufacturing Process

Diamyd Medical's Umeå facility uses the Baculovirus Expression Vector System (BEVS) in the complex manufacturing process of recombinant human GAD65 protein

Upstream  
process



Baculovirus  
expression system  
& insect cells



Clarification  
Capture  
Polish  
Nanofiltration

Downstream  
process



Drug Product  
formulation



## DIAMYD MEDICAL

- Swedish clinical phase pharmaceutical company, founded in 1994
- NASDAQ First North Growth Market, ticker DMYD B

## FINANCES

- Market Cap April 15, 2025 ~ MSEK 810
- Cash Apr 14, 2025: MSEK 93.0
- Preferential rights issue, MSEK 208, incl warrants TO5 exercisable in April 2026. Subscription period April 15-29, 2025.





## Management



**Dr. Ulf Hannelius, PhD, MBA**  
President & Chief Executive Officer



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Chief Operating Officer



**Anna Styrud, BSc**  
Chief Financial Officer



**Anton Lindqvist, MSc**  
Chief Scientific Officer



**Dr. Maja Johansson, PhD**  
Chief Operating Officer –  
Manufacturing Site

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