



SAB-142, a fully human anti-thymocyte globulin, demonstrated anticipated PD profiles and early efficacy signals in T1D patients with residual C-peptide

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30th September 2026

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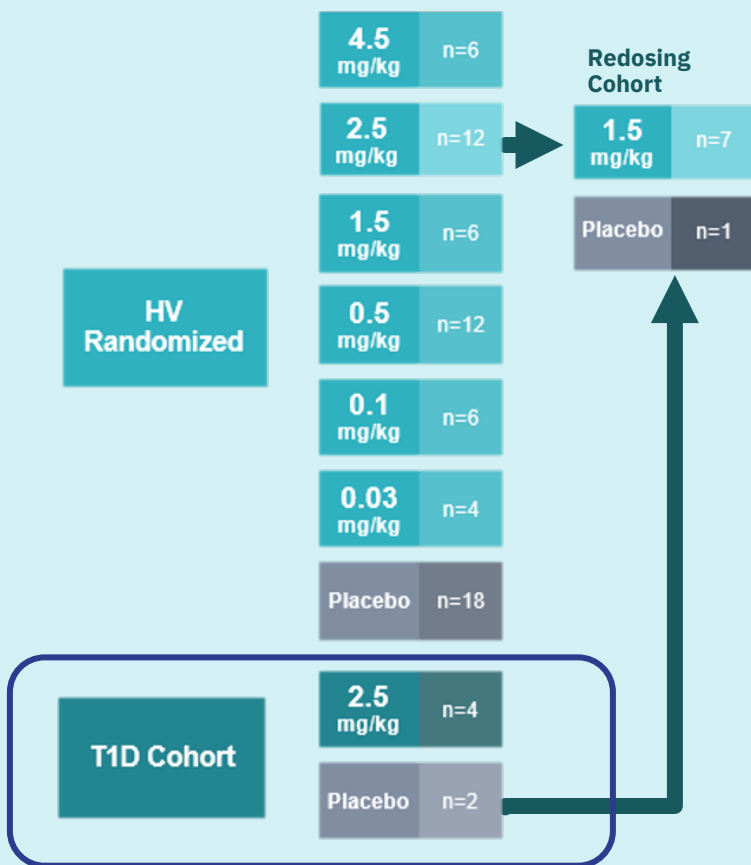
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SAB-142:

Redosable Immunomodulating Treatment for Stage 3 T1D

Study Design

Randomized, double-blind, placebo-controlled, single- and multiple- ascending dose, adaptive design clinical study



SAB-142 Phase 1 Data: Encouraging Efficacy Signals and Predictable, Safe Redosing



Efficacy

Encouraging early signals of C-peptide preservation in T1D patients >2 yrs from diagnosis



Early C-peptide signal consistent with beta cell preservation



Immunogenicity

Confirmed: SAB-142 has low immunogenicity



Low immunogenicity



Enables safe and reliable redosing



PK/PD

T cell preservation with enhanced “exhaustion” signature



Predictable PK upon redosing



Tregs preserved, increased T cell “exhaustion” signature



Safety and Tolerability

Positions SAB-142 for a convenient, potentially twice a year dosing regimen



No lymphodepletion; no neutropenia, thrombocytopenia, decrease in WBC or RBCs on single and repeat dosing



No serum sickness; Grade 1/mild CRS only

SAB-142 is a Fully Human Biologic:

Early clinical data shows the hallmarks of disease modification

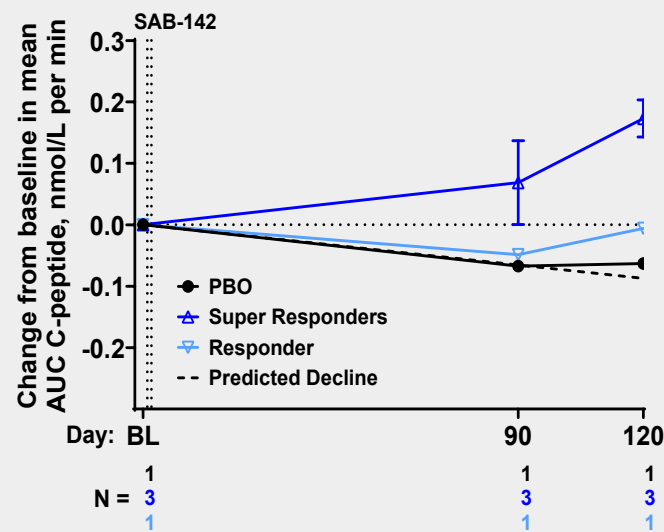


Efficacy

Encouraging early signals of C-peptide preservation in T1D patients >2 yrs from diagnosis

