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Tanruprubart (ANX005) targeted therapy reduces ventilation requirements in Guillain-Barré syndrome

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Tanruprubart (ANX005) is investigational and has not been approved for any indication in any jurisdiction.

Conflicts of interest

- Henk-André Kroon: Employee and shareholder of Annexon Biosciences
- Quazi Deen Mohammad: Consultancy/advisory role with Annexon Biosciences
- Jose Navarro: Consultancy/advisory role with Annexon Biosciences
- Glenn Morrison: Employee and shareholder of Annexon Biosciences
- Ping Lin: Employee and shareholder of Annexon Biosciences at the time of the study
- Robert Gerwien: Consultancy/advisory role with Annexon Biosciences
- Peter Collins: Employee and shareholder of Annexon Biosciences
- Khan Abul Kalam Azad: No disclosures
- Zhahirul Islam: Research funding from Fogarty International Center, National Institute of Neurological Disorders and Stroke of the National Institutes of Health, USA, and Annexon Biosciences
- Kenneth C. Gorson: Consultancy/advisory role with Annexon Biosciences, argenx, Janssen, and Sanofi

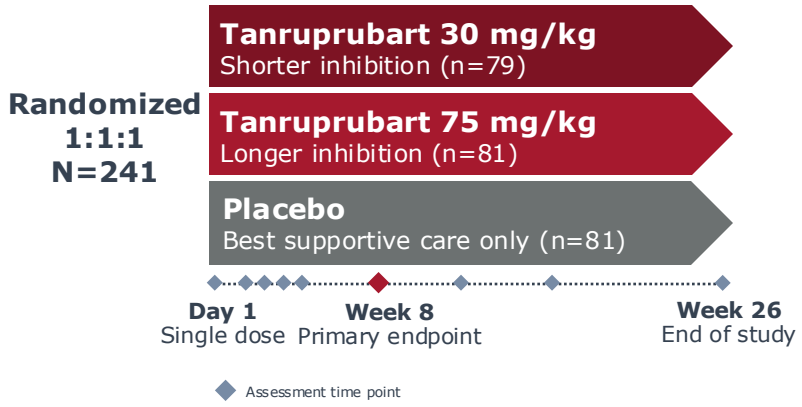
Tanruprubart targeted MOA and phase 3 design in Guillain-Barré Syndrome

- GBS is a rare, rapidly progressive, life-threatening neuromuscular emergency that can affect anyone at anytime, and often requires prolonged hospitalization and intensive care[1]
  - GBS is typically a post-infectious disease in which antibodies cross-react with nerve components activating C1q and the classical complement pathway driving inflammation, motor neuron conduction block, and nerve damage[2]

Tanruprubart
(ANX005)

- Monoclonal antibody
- Binds to and inhibits C1q
- Rapidly inhibits downstream complement activation

GBS-02: Phase 3 study in adults with GBS
(NCT04701164)



Tanruprubart 30 mg/kg met its primary endpoint demonstrating significant improvement in health status versus placebo at Week 8

Tanruprubart was generally well tolerated.

There was no increased infection rate while not receiving vaccination or prophylactic antibiotics

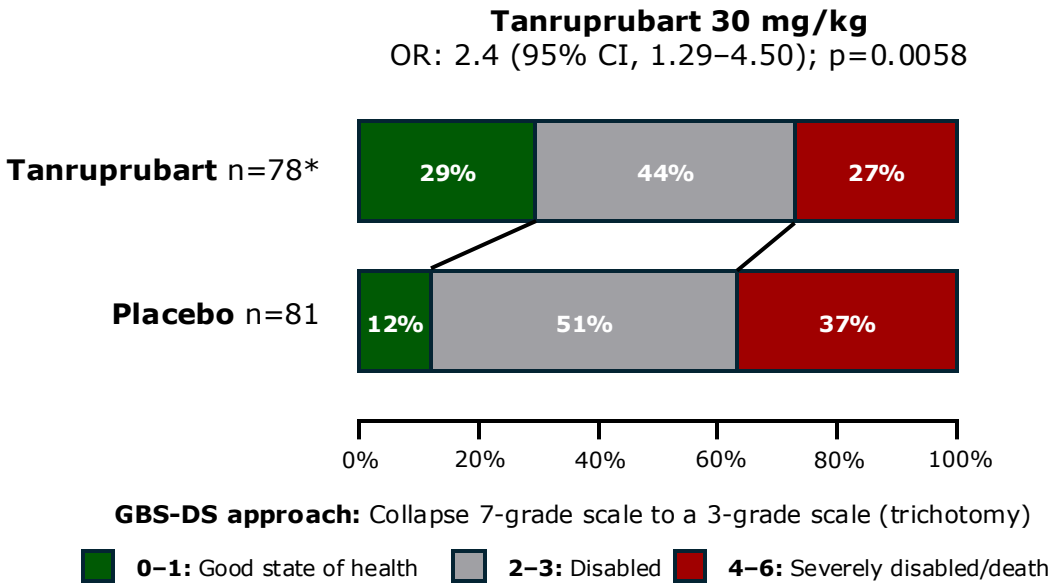
Aim: Assess the impact of tanruprubart on duration of ventilation, a critical disease burden marker

