

## Late Breaker LBP-537

Poster

## New noninvasive test of NASH

## Thu Apr 20th 08:00-18:00

#### Impact of NASH, gender, fasting glucose and body mass index on the liver fibrosis transition rate (FTR) in metabolic liver disease (MLD).

Poynard, et al. France

**Background and Aims**: There is no large evidence based data on the independent association between NASH and FTR in subjects with MLD. We aimed to assess the FTR using FibroTest previously validated as a surrogate marker of histological FTR (JHepatol 2012) and using a new quantitative non-invasive test (NIT) of NASH (NIT-NASHr patent-pending)(CGH 2017), which does not include fasting glucose (GLU) nor body mass index (BMI), two presumed fibrosis' risk factors (FRF).

**Methods**: The anonymous data of 89,427 cases with suspected MLD who got FibroTest (NASH-FibroSure) on fresh samples between 2006 and 2016 in USA were analyzed. FTR were assessed using the hazard function (probability of transition rate from F0 at birth to cirrhosis (FTR-F4)), and the impact of the severity of NASH presumed by NASHr, was estimated by Cox regression taking into account the standard FRF of MLD, male gender (MALE), GLU, and BMI. Sensitivity analyses used Cox with FTR to at least F1 (FTR-F1), neutralization of each FRF, and checking proportional hazards by stratification of each FRF.

**Results:** FTR-F4 (n = 8322;9.3%), in univariate analyses was highly associated with NASH severity (Figure), MALE, GLU (all p <0.0001) but not with BMI (p = 0.97). In multivariate analyses and in comparison with the FTR-F4 (hazard rate = 1) of 9613 (10.8%) subjects with normal NASHr (N0 = 0 to 0.25), the FTR-F4 of 25604 (28.6%) subjects belonging to the severe grade of NASHr (N3 = 0.75 to 1.00) was 113 (36-351) times (e(coef) (95% CI))) faster (z = 8; p <0.0001), the FTR-F4 of 29461 (32.9%) moderate grade (N2 = 0.50 to 0.75), 22 (7-69) times faster (z = 5; P <0.0001), and the 24749 (27.7%) minimal NASH (N1 = 0.25 to 0.50) was 3.5(1.1-11.2) times faster (z = 2; p = 0.03). The other independent factors were MALE FTR 2.4 (2.3-2.5) times faster (z = 38; p <0.0001) than female, and one additional umol/L GLU increased FTR-F4 by a factor of e(coef) = 1.023 (1.011-1.035) (z = 6; p <0.0001), that is, by 2.3% (1.6-3.0). Sensitivity analyses gave similar results. Interestingly, FTR-F1 (n = 3855; 42.6%) all FRF were associated in uni and multivariate analysis (all p <0.0001), including BMI with one additional kg/m2 increasing FTR-F1 by a factor of e(coef) = 1.017 (1.016-1.019) (z = 19; p <0.0001), that is, by 1.7% (1.6-1.9).

**Conclusions**: Progression to cirrhosis was driven by the severity of NASH as estimated by NIT-NASHr, male gender and elevated glucose, while the progression to earlier fibrosis stage was also driven by elevated BMI. New risk-factors could be assessed using this method in large database without biopsy



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# THU-476

Effect of weightloss on liver and heart using NIT

> Thu Apr 20th 08:00-18:00

#### Poster The impact of bariatric surgery on nonalcoholic fatty liver disease and cardiovascular risk utilizing non-invasive measures

#### C Netanel, D Goitein, M Rubin et al.

Background and Aims: Bariatric surgery is an effective treatment for morbidly obese patients. Significant improvement in steatosis, inflammation and fibrosis stage is reported in patients with non-alcoholic fatty liver disease (NAFLD). We have prospectively evaluated the effect of weight-loss on liver steatosis grade, nonalcoholic-steatohepatitis (NASH) diagnosis, fibrosis stage and cardiovascular risk before and after sleeve gastrectomy (SG), using noninvasive measures.