- ✓ Early C-peptide signal consistent with beta cell preservation
- ✓ 4 of 4 patients showed C-peptide preservation through 120 Days; 3 of 4 had enhanced C-peptide

Baseline-Corrected MMTT C-Peptide Mean AUC $\pm$ SEM

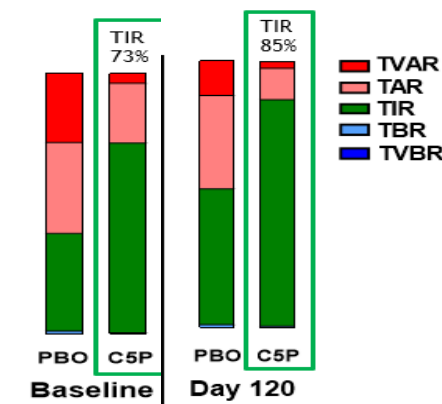
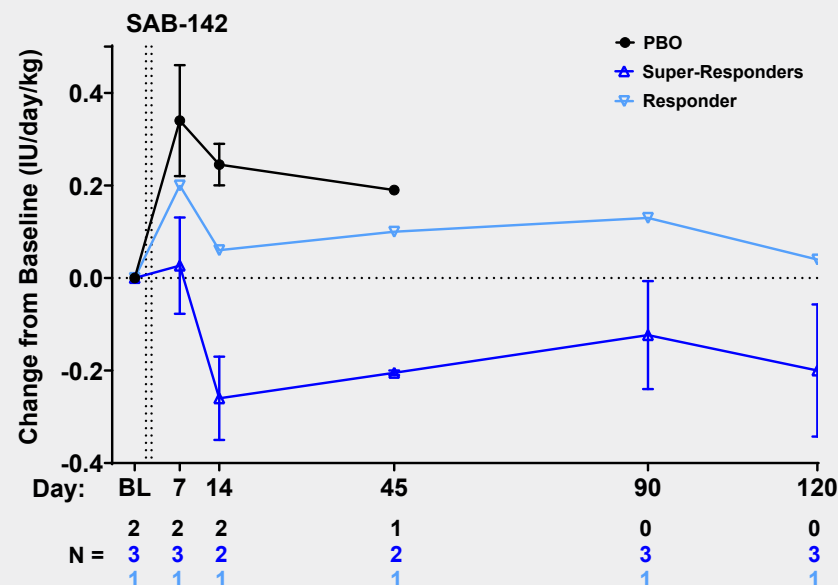


Efficacy

Encouraging early signals of C-peptide preservation in T1D patients >2 yrs from diagnosis

- ✓ Exogenous insulin use decreased in 3 of 4 SAB-142 treated patients
- ✓ TIR improved from 73% at baseline to 85% by End of Study

Mean Total Insulin Use Per Day $\pm$ SEM



SAB-142 is a Fully Human Biologic:

