## GBS-02: A Phase 3 Study to Evaluate Efficacy, Safety, Pharmacokinetics, and Pharmacodynamics of ANX005 in Patients with Guillain-Barré Syndrome (GBS)

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#### PRESENTED AT THE AMERICAN ACADEMY OF NEUROLOGY ANNUAL MEETING | APRIL 5-9, 2025, SAN DIEGO, CA

Data originally presented at the 2024 Peripheral Nerve Society Annual Scientific Meeting, June 22-25, 2024, Montreal, QC

**Disclosures:** JA: Honoraria, consultation fees, advisory board: Alexion, Alnylam, Akcea therapeutics, Argenx SE, Annexon, Dianthus, CSL Behring, Hansa, Grifols, Immunovant, Immunopharm, ImmunoAbs, Sanofi, Johnson & Johnson, Pfizer, Takeda HAK: employee and shareholder of Annexon Bioscience; ZI: research funding from Fogarty International Center, National Institute of Neurological Disorders and Stroke of the National Institutes of Health, USA, and Annexon Biosciences; PC: employee of Annexon Biosciences; BH: employee of Annexon Biosciences; EH: former employee and shareholder of Annexon Biosciences; PL: employee and shareholder of Annexon Biosciences; GM: employee and shareholder of Annexon Biosciences; JN: consultancy/advisory role with Annexon Biosciences; KAKA: no relevant disclosures; DRA: employee of Annexon Biosciences; TY: employee of Annexon Biosciences and holds equity ownership in Annexon Biosciences; QDM: consultancy/advisory role with Annexon Biosciences

Acknowledgement: The study was sponsored by Annexon Biosciences (Brisbane, CA, USA). Medical writing and editing assistance were provided by MedVal Scientific Information Services, LLC (Princeton, NJ, USA), and were funded by Annexon Biosciences.

## **Complement Inhibition With Tanruprubart (ANX005) Leads to Rapid, Robust Benefit Across Multiple Endpoints in Patients With GBS**

GBS is a complement mediated neuromuscular emergency with significant unmet need despite current treatment options



**Tanruprubart Inhibits C1q** to rapidly and completely shut down the classical complement pathway and subsequent neuroinflammation and nerve damage



In a Phase 3 pivotal trial, tanruprubart met the primary endpoint and showed consistent clinically meaningful and statistically significant benefit on GBS outcomes



**Tanruprubart has been generally well tolerated** with a safety profile comparable to placebo

## GBS is a Neuromuscular Emergency with Significant Long-Term Disability With No FDA Approved Therapies

### Significant unmet need exists<sup>1</sup>

**GBS is a rare, life-threatening** post infectious neuromuscular emergency<sup>2</sup>

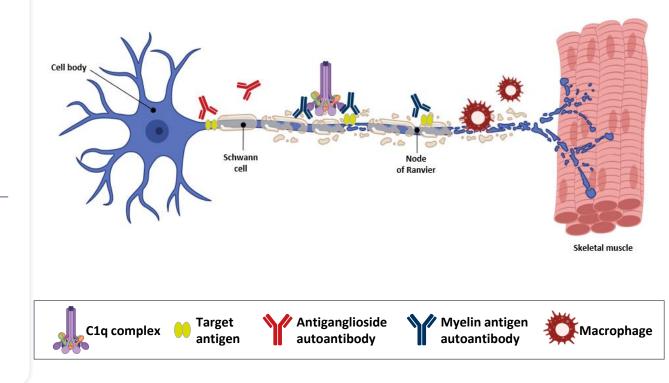
**~7,000** hospitalized and treated in the US per year<sup>3</sup> and **150,000** worldwide<sup>1</sup>

