

GB-o895, a high-affinity anti-TSLP mAb, demonstrates prolonged half-life and sustained pharmacological activity supporting every 6-month dosing in asthma

Generate:BiomedicinesSM

Dave Singh¹, Victoria Szenes², Andreas Eich³, Brian Leaker⁴, Philipp Badorrek⁵, Stanislav Ignatenko⁶, Annelize Koch⁷, Denisa Wilkes⁸, Trisha Shamp⁹, Antonios Aliprantis¹⁰, Karima Amiri², Heather van Epps², Lovely Goyal², Kapil Mayawala², Andrew Robertson², Stephanie Straley², Sacha Prashad², Oliver Kornmann³

Aims of Study

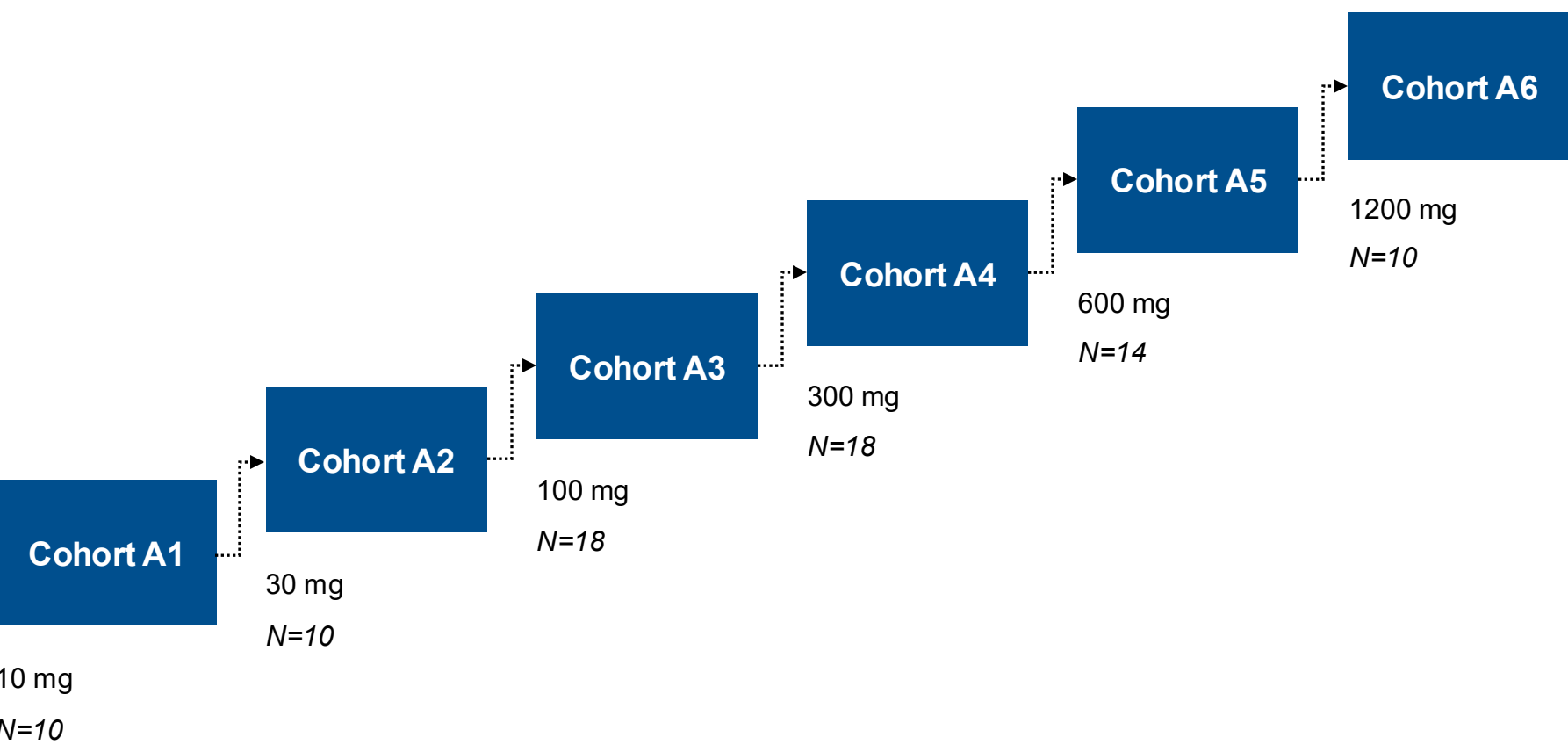
- Thymic stromal lymphopoietin (TSLP) is a validated target in asthma that drives lung inflammation
- Generate:Biomedicines developed GB-0895, a next generation, anti-TSLP mAb with
 - ~20-fold higher affinity for TSLP compared to tezepelumab
 - YTE Fc modifications for extended half-life
- Here we present interim data from an ongoing phase 1 randomized, placebo-controlled trial in participants with mild to moderate asthma
 - The study aimed to characterize safety, pharmacokinetics, and pharmacodynamics of GB-0895
 - All safety data are summarized by blinded cohorts
 - PK/PD data are presented in aggregate across active doses versus placebo to maintain trial integrity
 - Only data from the Part A (single ascending dose) are presented

