gossamerbio®

Q2:2021 Earnings Update

August 2021

Forward Looking Statement

This presentation contains forward-looking statements. All statements other than statements of historical facts contained in this presentation, including statements regarding our future results of operations and financial position, business strategy, prospective products, product approvals, research and development costs, timing and likelihood of success, plans and objectives of management for future operations, and future results of current and anticipated products, are forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "expect," "plan," "anticipate," "could," "intend," "target," "project," "contemplates," "believes," "estimates," "predicts," "potential" or "continue" or the negative of these terms or other similar expressions. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. These known risks and uncertainties are described in detail in our filings with the Securities and Exchange Commission (the "SEC") from time to time. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified and some of which are beyond our control, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise. All forward-looking statements are qualified in their entirety by this cautionary statement, which is made under the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 and we undertake no obligation to revise or update this presentation to reflect events or circumstances after the date hereof.

This presentation also contains estimates and other statistical data made by independent parties and by us relating to market size and growth and other data about our industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. In addition, projections, assumptions, and estimates of our future performance and the future performance of the markets in which we operate are necessarily subject to a high degree of uncertainty and risk.

2021 Year of Execution Has Set Stage for Milestones in 2022

1st Half of 2022*: Seralutinib Ph. 2 PAH Topline Readout

- Enrolling 80 PAH patients on standard background, including triple therapy
- Patients randomized 1:1 between seralutinib (up to 90mg BID) and placebo
- Primary endpoint: change in PVR from baseline at Week 24

TORREY STUDY

1st Half of 2022*: GB004 Ph. 2 UC Topline Readout

- Enrolling 195 mild-to-moderate UC patients, post-5-ASA (pre-biologic)
- Patients randomized 1:1:1 between 2 doses of GB004 and placebo
- Primary endpoint: Clinical remission at Week 12

shift uc

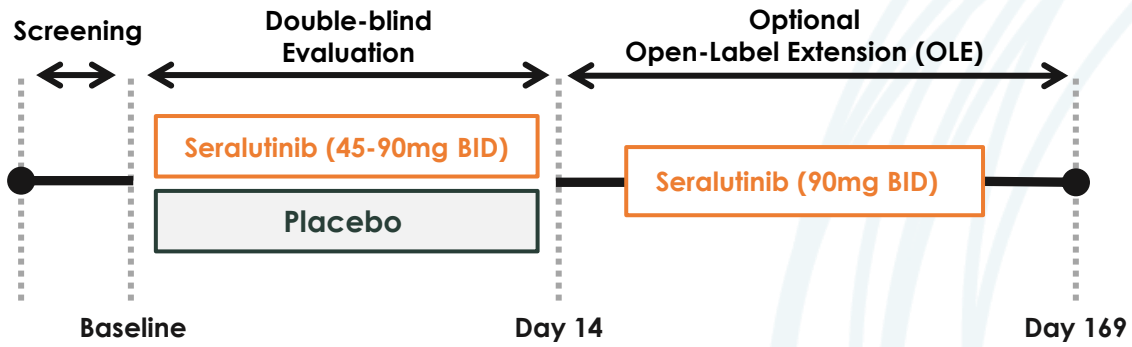
*Subject to further developments in the ongoing COVID-19 pandemic.

Seralutinib (GB002)

Inhaled PDGFR, CSF1R & c-KIT Inhibitor

Pulmonary Arterial Hypertension (PAH)

Overview of Phase 1b Study in Patients with PAH



- First subjects enrolled Q1:20; study interrupted by COVID-19 related site closures in the spring of 2020, limiting ability for patients to continue treatment on OLE
- Site re-openings in the fall of 2020 allowed enrollment of additional subjects, including opportunity for roll-over to the OLE
- A total of 8 subjects enrolled and completed the double-blind period (6 Seralutinib, 2 Placebo) with 2 subjects continuing and completing the OLE

Study Objectives

Primary

- To evaluate the safety and tolerability of inhaled seralutinib

Secondary

- To evaluate the pharmacokinetics (PK) of seralutinib

Exploratory

- To evaluate pharmacodynamic (PD) biomarker on blood samples

Inclusion Criteria and Dosing

Key Inclusion Criteria

- Diagnosis PAH, WHO group 1, FC II-IV
- Prior cardiac catherization data c/w PAH
- Baseline 6-minute walk >100 m
- On PAH background medications

