



# DURECT Corporation Announces Preliminary Data from the Ongoing DUR-928 Alcoholic Hepatitis Phase 2a Trial

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Live Webcast of AH Data Presentation and Discussions by KOLs Steven Flamm, M.D., Tarek I. Hassanein, M.D. and Paul Kwo, M.D. Tomorrow, Wednesday, May 8, 2019 at 8:30 a.m. ET

CUPERTINO, Calif., May 7, 2019 /PRNewswire/ — DURECT Corporation (Nasdaq: DRRX) today announced preliminary data from the ongoing DUR-928 alcoholic hepatitis (AH) Phase 2a clinical trial. On Wednesday, May 8th at 8:30 a.m. Eastern Time, DURECT will host a Key Opinion Leader (KOL) and earnings conference call, during which the Company will discuss financial results for the first quarter of 2019, provide a corporate business update, and present preliminary AH clinical trial data via webcast. Also participating in the call will be three KOLs on alcoholic hepatitis: Drs. Steven Flamm, Tarek Hassanein, and Paul Kwo. Dr. Kwo will present an overview of AH including details on the disease and its progression, current treatment options and new treatments in development. Drs. Hassanein and Flamm will discuss their experience treating patients in the ongoing DUR-928 AH clinical trial.

### Preliminary Results

Ten patients have completed dosing with DUR-928 to date in the ongoing open label, dose-escalation, multi-center U.S. trial. Eight patients (4 moderate and 4 severe) have been treated with DUR-98 at the 30 mg dose, and two patients (1 moderate and 1 severe) at the 90 mg dose.

Lille scores are used in clinical practice to help determine the prognosis for AH patients after 7 days of treatment. Patients with a Lille score below 0.45 have an 85% 6-month survival rate vs. those with Lille scores of above 0.45, have only a 25% 6-month survival rate (*Louvet A et al. Hepatology 2007; 45: 1348-54*). The lower the Lille score, the better the prognosis is for the AH patient. In our study, the median Lille score for the 9 AH patients treated with DUR-928 who returned for their Day 7 visit is 0.04, with a range of 0.01 to 0.19. The median Lille score among a cohort of 15 patients treated with either supportive care or supportive care with corticosteroids at the University of Louisville (UL) is 0.41 (shown as historical control).<sup>1</sup>

The chart below shows individual patient Lille scores plotted as a function of their initial MELD scores. Chart not found or type unknown

1. Our advisor, Dr. Craig McClain from the University of Louisville (UL), shared anonymized data from his study, in which 15 AH patients with initial MELD scores ranging from 15-30 received either supportive care alone (n=8) or supportive care with corticosteroids (n=7).
2. Of the 10 AH patients dosed to date with DUR-928, one patient did not return for the day 7 visit, so Lille scores could only be calculated for 9 of 10 patients.
3. Lille scores in the DUR-928 patients were significantly lower than that of the UL patients (p=0.002; Wilcoxon's Rank Sum Test).

Mathurin et al. proposed three prognostic classifications of AH patients in response to treatment based on Lille scores and their correlation with 28-day survival rates from a meta-analysis of four randomized controlled trials evaluating the effectiveness of corticosteroids in an aggregate of 324 patients with severe AH. (*Methurin P. et al. Gut 2011; 60:255-260*) The following table shows the percentage of patients from three AH data sets, including DUR-928, in each Mathurin classification based on patients' Lille scores. Seventy-eight percent (7/9) of the DUR-928 treated AH patients with Lille scores are classified as complete responders, 22% (2/9) are partial responders and none (0/9) were null responders.

	Percent of AH Patients in each Classification (data from separate studies)

Lille Score	Classification a	28-Day Survival Rate a	Prednisolone (n=51)b	UL (n=15)c	DUR-928 (n=9)d
?0.16	Complete Responder	91.1% ± 2.7%	49%	33%	78%
0.16-0.56	Partial Responder	79.4%± 3.8%	43%	20%	22%
?0.56	Null Responder	53.3%±5.1%	8%	47%	0%
		P<0.0001 (a)		P=0.002 (e)	

- a. Mathurin, et. al., Gut 2011;60:255-260
- b. Mathurin, “Selonsertib in Combination with Prednisolone for the Treatment of Severe Alcoholic Hepatitis: A Phase 2 Randomized Controlled Trial” presented at AASLD San Francisco November 2018. The table presents patients from the control group – all treated with corticosteroids (prednisolone + placebo). Initial MELD scores in this study ranged from 19 to 24.
- c. See footnote 1 on page 1. d) See footnote 2 on page 1. e) See footnote 3 on page 1.

Bilirubin is formed by the breakdown of red blood cells in the body. The level of total bilirubin in the blood is an indication of how the liver is functioning. Compared to baseline (n=10), the median reduction in total bilirubin in the DUR-928 treated patients was 16% at Day 7 (n=9) and 41% at Day 28 (n=8) compared to 3% at Day 7 and 35% at Day 28 in the UL patients. The chart below shows the percent change in total bilirubin at Day 7 and 28 compared to baseline (Day 0) for both the separate UL (as historical control) and DUR-928 studies.

