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REAL-WORLD EFFICACY AND SAFETY OF SOFOSBUVIR/VELPATASVIR/VOXILAPREVIR IN NS5A-INHIBITOR EXPERIENCED PATIENTS: AN INTERNATIONAL MULTICENTER STUDY FROM ASIA

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Background Sofosbuvir/Velpatasvir/Voxilaprevir (SOF/VEL/VOX) was approved as salvage therapy for NS5A-experienced hepatitis C virus (HCV) infected patients. However, the real-world data of SOF/VEL/VOX remained limited in Asia. We aim to analyse the real-world efficacy and safety of SOF/VEL/VOX among NS5A-experienced Asian HCV patients.

Methods This was a cross-sectional, multicenter, international study assessing the efficacy of retreatment using SOF/VEL/VOX among Asian HCV patients with prior direct-acting antiviral (DAA) failure. Our primary aim is sustained-virological response 12 weeks after completion of treatment (SVR12). Data on safety and treatment outcomes were also recorded.

Results Nineteen patients were included from 5 hospitals. Median age was 57, 84% were male, 47% were ex-IVDU and 63% had liver cirrhosis. Among 12 patients with liver cirrhosis, 75% were Child-Turcotte-Pugh Class A and 25% were Class B. Commonest genotype (GT) requiring retreatment using SOF/VEL/VOX was GT3 (68%), followed by GT1, GT2 and GT6 (11%). Prior DAA include SOF/VEL (79%), HARVONI (11%), Glecaprevir/Pibrentasvir (5%) and Daclatasvir/Asunaprevir (5%).

The overall SVR12 rate by intention-to-treat and per-protocol (PP) analysis was 84.1% and 94.1%, respectively. Two patients were demised before treatment completion from HCC progression and septic shock, and were excluded from PP analysis. The SVR12 was not significantly different in patients with GT3 (GT3: 91%, non-GT3: 100%, $p=0.647$). The only patient with virological failure had compensated GT3 cirrhosis with portal hypertension after completed 12 weeks of SOF/VEL/VOX. Significant improvement observed in median serum ALT, AST and bilirubin following SVR12 ($p<0.05$)

Conclusions In this real-world international study, we found that SOF/VEL/VOX is an efficacious and safe salvage regimen among NS5A-experienced HCV patients in Asia.

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EFFICACY AND SAFETY OF DIRECT ORAL ANTICOAGULANTS VERSUS VITAMIN K ANTAGONISTS FOR PORTAL VEIN THROMBOSIS IN CIRRHOSIS: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Background Portal vein thrombosis (PVT) is associated with a higher risk of liver decompensation, variceal bleeding and

long-term mortality in cirrhosis patients. Vitamin K antagonists (VKAs) have a narrow therapeutic range and require frequent dose titration, and the bleeding risk of VKAs in cirrhosis patients is not accurately reflected in the international normalized ratio (INR). Recent American Association for the Study of Liver Diseases (AASLD) guidelines recommend direct-acting oral anticoagulants (DOACs) in cirrhosis patients with non-tumoral PVT. However, the comparative efficacy between DOACs and VKAs for the treatment of cirrhosis with non-tumoral PVT currently remains unknown. We aim to perform a systematic review and meta-analysis to compare the efficacy and safety of DOACs versus VKAs to treat cirrhosis patients with non-tumoral PVT.

Methods We performed a systematic search of six electronic databases and selected all studies comparing DOACs with VKAs in the treatment of PVT in cirrhosis patients. The primary outcome was either complete or partial PVT recanalization. Secondary outcomes were PVT progression, major bleeding, variceal bleeding and death. (IDDF2021-ABS-0172 Figure 1)

Abstract IDDF2021-ABS-0172 Figure 1 Pooled rate of portal vein thrombosis recanalization (partial or complete)

Abstract IDDF2021-ABS-0172 Figure 2 Pooled risk of portal vein thrombosis progression