Methods: 26 patients with NAFLD, diagnosed by liver ultrasound (US), underwent pre- and post-operative evaluation (6-12 months after SG) with anthropometry, biochemical parameters, adiponectin, FibroMAX®, OWLiver® test (a serum based test that can discriminate NAFLD from NASH using metabolomics), US, real-time ShearWave™ elastography (SWE) and brachial artery flow-mediated dilation (FMD) test (surrogate marker for endothelial function and cardiovascular risk). An intra-operative liver biopsy was performed in 20 patients and NAFLD activity score (NAS) was calculated.

**Results**: At baseline steatosis was detected in 95.8% (41.6% severe, using FibroMAX®) and NASH in 29% (using OWLiver®) of subjects. In 78.3% fibrosis stage was 0-1 and in 21.7% 2-3 (using SWE). In 20% NAS score was  $\geq$ 4. BMI significantly decreased from 41.7 ± 4.8 kg/m2 to 29.6 ± 4.5 kg/m2 one year after SG. Fasting serum glucose, triglycerides, HDL-cholesterol, ALT, HbA1c and adiponectin also significantly improved after surgery (P <0.001). Steatosis grade significantly improved ( $\geq I$  using FibroMAX®) and NASH detection (using OWLiver®) reduced (4% of subjects) one year after SG (P <0.0001 and P <0.002, respectively). Both correlated with the reduction in BMI (P <0.01). Fibrosis stage (using SWE) decreased ( $\geq$ 1) in 22.7% of subjects, remained stable in 59.1% and increased ( $\geq$ 2) in 18.2%. High cardiovascular risk using FMD was detected in 37.5% at baseline and it significantly correlated with the NAS score (P <0.05). Postoperative cardiovascular risk has improved in 50% of subjects and worsened in 50%.

Conclusions: SG was associated with improvement in the biochemical parameters, steatosis grade and reduced NASH detection. Progression of fibrosis in some patients might be associated with the rapid weight loss and should be further characterized and investigated. Non-invasive measures can be utilized in the assessment of NAFLD progression. Larger studies are needed to determine the effect of SG on FMD.

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THU-249

FibroTest used as a key exclusion criteria for the presence of cirrhosis

Thu Apr 20th 08:00-18:00

### Poster Efficacy and safety of sofosbuvir and daclatasvir for 8 weeks in treatment-naïve non-cirrhotic patients with chronic hepatitis C virus genotype 3 infection

C Hezode, V Leroy, I Rosa, et al.

Background and Aims: HCV GT 3 is the second most common GT worldwide. For noncirrhotic patients with HCV GT 3 infection, the EASL and AASLD/IDSA guidelines recommend treatment with the IFN- and RBV-free regimen of DCV + SOF for 12 weeks, according to the results of the ALLY-3 phase 3 study, in which this patient group achieved a 96% SVRI2 rate. The objective of this pilot study was to investigate the efficacy and safety of 8 weeks of DCV + SOF in treatment-naïve patients with HCV GT 3 infection without cirrhosis.

Methods: This ongoing pilot study is a multicenter, open label, single arm trial that enrolled treatment-naïve GT-3 patients without cirrhosis. Key exclusion criteria included the presence of cirrhosis, as determined by either a FibroScan score ≥12.5 kPa or a FibroTest score of ≥0.75, and baseline HCV RNA level >6,000,000 IU/mL.The regimen was DCV 60 mg and SOF 400 mg once daily for 8 weeks. Efficacy was calculated as the percent of patients achieving SVR12 (HCV RNA <LLOD). Additional endpoints included the proportion of patients experiencing virologic breakthrough or relapse. Adverse events and clinical laboratory abnormalities were monitored to assess safety and tolerability. Analysis of baseline RASs is ongoing and will be presented; if a patient does not achieve SVR12, additional resistance testing will be performed.

**Results**: 50 patients, median age: 50 (range: 36-56), median FibroScan score: 7.65 kPa (range: 5.8-8.7; highest score: 11.5 kPa), median HCV RNA level: 5.83 (5.12-6.22) Log10IU/mL, were included. At the time of the present analysis, the SVR4 and SVR12 rates were 94.3% (33/35) and 92.3% (24/26), respectively. Two patients relapsed at post-treatment week 4.

Conclusions: The efficacy and safety of an 8-week DCV + SOF regimen for chronic HCV GT3 in treatment-naïve patients without cirrhosis is being investigated. Baseline characteristics, safety, SVR12 results and resistance analysis for the 50 patients will be presented at the meeting.