1. Willison HJ, et al. *Lancet*. 2016;388:717–27; 2. Willison HJ, et al. *J Neuroimmunol*. 2008;201-202:172–82.
CI, confidence interval; GBS, Guillain-Barré syndrome; GBS-DS, GBS–disability score; IRR, infusion-related reaction; MOA, mechanism of action; OR, odds ratio.

Tanruprubart 30 mg/kg improved muscle strength at week 1 in 87% of participants and met the primary endpoint at week 8

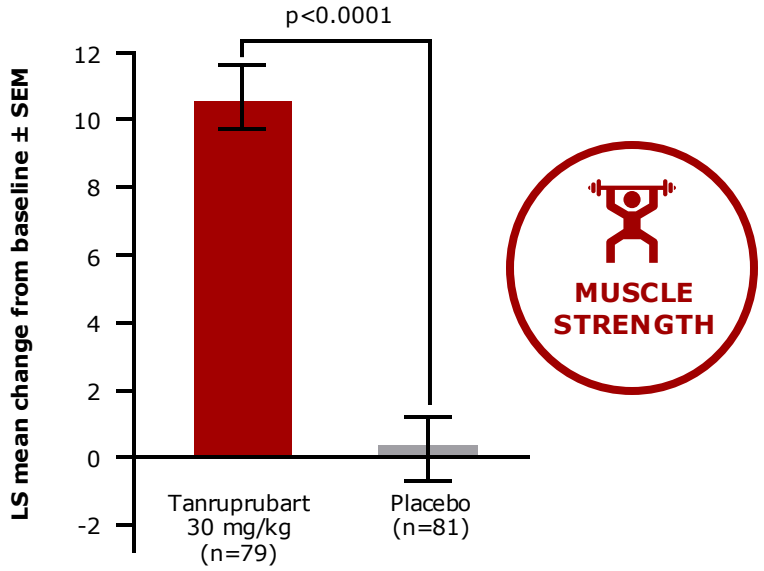
Primary endpoint: Functional Disability

Early and sustained improvements in health status with tanruprubart 30 mg/kg versus placebo at Week 8



Key secondary endpoint: Muscle Strength[1]

More than a 10-point improvement in muscle strength over placebo at Week 1



Tanruprubart 30 mg/kg–treated participants had 2.4-fold higher likelihood of being in a better state of health relative to placebo

87% of participants improved in MRC Sum Score at Week 1 with a single 30 mg/kg administration vs 46% of participants in the placebo group