**No FDA-approved therapies**<sup>4</sup>

#### **Despite current treatment:**

**~1 in 4** patients requires mechanical ventilation<sup>5,6</sup> Global 1-year mortality rate<sup>7</sup> is **2-17%** 

# GBS is a complement mediated neuromuscular emergency<sup>1,8</sup>

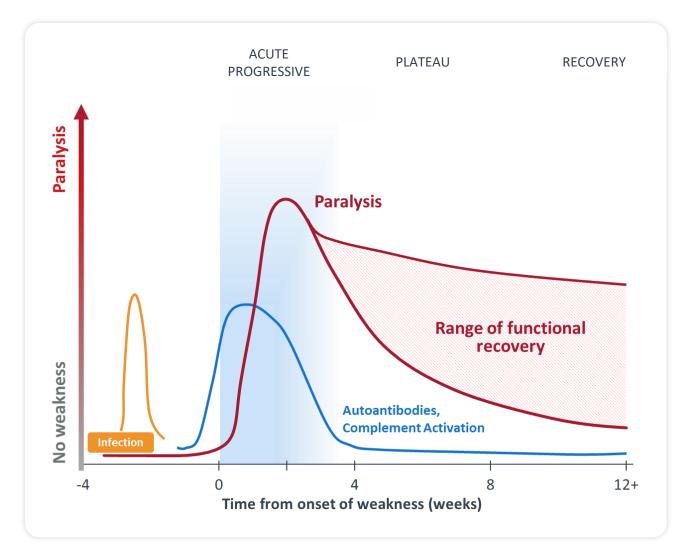


\*On the GBS-DS scale

GBS, Guillain-Barré syndrome; IVIg, intravenous immunoglobulin; MOA, mechanism of action.

1. van Doorn PA. *Presse Med*. 2013;42(6 Pt 2):e193-201; 2. Willison HJ, et al. *Lancet*. 2016;388(10045):717-27; 3. Annexon, data on file. 4. Hughes RA, et al. *Cochrane Database Syst Rev*. 2014;2014(9):Cd002063; 5. Martic V, et al. *Can J Neurol*. *Sci.* 2018 May;45(3):269-74. 6. van den Berg B, et al. *Nat Rev Neurol*. 2014;10(8):469-82; 7. Doets AY, et al. Regional variation of Guillain-Barré syndrome. *Brain*. 2018;141(10):2866-77. 8. Dalakas MC et al. *Nat Rev Neurol*. 2012;16(11):601-17.

## **Complement Rapidly Drives Neuroinflammation and Nerve Damage During the Acute Progressive Phase of GBS Leading to Disability**



#### Acute progressive phase:

 Rapidly progressive bilateral muscle weakness peaking by 1 week in most cases and lasting up to 4 weeks

#### **Plateau phase:**

 May include extended period of ventilation in ICU and intensive support care lasting weeks to months

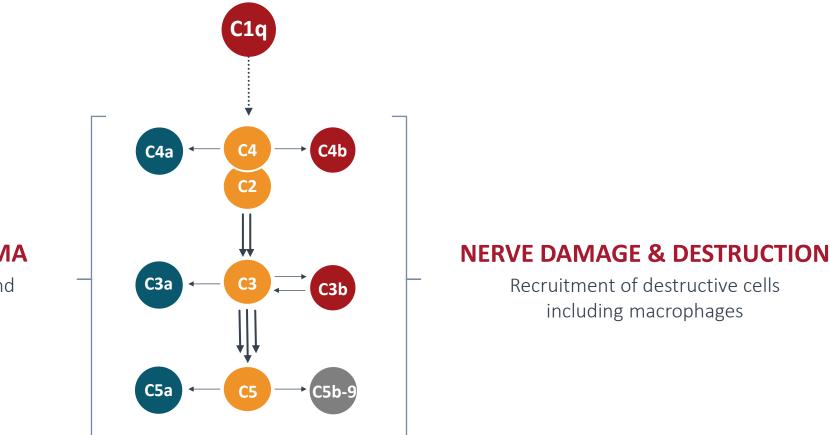
#### **Recovery phase:**

 Gradual muscle strength and functional improvement occurring over weeks to years as nerves repair