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# THU-219

Testing safety and efficacy of DAA in genotype Ib **HCV** patients with cirrhosis as per FibroTest

> Thu Apr 20th 08:00-18:00

#### Poster Efficacy and safety of paritaprevir/ritonavir, ombitasvir and dasabuvir plus/minus ribavirin for treatment of hepatitis C virus genotype 1b compensated cirrhosis in patients aged 70 years or older

A Trifan, C Cijevschi Prelipcean, L Gheorghe, et al.

Background and Aims: Advanced age has been a major limitation of previous interferonbased treatment for chronic HCV infection because its poor response and tolerability. Direct acting antivirals therapies (DAAs) are highly effective and safe, allowing treatment for elderly patients with no age limit. However, pivotal trials of all-oral combinations with DAAs included few elderly patients with compensated cirrhosis. This study aims to analyze the realworld efficacy and safety of paritaprevir/ritonavir, ombitasvir and dasabuvir +/- ribavirin PrOD  $\pm$  ribavirin in elderly patients with HCV genotype 1b compensated cirrhosis.

Methods: 856 patients with HCV genotype 1b compensated cirrhosis were prospectively included and treated with PrOD + ribavirin for 12 weeks across 10 academic centers in Romania from December 1st 2015 to May 31, 2016. All patients had HCV compensated Child A cirrhosis (F4 established by Fibromax). SVR12, severe adverse events, grade 4 laboratory abnormalities, death rate, and discontinuation rate were recorded. The patients were divided in two groups by age: ≥70 years and <70 years. Efficacy and safety of PrOD +ribavirin therapy were analyzed and compared between two groups.

Results: Among 856 patients included (females 56.8%, median age 60 yrs), 104 (12.1%) were aged ≥70 yrs, most female (60.6%), median age 74 yrs (range: 70-82), and 35 (33.7%) treatment-experienced. SVR12 rates, based on intention-to-treat and per-protocol analyses, were 97.1% and 100%, respectively in patients  $\geq$ 70 yrs, compared to 98.1% and 98.8%, respectively in patients < 70 yrs. Severe AEs leading to treatment discontinuation were reported in 1 patient (0.9%) in elderly group (1-cardiac failure) compared to 6 patients (0.8%) in younger group. Four patient died in younger group and one in elderly group.

Conclusions: Treatment with PrOD  $\pm$  Ribavirin regimen in patients aged 70 yrs or older with HCV genotype 1b compensated cirrhosis is highly effective and safe, similar to that in younger patients

## Poster THU-197

FibroTest independent predictor of survival in HCV

> Thu Apr 20th 08:00-|8:00

#### Baseline serum ferritin is an independent predictive factor of mortality in patients with chronic hepatitis C after long term follow-up

C. Jezequel, Z.B. Ali, C. Pronier, et al.

Background and Aims: Serum ferritin is elevated in patients with HCV chronic hepatitis. It has been suggested that it could impact the mortality related to liver cancer. However, most of the studies included only cirrhotic patients with a short termfollow-up. The aim of this study was to investigate the impact of baseline serum ferritin (SF) on long-term survival and causes of death (hepatic versus extrahepatic) in a cohort of chronic HĆV infected patients with long term follow-up.

Methods: Patients were selected from a cohort of 4419 consecutive HCV positive patients. Inclusion criteria was SF available at first presentation. Clinical and biological data were recorded at inclusion and at the end of follow-up. Survival and causes of death were obtained from national registry of death certificate. Liver fibrosis was determined using liver biopsy or non-invasive tests (elastography or FibroTest.). Survival was studied according to SF level. A Cox model was built to take into account age, gender, liver fibrosis stage and SF level.