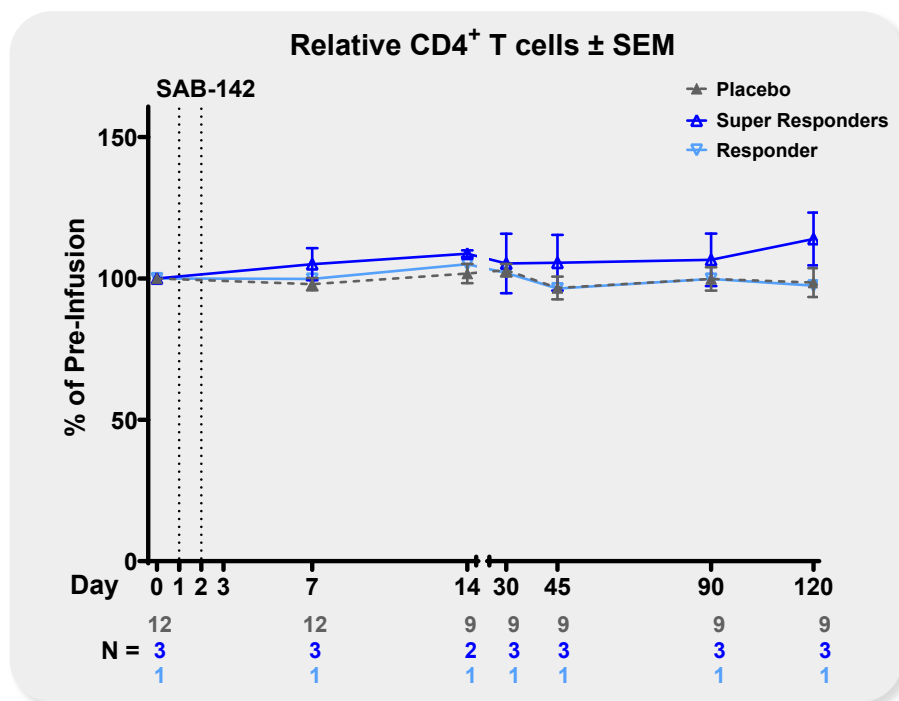
No T cell depletion



PD

CD4 T cell populations preserved

✓ T cell preservation reduces safety risks



Rabbit ATG causes sustained depletion of CD4⁺ T cells.

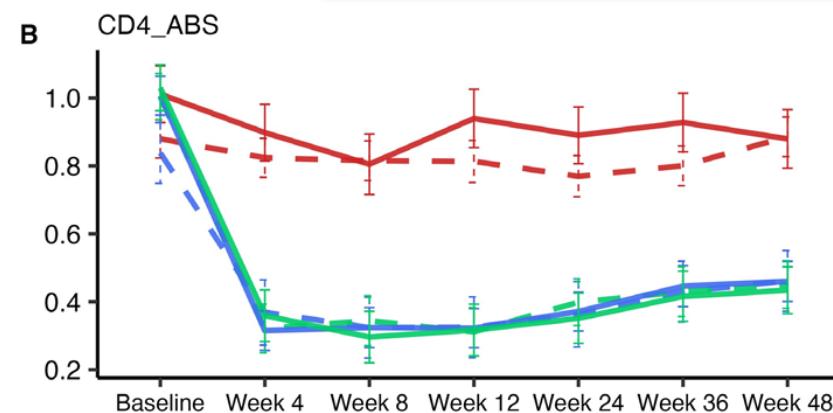
JCI insight

CLINICAL MEDICINE

Responders to low-dose ATG induce CD4⁺ T cell exhaustion in type 1 diabetes

Laura M. Jacobsen,^{1,2} Kirsten Diggins,¹ Lori Blanchfield,² James McNichols,² Daniel J. Perry,² Jason Brant,² Xiaoru Dong,^{2,4} Rhonda Bacher,⁴ Vivian H. Gersuk,¹ Desmond A. Schatz,¹ Mark A. Atkinson,^{1,2} Clayton E. Mathews,^{1,2} Michael J. Haller,¹ S. Alice Long,¹ Peter S. Linsley,¹ and Todd M. Brusko^{1,2}

¹Department of Pediatrics, College of Medicine, University of Florida, Gainesville, Florida, USA; ²Department of Pathology, Immunology, and Laboratory Medicine, University of Florida Diabetes Institute, Gainesville, Florida, USA; ³Benaroya Research Institute at Virginia Mason, Seattle, Washington, USA; ⁴Department of Biostatistics, University of Florida, Gainesville, Florida, USA.



SAB-142 is a Fully Human Biologic:

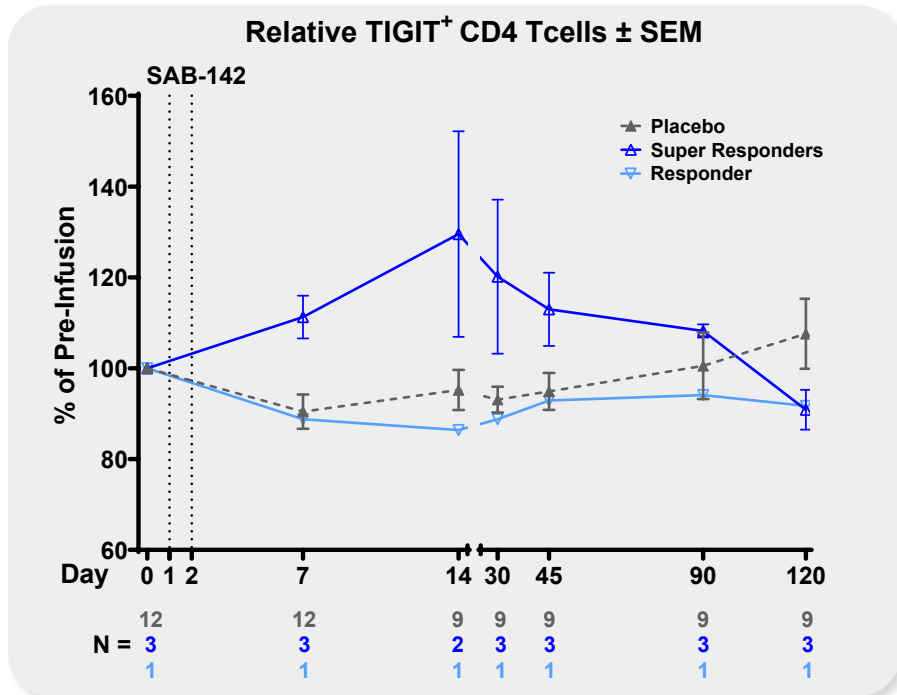
Increased expression of exhaustion markers



