## Abstract OP11 Table 1

Normal ALT [ALT <30 IU/I for females and ALT <45 IU/I for males]												
Test	AUROC	Cut-off	Sens (%)	Spec (%)	PPV (%)	NPV (%)	Avoid biopsy					
AST/ALT	0.81	0.8	94	44	35	96	18/70 (26%)					
BARD	0.71	2	94	26	29	93	15/70 (21%)					
FIB-4	0.86	1.30	82	77	52	92	43/70 (61%)					
NAFLD	0.85	-1.455	82	51	35	90	29/70 (41%)					
Raised ALT												
AST/ALT	0.79	8.0	59	86	46	91	184/235 (78%)					
BARD	0.78	2	83	57	28	94	118/235 (50%)					
FIB-4	0.85	1.30	81	72	37	95	148/235 (63%)					
NAFLD	0.80	-1.455	71	65	29	92	138/235 (59%)					

Conclusion The FIB-4 score performed well in patients with normal or raised ALT, reliably excluding advanced fibrosis and reducing the need for liver biopsy. Therefore, the FIB-4 score may be an appropriate tool for use in primary care to triage patients with NAFLD who need referral for further assessment. Further validation in a general practice cohort is underway.

## Viral hepatitis

OP12 SIMILAR SVR RATES IN IL28B CC, CT OR TT PRIOR RELAPSER, PARTIAL- OR NULL-RESPONDER PATIENTS TREATED WITH TELAPREVIR/PEGINTERFERON/RIBAVIRIN: RETROSPECTIVE ANALYSIS OF THE REALIZE STUDY

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Introduction IL28B polymorphisms are linked to differences in SVR rates in HCV treatment-naÔve patients treated with pegylated interferon (P) and ribavirin (R). REALIZE is a Phase 3 study that compared the efficacy, safety and tolerability of telaprevir (T), with or without a Lead-in (LI), in combination with PR against PR alone in prior treatment-failure patients including relapsers, partial responders and null responders (NR). Both T/PR arms were superior to control in all three patient categories. The relationship between IL28B genotype and SVR was investigated retrospectively.

Method 527/662 (80%) patients enrolled in REALIZE consented to genetic testing. This represented 72%, 76% and 98% of the total relapsers, partial responders, and NR, respectively. Genotype

rs12979860 was determined using a TaqMan allelic discrimination assay validated against Sanger sequencing on 50 independent samples. This was a retrospective study based on patients who consented to genetic testing prior to the discovery of IL28B, thus, sample size was not based on formal statistical considerations.

Results Overall, 94% were Caucasian and 4% were Black. 18% of patients were IL28B CC, 61% CT and 21% TT. By prior response category, the highest proportion of IL28B TT patients was among prior NR (28%) while the highest frequency of CC patients occurred among prior relapsers (27%). The observed IL28B genotype frequencies indicate that the population was not in Hardy-Weinberg equilibrium ( $\chi^2$ =28, p<0.0001). IL28B genotypes were well balanced across all arms with exception of a higher frequency of TTs in the placebo arm. Since no differences were observed between the two T arms, a pooled analysis is presented.

Conclusion Differences in SVR rates among IL28B CC, CT and TT patients were only evident when the three patient subpopulations were pooled, however, SVR among CT and TT patients were still high. In this retrospective analysis, IL28B genotype did not contribute to outcome prediction in prior treatment-experienced patients treated with a telaprevir-based regimen and thus, may be of limited utility in this setting.

OP13

## CD8B LOW T CELLS ARE A PROMINENT, FUNCTIONALLY DISTINCT POPULATION IN CHRONIC HEPATITIS B INFECTION

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**Introduction** The failure of antigen-specific CD8 T cells is a well recognised feature of chronic hepatitis B (HBV) infection, however the bulk CD8 T cell population is also characterised by low expression of CD28 and poor IL-2 production and proliferation capacity (Das, Hoare et al 2008). We have previously observed a prominent CD8 T cell population in chronic HBV to be CD8blow (Walker, Kang et al) - this is most obvious in the cells which lack expression of CD161 (a molecule associated with liver homing). The relationship of these two observations has not previously been explored. Such changes may represent infection induced immune exhaustion or an acquired tolerance mechanism, which is breached during flares in disease activity. Both scenarios have important implications either for development of immunotherapy for viral clearance or treatment for prevention of disease progression.

Aim The aim of this study was to further characterise the phenotypic and functional features of the bulk CD8 T cell population in chronic HBV infection and the relationship of CD28lowCD8+ and CD161-CD8b<sup>low</sup> T cell populations.

Method Peripheral blood mononucleocytes were obtained from patients with eAg+ve chronic HBV (n=6), eAg-ve chronic HBV (n=12), chronic hepatitis C (HCV) genotype 1 (n=5) and healthy

## Abstract OP12 Table 1

	Overall Population		Prior Relapsers		Prior Partial Respo	Prior Partial Responders		Prior Null Responders	
% SVR (n)	Pooled T12/PR48 Arms (N = 422)	Pbo/PR48 Arm (N = 105)	Pooled T12/PR48 Arms (N = 209)	Pbo/PR48 Arm (N=52)	Pooled T12/PR48 Arms (N = 79)	Pbo/PR48 Arm (N = 20)	Pooled T12/PR48 Arms (N = 134)	Pbo/PR48 Arm (N = 33)	
IL28B CC	79 (76)	29 (17)	88 (58)	33 (12)	63 (8)	20 (5)	40 (10)	NA (0)	
IL28B CT	60 (266)	16 (58)	86 (117)	20 (30)	58 (57)	20 (10)	29 (92)	6 (18)	
IL28B TT	61 (80)	13 (30)	85 (34)	30 (10)	71 (14)	0 (5)	31 (32)	7 (15)	