

Long-Term Efficacy and Safety of Open-Label Seladelpar Treatment in Patients With Primary Biliary Cholangitis: Pooled Interim Results for up to 3 Years From the ASSURE Study

Eric J. Lawitz¹, Palak J. Trivedi², Kris V. Kowdley³, Stuart C. Gordon⁴, Christopher L. Bowlus⁵, Maria Carlota Londoño⁶, Gideon M. Hirschfield⁷, Aliya Gulamhusein⁷, Daria B. Crittenden⁸, Shuqiong Zhuo⁹, Carrie Heusner⁹, Cynthia Levy¹⁰

¹Texas Liver Institute, University of Texas Health San Antonio, San Antonio, TX, USA; ²National Institute for Health Research Birmingham Biomedical Research Centre, Centre for Liver and Gastrointestinal Research, College of Medical and Dental Sciences, University of Birmingham, Birmingham, UK, and Liver Unit, University Hospitals Birmingham Queen Elizabeth, Birmingham, UK; ³Liver Institute Northwest, Seattle, WA, USA; ⁴Division of Hepatology, Henry Ford Hospital, Wayne State University School of Medicine, Detroit, MI, USA; ⁵Division of Gastroenterology and Hepatology, University of California Davis School of Medicine, Sacramento, CA, USA; ⁶Liver Unit, Hospital Clínic Barcelona, Instituto de Investigaciones Biomédicas August Pi i Sunyer (IDIBAPS), Centro de Investigación Biomédica en Red de Enfermedades Hepáticas y Digestivas (CIBEREHD), Barcelona, Spain; ⁷Division of Gastroenterology and Hepatology, Toronto Centre for Liver Disease, University of Toronto, Toronto, Canada; ⁸Gilead Sciences, Inc., Foster City, CA, USA; ⁹CymaBay Therapeutics, Inc., Fremont, CA, USA; ¹⁰Division of Digestive Health and Liver Diseases, University of Miami School of Medicine, Miami, FL, USA

Disclosures: **EJL** reports receiving grants or contracts from 89Bio; Akero Therapeutics; Alnylam Pharmaceuticals; Amgen; AstraZeneca; Boehringer Ingelheim; Bristol Myers Squibb; COUR Pharmaceuticals; CymaBay Therapeutics; Eli Lilly and Company; Enanta Pharmaceuticals; Enyo Pharma; Exalenz Bioscience; Galectin Therapeutics; Galmed Pharmaceuticals; Genfit; Gilead Sciences, Inc.; GSK; Hanmi Pharmaceuticals; Hightide Biopharma; Intercept Pharmaceuticals; Inventiva; Ipsen; Janssen Pharmaceuticals; Madrigal Pharmaceuticals; Merck & Co.; NGM Biopharmaceuticals; Northsea Therapeutics; Novartis; Novo Nordisk; Organovo; Poxel; Regeneron; Sagimet Biosciences; Takeda; Terns Pharmaceuticals; Viking Therapeutics; and Zydus Pharmaceuticals; and honoraria for lectures, presentations, speakers bureaus, manuscript writing, or education events from AbbVie; Gilead Sciences, Inc.; Intercept; and Madrigal. **PJT** reports receiving institutional funding support from NIHR (UK); lecture fees from Advanz Pharma/Intercept Pharmaceuticals, Albireo/Ipsen, CymaBay Therapeutics, and Dr. Falk Pharma; consulting fees from Advanz Pharma/Intercept Pharmaceuticals; Albireo/Ipsen; ChemoMab Therapeutics; CymaBay Therapeutics/Gilead Sciences, Inc.; Dr. Falk Pharma; Mirum; Perspectum; and Pliant Therapeutics; and grant support from Advanz Pharma/Intercept Pharmaceuticals; Albireo/Ipsen; Bristol Myers Squibb; Core (Guts UK); EASL; Gilead Sciences, Inc.; GSK; Innovate UK; Ipsen; LifeArc; NIHR; Mirum Pharma; PSC Support; The Wellcome Trust; The Medical Research Foundation (UK); and Regeneron Pharmaceuticals. **KVK** reports receiving grants or contracts from 89Bio; Boston Scientific; Corcept; CymaBay Therapeutics; Genfit; Gilead Sciences, Inc.; GSK; Hanmi; Intercept Pharmaceuticals; Ipsen; Janssen; Madrigal; Mirum; Novo Nordisk; NGM; Pfizer; Pliant; Terns; Viking Therapeutics; and Zydus Pharmaceuticals; royalties or licences from UpToDate; consulting fees from 89Bio; CymaBay Therapeutics; Genfit; Gilead Sciences, Inc.; GSK; HighTide; Inipharma; Intercept Pharmaceuticals; Ipsen; Madrigal; Mirum; NGM; and Zydus Pharmaceuticals; payment or honoraria for lectures, presentations, speakers bureaus, manuscript writing, or educational events from AbbVie; Gilead Sciences, Inc.; and Intercept Pharmaceuticals; participation on a data safety monitoring board or advisory board with CTI and Medpace; and stock or stock options with Inipharma. **SCG** reports receiving grants or contracts from AbbVie Pharmaceuticals, Arbutus, CymaBay Therapeutics, GSK, Ipsen, and Mirum Pharmaceuticals; and participation on a data safety monitoring board or advisory board with CymaBay Therapeutics, GSK, and Ipsen Pharmaceuticals. **CLB** reports receiving grants or contracts to his institution from Boston Scientific; Bristol Myers Squibb; Calliditas Therapeutics; Cara Therapeutics; ChemoMab; COUR Pharmaceuticals; CymaBay Pharmaceuticals; Gilead Sciences, Inc.; GSK; and Hanmi Pharmaceuticals; and consulting fees from Alnylam; ChemoMab; CymaBay Therapeutics; Gilead Sciences, Inc.; GSK Pharmaceuticals; Ipsen Bioscience; and NGM Bio. **MCL** reports receiving institutional grants or contracts from Mirum; consulting fees from Advanz; Gilead Sciences, Inc.; GSK; Ipsen; and Falk; payment or honoraria for lectures, presentations, speakers bureaus, manuscript writing, or educational events from Advanz Pharma; Gilead Sciences, Inc.; and Ipsen; and support for attending meetings and/or travel from Advanz Pharma and Ipsen. **GMH** reports having consulted for Advanz; CymaBay Therapeutics; Falk; Gilead Sciences, Inc.; GSK; Intercept Pharmaceuticals; Ipsen; Kowa; Mirum; and Pliant. **AG** reports receiving consulting fees from Gilead Sciences, Inc., and Advanz Pharma; payment or honoraria for lectures, presentations, speakers bureaus, manuscript writing, or educational events from Advanz Pharma; and support for attending meetings and/or travel from Gilead Sciences, Inc. **DBC** is an employee of Gilead Sciences, Inc., and may own stock in Gilead