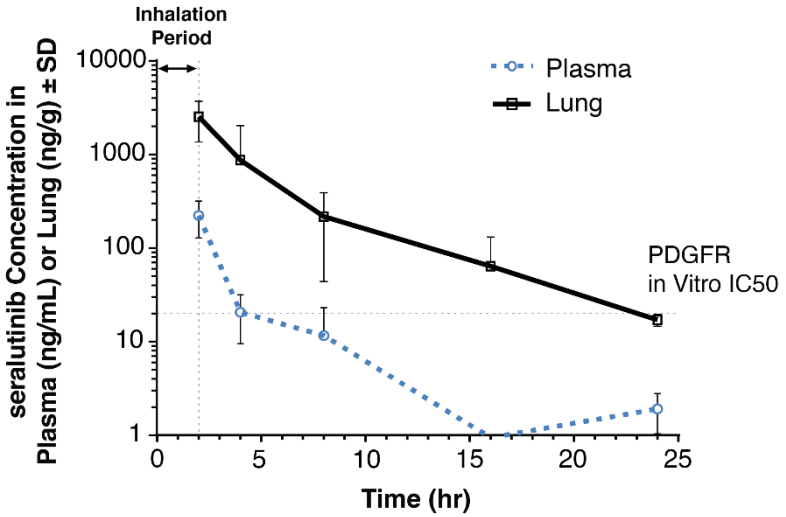
Dosing

- 45 mg (wk 1) to 90 mg (wk 2) BID dose escalation first 14 days
- 90 mg BID in OLE days 15 - 169

Source: clinical trials.gov/NCT03926793

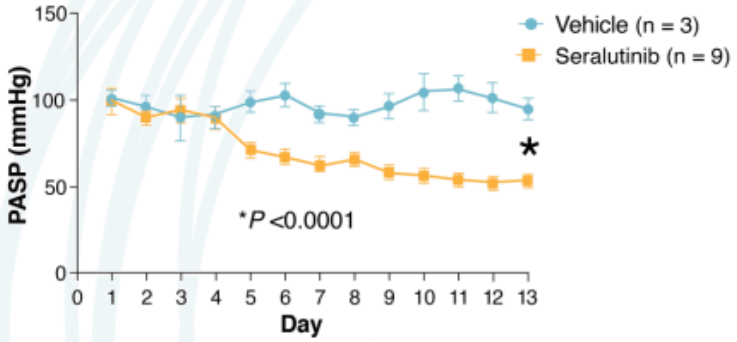
Gossamer Took A Systematic Approach to Arrive at 45 – 90mg BID Dosing for Seralutinib

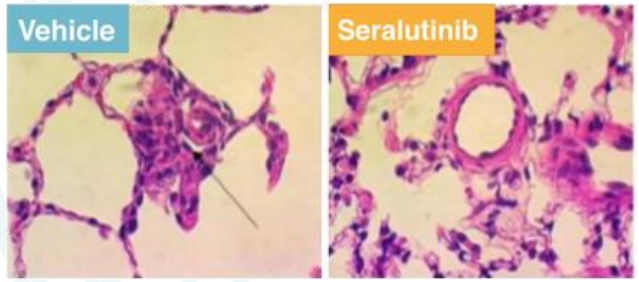
Seralutinib Designed to be an Inhaled Therapeutic



- ✓ Much greater (~30x mean) lung-to-plasma ratio and lung half life (~6 hours vs. 3 hours in plasma) observed in rats