## Tanruprubart (ANX005) Is A Monoclonal Antibody Targeting C1q To Block The Classical Complement Pathway At the Start

#### C1q Is the Initiating Molecule of the Classical Complement Pathway

C1q anchors to auto-antibodies on nerve surface and activates the pathway

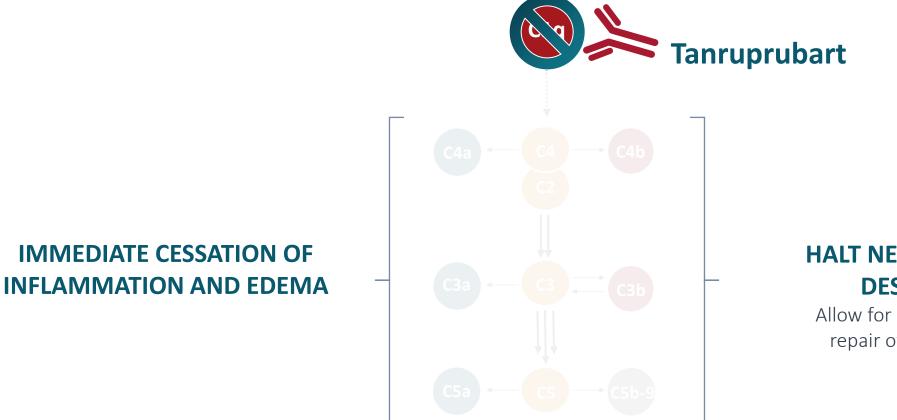


#### INFLAMMATION AND EDEMA

Local, immediate, complement and '1<sup>st</sup> responder' driven

## Tanruprubart (ANX005) Is A Monoclonal Antibody Targeting C1q To Block The Classical Complement Pathway At the Start

Tanruprubart Rapidly Shuts Down Activation of the ENTIRE Classical Complement Pathway on the Nerve

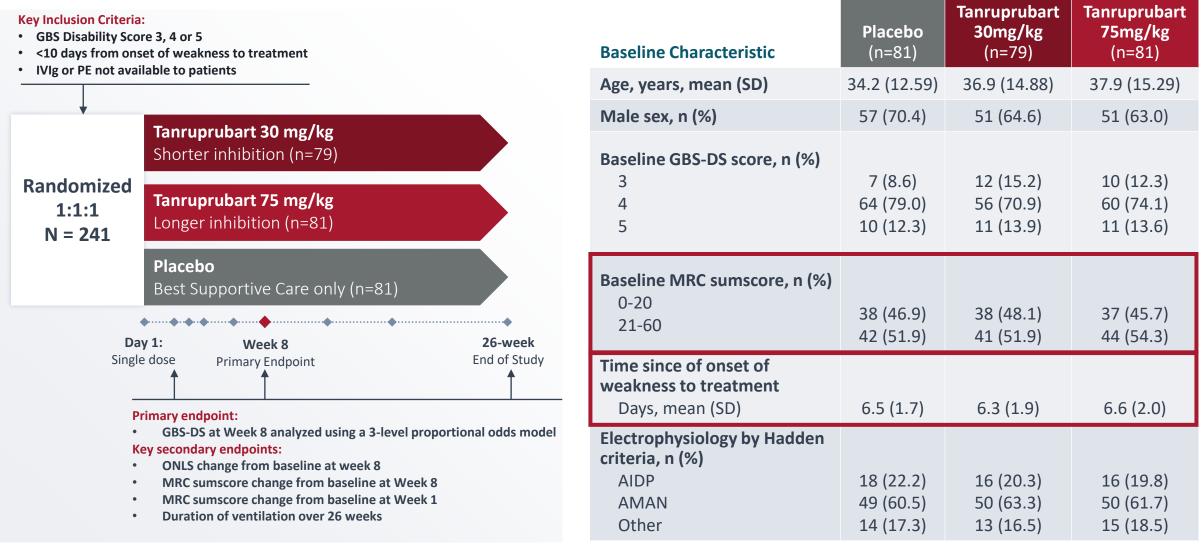


## HALT NERVE DAMAGE & DESTRUCTION

Allow for recovery phase and repair of damaged nerves

## GBS-02 Was A Phase 3 Randomized, Double-blind, and Placebocontrolled Study Of Tanruprubart (ANX005) In Patients With GBS

Two doses selected to determine most effective duration of C1q inhibition

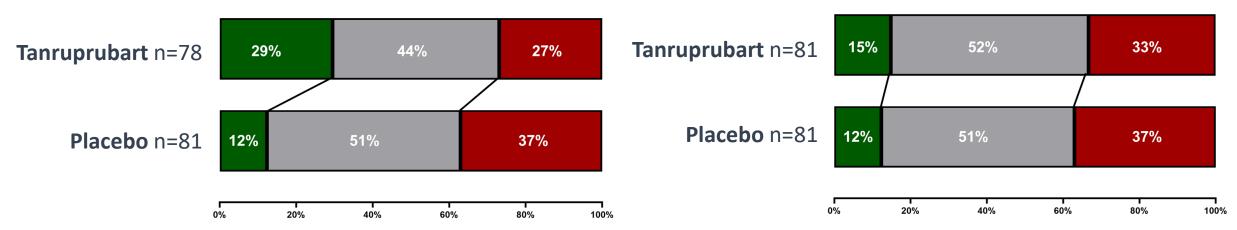


6 AIDP, acute inflammatory demyelinating polyneuropathy; AMAN, acute motor axonal neuropathy; GBS-DS, Guillain-Barré Syndrome Disability Score; IVIg, intravenous immunoglobulin; MRC, Medical Research Council; ONLS, Overall Neuropathy Limitations Scale; PE, plasma exchange.

