FINDINGS FROM A LARGE ASIAN CHRONIC HEPATITIS C REAL LIFE STUDY

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This article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as doi: 10.1111/jvh.12989

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Keywords: Chronic hepatitis C, cure, sustained virological response, treatment failure, virological failure, genotype.

Running title: Asian Hepatitis C Real Life study

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Financial Support
None
Abbreviations:

CHC  Chronic hepatitis C
AE   Adverse events
HCV  Hepatitis C virus
HCV RNA Hepatitis C ribonucleic acid
LFT  Liver function test
PCR  Polymerase chain reaction
SAE  Severe Adverse Event
SVR12 sustained virological response at followup week 12
SR   sofosbuvir + ribavirin
SPR  sofosbuvir, pegylated interferon + ribavirin
SL±R sofosbuvir, ledispasvir ± ribavirin
SD±R sofosbuvir, daclatasvir ± ribavirin
3D±R ombitasvir, parateprevir, dasubuvir ± ribavirin

ABSTRACT

There is a paucity of information on Chronic Hepatitis C (CHC) patients treated with direct antiviral agents (DAA) in Asia. We invited Asia-Pacific physicians to collate databases of patients enrolled for CHC treatment, recording baseline clinical, virological and biochemical characteristics, sustained virological response at week 12 (SVR12), and virologic failure. SVR12 outcome was based on intention-to-treat (ITT). Multivariate analysis was used to assess independent risk factors for SVR12 using SPSS version 20. 2171 patients from India (n=977), Myanmar (n=552), Pakistan (n=406), Thailand (n=139), Singapore (n=72) and Malaysia (n=25) were collected. At baseline, mean age was 49 years, 50.2% were males and 41.8% had

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cirrhosis. Overall SVR12 was 89.5 % and by genotype (GT) based on ITT and
treatment completion respectively, was 91% and 92% for GT1, 100% and 100%
GT2, 91% and 97% GT3, 64% and 95% GT4, 87% and 87% GT6, and 79% and
91% in GT untested. Patients with cirrhosis had SVR12 of 85% versus 93% for non-
cirrhosis ( p<0.001) (RR 2.1, 95%CI 1.4-3.1, p=0.0002). Patients with GT1 and 3
treated with sofosbuvir/ribavirin (SR) had 88% and 89% SVR12 respectively but
those GT6 treated with sofosbuvir/ledipasvir (SL) had only 77.6% SVR12.
Multivariate analysis showed absence of cirrhosis was associated with higher SVR12
(OR 2.0, 95%CI 1.3-3.1, p=0.002).
In conclusion, patients with GT1 and 3 with/without cirrhosis had surprisingly high
efficacy using SR, suggesting that Asians may respond better to some DAAs.
However, poor GT6 response to SL suggests this regimen is suboptimal for this
genotype.

INTRODUCTION
Globally, of 170 million people who may be infected with hepatitis C virus (HCV),
more than 50% live in Asia (1). In the recent Global Burden of Disease Survey (2),
viral hepatitis accounted for over 1 million deaths in Asia, of which ~ 20% were due
to chronic hepatitis C. Countries with the highest prevalence (1) (3) are those in
Central, South and East-Asia (Mongolia, China, Taiwan and Pakistan)(> 3%),
followed by Southeast Asian countries (2%-3%). In Asia, approval of directly acting
antiviral agents (DAA) lagged behind that of Western countries, but most countries in
Asia now have DAA availability.
Asia also has a unique distribution of HCV genotypes (GT) which makes treatment
challenging (3). GT1b (45-64%) is the predominant GT in East-Asia countries
(China, Taiwan, South Korea and Japan), followed by GT2 infection. Australia has a