Human Dose Scaled to Efficacious Results in Rats

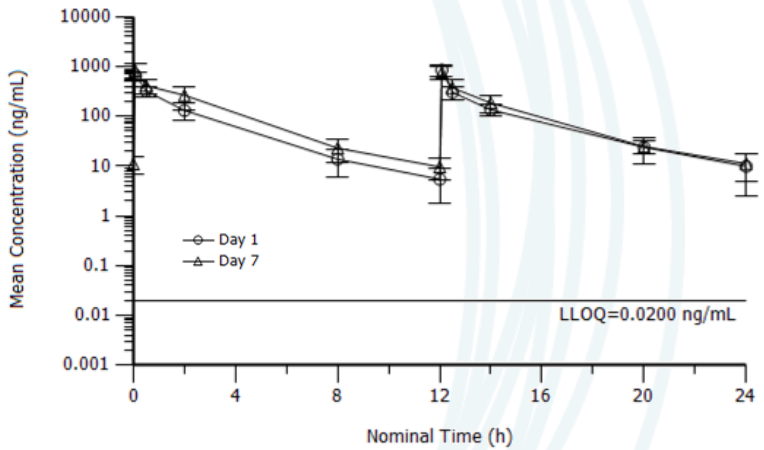




- ✓ Allometric and direct scaling for inhalation products† suggests ~12.8 mg/kg BID dose efficacious in SuHx PAH model translates to ~90 mg BID in humans

Phase 1 PK Confirms Scaling and IC50 Coverage of Target Kinases

Seralutinib 90mg BID –
Total Plasma Concentration in Healthy Volunteers

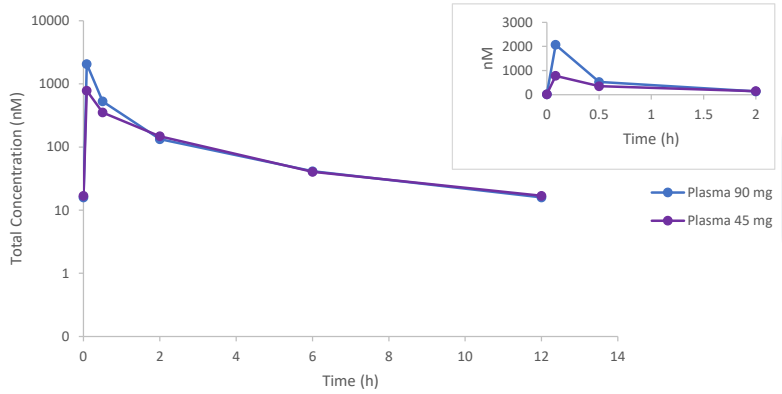


- ✓ 45mg and 90mg BID doses selected to maintain IC50 coverage in the lung above the IC50 values of PDGFRa, PDGFRβ, c-KIT, and CSF1R based on Phase 1 NHV data

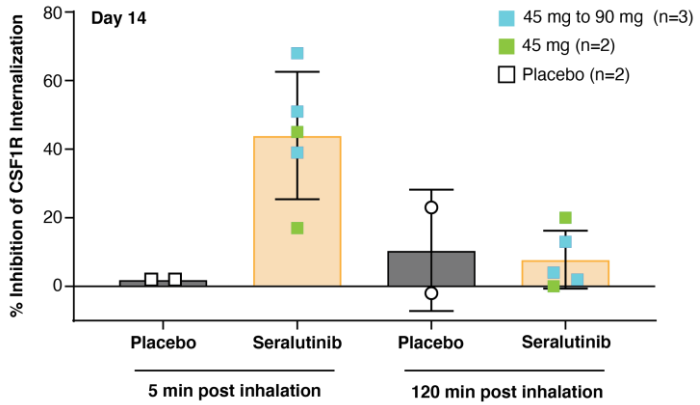
†Allometric and direct scaling approaches as described in JE Philips; Pharmacology & Therapeutics, 178 (2017) Theres`e Ericsson et al; Pharm Res, July 2017
BID: twice daily; SD: standard deviation; PASP: pulmonary arterial systolic pressure; SuHx: sugen hypoxia; NHV: normal healthy volunteers

Phase 1b PK Profile, Target Engagement Data, and Extrapolated Lung Concentrations Support Target Coverage of Dose Range Predictions