PD

TIGIT⁺ CD4 T cells expanded in super responders

- ✓ Increase in exhaustion profile correlated to improved efficacy



Rabbit ATG CD4⁺ T Cell
Exhaustion correlates with C-
peptide preservation

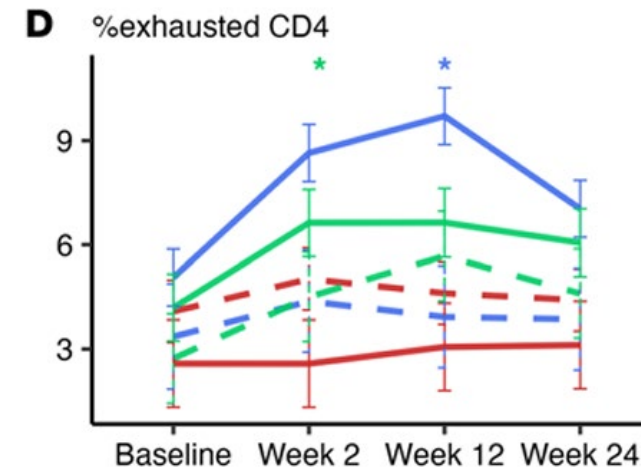
JCI INSIGHT

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SAFEGUARD: Multicenter, Global Phase 2b Safety and Efficacy Trial of SAB-142 in Stage 3 Type 1 Diabetes Patients



SAFEGUARD

Phase 2b
Study

SAFety and Efficacy of human anti-thymocyte immunoglobulin SAB-142 ARresting progression of Type 1 Diabetes

Trial design:

- 159 pediatric, adolescent, and adult patients (5-40 years)
 - Part A:** 12 patients – dose-ranging study for 12 months
 - Part B:** 147 patients – randomized, double-blind, placebo-controlled, dose-ranging study for 12 months
 - Part C:** All patients including placebo with preserved beta cells eligible for 12-month long-term extension study upon completion

Inclusion criteria:

- New onset Stage 3 T1D: within 100 days of diagnosis
- Baseline C-peptide ≥ 200 pmol/L

Dosing regimen:

- Intravenous (IV)
- 0.5 mg/kg on Day 1 and remainder of dose Day 2
- Induction dose levels: 1.5 and 2.5 mg/kg
- Maintenance dose: 1.5 mg/kg every 6 months**

Global study initiated;
first patient dosed in
December 2025 with
Topline results
expected 2H 2027



United States
(FDA) NCT07187531



Europe
(EMA)



United Kingdom
(MHRA)