Results: 2099 patients were included (median age 45 years; male 59.8%). Among the 1979 HCV-RNA positive patients (94.3%), 62.9% had genotype I and 20.8% genotype 3 infection. Stage of fibrosis was F0-F1 in 59.1%, F2 in 15.2%, F3 in 12% and F4 in 13.7%. 1340 patients received at least one anti-viral treatment and 51% achieved sustained virological response. The median follow-up was 11.7 years [5.9– 17.9]. Two groups were determined according to median SF (180 [85–371]). Overall survival was 85.9% and 77% after 10 and 15 years. In multivariate analysis, age, gender, fibrosis stage and SF were independently associated with survival. Mortality was liver related in 42.8% (decompensation 20.5% and liver cancer 22.3%). Overall mortality was significantly higher in high SF group (p < 0.0001) without any impact on cause of death (p = 0.09).

Conclusions: High serum ferritin at inclusion was predictive of higher mortality after long term followup in a large cohort of patients with various stages of fibrosis, after adjustment on usual predictors. It was not specifically related to liver cancer with an impact equally distributed between liver and non liver related mortality.

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## **Poster** THU-263

Safety and efficacy of DAA GLE-PIB in patients with cirrhosis as per FibroTest

> Thu Apr 20th 08:00-18:00

#### Pharmacokinetics and safety of glecaprevir/pibrentasvir in adults with chronic genotype 1–6 hepatitis C virus infection and compensated cirrhosis: an integrated analysis *E. Gane, F. Poordad, J. Valdes, et al.*

**Background and Aims:** The direct-acting antiviral (DAA) combination of glecaprevir (GLE, NS3A protease inhibitor identified by AbbVie and Enanta) and pibrentasvir (PIB, NS5A inhibitor) demonstrated high sustained virologic response (SVR) rates of 96–100% in phase 2 and 3 studies of adults infected with genotypes (GTs) 1–6, including patients with cirrhosis. We report integrated safety results from HCV-infected adults with cirrhosis.

**Methods**: Four multicenter, open-label, phase 2 or 3 studies included HCV-infected adults with compensated cirrhosis who were treatment-naive or treatment experienced with interferon (IFN) or pegylated IFN, ribavirin, and/or sofosbuvir. Cirrhosis was confirmed by liver biopsy, Fibroscan score  $\geq$  14.6 kPa or FibroTest score  $\geq$  0.75 and aspartate aminotransferase-to-platelet ratio >2. Excluded were patients with albumin <2.8 g/dL, international normalized ratio >1.5–2.3, or platelets <60,000–90,000/mm3. Pharmacokinetic parameters, adverse events (AEs), and laboratory abnormalities were assessed.

**Results**: A total of 288 patients (mean age Å) SD, 58.3 Å) 9.16; 63.2% male; 84.7% white; 49.3% previous injection drug user)were enrolled. All HCV GTs 1–6 were included. Baseline Child-Pugh Scores were 5 in 249 patients (86.5%) and 6 in 37 (12.8%;  $\geq$ 6 in 1 patient and data missing in 1). The baseline platelet count was <100 Å~ 109/L in 68 (23.6%). Treatment was G/P 300/120 mg orally once daily for 12 weeks in 225 (78.1%) patients and 16weeks in 63 (21.9%). Glecaprevir exposure in cirrhotic subjects was approximately 2.2-fold the exposure in noncirrhotic subjects. Pibrentasvir exposures in cirrhotics and noncirrhotics were similar. No increase in alanine aminotransferase (ALT) to grade 3 or higher occurred during the treatment period. No treatment-emergent, AE-related deaths occurred. Most AEs were mild; the most common were fatigue or headache

**Conclusions:** G/P was well tolerated by HCV-infected patients with compensated cirrhosis despite the 2-fold increase in glecaprevir exposure in patients with compensated cirrhotics compared with noncirrhotic patients. No grade  $\geq$ 3 elevations in ALT and no cases consistent with drug-induced liver injury occurred. No DAA-related serious AEs or DAA-related AEs leading to discontinuation were reported.

## Poster THU-273

Safety and efficacy of SOF/ VEL/VOX or SOF/VEL in patients with minimal fibrosis as per FibroTest

> Thu Apr 20th 08:00-18:00

#### Treatment with SOF/VEL or SOF/VEL/VOX is well tolerated and results in high SVR12 in genotype 1–6 HCV infected patients with minimal fibrosis: a retrospective analysis of the ASTRAL and POLARIS clinical studies

E. Lawitz, M. Bourliere, L. Han, et al.

Background and Aims: The prioritization of patients with advanced cirrhosis for treatment with DAA based therapy has resulted in a large population of untreated patients with minimal fibrosis. Many such patients are not screened for HCV infection, do not seek treatment as they are asymptomatic, or are deferred because of mild liver disease. Simple, safe and highly effective regimens will be necessary to overcome barriers to care in this population.