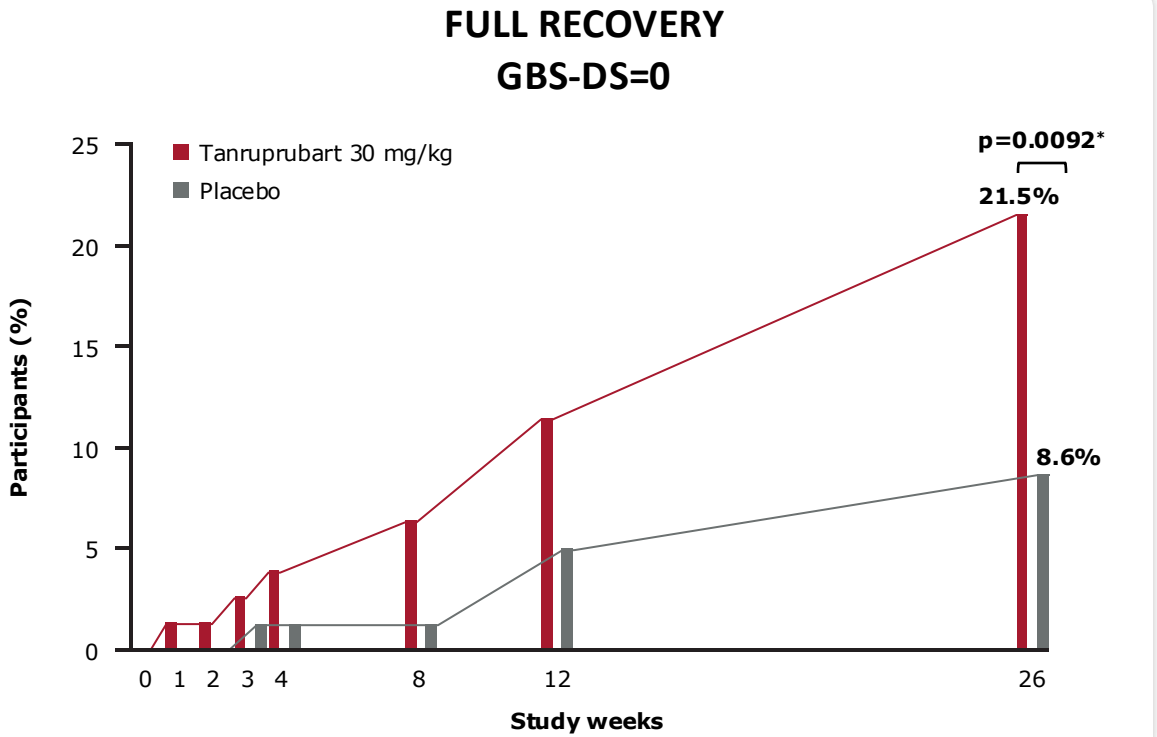
*One participant did not have week 8 GBS-DS data.

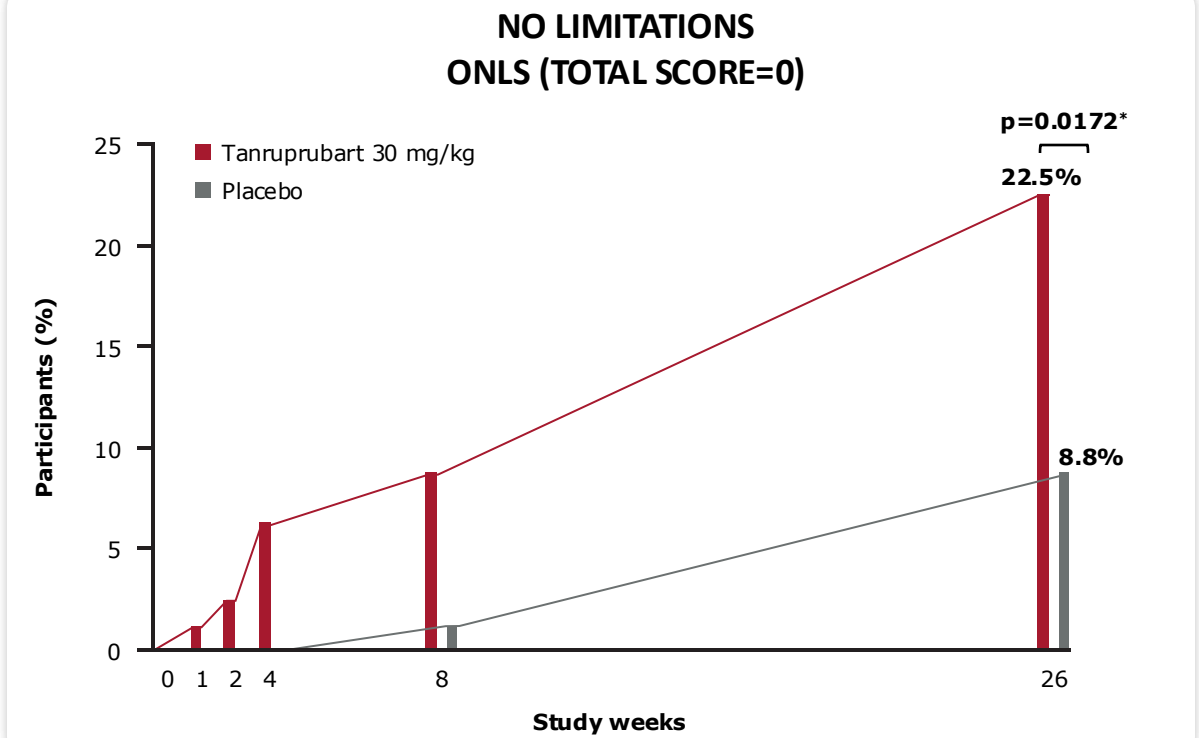
1. Walgaard C, et al. Neurology. 2011;76:968–75.