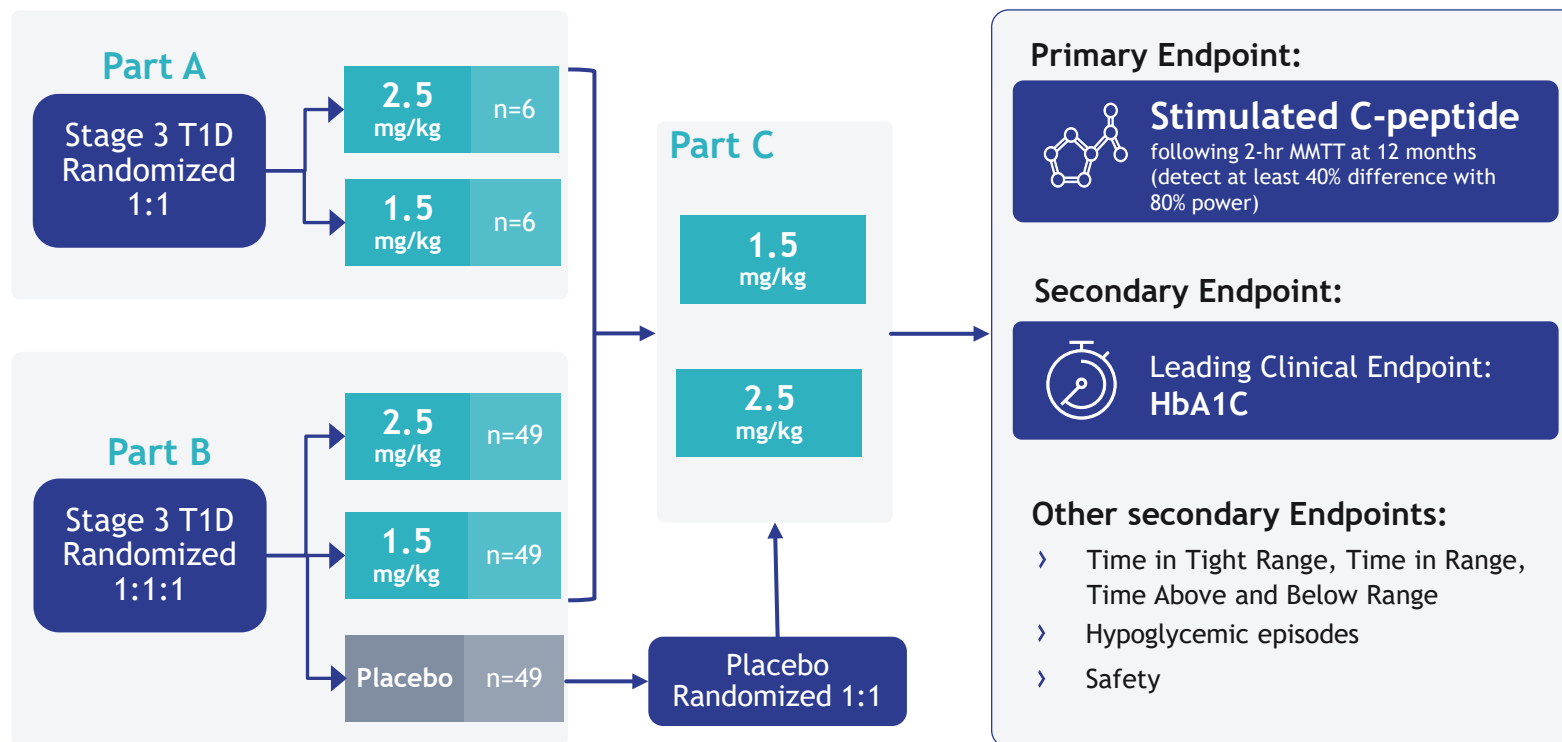


Australia
(TGA)



New Zealand
(MEDSAFE)

Phase 2b Study Design



Introduction



SAB-142 is a Fully Human, Multi-Specific, Re-dosable, Targeted Anti-Thymocyte Globulin (hATG) for Delaying Onset and Progression of T1D.



The aim of this study was to characterize SAB-142's PD profile in a cohort of T1D patients >100 days post diagnosis. This cohort was stratified by Super responders (C-peptide > baseline) vs Responder (C-peptide preservation) to elucidate potential PD efficacy modifiers.

Study Design

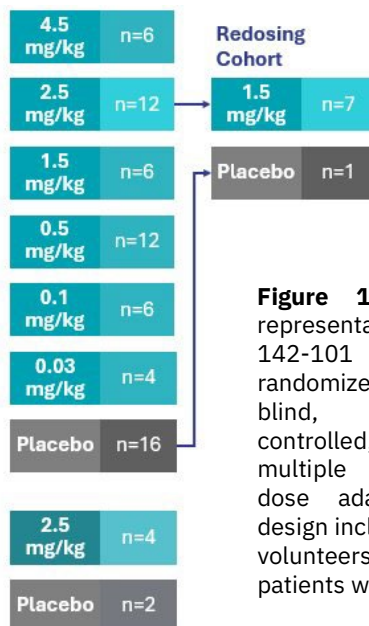


Figure 1. Schematic representation of SAB-142-101 phase 1 randomized, double-blind, placebo-controlled, single and multiple ascending dose adaptive study design including healthy volunteers (HV) and patients with T1D.

