Efficacy and Safety of Glecaprevir and Pibrentasvir in Saudi Patients with Chronic Hepatitis C Virus Infection at a Major Tertiary Hospital

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Abstract:

Objectives: To evaluate the effectiveness and safety of glecaprevir/pibrentasvir **(**GLE/PIB**)** in chronic hepatitis C **(**HCV**)** patients, and to assess the prescribers' adherence to Food and Drug Administration recommendations on treatment duration.

Methods: A retrospective cohort study was carried out on chronic HCV patients of ≥18 years, with or without cirrhosis, naive or experienced, and with normal kidney function or chronic kidney disease **(**including dialysis patients**)** at Prince Sultan Military Medical City in Riyadh, Saudi Arabia, between February 2020 and March 2021. The primary effectiveness end-point was the number and percentage of patients who achieved a sustained virologic response **(**SVR12**)**, virologic failure, and non-response. Safety was determined considering both serious and non-serious adverse events.

Results: A total of 92 patients were enrolled in this study. Among patients, 52 **(**56.5%**)** were female, 84 **(**91.3%**)** were naive, and 45 **(**48.9 %**)** had HCV genotype 4. The SVR12 was achieved in 91 **(**98.9%, 95% CI: [94-99.8]**)** patients. Only one patient **(**1.1%, 95% CI: [0.2-5.9]**)** developed virologic non-response and there were missing data on virologic failure. Overall, non-serious adverse events were observed in 26 **(**28.5%**)** patients, and none of them had serious adverse events that led to treatment discontinuation. Approximately 75% of the patients received an inappropriate treatment duration **(**12 weeks vs. the recommended 8 weeks**)** and most **(**n=40, 58%; p<0.022**)** of the exceedingly long treatments were prescribed by registrars.

Conclusion: The GLE/PIB was highly effective and safe in chronic HCV Saudi patients.

Keywords:

Hepatitis C virus, direct-acting antiviral agent, chronic kidney disease, glecaprevir, pibrentasvir, Saudi Arabia.