Sciences, Inc. **CH** and **SZ** reports nothing to disclose. **CL** reports receiving research grants paid to her institution from Calliditas; CymaBay Therapeutics; Escient; EWR; Gilead Sciences, Inc.; GSK; Intercept Pharmaceuticals; Ipsen; Kowa; Mirum; Target; and Zydus Pharmaceuticals; consulting fees from Calliditas; CymaBay Therapeutics; Gilead Sciences, Inc.; GSK; Intercept Pharmaceuticals; Ipsen; Kowa; and Mirum; and participation on a data safety monitoring board with COUR Pharmaceuticals.

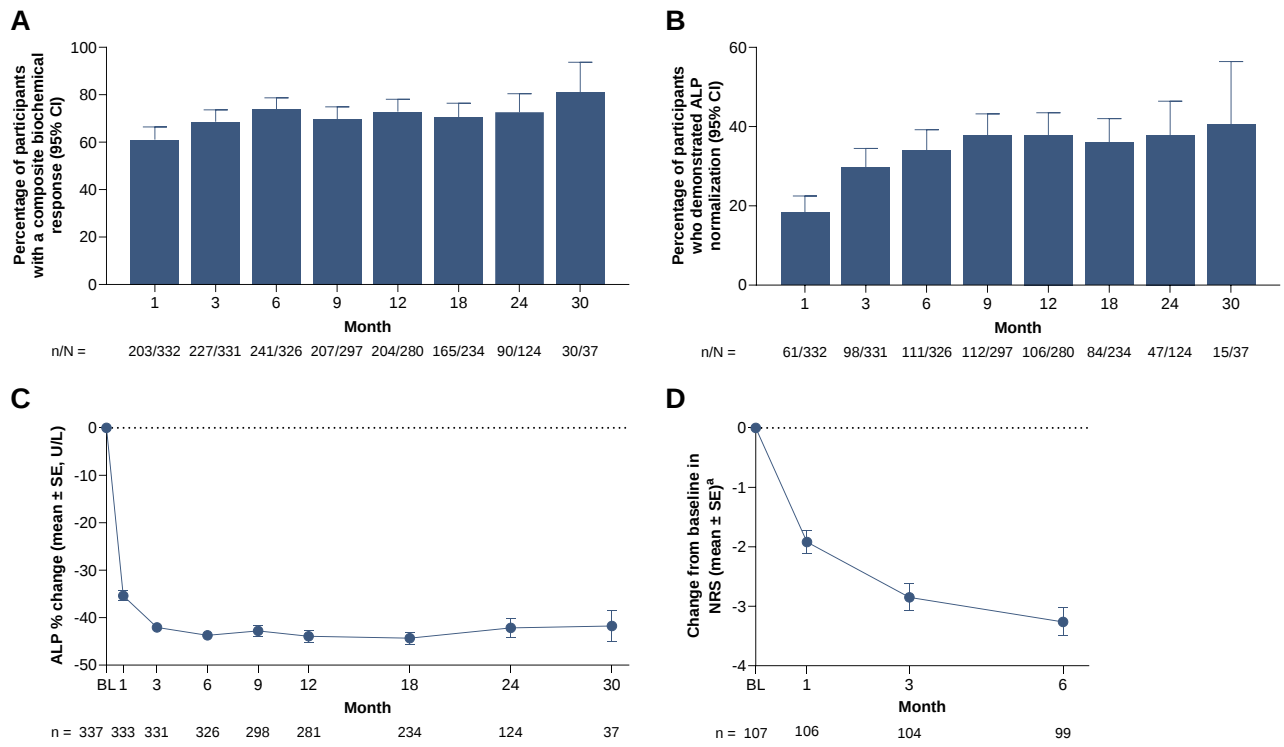
Background: ASSURE (NCT03301506) is an ongoing, open-label, long-term, Phase 3 trial of seladelpar—a novel delpar (selective PPAR δ agonist)—in patients (pts) with primary biliary cholangitis rolling over from the Phase 3, placebo-controlled, registrational RESPONSE trial (NCT04620733) or with prior participation in legacy trials (Phase 3 ENHANCE [NCT03602560], CB8025-21629 [NCT02955602], CB8025-31731 [NCT03301506], CB8025-21838 [NCT04950764]). The parent studies required an inadequate response or intolerance to first-line ursodeoxycholic acid. Here, we report pooled interim efficacy and safety for all pts in ASSURE.

Material and Methods: Using a data cutoff of January 31, 2024, pt exposure to seladelpar in ASSURE (including exposure in pts who were randomized to the active treatment arm in RESPONSE) was analyzed. Key efficacy endpoints included composite biochemical response (CBR; alkaline phosphatase [ALP] $<1.67\times$ upper limit of normal [ULN], ALP decrease $\geq 15\%$, and total bilirubin [TB] $\leq$ ULN) and ALP normalization. Pruritus was recorded using a numeric rating scale (NRS; 0–10) collected daily through month (M) 6; change from baseline (BL) was assessed through M6 in pts with moderate-to-severe pruritus (NRS ≥ 4) at BL. Exposure-adjusted adverse events (AEs) were calculated for each year on study as incidence per 100 pt-years. BL was based on first exposure to seladelpar in ASSURE or RESPONSE.