## Shorter Duration of Complement Inhibition Showed Significant and Clinically Meaningful Treatment Effect on GBS-DS at Week 8

Primary Endpoint: 2.4-Fold Higher Likelihood of Being in a Better State of Health Relative to Placebo

30 mg/kg OR 2.41, p=0.0058 75 mg/kg OR 1.20, p=0.5548



**APPROACH:** Collapse 7-grade scale to a 3-grade scale (trichotomy)

0-1: Good state of health 2-3: Disabled 4-6: Severely disabled/death

# Tanruprubart (ANX005) 30 mg/kg Provided Rapid Recovery of Muscle Strength and Motor Function

Rapid Recovery in Muscle Strength Is A Critical Prognostic Factor Of Clinically Meaningful Improvement

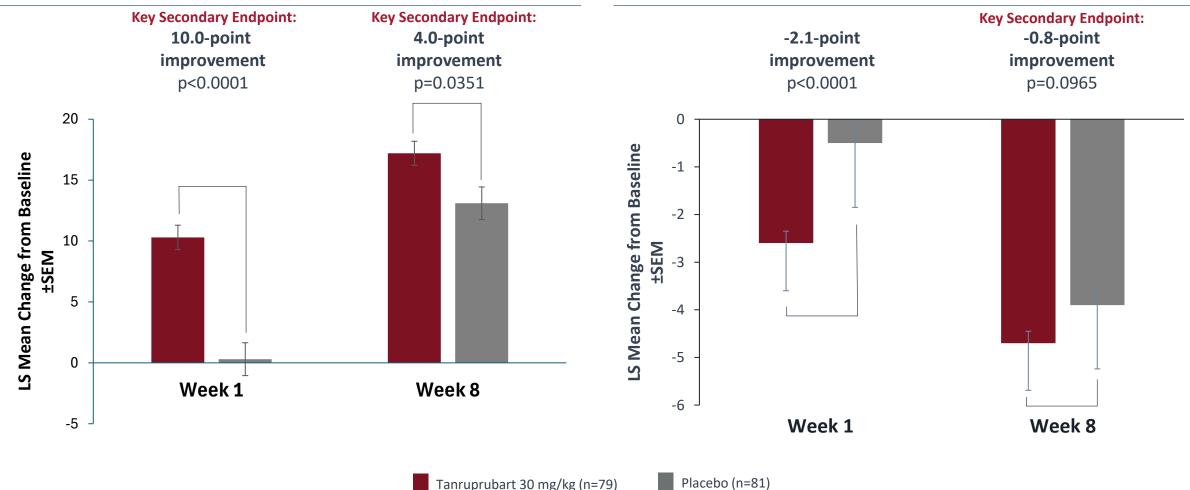
**Key Secondary Endpoint: 14 Times More Likely** More Than A 10-point Improvement In Muscle Strength To Perform Timed Up And Go (TUG) (MRC Sum Score)<sup>1</sup> At Week 1 **Over Placebo At Week 1** OR 14.0 p<0.0001 p<0.0001 35 10 30 25 8-LS Mean Change From % Patients Baseline ± SEM 20 6-15 4-**MUSCLE** MOTOR 10 STRENGTH FUNCTION 2-5 0 0 Tanruprubart Placebo -2 Tanruprubart Placebo 30 mg/kg (n=79) (n=81) 30 mg/kg (n=79) (n=81)