CI, confidence interval; GBS, Guillain-Barré syndrome; GBS-DS, GBS–disability score; MRC, Medical Research Council; OR, odds ratio; SEM, standard error of the mean.

Tanruprubart 30 mg/kg led to durable recovery with more patients returning to normal function across multiple measures at week 26

>2X more treated participants (vs placebo) fully recover on multiple measures at week 26





*Nominal.
GBS-DS, Guillain-Barré syndrome-disability score; ONLS, overall neuropathy limitations scale.

Duration of ventilation analysis methodology

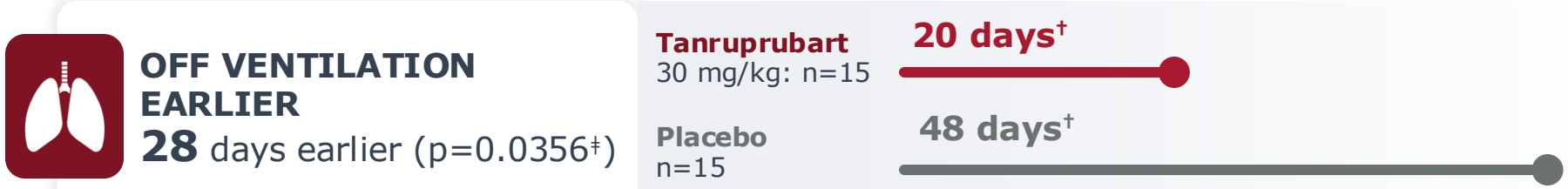
- Ventilation day definition: any calendar day on which a participant received invasive mechanical ventilation for any duration
  - Never ventilated were assessed as 0 days
- Intubation and weaning: timing and criteria at each Principal Investigator's discretion
- Analysis population: participants who required mechanical ventilation at any point after randomization
- Statistical model: ventilation duration was analyzed using a zero-inflated negative binomial (ZINB) model to:
  - Accommodate the excess of zeros (participants never ventilated)
  - Handle the overdispersion among those ventilated
- Imputation for death: to avoid underestimation of ventilator burden for participants who died while on mechanical ventilation, they were assigned 182 days (the full trial length)
  - Seven out of 9 deaths in study had been mechanically ventilated:
    - 3 placebo
    - 2 tanruprubart 30 mg/kg
    - 2 tanruprubart 75 mg/kg
- Sensitivity analyses *(post-hoc):* Wilcoxon rank-sum test assessed the impact of the imputation strategy and baseline characteristics on reported duration of ventilation

Tanruprubart 30 mg/kg meaningfully reduces ventilation compared to placebo across multiple analyses

Seven out of 9 deaths in study had been mechanically ventilated

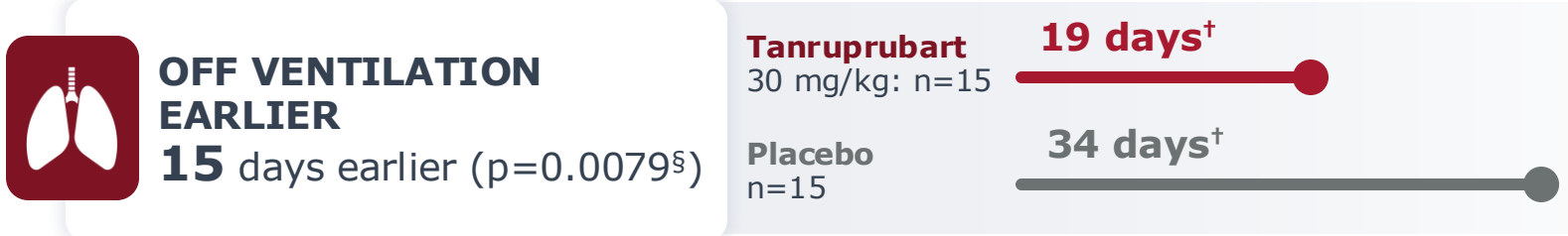
Imputed*

OFF VENTILATION EARLIER
28 days earlier (p=0.0356‡)