Methods: This is a retrospective analysis of the safety and efficacy of treatment with SOF/VEL for 12 weeks or SOF/VEL/VOX for 8 weeks in genotype I–6 HCV infected patients with minimal fibrosis from the Phase 3 ASTRAL and POLARIS studies. Minimal fibrosis was defined as liver biopsy staged Metavir F0-2, transient elastography <9.6 kPa, or Fibrotest <0.59. Efficacy was assessed by sustained by sustained as a structure of the state of the structure of the struct virologic response 12 weeks after treatment (SVR12). Plasma HCV RNA was quantified with the CAP/ CTM HCV 2.0 assay with LLOQ = 15 IU/mL.

Results: 708 and 376 patients with genotype I-6 HCV infection and minimal fibrosis were treated with SOF/VEL for 12 weeks or SOF/VEL/VOX for 8 weeks, respectively. Most were male (53%), white (82%), and had IL28B non-CC genotype (68%) and 22% had failed treatment with an interferon-based regimen. The Table 1 below presents the SVR12 rates by regimen and genotype. SOF/VEL for 12weeks resulted in SVR12 rates ≥96% across all HCV genotypes in patients with minimal fibrosis. SOF/VEL/ VOX for 8 weeks was highly efficacious in patients with genotype 3 HCV infection and minimal fibrosis. SOF/VEL and SOF/VEL/VOX were well tolerated with low incidences of severe adverse events (3.1% and 2.4%), serious adverse events (2.5% and 3.5%) and discontinuations due to adverse events (0.3%, 0).

Conclusions: Treatment with SOF/VEL for 12 weeks or SOF/VEL/VOX for 8weeks is well tolerated and results in high SVR12 in HCV infected patients with minimal fibrosis. The availability of short duration, pangenotypic, highly effective and well-tolerated treatments will enable non-specialists to engage in care of patients with no fibrosis or minimal fibrosis and thereby impact the prevalence and burden of disease in this population.

# FRI-155

FibroTest for identification of patients with HBV & HBeAg negative

> Fri Apr 21th 08:00-18:00

### Poster An algorythm including quantitave HBsAg and HBcrAg is useful for discrimation between hepatitis B virus inactive carriers and patients with active chronic hepatitis B HBeAg negative

M.R. Barciela, A. Ruiz, D. Tabernero, et al.

Background and Aims: One of the challenges in patients with chronic hepatitis B HBeAg negative is discriminate between inactive carriers (IC) and active chronic hepatitis (ACH) since prognosis and indication for treatment is different. We aimed to assess the usefulness of biomarkers (quantitative HBsAg [qHBsAg] and HBcrAg, APRI, Forns' index and FibroIndex) and elastography for identification of those patients with histological evidence of liver damage.

**Methods:** From a prospective cohort including 202 HBeAg negative subjects, 60 patients with HBV DNA between > 2000 IU/mL and 20.000 UI/ml and normal ALT or <2xULN (55% male, mean age 45 years, 70% Caucasian) were selected. A liver biopsy, elastography, HBV genotype and serum biomarkers were carried out in all included patients. ACH was defined by the presence of fibrosis ≥3 and/or necroinflammation  $\geq$ 3 (ISHAK index).

Results: Among them, 27% had ACH and 73% were IC. Patients with ACH have higher levels of the coefficient ALT/ULN ALT (1.2 vs. 0.7 IU/ mL, p = 0.006), HBV DNA (4.3 vs. 3.2 log IU/mL, p = 0.003) and HBcrAg (3.6 vs. 2.4 log U/mL, p = 0.002), but similar qHBsAg ( p = 0.1). However, all 14 patients with qHBsAg ≤ 3 log IU/mL were IC and therefore the negative predictive value (NPV) of this cut-off for ruling out ACH was 100%. Among patients with qHBsAg > 3 log IU/mL, HBcrAg  $\leq$  2.5 log U/mL cut-off presented a NPV of 84% and positive predictive value of 55% for detection of ACH (Figure). Overall, this algorithm including qHBsAg and HBcrAg presented a NPV of 90% and diagnostic accuracy of 78%. Non-invasive biomarkers of liver fibrosis (Forns' index, FibroTest, elastography) did no differ between ICs and ACH patients, except for APRI index (0.6 vs. 0.44, p = 0.03)