## **Rapid and Immediate Impact To Disease Trajectory**

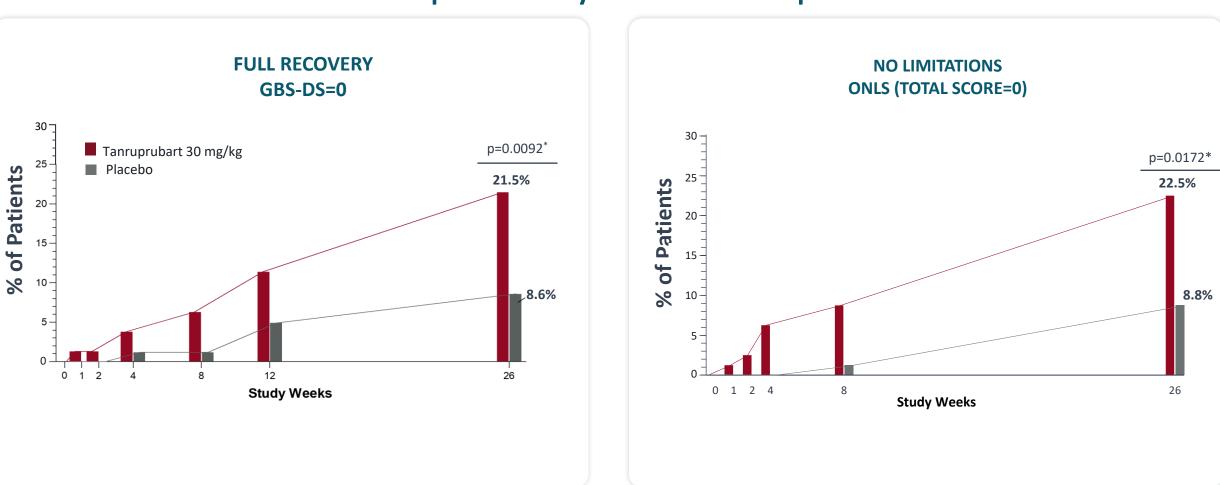
**Other Key Secondary Endpoints Demonstrated Treatment Benefit** 

#### RAPID IMPROVEMENT IN MUSCLE STRENGTH (MRC SUM SCORE)

**REDUCED MOTOR DISABILITY (ONLS)** 



### Tanruprubart (ANX005) Treatment Benefit is Durable, Leading to Increased Return to Normal Function Across Multiple Measures of Function and Mobility



~2X+ times more treated patients fully recover on multiple measures at week 26

## Tanruprubart (ANX005) Consistently Showed Faster Recovery Across Clinically Important Measures

**Helping Patients Achieve Their Independence Sooner** 



ICU, intensive care unit; ns, not significant.

11 <sup>1</sup>Based on first scheduled visit of recording <sup>2</sup>Among patients ventilated <sup>3</sup>Among patients requiring ICU

## Tanruprubart (ANX005) Was Generally Well-Tolerated

#### MAJORITY OF AES WERE MILD (GRADE 1) TO MODERATE (GRADE 2)

- Most common related events were infusion-related reactions
  - Majority were mild transient rashes
- SAEs and Grade 3 AEs balanced across groups, characteristic of disease morbidity

#### DEATHS

- No difference observed in incidence of all-cause mortality — 3 deaths in each dose group
  - Mortality rate of 3.7% consistent with rates seen in clinical trials

	Placebo n=81	Tanruprubart 30 mg/kg n=79	Tanruprubart 75 mg/kg n=81
	All Grades	All Grades	All Grades
Number of subjects reporting TEAEs, n (%)	79 (97.5)	79 (100.0)	80 (98.8)
Number of subjects with infusion- related reaction, n (%)	4 (4.9)	24 (30.4)	32 (39.5)
Rash (most common with IRR)	2 (2.5)	20 (25.3)	25 (30.9)
Most common TEAEs (non-IRR), n (%)			
Blood CPK increased	46 (56.8)	44 (55.7)	35 (43.2)
Musculoskeletal pain	35 (43.2)	36 (45.6)	26 (32.1)
ALT increased	23 (28.4)	21 (26.6)	23 (28.4)
Urinary tract infection	18 (22.2)	19 (24.1)	18 (22.2)
Hypokalemia	24 (29.6)	16 (20.3)	11 (13.6)
Constipation	10 (12.3)	15 (19.0)	17 (21.0)
AST increased	16 (19.8)	11(13.9)	17 (21.0)

AE, adverse event; ALT, alanine aminotransferase; AST, aspartate aminotransferase; CPK, creatinine phosphokinase; IRR, infusion-related reaction; SAE, serious adverse event; TEAE, treatment-emergent adverse event; UTI, urinary tract infection.

# Tanruprubart (ANX005) 30 mg/kg Single Dose Led to Rapid, Robust, and Consistent Benefit Across Multiple Endpoints

First targeted immunotherapy in GBS

Single dose rapidly blocks C1q and complement-mediated neuroinflammation and nerve damage

Clinically meaningful improvement throughout the study

- 10-point point improvement in muscle strength at week 1
- Earlier gains in function and reductions in disability
- ~2x more complete recovery at the end of the 26-week study

Generally well tolerated

Safety data similar to placebo

 No increased infection rate while not requiring vaccination or prophylactic antibiotics