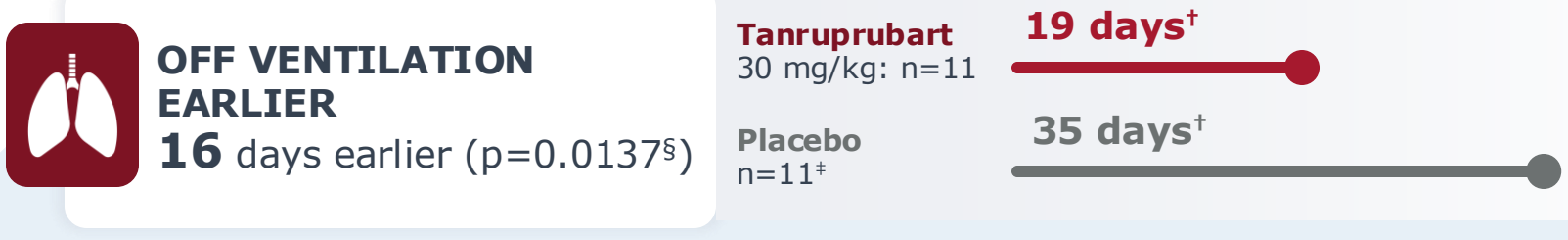
Non-imputed

OFF VENTILATION EARLIER
15 days earlier (p=0.0079§)



