medical therapy. Patients with IGG4-HBD respond well to medical therapy and Rituximab can be used effectively in their management.

PWE-16 INJECTING NETWORK STRUCTURE DETERMINES THE MOST EFFICIENT STRATEGY FOR HEPATITIS C ELIMINATION

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(a)

(b)

Abstract PWE-16 Figure 1 Box plots showing prevalence of HCV at 5 years, for each network structure from a baseline prevalence of 41.7%: (a) without treatment; (b) treating 6 PWID per month by each of random and degree-based targeted ('network') strategies. The ends of the boxes are the upper and lower quartiles, a horizontal line inside each box marks the median value and the whiskers extend to extreme values at most 1.5x the inter-quartile range. Outliers beyond this range are indicated by crosses

Introduction Transmission of Hepatitis C (HCV) continues via sharing of injection equipment between people who inject drugs (PWID). Network-based modelling studies have produced conflicting results as to whether random treatment is preferable to targeting treatment at PWID with multiple partners. We hypothesise that differences in network structure produce this heterogeneity, and aim to test how changing network structure affects HCV transmission and treatment effects. **Methods** We create three different dynamic injecting network structures connecting 689 PWID (UK-net, AUS-net and USA-net) based on published empirical data. HCV within the networks is transmitted via a susceptible-infected-susceptible model. At 5 years we compare prevalence of HCV in the three networks in three scenarios: 1) with no treatment, 2) with randomly targeted treatment and 3) with treatment targeted at PWID with the most injecting partnerships.

Results Median HCV prevalence at 5 years without treatment differed significantly between the three networks (UK-net 42.8%; AUS-net 38.2%, $p < 0.0001$; USA-net 54.0%, $p < 0.0001$). In the treatment scenarios UK-net showed a clear benefit of targeted treatment (median 5-year prevalence 1.0% vs. 9.6% vs. $p < 0.0001$), AUS-net showed a smaller benefit (0.15% vs. 0.44%, $p < 0.0001$) and USA-net showed no significant difference (29.3% vs. 29.2% random, $p = 0.0681$). In sensitivity analyses, targeted treatment was optimised in low prevalence, moderate treatment coverage conditions whereas random treatment was optimised in low treatment coverage, high baseline prevalence conditions.

Conclusions Network structure determines the transmission rate of HCV in PWID and the most efficient treatment strategy to achieve elimination. In real-world injecting network structures, the benefit of targeting HCV treatment at individuals with multiple injecting partnerships may have been underestimated. Therefore, focussing additional treatment resources at actively injecting PWID who are less engaged with harm reduction may be worthwhile.

PWE-17 PATIENTS WITH HEPATOCELLULAR CARCINOMA HAVE HIGHER RISK AMAP SCORES UP TO 5 YEARS BEFORE DIAGNOSIS

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Introduction Many patients with hepatocellular carcinoma (HCC) are diagnosed too late to be offered potentially curative therapies and there is an unmet need for earlier detection. A recent international study assessed the 'aMAP' score (age, male gender, albumin-bilirubin, platelets) for stratifying patients with chronic liver disease into low (<0.2%), medium (0.4-1%) or high (1.6-4%) annual risk of developing HCC [Fan R et al, *J Hepatol* 2020]. However, the data was predominantly from patients with chronic viral hepatitis recruited in tertiary centres, which may have been subject to referral bias. Consequently, the aim of our study was to assess whether aMAP scoring could have identified patients who developed HCC in an unselected UK population including non-viral liver diseases.

Methods A prospectively recorded liver cancer database was used to identify all patients diagnosed with HCC according to EASL-EORTC criteria, over a 10-year period at a major acute