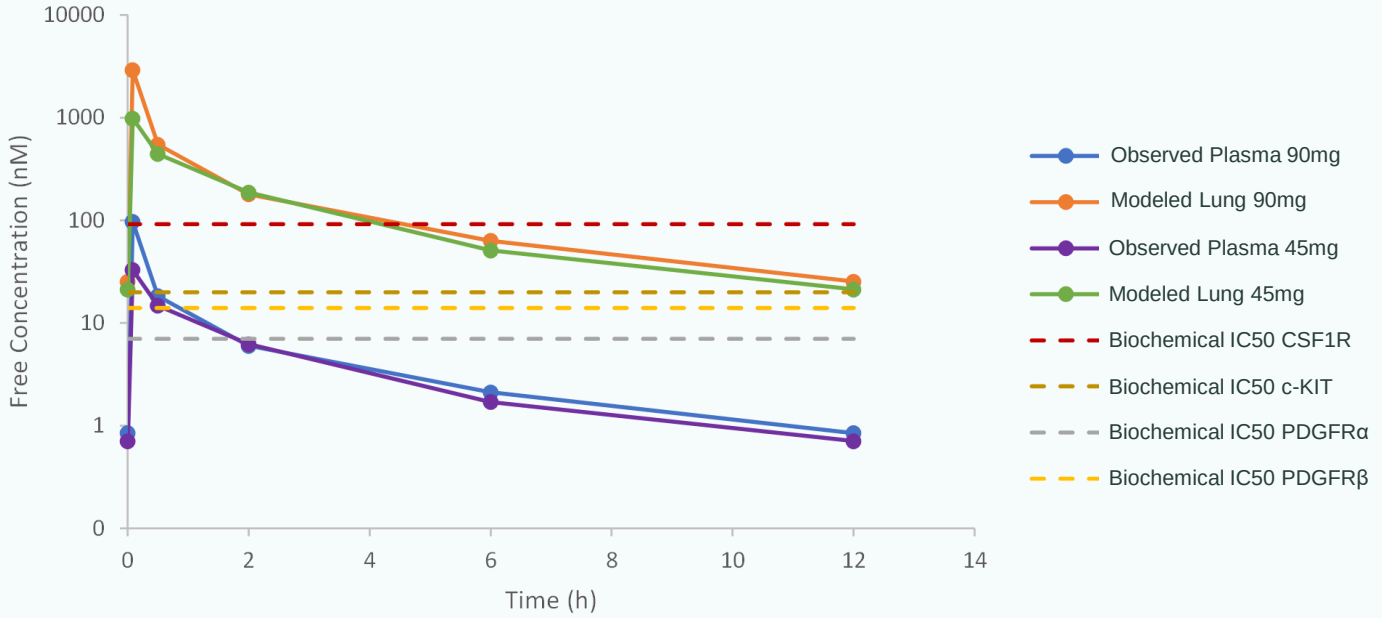
Systemic Total Drug PK in PAH Patients Matches Normal Healthy Volunteer Experience



Seralutinib Transiently Inhibits CSF1R in Plasma



Observed Phase 1b Free Plasma and Modeled Free Lung Concentrations Support Target Coverage in Lungs and Systemic Sparing



- Seralutinib systemic PK in PAH characterized by T_{max} of 5-6 min and half-life of ~4 hours following a single inhaled dose
- Blood target engagement biomarker (CSF1R) data consistent with free drug concentration levels considering biochemical IC50 of CSF1R
- With the extrapolated lung exposures of ~30x and in-vitro biochemical IC50's, seralutinib doses of 45-90 mg BID are anticipated to provide target coverage in the lung over 24 hours

Note: ng/mL to nM conversion: (ng/mL)/(molecular weight)*1000; total to free seralutinib conversion applies human plasma protein binding fraction of 95.1%
Source: Data on File

