VCTE, and FAST as early as Month 6, which were sustained through Month 18. No improvement was observed in placebo group (figure 1).

Conclusions OCA treatment yielded early, sustained improvements in experimental NIT measures of fibrosis in NASH. Improvements in FM and FM VCTE are consistent with previously reported antifibrotic effects of OCA, and FAST improvements are consistent with amelioration of inflammation and fibrosis, key histologic features of NASH. The REGENERATE study remains ongoing and will continue through clinical outcomes for verification and description of clinical benefit.

027

MORTALITY DURING FIRST ADMISSION FOR ALCOHOL-RELATED LIVER DISEASE IN ENGLAND: HIDDEN PATIENTS OR MISSED OPPORTUNITIES?

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Introduction In-hospital mortality from alcohol-related liver disease (ARLD) remains high, with concern that some patients are dying during their first (index) emergency hospitalisation. However, the mortality rate during index ARLD admission in England is not well characterised. Nor do we know the relative proportion of fatalities that are genuinely 'hidden' to the system as opposed to having had prior contacts with primary or secondary care.

Methods The CPRD dataset contains a nationally representative sample of the English population (approx. 13 million, 23.2%) with linked data from both primary and secondary care. We obtained data for all people with an alcohol or liver-related READ code in their primary care record or an alcohol-specific ICD-10 diagnosis in secondary care (n=496,762). We then selected all patients admitted as an emergency for index ARLD in fiscal year 2017/18 (applying our recently reported diagnostic algorithm for ARLD and screening the preceding 10 years), characterised their prior contacts with services across the decade before admission, their clinical characteristics and in-hospital mortality.

Results Within the CPRD sample population for 2017/18, there were 2,423 patients with an index admission for ARLD (their first in last decade). In-hospital mortality for index admissions in England was 15.1% (n=366), with a mean age of 59 years, 60.7% male and mean Charlson index 18. Of the deaths, 28% had no record of an emergency admission for any cause in last 10 years – individuals who appear hidden to hospital services. However, 47% of those dying had at least one previous admission for an alcohol-specific diagnosis (other than liver disease) with a mean interval of 760 days between their first admission and fatal ARLD index. Of the deaths, 9% had no record of any primary care contact (seemingly unknown to GP services). However, 63.7% of those dying had a previous READ code for an alcohol-related problem in their GP record.

Conclusion In England in 2017/18, fifteen percent of patients admitted for the first time with ARLD died during admission. Of patients who died, almost one in ten had had no contact with primary care, and over one in four had no record of a secondary care admission in the preceding 10 years. Patients lacking contact with both primary and secondary care

represent a 'hidden group', with apparent lack of opportunity for healthcare intervention. However, a high proportion of patients who died are known to both primary and secondary care. There may be missed opportunities or ineffective healthcare intervention at both primary and secondary care levels. New, more effective strategies are needed to detect and help people at high risk of presenting acutely for the first time with fatal ARLD.

Characteristics of survivors vs. those who died

Number of deaths = 477 (13.91%); 141 (29.56%) had no previous GP contact;

16 (3.35%) had a GP liver flag only; 189 (39.62%) have an alcohol flag only and 131 (27.46%) both alcohol and liver codes.

Number of survivors = 2,952 (86.09%); 868 (29.40%) had no previous GP contact; 43 (1.46) with a liver flag only; 1,309 (44.34%) with an alcohol flag only and 732 (24.80%) with both alcohol and liver codes.

Mann-Whitney- comparison of the total number of days between the 2017/2018 index, and the date of first GP: alcohol, liver and combined alcohol + liver code. Showed no statistical significance between the length in time from GP code and index, within the died vs survived cohorts.

Mortality cohort (n=477)

- 1. Mean age = 59 (SD- 12.6)
- 2. ARLD code in primary = 61.6%
- 3. Short stay (< 2 days) = 6.5%
- 4. AKI= 64.8%
- 5. Ascites = 51.2%
- 6. Varices = 22.9

Survived cohort (n=2,952)

- 1. Mean age = 53 (SD-11.9)
- 2. ARLD code in primary = 46.3%
- 3. Short stay (<2 days) = 10.1%
- 4. AKI= 14.8%
- 5. Ascites = 29.1%
- 6. Varices = 16.9%

028

SOCIO-ECONOMIC DEPRIVATION ADVERSELY AFFECTS REFERRAL AND LISTING FOR LIVER TRANSPLANTATION IN CIRRHOTIC PATIENTS

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Introduction In Scotland lower socio-economic status is associated with a greater risk of liver-related mortality. Limited data exist on whether socio-economic status influences referral for liver transplantation (OLT). We aimed to investigate the link between deprivation and access to OLT in Scotland.

Methods Patients (>18 years) with chronic liver disease referred for OLT between January 2009 and December 2017 were identified. Demographics including deprivation score related to postcode (Scottish Index of Multiple Deprivation [SIMD]) were recorded. Severity of liver disease, presence of HCC, listing decision and post listing outcomes were also documented. SIMD groups were paired into quintiles for analysis. Liver related deaths in Scotland during this time were used as an estimate of severe liver disease in the

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