Study Design

GB-o895 Phase 1, Double Blind, Placebo-Controlled Clinical Trial in Mild-to-Moderate Asthma Patients

- Mild-to-moderate asthma patients
- Subcutaneous administration
- Sentinels 1:1 randomization; Remainder 3:1 randomization
- Blood eosinophils ≥ 150 cells/μL
- Asthma controlled on as-needed SABA and stable low-to-moderate dose of ICS or stable low-to-moderate dose of ICS/LABA combination
- FEV1 ≥ 60% of predicted normal value
- ACT > 19

Part A: Single-ascending dose (SAD) | N=80



Conducted in the United Kingdom, Germany, and USA at 8 sites
MAD portion of study enrolled an additional 16 participants

Results

Baseline characteristics are consistent across cohorts of our Ph 1 study

	Cohort A1 10mg (N=10)	Cohort A2 30mg (N=10)	Cohort A3 100mg (N=18)	Cohort A4 300mg (N=18)	Cohort A5 600mg (N=14)	Cohort A6 1200mg (N=10)	Total (N=80)
Age, years Mean (SD)	40 (12)	42 (12)	40 (13)	41 (13)	36 (13)	41 (11)	40 (13)
Sex, M/F %	70/30	50/50	72/28	56/44	50/50	70/30	61/39
Baseline Eos, cells/uL Mean (SD)	255 (123)	231 (59)	276 (166)	269 (110)	338 (136)	244 (100)	273 (126)
FEV1, Predicted % Mean (SD)	87.5 (9.9)	88.0 (19.8)	85.8 (9.2)	90.3 (11.9)	85.9 (11.1)	92.6 (10.7)	88.2 (12.0)
FeNO, PPB Mean (SD)	37.7 (12.4)	25.8 (19.8)	34.8 (33.1)	32.7 (24.6)	33.6 (13.6)	28.8 (27.8)	32.6 (23.8)
ACT Score Mean (SD)	21.7 (1.7)	23.7 (1.3)	23.2 (1.7)	22.6 (1.7)	23.0 (1.6)	22.5 (1.5)	22.8 (1.7)

Each cohort includes randomized active and placebo participants; presented blinded to preserve trial integrity

