Breakfast Meeting Vienna 2019

Friday, April 12th, 6.45am - 8.00am
Courtyard by Marriott Vienna Prater/Messe Prater 3 & 4, Level 1

6.45AM – 7.00AM
Breakfast & Coffee

7.00AM – 7.10AM
Opening Remarks
Chair: Dr. Peter G. Traber
Partner, Alacrita Consulting Inc.

7.10AM – 7.30AM
Using SHG for F≥2 Biopsy Screening in NASH Clinical Trials
Prof. Pierre Bedossa
Medical Director, LIVERPAT;
Visiting Professor,
Institute of Cellular Medicine,
University of Newcastle

7.30AM – 7.50AM
Automated Fibrosis and Steatosis Quantification in NASH Clinical Trials
Prof. Stephen Harrison
Medical Director, Pinnacle Clinical Research;
Visiting Professor of Hepatology,
Radcliffe Department of Medicine,
University of Oxford

7.50AM – 8.00AM
Q&A
For Internal Distribution Only

Company: Pfizer
Investor/Acquirer: Novartis
Deal Size: Undisclosed financial details

Company: Pfizer
Investor/Acquirer: AstraZeneca
Deal Size: US$330 million

Company: Jecure Therapeutics
Investor/Acquirer: Genentech
Deal Size: Undisclosed financial details

Company: Ionis Pharmaceuticals
Investor/Acquirer: AstraZeneca
Deal Size: US$330 million

Company: DeuteRx
Investor/Acquirer: Poxel
Deal Size: EUR 6.8 million (US$8 million) in cash plus 1.29 million in new Poxel ordinary shares

Company: Pfizer
Investor/Acquirer: NASH Pharmaceuticals
Deal Size: 15,800,000 Breathec common shares at US$0.24 per Payment Share

Company: Amgen
Investor/Acquirer: Akero Therapeutics
Deal Size: US$65 million raised in series A financing

Company: Yuhnan Corporation
Investor/Acquirer: Gilead Sciences
Deal Size: US$785 million

Company: Agenus
Investor/Acquirer: Gilead Sciences
Deal Size: US$150 million

Company: GENFIT
Investor/Acquirer: Covance
Deal Size: Licensing agreement - New diagnostic test for NASH

For Internal Distribution Only
**NASH DASH**

**Investments in One of NASH's Biggest Markets**

**China**

**2015**
- Company: PegBio
  - Pipeline: NAFLD/Obesity/Type II Diabetes
  - Deal Size: US$ ~1 million
- Company: CHIPSSCREEN
  - Pipeline: NASH: CS17919 (Preclinical), Type II Diabetes
  - Deal Size: Undisclosed

**2016**
- Company: Hightide
  - Pipeline: FSC, NAFLD/NASH, Hyperlipidemia
  - Deal Size: Undisclosed
- Company: Zelgen
  - Pipeline: PBC/NAFLD and related diseases
  - Deal Size: Undisclosed
- Company: PegBio
  - Deal Size: Undisclosed

**2017**
- Company: Terns
  - Pipeline: NASH: TERN-101 (Europe - Phase 1), TERN-101 (China - Preclinical), TERN-201 (Preclinical)
  - Deal Size: US$ ~30 million
- Company: Gmaxbio
  - Pipeline: NASH, Obesity, Type II Diabetes
  - Deal Size: Undisclosed
- Company: Hightide
  - Deal Size: Undisclosed
- Company: Zelgen
  - Deal Size: Tens of millions of RMB
- Company: PegBio
  - Deal Size: US$ ~20 million
- Company: Atombp
  - Pipeline: NASH: ABP-6014 (Preclinical)
  - Deal Size: Undisclosed
- Company: Waterstone
  - Pipeline: Fatty liver: WS-008 (IND/CTA)
  - Deal Size: Undisclosed

**2018 till date**
- Company: Terns
  - Deal Size: US$ ~30 million
- Company: Atombp
  - Deal Size: Tens of millions of RMB
- Company: CHIPSSCREEN
  - Deal Size: Undisclosed
- Company: Schwind
  - Pipeline: NASH:Liver Fibrosis: XW003 (Preclinical), XW004 (Preclinical)
  - Deal Size: US$ ~30 million
- Company: 3-V Bioscience
  - Pipeline: NASH: ASC40 (Phase 1)
  - Deal Size: US$ ~25 million
- Company: Taiwan J Pharmaceuticals
  - Pipeline: NASH: JKB-122 (Phase 2), JKB-133 (Phase 3)
  - Deal Size: US$ ~25 million

**Rapid Growth of NASH M&A Deals (China)**

- More than US$ ~1 million
- More than US$ ~50 million
- More than US$ ~220 million
- Not available

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Qualification of Stage F2 Patient’s Biopsies from the F1a,b,c During Screening/Enrolment

<table>
<thead>
<tr>
<th>Stages</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>None</td>
</tr>
<tr>
<td>1a</td>
<td>Mild (delicate) zone 3 perisinusoidal fibrosis</td>
</tr>
<tr>
<td>1b</td>
<td>Moderate (dense) zone 3 perisinusoidal fibrosis</td>
</tr>
<tr>
<td>1c</td>
<td>Portal/periportal fibrosis only</td>
</tr>
<tr>
<td>2</td>
<td>Zone 3 perisinusoidal fibrosis with portal/periportal fibrosis</td>
</tr>
<tr>
<td>3</td>
<td>Bridging fibrosis</td>
</tr>
<tr>
<td>4</td>
<td>Cirrhosis</td>
</tr>
</tbody>
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- Differences between F1a,b,c and F2 lies mainly in the quantification of collagen within peri-sinusoidal (PS) and peri-portal regions that could be identified by SHG.
Quantification of Collagen near Steatosis by analyzing of SHG/TPE images

Clear association with steatosis reduction to fibrosis reduction

Fibrosis reduction occurs within peri-sinusoidal (PS) regions in all patients but may not be pathologist-read as stage improvement ≥ 1
Presentations at EASL’s The International Liver Congress™ 2019

Oral ePoster Session: Fatty Liver Disease-Clinical
SAT-347 MRI-PDFF Response in MGL-3196 and Placebo Treated Patients Predicts Reduction in Ballooning and Inflammation Components of NAS and NASH Resolution in a 36-week Serial Liver Biopsy Study
Prof. Stephen Harrison, Pinnacle Clinical Research

Parallel Session: NAFLD - Preclinical Pipeline
PS-129 The Glucocorticoid Antagonist ST001 Prevents Development of NASH and Improves Aspects of the Metabolic Syndrome in the DIAMOND™ Mouse Model
Ms Rebecca Caffrey, Sanyal Biotechnology

Poster Tour: NAFLD: Therapy
SAT-342 Morphometric Collagen Analysis Discerns Anti-fibrotic Effects of INT-767 and OCA in NASH Mouse Models Using Second Harmonic Generation Imaging
Ms Li Chen, PharmaNest

Poster: Autoimmune and Chronic Cholestatic Liver Disease: Clinical Aspects
FRI-033 Long-term Obeticholic Acid Treatment is Associated with Improvements in Collagen Morphometry in Patients with Primary Biliary Cholangitis
Andreas E Kremer, Department of Medicine I, Friedrich-Alexander-University Erlangen-Nürnberg, Erlangen, Germany

Late-breaker Data!
The HistoIndex Breakfast Meeting - Vienna 2019 is an independent event, and is not an official function of The International Liver Congress™ 2019 by EASL.
Thank You for Joining Us!

See you in November for our next Breakfast Meeting in Boston while attending The Liver Meeting® 2019