Summary of Key Outcomes From Phase 1b Study in PAH with Seralutinib

Summary of Outcomes By Section of Study

Double-blind period

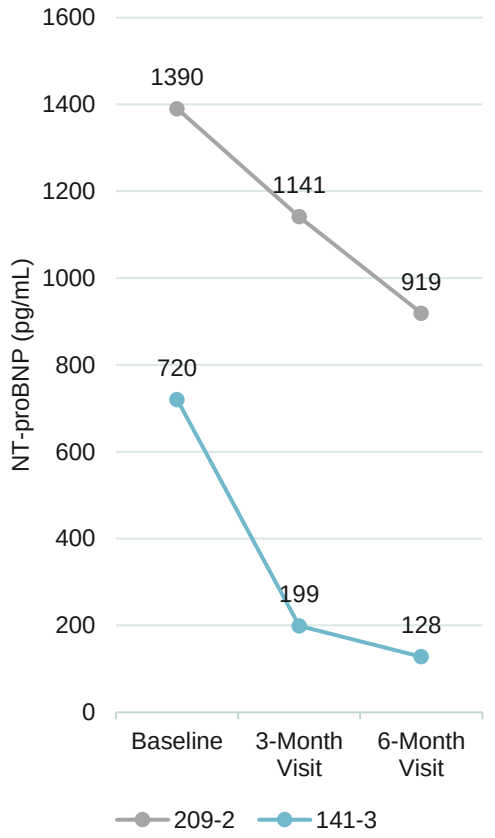
- All 8 subjects completed the 14-day treatment period
- No SAEs reported
- The most frequently reported AEs were:
  - Cough (mild-moderate)
  - Headache (mild)
- There were no clinically significant changes in labs, ECGs, PFTs, or vital signs
- Evidence of peripheral blood target engagement (e.g., CSF1R)

Open-Label Extension (OLE)

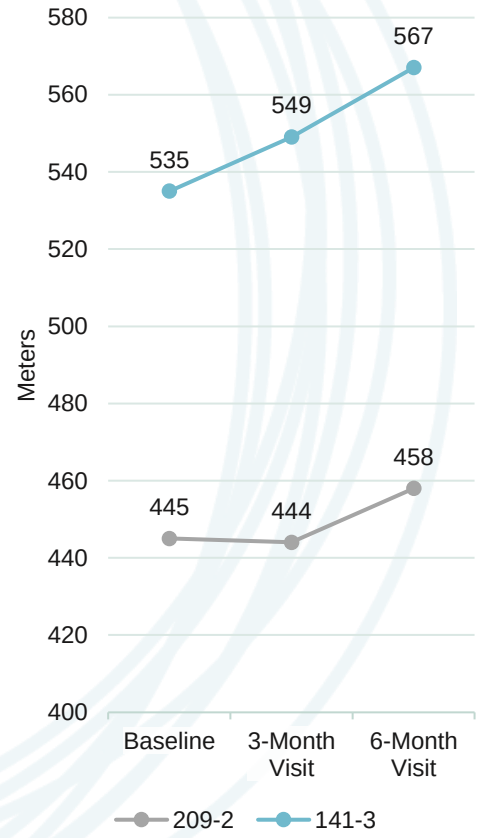
- 2 subjects entered and completed the OLE receiving 90 mg BID
- No SAEs reported and no safety concerns identified with longer term dosing
- NT-ProBNP levels decreased and 6-minute walk distances increased

Biomarker & Functional Outcomes for OLE Patients

Δ in NT-proBNP from Baseline



Δ in 6MWD from Baseline



SAEs: serious adverse events; ECGs: electrocardiograms; PFTs: pulmonary function tests; 6MWD: six-minute walk distance
Source: Data on File.