GB-o895 has been well-tolerated

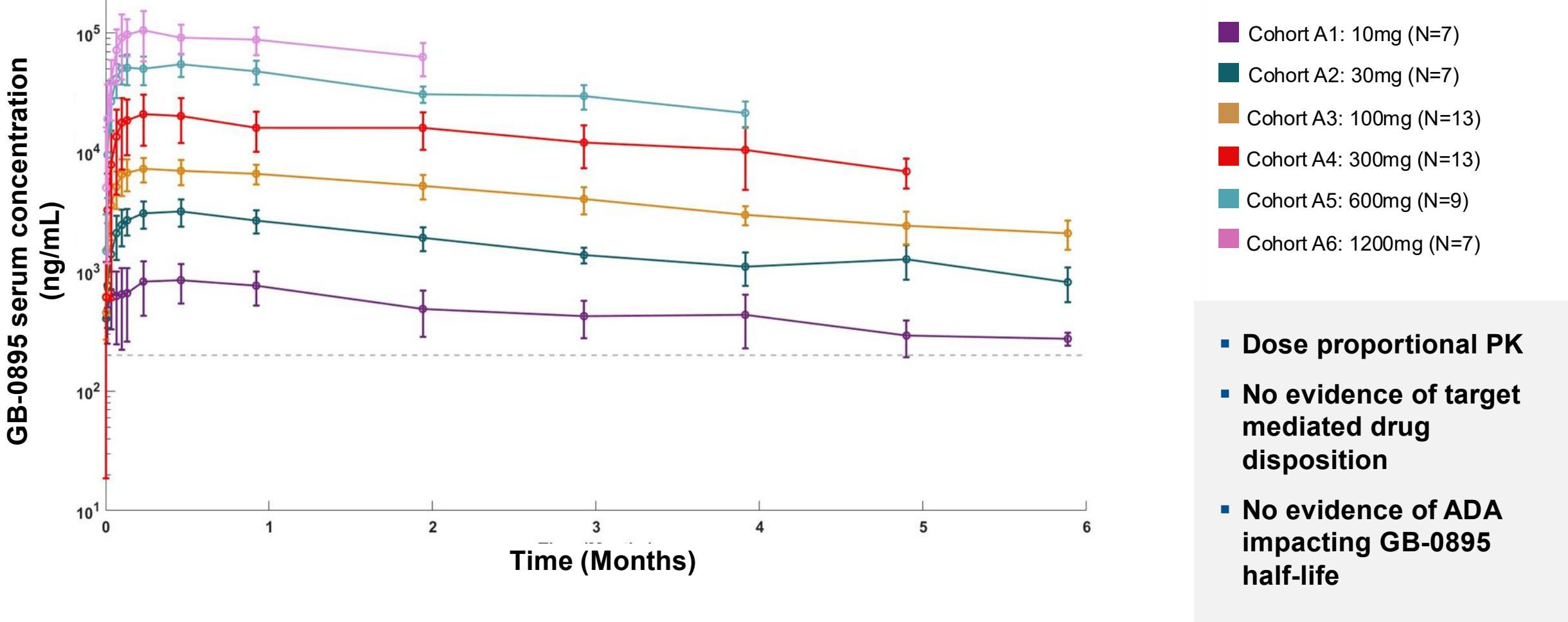
Safety data are summarized by blinded cohorts including active and placebo subjects

- 80 subjects received a single dose of GB-0895 or placebo; followed ≥ 26 weeks
- Most common TEAEs by PT (≥10% incidence in all treatment groups): nasopharyngitis, rhinitis, headache
- 3 SAEs reported: Occurred in cohort A3: 100mg (n=2) and cohort A4: 300mg (n=1)
 - All Grade 3, Not Related to study drug
- All other TEAEs mild-moderate in severity (Grade 1-2); ISR all Grade 1
- No trend in increasing incidence or severity of TEAEs vs dose

