SOLAIRIA-1 & SOLAIRIA-2: Two Phase 3 randomized, double-blind, placebo-controlled studies of GB-0895, a long-acting anti-TSLP antibody, in severe uncontrolled asthma

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Background & Aims of Study

- Thymic Stromal Lymphopoietin (TSLP), an alarmin, drives inflammatory responses in the airways and is a validated therapeutic target in severe asthma.
- **Generate:Biomedicines developed GB-0895**, a next-generation human monoclonal antibody (mAb) against TSLP, with the following properties to achieve a dosing regimen of a single subcutaneous (SC) injection every 6 months :
  - ~20-fold higher affinity for TSLP compared with tezepelumab
  - YTE Fc modifications for an extended half-life
- A Phase 1 study showed durable reductions in key asthma PD biomarkers, such as BEC, FeNO, IL-5, and IL-13, for ≥ 6 months in patients with asthma with magnitude comparable to tezepelumab monthly doses.
- SOLAIRIA-1 (NCT07276724) and SOLAIRIA-2 (NCT07359846) are ongoing, global, Phase 3, replicate, randomized, double-blind, placebo-controlled, registrational studies evaluating the efficacy and safety of adjunctive GB-0895 in adults and adolescents ≥ 12 years age, with severe uncontrolled asthma with an optional open-label extension (OLE).

Inclusion & Exclusion Criteria

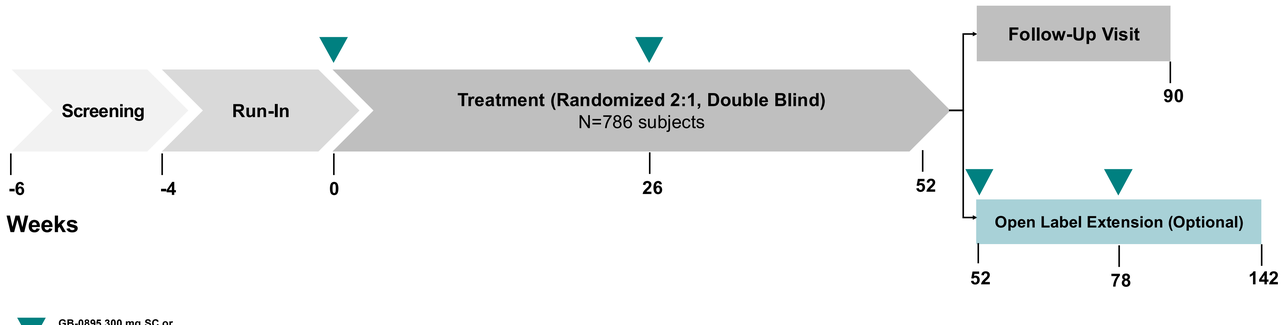
Key Inclusion Criteria

1. Age ≥ 12 and ≤ 80 years
2. Physician-documented diagnosis of asthma for 2 years
3. Medium or high dose ICS for ≥ 12 months before Screening plus ≥ 1 additional asthma controller ≥ 3 months before Screening with no change in ICS or controller(s) for ≥ 3 months
4. Documented history of ≥ 2 asthma exacerbations requiring systemic corticosteroids despite medium-to-high dose ICS in the prior 12 months
5. Adults: pre-BD FEV1 <80% predicted at Screening; Adolescents: pre-BD FEV1 < 90% predicted OR, FEV1:FVC < 0.80 at Screening
6. Positive BD responsiveness test at Screening or within 18 months
7. ACQ-6 score ≥ 1.5 (Screening & Randomization)

Key Exclusion Criteria

1. A clinically significant asthma exacerbation within 12 weeks before the Screening Visit or during Run-in and requiring a change in asthma maintenance therapy.
2. Respiratory disease, including current infection, bronchiectasis, pulmonary fibrosis, bronchopulmonary aspergillosis, tuberculosis, diagnosis of chronic pulmonary disease, or a history of lung cancer.
3. Eosinophilic diseases.
4. Treatment with systemic immunosuppressive drugs within 12 weeks prior Randomization.
5. Receipt of an investigational biologic within 4 months or 5 half-lives, OR an investigational non-biologic within 30 days or 5 half-lives before Screening.

SOLAIRIA 1 & 2 | GB-0895 Asthma Phase 3 Trial Design



ENDPOINTS

Primary:

- Annualized asthma exacerbation rate (AAER) over 52 weeks

Key Secondary:

- AAER over 52 weeks among subjects with baseline eosinophils (EOS) <300 cells/μL
- FEV_1 (forced expiratory volume in 1 second)
- Asthma Quality of Life Questionnaire (AQLQ(S)12+)
- Asthma Control Questionnaire (ACQ-6)
- Time to first asthma exacerbation
- Daytime and nighttime asthma symptom scores

KEY ASSESSMENTS

Respiratory:

- Spirometry, FeNO, Home-Based Peak Exploratory Flow

Patient Questionnaires:

- AQLQ(S)12+, ACQ-6, SGRQ, ADSD, ANSD, SNOT-22, PGI-S, PGI-C, and EQ-5D-5L

PATIENT POPULATION

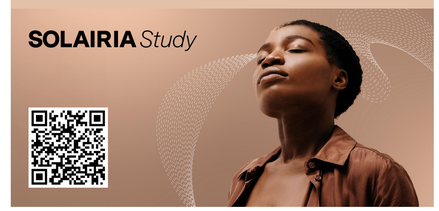
- Adults and adolescents with severe asthma (≥ 2 exacerbation in last 12 months)
- No restrictions on blood EOS (all-comers)

Abbreviations: Abbreviations: AAER=annualized asthma exacerbation rate; ACQ-6=Asthma Control Questionnaire; ADSD=Asthma Daytime Symptom Diary; ANSD=Asthma Nighttime Symptom Diary; AQLQ(S)12+=Asthma Quality of Life Questionnaire; EQ-5D-5L=5-level EuroQol 5 dimensions questionnaire; EOS=eosinophils; FeNO=fractional exhaled nitric oxideFEV1=forced expiratory volume in 1 second; PEF=peak expiratory flow; PGI-C=Patient Global Impression of Asthma Change; PGI-S=Patient Global Impression of Asthma Severity; SC=subcutaneous; SGRQ=St. George's Respiratory Questionnaire; SNOT-22=22-Item Sino-Nasal Outcomes Test

Conclusions

- SOLAIRIA-1 & SOLAIRIA-2 are investigating key asthma clinical outcomes, including AAER, lung function, asthma control, symptom burden and quality of life, and safety assessments.
- The replicate study designs and their statistical power ensure evaluation of safety and efficacy of GB-0895 in patients with severe uncontrolled asthma.

GB-0895 is being evaluated in two ongoing Phase 3, global, randomized, double-blind, placebo-controlled studies in adults and adolescents with severe uncontrolled asthma (SOLAIRIA-1 & SOLAIRIA-2).



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Conflict of Interest statement: All authors are employees and shareholders of Generate Biomedicines.