## POSTER OF DISTINCTION

A43

## LONG-TERM EFFICACY AND SAFETY OF OBETICHOCLIC ACID IN PRIMARY BILIARY CHOLANGITIS: RESPONDER ANALYSIS OF OVER 5 YEARS OF TREATMENT IN THE POISE TRIAL

<u>G. Hirschfield</u><sup>2</sup>, D. Jones<sup>1</sup>, M. Carbone<sup>3</sup>, C.L. Bowlus<sup>4</sup>, F. Nevens<sup>5</sup>, A.E. Kremer<sup>6</sup>, A. Liberman<sup>7</sup>, L. MacConell<sup>7</sup>, B. E Hansen<sup>2</sup>

1. Newcastle University, Newcastle upon Tyne, Tyne and Wear, United Kingdom; 2. University of Toronto, Toronto, ON, Canada; 3. Universita degli Studi di Milano-Bicocca, Milano, Lombardia, Italy; 4. University of California Davis School of Medicine, Sacramento, CA; 5. University Hospitals KU, Leuven, Belgium; 6. Friedrich Alexander University of Erlangen–Nürnberg, Erlangen, Germany; 7. Intercept Pharmaceuticals, San Diego, CA

**Background:** Obeticholic acid (OCA), a potent farnesoid X receptor agonist, is approved as second-line treatment for primary biliary cholangitis (PBC) in patients with an incomplete response or intolerance to ursodeoxycholic acid.

**Aims:** We evaluated the effect of OCA in PBC patients enrolled in the POISE trial, comparing those who did or did not achieve the POISE response criteria.

**Methods:** The phase 3, randomized, double-blind, 1-year POISE trial evaluated the efficacy and safety of OCA 5 and 10 mg vs placebo in patients with PBC; a 5-year open-label extension followed in which all patients received OCA. This analysis evaluated longer-term efficacy and safety in patients who achieved the POISE primary endpoint of alkaline phosphatase (ALP) <1.67 × upper limit of normal (ULN), total bilirubin <ULN, and ALP decrease >15% from baseline after 1 year of OCA and in patients who were incomplete responders.

**Results:** The analysis included 86 patients who achieved the POISE primary endpoint at year 1 of OCA treatment and 107 incomplete responders (mean baseline ALP, 268 vs 356 U/L, respectively; *P*<0.0001). Mean change from baseline in ALP at year 5 was –101 U/L for responders and –121 U/L for incomplete responders (*P*<0.0001; **Figure**). Median (Q1, Q3) baseline GLOBE 10-year risk of event scores were 16 (11, 23) for responders and 25 (15, 43) for incomplete responders. Change from baseline in median (Q1, Q3) GLOBE 10-year risk of event at year 1, which includes age and thus increases with time, was –2 (–4, 2) for responders and –2 (–6, 4) for incomplete responders; at year 5, these changes were 2 (–2, 7) and 4 (–4, 11),

respectively. Median (Q1, Q3) baseline UK-PBC 10-year risk of event scores were 5 (3, 8) for responders and 8 (4, 16) for incomplete responders. Change from baseline in median (Q1, Q3) UK-PBC 10-year risk of event at year 1 was –1 (–3, 0.2) for responders and –1 (–3, 1) for incomplete responders; at year 5, these changes were – 0.8 (–2, 0.2) and –0.05 (–2, 2), respectively. The most frequently reported AEs among responders and incomplete responders were pruritus (67%, 86%) and fatigue (35%, 31%).

**Conclusions:** OCA treatment improved key biochemical markers of PBC, regardless of achieving the POISE primary endpoint after 1 year of OCA treatment. Changes in biochemical parameters over time were often similar between groups.

Responders Incomplete Responders 75 50 Mean Change From Baseline (SD) 25 0 -25 -50 -75 -100 -125 -150 -175-200 -225 -250 -275 60 12 24 36 48 72 3 6 Months After OCA Initiation 80 85 84 Responders 27

Figure. Mean (SD) Change From Baseline in Alkaline Phosphatase Levels
Through Month 72 by Responder Subgroup

Funding Agencies: Intercept Pharmaceuticals

<sup>\*</sup>P≤0.002 within-treatment comparisons using a paired t-test.