

SUPPLEMENTAL ONLINE MATERIAL

JOURNAL

Drugs – Real World Outcomes

TITLE

Association of Albumin-Bilirubin Grade and Sequential Treatment With Standard Systemic Therapies for Advanced Hepatocellular Carcinoma: A Retrospective Cohort Study Using a Japanese Administrative Database

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Supplemental Table 1 Diagnostic criteria

Diagnosis	ICD-10 code or disease code and description
Hepatocellular carcinoma	C22.0: Malignant neoplasm: Liver cell carcinoma 8842916: Combined hepatocellular carcinoma and cholangiocarcinoma (part of C22.7)
Diabetes	E10: Type 1 diabetes mellitus E11: Type 2 diabetes mellitus E12: Malnutrition-related diabetes mellitus E13: Other specified diabetes mellitus E14: Unspecified diabetes mellitus
Hepatitis B	B18.0: Chronic viral hepatitis B with delta-agent B18.1: Chronic viral hepatitis B without delta-agent
Hepatitis C	B18.2: Chronic viral hepatitis C
Alcoholic liver disease	K70: Alcoholic liver disease
Any liver disease	K70: Alcoholic liver disease K71: Toxic liver disease K72: Hepatic failure, not elsewhere classified K73: Chronic hepatitis, not elsewhere classified K74: Fibrosis and cirrhosis of liver K75: Other inflammatory liver diseases K76: Other diseases of liver K77: Liver disorders in diseases classified elsewhere

ICD-10 International Statistical Classification of Diseases and Related Health Problems, 10th

Revision

Supplemental Table 2 Cox regression analysis of factors associated with overall duration of systemic treatment

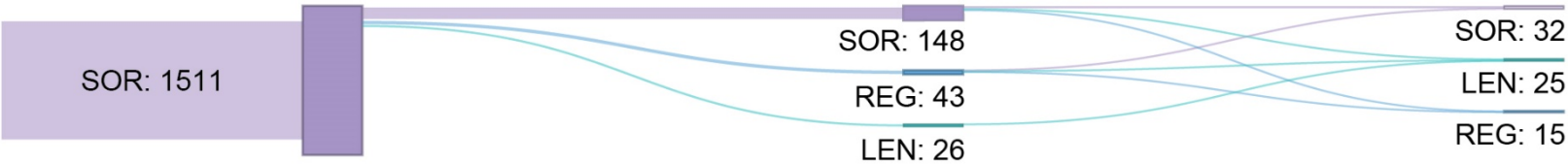
Covariate	Hazard ratio (95% CI)	P value
ALBI at baseline (grade 2b or 3 vs. grade 1 or 2a)	1.61 (1.22–2.13)	0.0009
Designated cancer hospital (yes vs. no)	0.79 (0.56–1.11)	0.1698
Age at index date, years	0.99 (0.98–1.01)	0.4222
Sex (male vs. female)	0.85 (0.61–1.17)	0.3056
Hospital admission within 60 days before index date (excluding on index date) (yes vs. no)	0.98 (0.75–1.28)	0.8805
Presence of diabetes at baseline (yes vs. no)	1.03 (0.80–1.32)	0.8361
Presence of hepatitis B at baseline (yes vs. no)	1.25 (0.87–1.80)	0.2258
Presence of hepatitis C at baseline (yes vs. no)	1.20 (0.92–1.57)	0.1796
Presence of alcoholic liver disease (ICD-10 code K70) at baseline (yes vs. no)	0.87 (0.55–1.38)	0.5585
Fibrosis-4 index at baseline	1.04 (1.01–1.08)	0.0156
Presence of TACE within 3 years before index date (yes vs. no)	0.81 (0.61–1.06)	0.1243

A total of 384 patients were included in the Cox regression analysis. By the end of the observation period, 253 patients had stopped systemic treatment and 131 patients were still receiving systemic treatment

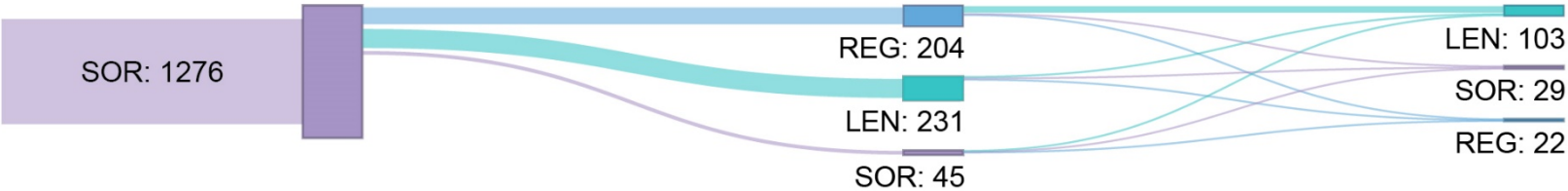
CI confidence interval, *ALBI* albumin-bilirubin, *ICD-10* International Statistical Classification of Diseases and Related Health Problems, 10th Revision, *TACE* transarterial chemoembolization

Supplemental Fig. 1 Treatment sequence. Shown are the numbers of patients receiving each standard of care as index line (left), first subsequent line (middle), and second subsequent line (right) therapy in each cohort. *LEN* lenvatinib, *REG* regorafenib, *SOR* sorafenib

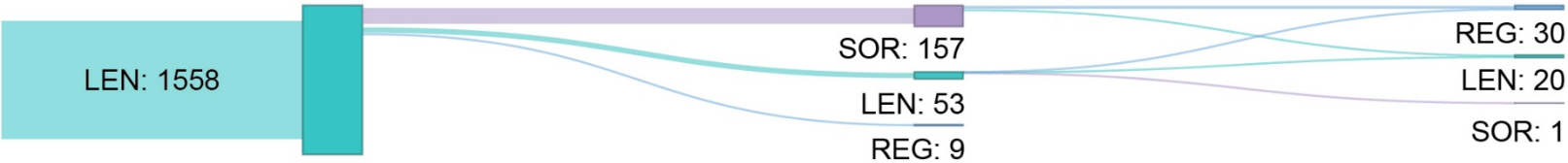
Sorafenib A cohort



Sorafenib B cohort



Lenvatinib cohort



Supplemental Fig. 2 Distribution of ALBI grade at baseline and at the end of index line treatment in patients from each cohort who completed index line treatment without TACE and who had ALBI scores available at both timepoints. The mean (SD) ALBI score and number of patients at each timepoint are shown under the ALBI grade distribution columns. 1L index line treatment (assumed first line), ALBI albumin-bilirubin, SD standard deviation, TACE transarterial chemoembolization