P-Values calculated with Wilcoxon's Signed Rank Test

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P-Values calculated with Wilcoxon's Signed Rank Test

Model of End-Stage Liver Disease (MELD) score is another common scoring system used to assess the severity and prognosis of AH patients. Patients with MELD scores of 11-19 are classified as having moderate AH and patients with MELD scores of 20-30 are classified as having severe AH. As with Lille scores, the lower the MELD score, the better the prognosis for the AH patient. In our study (shown in the chart below), the median reduction from baseline (Day 0, prior to treatment) (n=10) in MELD in the DUR-928 treated patients was 4% at Day 7 (n=9) and 21% at Day 28 (n=8) compared to a 4% increase at Day 7 and 6% reduction at Day 28 in the UL patients (as historical control).

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MELD is calculated based on (a) bilirubin, (b) serum creatinine (sCr), and (c) International Normalized Ratio (INR), which is a measure of prothrombin time. P-Values calculated with Wilcoxon's Signed Rank Test

To date there is no statistical difference in the pharmacokinetic profiles between moderate and severe AH patients treated with DUR-928. There have been no drug-related adverse events in the DUR-928 treated patients to date.

The data presented in this press release are preliminary and will be finalized upon completion of the trial. There can be no assurance that additional patients treated with DUR-928 will have similar results as those reported here.

### About the Ongoing DUR-928 Alcoholic Hepatitis Phase 2a Trial

DURECT is conducting a Phase 2a clinical trial with intravenously administered DUR-928 in patients with AH. This is an open label, dose escalation (30, 90 and 150 mg), multi-center U.S. study that is enrolling patients with moderate and severe AH. Dose



escalation may occur following review of safety and pharmacokinetic (PK) results of the prior dose level by a Dose Escalation Committee (DEC). The target number of patients for the study is 4 moderate and 4 severe patients per dose group. The objectives include assessment of safety, PK and pharmacodynamic (PD) signals, including liver chemistry and biomarkers.

### **Conference Call and Webcast with Slides**

**Wednesday, May 8th at 8:30 a.m. Eastern Time/5:30 a.m. Pacific Time**

Toll Free: 888-882-4478  
International: 323-794-2590  
Conference ID: 7156796  
Webcast: <http://public.viavid.com/index.php?id=134476>

A live audio webcast and data slide presentation will be available by accessing DURECT's homepage at [www.durect.com](http://www.durect.com) and clicking "Investors." If you are unable to participate during the live webcast, the call and slide presentation will be archived on DURECT's website under "Event Calendar – Past Events" in the "Investors" section.

### **About DURECT Corporation**

DURECT is a biopharmaceutical company actively developing therapeutics based on its Epigenetic Regulator Program and proprietary drug delivery platforms. DUR-928, a new chemical entity in Phase 2 development, is the lead candidate in DURECT's Epigenetic Regulator Program. An endogenous, orally bioavailable small molecule, DUR-928 has been shown in preclinical studies to play an important regulatory role in lipid homeostasis, inflammation, and cell survival. Human applications may include acute organ injury such as AH and acute kidney injury (AKI), chronic hepatic diseases such as nonalcoholic steatohepatitis (NASH), and inflammatory skin conditions such as psoriasis and atopic dermatitis. DURECT's advanced oral and injectable delivery technologies are designed to enable new indications and enhanced attributes for small-molecule and biologic drugs. Late stage product candidates in this category include POSIMIR® (bupivacaine extended-release solution), an investigational locally-acting, non-opioid analgesic intended to provide up to 3 days of continuous pain relief after surgery, and ORADUR®-Methylphenidate ER Capsules, approved in Taiwan as Methydur Sustained Release Capsules, where it is indicated for the treatment of attention deficit hyperactivity disorder (ADHD). In addition, for the assignment of certain patent rights, DURECT receives single digit sales-based earn-out payments from U.S. net sales of Indivior's PERSERIS™ (risperidone) drug for schizophrenia, which was commercially launched in February 2019. For more information, please visit [www.durect.com](http://www.durect.com).

### **DURECT Forward-Looking Statement**

The statements in this press release regarding preliminary data from the ongoing Phase 2a trial of DUR-928 in patients with AH, including data regarding Lille scores, response rates and bilirubin and MELD reductions are forward looking statements to the extent that they suggest that they are predictive of results for the full trial or for the outcomes of the patients whose data is reported. This press release also includes additional forward looking statements, including regarding clinical trial plans for DUR-928, the potential use of DUR-928 to treat AH, AKI, chronic hepatic diseases such as NASH, and inflammatory skin disorders such as psoriasis and atopic dermatitis, as well as statements regarding the use of POSIMIR to treat post-surgical pain, the use of Methydur to treat ADHD, and potential earn-out payments from U.S. sales of PERSERIS. These forward-looking statements involve risks and uncertainties that can cause actual results to differ materially from those in such forward-looking statements. Potential risks and uncertainties include, but are not limited to, that the remainder of the Phase 2a clinical trial of DUR-928 in AH patients does not replicate the interim results reported here, the risk of delays in the enrollment of the ongoing clinical trials of DUR-928 in AH, NASH and psoriasis, potential adverse effects arising from the testing or use of DUR-928, the risk that the FDA may not approve the POSIMIR NDA, the risk that PERSERIS and Methydur will not have successful launches, our ability to avoid infringing patents held by other parties and secure and defend patents of our own patents, and our ability to manage and obtain capital to fund our operations and expenses. Further information regarding these and other risks is included in DURECT's Form 10-Q filed with the Securities and Exchange Commission on May 7, 2019 under the heading "Risk Factors."

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