Abstract IDDF2021-ABS-0172 Figure 3 Pooled risk of major bleeding

Abstract IDDF2021-ABS-0172 Figure 4 Pooled risk of variceal bleeding

Abstract IDDF2021-ABS-0172 Figure 5 Pooled risk of death

Results From 943 citations, we included a total of 11 studies (10 observational and 1 randomized trial) evaluating 4 types of DOACs (rivaroxaban, apixaban, edoxaban and dabigatran) that fulfilled the inclusion criteria. 3 studies included patients with Child-Turcotte-Pugh (CTP)-C cirrhosis. The overall pooled rate of PVT recanalization, PVT progression, major bleeding and death were 46.0%, 12.9%, 7.9% and 10.2%, respectively. We found that DOACs were associated with a higher pooled rate of PVT recanalization (RR=1.67, 95%CI: 1.02, 2.74, $I^2=79\%$) and lower risk of PVT progression (RR= 0.14, 95%CI: 0.03-0.57, $I^2=0\%$). The pooled risk of major bleeding (RR= 0.29, 95%CI: 0.08-1.01, $I^2=0\%$), variceal bleeding (RR=1.29, 95%CI: 0.64-2.59, $I^2=0\%$) and death (RR=0.31, 95%CI: 0.01-9.578, $I^2=80\%$) were similar between DOACs and VKAs. (IDDF2021-ABS-0172 Figure 2, IDDF2021-ABS-0172 Figure 3, IDDF2021-ABS-0172 Figure 4)

Conclusions For the treatment of PVT in patients with cirrhosis, the bleeding risk was comparable between DOACs and VKAs. However, DOACs were associated with a higher pooled rate of PVT recanalization.

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GLOBAL INCIDENCE AND RISK FACTORS OF PANCREATIC CANCER AMONG YOUNG ADULTS: AN EPIDEMIOLOGICAL STUDY

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Background The objective of this study is to examine the incidence and risk factors for pancreatic cancer among younger adults aged 15-49 years old using global and national cancer registry data.

Methods We retrieved the *Global Cancer Observatory (GLOBOCAN)* 2020 for age-standardised incidence (ASI) per 100 000 of pancreatic cancer among younger individuals from 185 countries. We estimated the prevalence of various risk factors among the younger adults for each country by jointpoint regression. We performed the multivariable linear regression to test the associations between risk factors and incidence whilst adjusting for the human development index (HDI) and gross domestic products (GDP).

Results The total number of new cases of young-onset pancreatic cancer was 27 210, with an ASI of 0.68 in 2020

Abstract IDDF2021-ABS-0184 Figure 1 Global incidence of young-onset pancreatic cancer in 2020

(IDDF2021-ABS-0184 Figure 1. Global incidence of young-onset pancreatic cancer in 2020). The highest ASI was in males (0.85 vs. 0.50 in females); Central and Eastern Europe (1.4), Northern America (1.3), Western Europe (1.2); and countries of High Income (1.1) and Upper-Middle Income (0.75). Nations with a higher incidence of young-onset pancreatic cancer had a higher prevalence of tobacco use (beta coefficients (β)=0.021, 95% confidence intervals (CI) 0.012-0.030), alcohol consumption (β =0.037, CI 0.024-0.051), unhealthy dietary habits (β =0.014, CI 0.008-0.019), hypertension (β =0.018, CI 0.007-0.029), and high cholesterol (β =0.019, CI 0.011-0.026) among the young population.

Conclusions The burden of young-onset pancreatic cancer was notable in 2020, with higher incidence observed in male subjects and more developed regions. The associated risk factors for young-onset pancreatic cancer were tobacco use, alcohol consumption, unhealthy dietary habits, hypertension, and high cholesterol. To prevent young-onset pancreatic cancer, lifestyle modifications, metabolic diseases management, and early detection by screening among high-risk young individuals could be useful strategies.

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IMPROVING HEPATITIS B VACCINATION AND RESPONSE RATE IN LIVER TRANSPLANT RECIPIENTS

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Background Hepatitis B virus (HBV) vaccination is indicated for all unexposed transplant recipients on long-term immunosuppression. However, vaccine response is often poor and monitoring overlooked. We conducted a service improvement project over five months to identify liver transplant (LT) recipients with inadequate anti-HBs titre and started them on a vaccination programme. Non-responders were identified for future intervention.