Conclusions: An algorithm including HBsAg and HBcrAg levels allows the exclusion of active chronic hepatitis in patients with HBV DNA > 2000 IU/mL and ALT < 2xULN with a negative predictive value of 90%.

FRI-336

Prevalence of steatosis, NASH, fibrosis and cirrhosis in treated HIV

> Fri Apr 21th 08:00-|8:00

> > Poster SAT-242

FibroTest in HCV treated by DAA

> Fri Apr 21th 08:00-18:00

#### Poster Liver steatosis and fibrosis in at-risk European HIV-monoinfected patients

#### M. Lemoine, L. Assoumou, P. Ingiliz, et al.

Background and Aims: Nonalcoholic fatty liver disease (NAFLD) has emerged as a new concern in HIV-infected patients. The ECHAM (European Cohort on HIV, Ageing and Metabolic liver disease) Study Group aimed to assess the prevalence of NAFLD and its complications i.e nonalcoholic steatohepatitis (NASH), fibrosis and cirrhosis in treated HIV-monoinfected individuals.

Methods: This cross-sectional study conducted in seven European centers enrolled HIV-infected individuals with persistently elevated transaminases (≥ 1.5 ULN) and/or metabolic syndrome (MS), and/ or lipodystrophy without other causes of liver disease (i.e HCV or HBV coinfections or excessive alcohol intake). All patients underwent complete non-invasive metabolic and liver assessments including hepatic MRI, Fibroscan./CAP and FibroTest. A liver biopsy was indicated in case of suspected significant fibrosis ( $\geq$ F2) based on Fibroscan. ( $\geq$ 7.1 kPa) and/or Fibrotest. ( $\geq$ 0.49).

Results: Between March 2014 and November 2015, 461 individuals were screened, 442 met the inclusion criteria and 402 had full liver assessment and were further analyzed. Patients were mainly males (85%) with a median age of 55 years (IQR 50-61). The median time since HIV diagnosis was 19 years (14–24), ART duration 16 years (12–19). Nadir of CD4 count was 184 (84–266)/mm3. HIV viral load was<50cp/mL in 97% of cases with a median CD4 count of 630/mm3 (510-832). Of the 402 patients, 269 (67%) had a MS and 218 (54%) insulin resistance defined by HOMA index ≥2.5. Median ALT, AST and GGT levels were 34 (24–50), 29 (23–37) and 48 (29–81) IU/L, respectively. Hepatic MRI identified 257 (64%) patients with significant steatosis defined by a fat fraction >5%. Using non-invasive markers of fibrosis, 140 (35%) had suspected significant liver fibrosis including 12.4% with cirrhosis. However, the concordance between Fibroscan and Fibrotest for the diagnosis of fibrosis was poor (kappa coefficient 13%). Of 140 patients eligible for liver biopsy, 50 accepted the procedure; their demographic and clinical characteristics were similar to those who refused biopsy. Histological analysis reported steatosis in 76%, NASH in 43%, significant fibrosis (≥F2) in 30% and cirrhosis in 2 (4%) patients.

Conclusions: Nonalcoholic HIV-monoinfected patients on ART with metabolic disorders are at high risk of liver steatosis and fibrosis. However, non-invasive markers of fibrosis should be interpreted with caution in this population. (Study registered on clinicialtrial.org, NCT02093754).