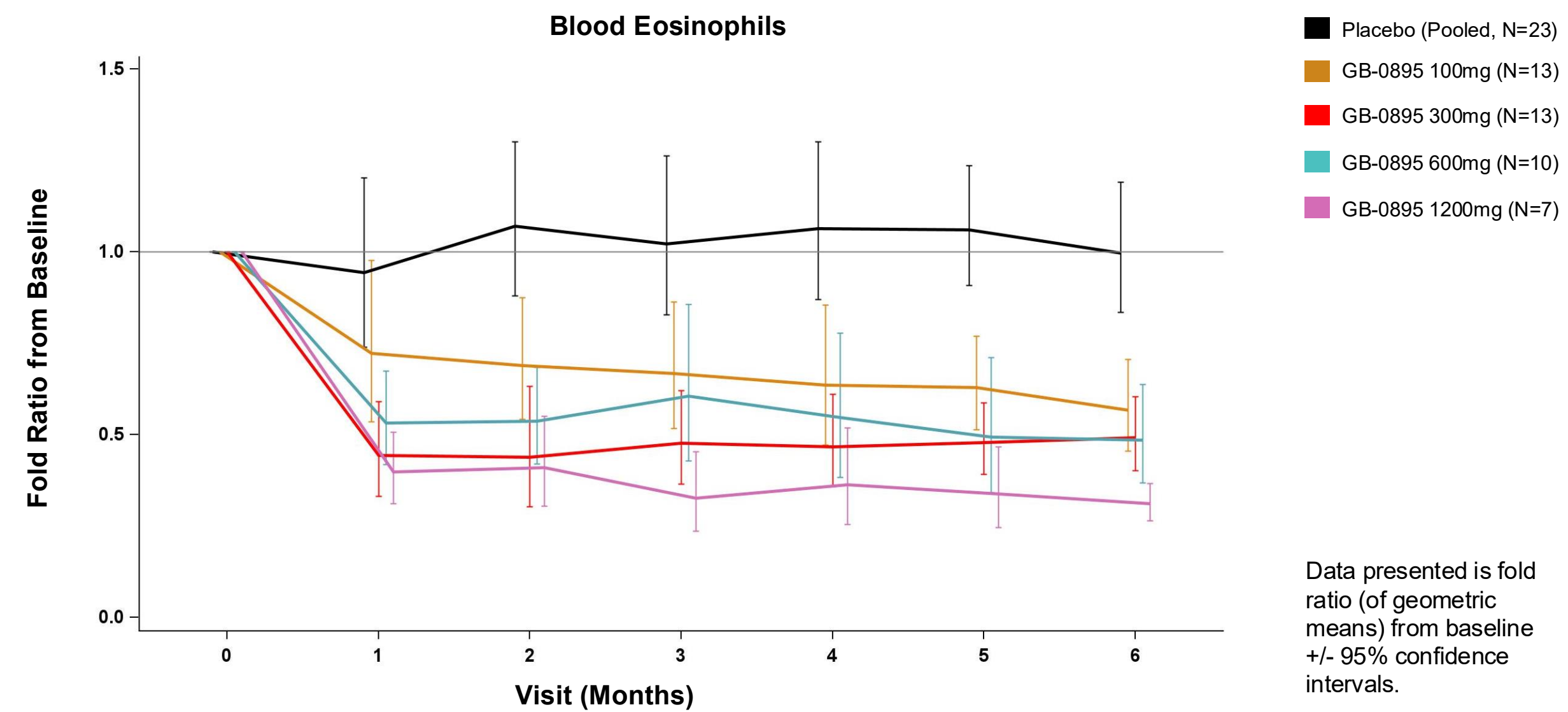
Subject Incidence of:	Cohort A1 (10mg) N=10	Cohort A2 (30mg) N=10	Cohort A3 (100mg) N=18	Cohort A4 (300mg) N=18	Cohort A5 (600mg) N=14	Cohort A6 (1200mg) N=10	Total N=80
Any TEAE	9 (90.0%)	8 (80.0%)	18 (100%)	17 (94.4%)	12 (85.7%)	9 (90.0%)	73 (91.3%)
Any ISR*	1 (10.0%)	0 (0.0%)	1 (5.6%)	3 (16.7%)	4 (28.6%)	1 (10.0%)	10 (12.5%)

*ISRs include AEs reported under the MedDRA High Level Term 'Injection Site Reactions'
TEAE = Treatment emergent adverse event; ISR = Injection Site Reaction; SAE = Serious adverse event; PT = Preferred Term