Results

C-Peptide and Glycemic Control

Baseline-Corrected MMTT C-Peptide Mean AUC $\pm$ SEM

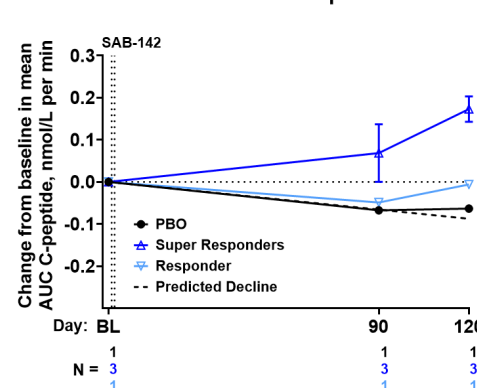


Figure 2A. Change from baseline in MMTT C-peptide AUC following SAB-142 administration. Predicted decline was estimated by calculating the incremental placebo MMT AUC and generating a linear slope. Source: Haller et al. 2019

Mean Total Insulin Use Per Day $\pm$ SEM

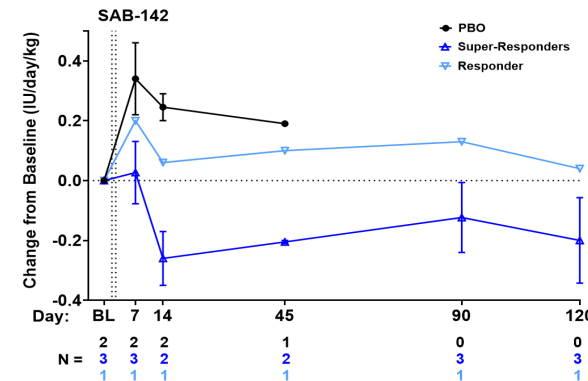


Figure 2B. Change from baseline in mean total daily insulin use following SAB-142 administration

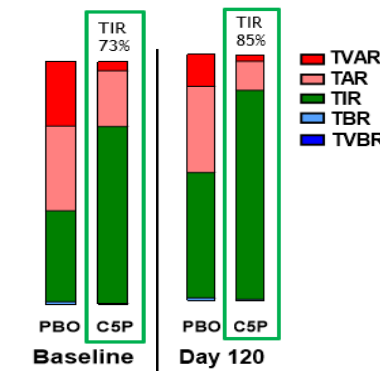


Figure 2C. Continuous glucose monitoring (CGM) glycemic metrics at baseline and Day 120 following SAB-142 administration

CD4⁺ T Cell Populations Preserved; Enhanced Exhaustion

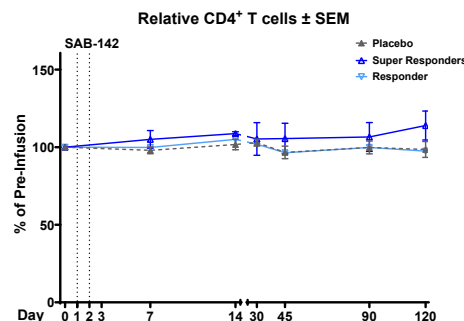


Figure 3. CD4 T cell change from baseline broken out by super responders and responders

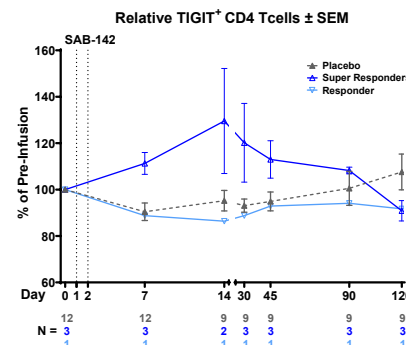


Figure 4. CD4+ TIGIT⁺ T cells change from baseline broken out by super responders and responders

Conclusions

- In a cohort of T1D patients >100 days post diagnosis, SAB-142 demonstrated c-peptide preservation, reduced exogenous insulin use, and improved time in range.
- 4:4 SAB-142 treated subjects had preserved C-peptide and 3:4 had enhanced C-peptide compared to baseline
- SAB-142 demonstrated predictable PD responses, with increased tolerogenic biomarkers and no T cell depletion.
- Super Responders showed increased T cell exhaustion profile compared to Responder