#### Changes in markers of liver function in hepatitis C virus genotype 1b Asian patients with compensated cirrhosis treated with ombitasvir/paritaprevir/ritonavir plus dasabuvir with ribavirin in the ONYX-II study

J. Heo, Y. Luo, W.-L. Chuang, et al.

Background and Aims: Patients chronically infected with hepatitis C virus (HCV) are at risk of developing extrahepatic manifestations of HCV as well as progressing to compensated or decompensated cirrhosis and hepatocellular carcinoma. Although current treatments have high rates of sustained virologic response (SVR), relatively little is known about possible regression of liver fibrosis after achieving an SVR. The ONYX-II trial examined the efficacy and safety of ombitasvir (OBV), ritonavir-boosted paritaprevir (PTV/r; identified by AbbVie and Enanta) and dasabuvir (DSV) + ribavirin (RBV) in Asian patients with HCV genotype (GT) 1b infection and compensated cirrhosis. Here we report changes in key markers of liver fibrosis and function on and post treatment.

Methods: Patients with chronic HCV GT1b infection and compensated cirrhosis were enrolled in China, South Korea and Taiwan and received 12 weeks of OBV/PTV/r (25 mg/150 mg/100 mg once daily) and DSV (250 mg twice daily) with weight-based RBV. The primary objective of ONYX-II was to assess efficacy (SVR12) and safety of the regimen. Changes in markers of liver fibrosis and function between baseline (BL) and post-treatment week (PTW) 12 are presented.

Results: Overall, 104 patients were enrolled and treated in ONYX-II. All patients (104/104, 100%) achieved SVR12. BL and PTW12 data for FibroTest score, alanine aminotransferase (ALT), aspartate aminotransferase (AST), total bilirubin, albumin, platelet count and alpha fetoprotein (AFP) are shown in Table 1. All selected parameters showed numerical improvements between BL and PTW12. Mean ALT and AST levels returned to within normal range and FibroTest scores demonstrated a numerical improvement, suggesting improvement in liver status. The complete set of data between BL and PTW12 will be presented for these parameters and other liver composite parameters at the conference

Conclusions: Measurement of key liver function markers during the ONYX-II trial showed a numerical improvement in these markers within 12 weeks of completion of treatment in HCV GTIb-infected patients with compensated cirrhosis. Further follow-up of these patients will determine the long-term durability of these changes.

FibroTest used to determine the presence of cirrhosis

> Sat Apr 22th 08:00-18:00

#### Poster SOF/VEL/VOX results in high SVR12 rates when administered for 12 weeks in DAA-experienced patients or for 8 Weeks in SAT-280 DAA-naïve patients: an integrated analysis of the POLARIS-1, POLARIS-2, POLARIS-3 and POLARIS-4 studies

S.K. Roberts, C.L. Cooper, E. Lawitz, et al.

Background and Aims: The once-daily fixed-dose combination tablet of sofosbuvir/velpatasvir/ voxilaprevir (SOF/VEL/VOX) was evaluated for the treatment of genotype 1–6 HCV infection in four Phase 3 studies in direct acting antiviral (DAA)-experienced (POLARIS-1 and POLARIS-4) and DAAnaïve (POLARIS-2 and POLARIS-3) patients with and without compensated cirrhosis. DAA experienced patients received treatment for 12weeks and DAA-naïve patients received treatment for 8 weeks. Overall SVR12 rates were >95% across all the studies. This post-hoc analysis assesses efficacy in patients with and without traditional negative predictors of response.

Methods: This was a retrospective analysis of data from 1,056 patients treated with SOF/VEL/VOX in the Phase 3 studies. Presence of cirrhosis was determined by histology, Fibrotest/APRI, or Fibroscan. Viral load and other clinical and laboratory assessments were determined prior to treatment with SOF/ VEL/VOX. Prior treatment records were source verified and race was self-reported by the patient to the investigator.

Results: Overall, 38% of patients had cirrhosis, 70% had HCV RNA ≥800,000 IU/mL, 59% of the DAAexperienced patients had received an NS5A inhibitor-containing regimen, 20% of the DAA-naïve patients had prior treatment failure with pegylated interferon + ribavirin, 12% were ≥65 years old and 10% were black. Table 1 provides SVR12 rates for each patient subgroup.

Conclusions: The POLARIS-1, POLARIS-2, POLARIS-3, and POLARIS-4 studies enrolled a diverse patient population that included a significant number of patients with historically negative predictors of response including cirrhosis and prior exposure to DAA-containing regimens. High SVR12 rates for the ribavirin-free regimen of SOF/VEL/VOX were achieved across subgroups.