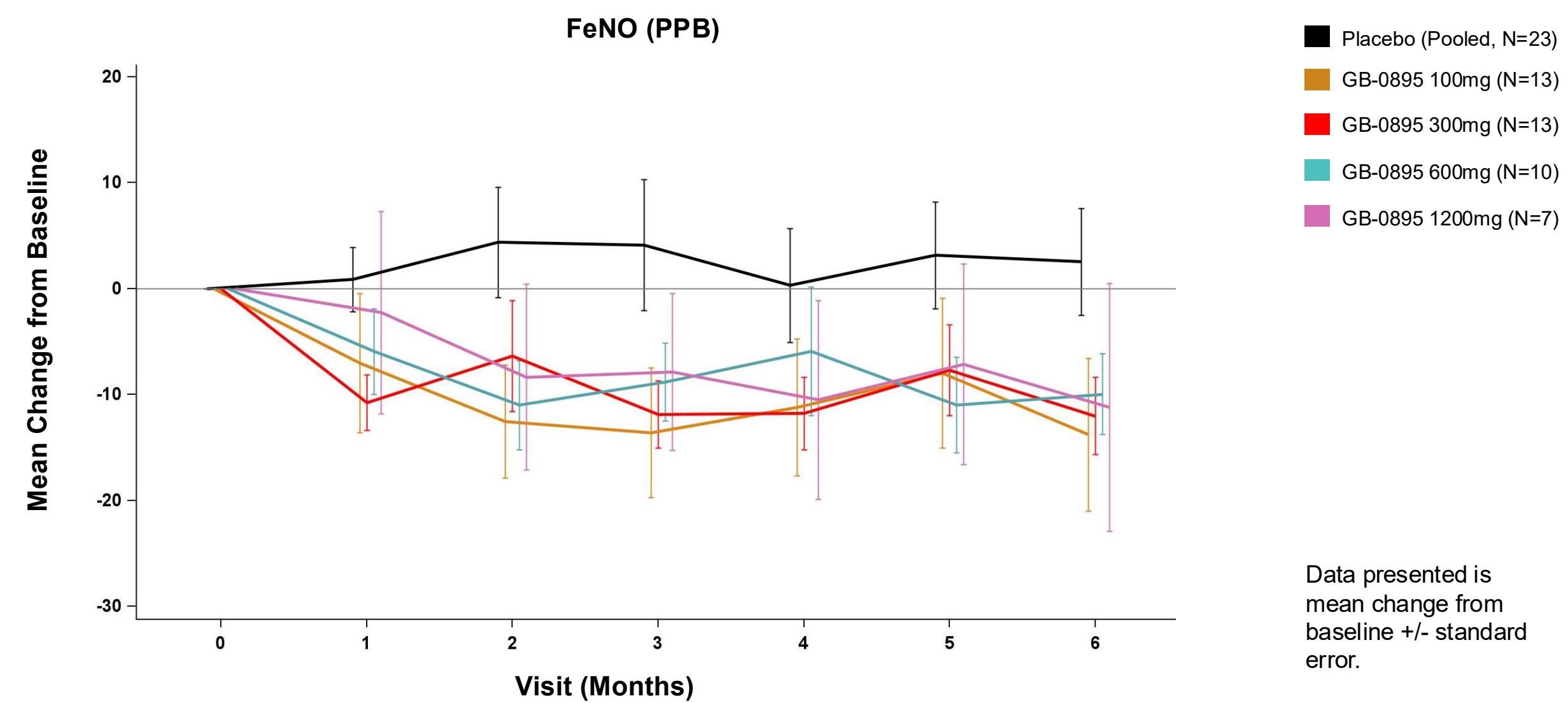
Clinical PK data for GB-o895 show half-life of ~89 days