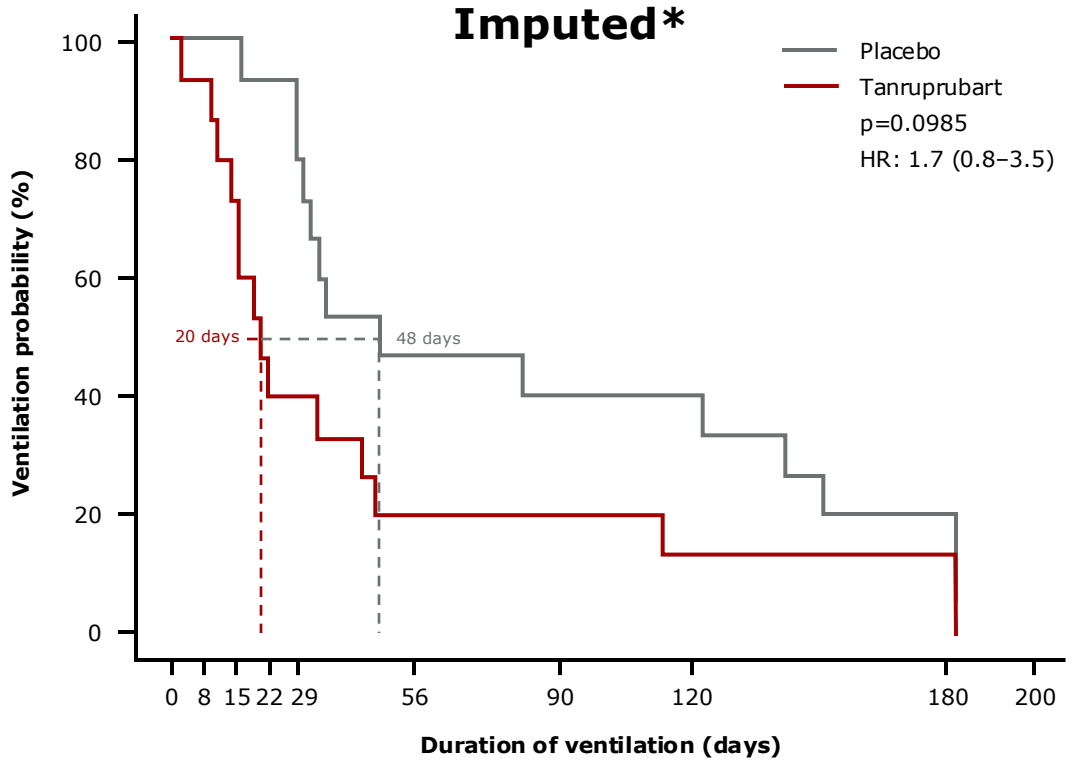
Ventilated at first dose

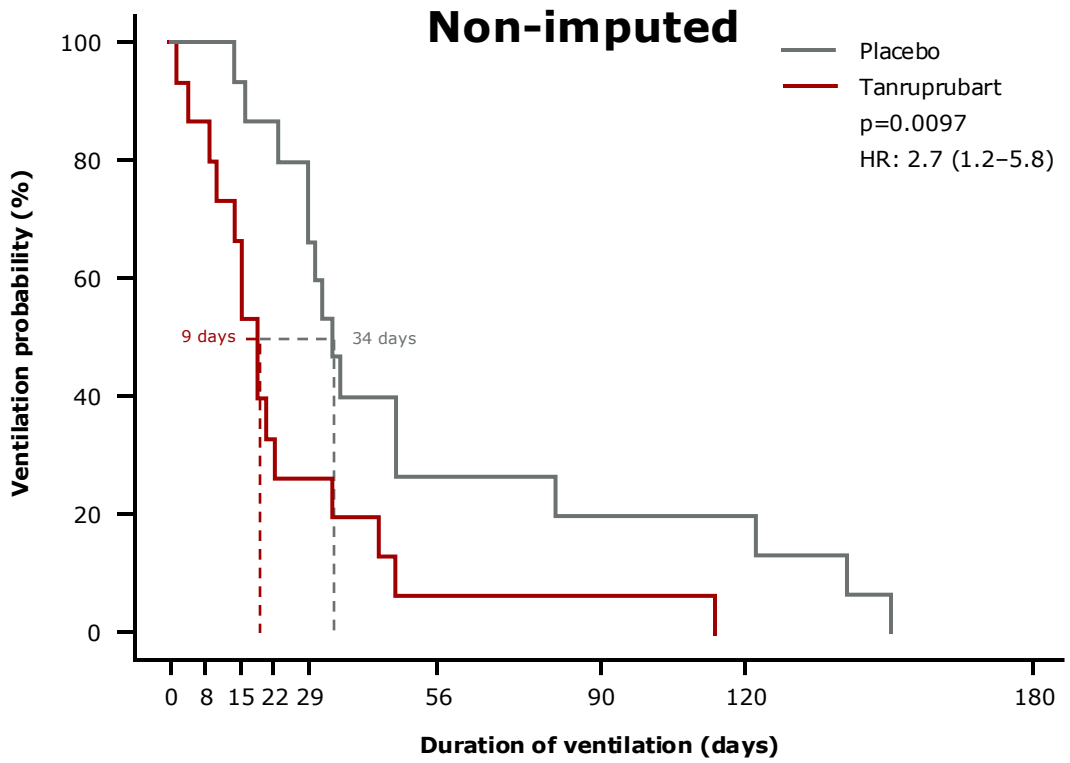
OFF VENTILATION EARLIER
16 days earlier (p=0.0137§)



*Participants who died and required mechanical ventilation were imputed with 182 days (full duration); †Median; ‡Nominal, analyzed via ZINB; §Nominal, analyzed via Wilcoxon rank-sum test; ‡Including 1 patient who was ventilated after GBS-DS baseline assessment but before receiving their first dose. GBS-DS, Guillain-Barré syndrome–disability score; ZINB, zero-inflated negative binomial.