Details for Upcoming Phase 1b Biomarker Data Presentation at ERS

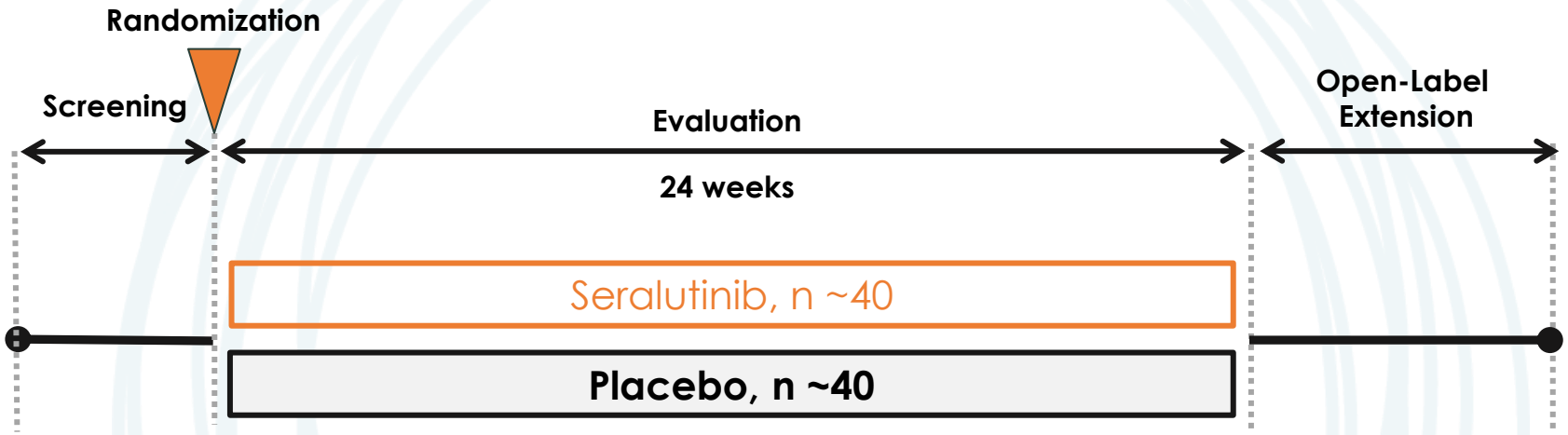
- **ePoster Title:** Evidence of Target Engagement and Pathway Modulation: Biomarker Analysis of the Phase 1b Inhaled Seralutinib Study

- **Session Date:** Sunday, September 5, 2021

- **Session Time:** 1:15pm CEST / 7:15am EDT / 4:15am PDT

TORREY: Phase 2 Study of Seralutinib in Patients With Functional Class II and III PAH

TORREY STUDY



Patient Population	Functional Class II and III PAH patients on standard background therapy (including triple therapy); PVR >/= 400 dyne*s/cm^5
Endpoints	**Primary:** PVR Change from Baseline at Week 24 **Key Secondary:** 6MWD Change from Baseline at Week 24
Dosing Regimen	Dose-titrated in range of 45 to 90mg BID

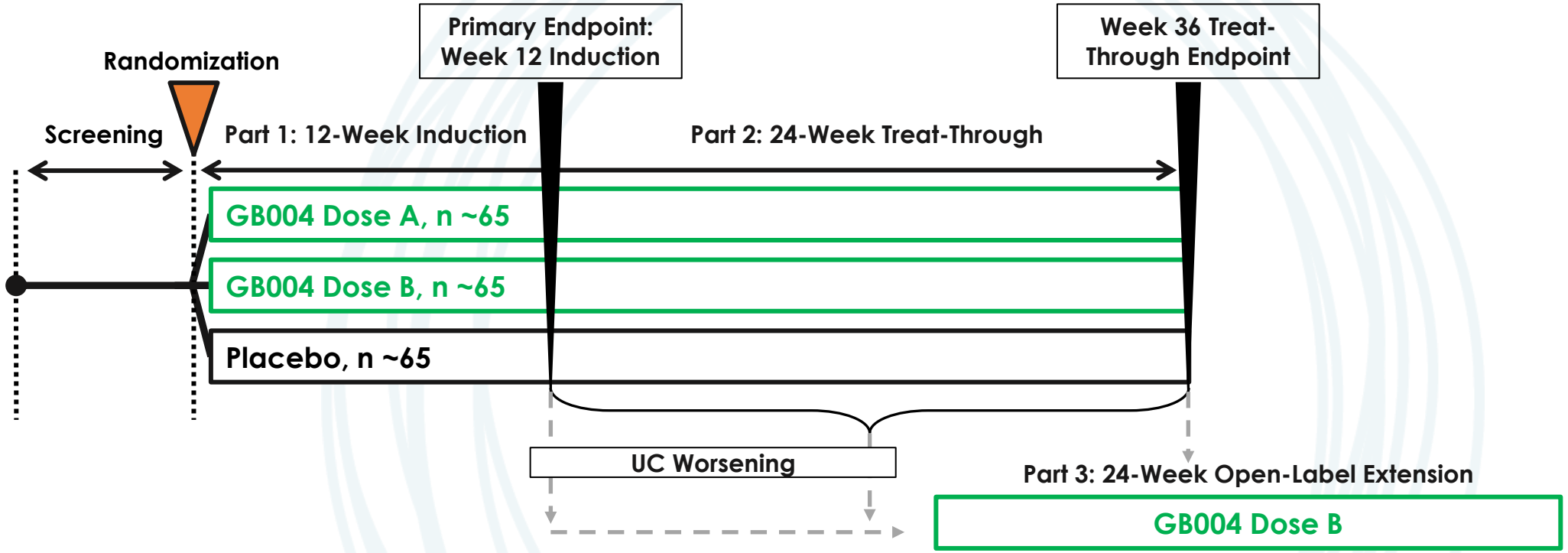
PVR: pulmonary vascular resistance; 6MWD: six-minute walk distance
Source: clinical trials.gov/NCT04456998