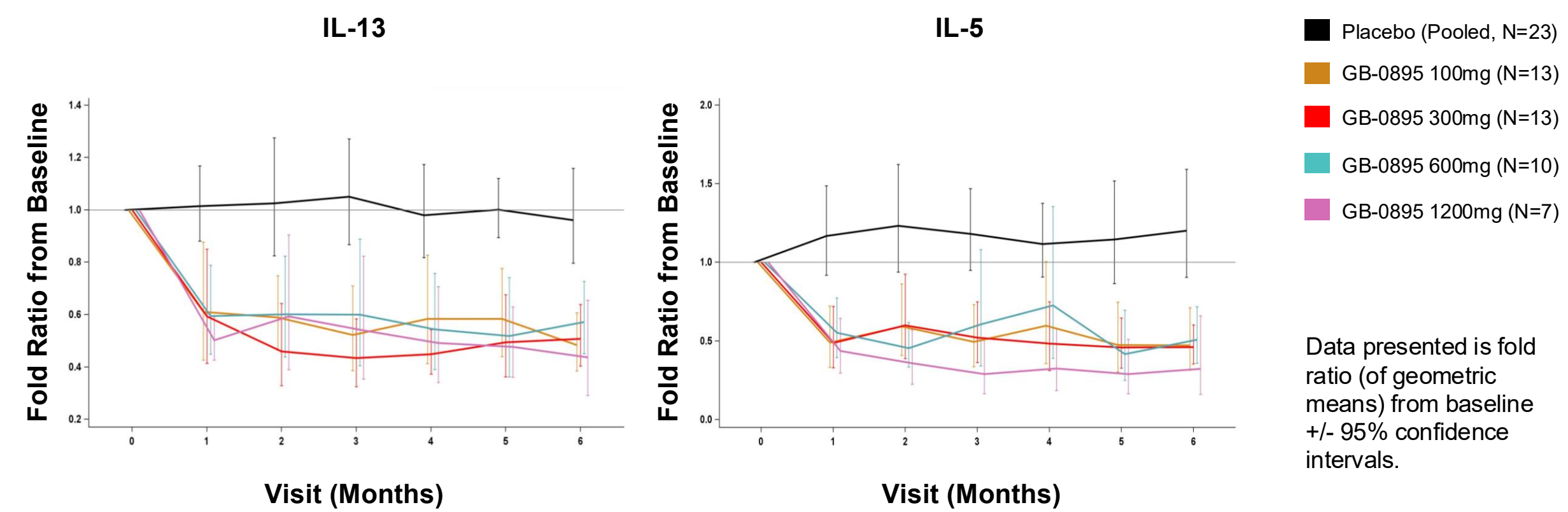
A single subcutaneous administration of GB-o895 leads to sustained reductions in blood eosinophils for 6 months at 100-1200 mg doses



A single subcutaneous administration of GB-o895 leads to sustained reductions in FeNO for 6 months at 100-1200 mg doses



A single subcutaneous administration of GB-o895 leads to sustained reductions in IL-13 and IL-5 for 6 months at 100-1200 mg doses



Conclusions

- GB-0895 has been well tolerated
- GB-0895 demonstrates dose-proportional pharmacokinetics with a half-life of ~89 days
- A single subcutaneous dose provides 6 months of pharmacologic activity, as evidenced by reductions in EOS, FeNO, IL-5, and IL-13
- Broad anti-inflammatory activity of GB-0895 is consistent with the mechanism of action as previously reported with tezepelumab
- These data support dosing of GB-0895 subcutaneously every 6-months for severe asthma

PHASE 3 TRIALS OF
GB-0895 EXPECTED TO INITIATE
IN Q4 2025

Affiliations

- ¹ Medicines Evaluation Unit, UK
- ² Generate:Biomedicines
- ³ Institut für Klinische Forschung, Germany
- ⁴ Queen Anne Street Medical Centre, UK
- ⁵ Institute for Toxicology and Experimental Medicine, Germany
- ⁶ Charité Research Organization, Germany
- ⁷ Simbec Orion, UK
- ⁸ Hammersmith Medicines Research Ltd, UK
- ⁹ Nucleus Network, US
- ¹⁰ Pioneering Medicines, Flagship Pioneering

ERS CONGRESS | 2025
27 September – 1 October | Amsterdam, Netherlands

Date of Data Extract: 04Aug2025.