Tanruprubart 30 mg/kg consistently reduced duration of ventilation compared to placebo





Number at risk

Placebo	15	15	15	14	14	7	6	6	3	0
Tanruprubart	15	14	11	7	6	3	3	2	2	0

Number at risk

Placebo	15	15	14	13	12	4	3	3		0
Tanruprubart	15	13	10	5	4	1	1	0		0

-------- Time until 50% of participants are off ventilation

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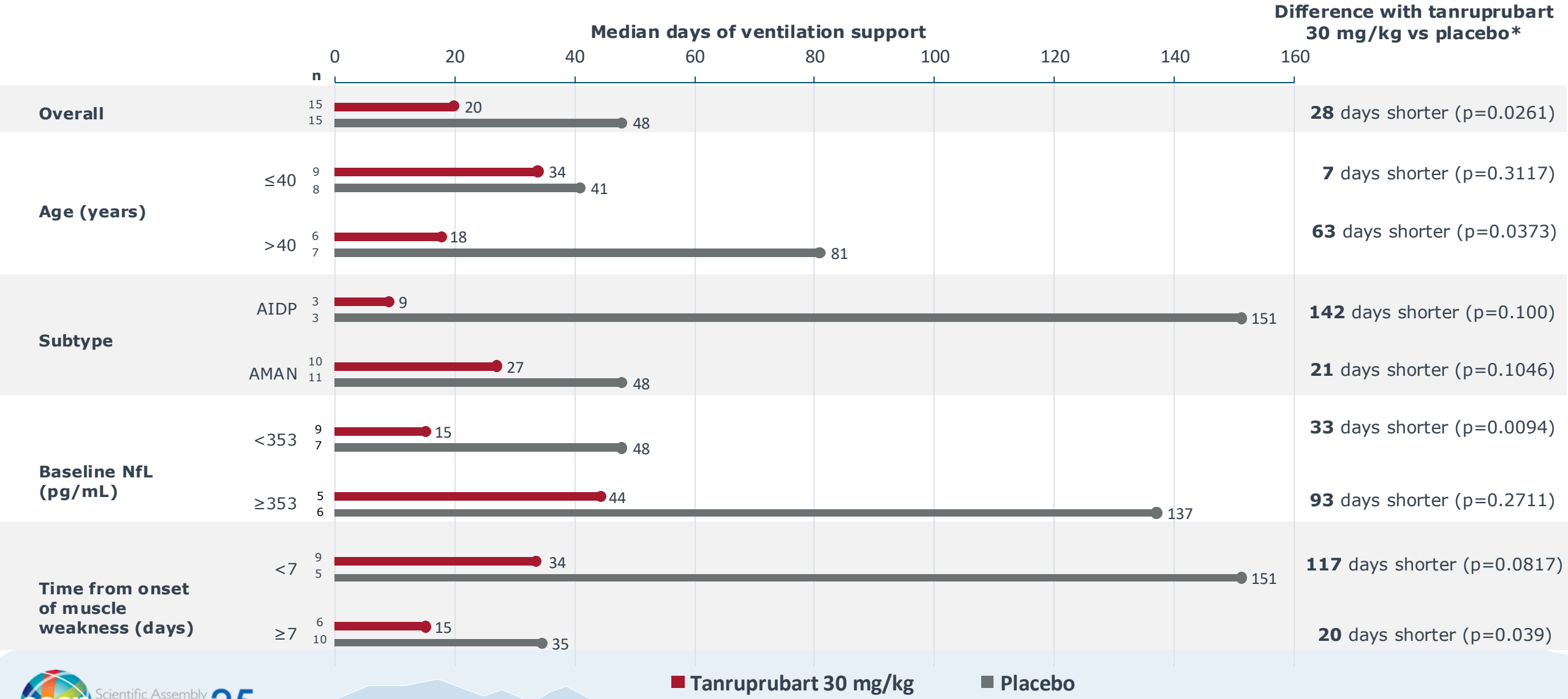
*Participants who died while requiring mechanical ventilation were imputed with 182 days (full duration).

Consistent benefit on ventilation across subgroups with tanruprubart 30 mg/kg



*Nominal; participants who died and required mechanical ventilation were imputed with 182 days (full duration); analyzed via Wilcoxon rank-sum test.
AIDP, acute inflammatory demyelinating polyneuropathy; AMAN, acute motor axonal neuropathy; NfL, neurofilament light.

Summary of tanruprubart 30 mg/kg benefits in GBS

- Improved muscle strength in ~90% of participants at Week 1 and met primary endpoint of GBS-DS at Week 8
- Reduced ventilator dependence and duration versus placebo, consistent across analytical methods and subgroups
- Tanruprubart was generally well tolerated
- Targeted immunotherapy with demonstrated improvement in critical clinical outcomes

GBS, Guillain-Barré syndrome; GBS-DS, GBS–disability score.

Thank you!