GB004

Gut-Targeted,
Hypoxia Inducible Factor 1-Alpha
(HIF-1a) Stabilizer

Inflammatory Bowel Disease (IBD),
including Ulcerative Colitis (UC) and
Crohn's Disease (CD)

SHIFT-UC Phase 2 Study In Active UC: Measuring Short- and Long-Term Results of Therapy



Patient Population:	• Adult UC patients with mild-to-moderate UC, Mayo 5-10, Endoscopic score (MES) ≥=2, RBS=≥1, Stool Freq=≥1
Objectives:	• Assess efficacy and safety of tablet formulation in UC • Demonstrate proof of concept for GB004 MoA
Endpoints:	• **Primary**: Clinical Remission at 12 weeks • **Secondary**: Clinical Response, Mucosal Healing, Endoscopic Improvement, Histologic Remission • **Other**: Safety and tolerability, Disease Clearance, serum, fecal, tissue biomarkers

MES = Mayo endoscopic score; RBS = rectal bleeding sub-score; MoA = mechanism of action.

Details for Upcoming Phase 1b Composite Endpoint Presentation at UEGW

- **Abstract Title:** Assessment of Composite Endpoints Comprising Symptomatic, Histologic, Endoscopic, and Molecular Improvement in a Phase 1b Study of GB004, a Gut-Targeted, Hypoxia-Inducible Factor (HIF)-1a Stabilizer, in Mild-to-Moderate Ulcerative Colitis
- **Presenting Author:** Silvio Danese, MD, PhD
- **Abstract Number:** OP124
- **Session Title:** IBD Clinical Trials III
- **Session Date:** Monday, October 4, 2021
- **Session Time:** 3:00pm CEST / 9:00am EDT / 6:00am PDT

Gossamer Bio Q2:2021 Earnings Update

Q2 2021 Financial Summary

(in thousands, except share and per share amounts)

BALANCE SHEET DATA:	June 30, 2021	December 31, 2020
Cash, cash equivalents, and marketable securities	$ 405,919	$ 512,628
Working capital	387,005	483,672
Total assets	432,510	539,433
Total liabilities	211,817	218,749
Accumulated deficit	(695,003)	(577,530)
Total stockholders' equity	220,693	320,684

	Three months ended June 30,		Six months ended June 30,	
	2021	2020	2021	2020
Operating expenses:				
Research and development	$ 44,318	$ 38,684	$ 86,145	$ 80,098
In process research and development	15	15,000	45	17,805
General and administrative	11,263	11,655	22,609	22,403
Total operating expenses	55,596	65,339	108,799	120,306
Loss from operations	**(55,596)**	**(65,339)**	**(108,799)**	**(120,306)**
Other income (expense), net				
Interest income	141	898	334	2,496
Interest expense	(4,834)	(2,491)	(9,614)	(3,198)
Other income	457	62	606	64
Total other income (expense), net	(4,236)	(1,531)	(8,674)	(638)
Net loss	**$ (59,832)**	**$ (66,870)**	**$ (117,473)**	**$ (120,944)**
Net loss per share, basic and diluted	$ (0.80)	$ (1.00)	$ (1.58)	$ (1.88)
Weighted average common shares outstanding, basic and diluted	74,672,882	66,599,915	74,384,805	64,245,119