Results: 337 pts received 10-mg seladelpar daily. 34 pts reached 30M on study; 90 pts had ≥ 24 M of seladelpar exposure. At BL, the mean (SD) age was 58.1 (9.7) years, 318/337 (94%) pts were female, mean (SD) ALP was 287.5 (128.4) U/L, mean (SD) TB was 0.75 (0.34) mg/dL, and 55/337 (16%) had cirrhosis. At M12, M24, and M30, 204/280 evaluable pts (73%), 90/124 (73%), and 30/37 (81%) met the CBR endpoint, respectively, and ALP normalized in 106/280 (38%), 47/124 (38%), and 15/37 (41%) pts, respectively. In the pruritus NRS, mean (SE) change from BL at 6M was -3.3 (0.24) among 99 evaluable pts. Outcomes are in **Figure 1**. Exposure-adjusted AEs were observed in 86, 70, and 63 pts per 100 pt-years at M12, M24, and M36, respectively. There were no treatment-related serious AEs.

Conclusions: By M30 of the long-term ASSURE study, seladelpar resulted in a durable and sustained biochemical response in 81% of pts, with an ALP normalization rate of 41%, and robust improvement in pruritus. Seladelpar continues to appear safe and well tolerated, with no new safety signals or change in frequency of AEs with up to 3 years of exposure.

Figure 1. (A) Composite Biochemical Response Rate Through Month 30, (B) ALP Normalization Through Month 30, (C) ALP Percentage Change From BL Through Month 30, and (D) Pruritus NRS Change From BL Through Month 6



Data cutoff: January 31, 2024.

ALP, alkaline phosphatase; BL, baseline; NRS, numeric rating scale.

^aThe pruritus NRS ranged from 0 (no itch) to 10 (worst itch imaginable).