Treatment-Naive Genotype 2 Without Cirrhosis

Recommended regimens listed by evidence level and alphabetically for:

Treatment-Naive Persons With Genotype 2 Infection Without Cirrhosis

RECOMMENDED	DURATION	RATING
Daily fixed-dose combination of glecaprevir (300 mg)/pibrentasvir (120 mg)[a]	8 weeks	I, A
Daily fixed-dose combination of sofosbuvir (400 mg)/velpatasvir (100 mg)	12 weeks	I, A

[a] Dosing is 3 coformulated tablets (glecaprevir [100 mg]/pibrentasvir [40 mg]) taken once daily. Please refer to the prescribing information.

Recommended Regimens

Glecaprevir/Pibrentasvir

ENDURANCE-2 was a randomized, double-blind, placebo-controlled trial of the daily fixed-dose combination of glecaprevir (300 mg)/pibrentasvir (120 mg) administered as three 100 mg/40 mg fixed-dose combination pills for 12 weeks among 302 genotype 2-infected treatment-naive or treatment-experienced participants. Treatment-experienced participants included those previously treated with interferon or peginterferon ± ribavirin, or sofosbuvir plus ribavirin ± peginterferon. Participants randomized to placebo later received open-label treatment with glecaprevir/pibrentasvir for 12 weeks. Among 202 participants randomized to active treatment, 70% (141/202) were treatment naive and none had cirrhosis. The SVR12 rates were 99% and 100% by intention-to-treat and modified intention-to-treat analysis, respectively. There were no virologic failures. One participant who achieved SVR4 was lost to follow-up before the SVR12 evaluation. There was no effect of baseline RASs on SVR12 rate. Overall, therapy was well tolerated and the adverse event profile was not different compared with placebo (Asselah, 2018b).

A shorter duration of glecaprevir/pibrentasvir for 8 weeks was evaluated in the SURVEYOR-II, part 4 study. This was a single-arm, phase 2 study that evaluated glecaprevir/pibrentasvir for 8 weeks among 203 treatment-naive or treatment-experienced participants (previously treated with interferon or peginterferon ± ribavirin, or sofosbuvir plus ribavirin ± peginterferon) with genotype 2, 4, 5, or 6 infection without cirrhosis. Of the 142 participants with genotype 2 infection, 96% (137/142) were treatment naive. Among the treatment-naive, participants with genotype 2 infection, 99% (135/137) achieved SVR12. The presence of baseline RASs had minimal effect on SVR12 rates. Forty-two percent (53/126) of treatment-naive and treatment-experienced participants with genotype 2 had the L31M RAS within the NS5A gene at baseline. Ninety-six percent (51/53) of these participants achieved SVR12 (Asselah, 2018b).

While not a head-to-head comparison, the results of ENDURANCE-2 and SURVEYOR-II, part 4 indicate that glecaprevir/pibrentasvir administered for 8 weeks or 12 weeks is highly efficacious among treatment-naive persons with genotype 2 infection without cirrhosis. In an integrated analysis of 297 DAA-naive persons with

genotype 2 infection without cirrhosis treated with 8 weeks of glecaprevir/pibrentasvir in 6 phase 2 or 3 clinical trials, SVR12 rate was 98% (252/257) (Naganuma, 2019). Additionally, a real-world Italian cohort of treatment-naive persons with genotype 2 infection without cirrhosis treated with glecaprevir/pibrentasvir for 8 weeks achieved an SVR rate of 98% (173/175) (D'Ambrosio, 2019). A meta-analysis of real-world cohorts that examined glecaprevir/pibrentasvir treatment response among adults demonstrated SVR12 rates of 99.0% (n=274) and 98.0% (n=29) among participants with genotype 2 infection without or with compensated cirrhosis, respectively, with 8 weeks of treatment (Lampertico, 2020).

Sofosbuvir/Velpatasvir

The daily fixed-dose combination of sofosbuvir (400 mg)/velpatasvir (100 mg) for 12 weeks was approved by the FDA for the treatment of persons with genotype 2 infection without cirrhosis or with compensated cirrhosis. ASTRAL-2 compared 12 weeks of sofosbuvir/velpatasvir to 12 weeks of sofosbuvir plus ribavirin in 266 treatment-naive and treatment-experienced persons without cirrhosis or with compensated cirrhosis. The study showed superior efficacy of sofosbuvir/velpatasvir (SVR12 rates of 99% versus 94%); (Foster, 2015a). ASTRAL-1 also included 104 treatment-naive and treatment -experienced participants with genotype 2 infection without cirrhosis or with compensated cirrhosis, all of whom achieved SVR12 (Feld, 2015). Pooled analysis of all participants with genotype 2 infection in ASTRAL-1 and ASTRAL-2 demonstrated 100% SVR12 rate in participants with compensated cirrhosis (29/29) and 99% SVR12 rate in treatment-naive participants (194/195). Among participants with genotype 2 infection receiving sofosbuvir/velpatasvir, the presence of baseline NS5A or NS5B RASs was not associated with virologic failure (Asselah, 2018).

The POLARIS-2 phase 3 study randomized DAA-naive persons to 8 weeks of sofosbuvir (400 mg)/velpatasvir (100 mg)/voxilaprevir (100 mg) versus 12 weeks of sofosbuvir/velpatasvir. Fifty-three participants with genotype 2 infection were included in the sofosbuvir/velpatasvir arm and all achieved SVR12 (100%). This study confirms the high efficacy and safety of this 12-week regimen in persons with genotype 2 infection (Jacobson, 2017).

In a single-arm, phase 3 study from Asia that included 375 treatment-naive and treatment-experienced persons with genotype 1, 2, 3, 4, 5, or 6 infection (18% with cirrhosis) treated with 12 weeks of sofosbuvir/velpatasvir, SVR was achieved in 95% (362/375) (Wei, 2019). Of the 62 participants with genotype 2 infection, 100% achieved SVR. A real-world, pooled analysis of 12 cohort studies demonstrated an SVR rate of 99.3% (1535/1546) among adults with genotype 2 infection (with or without compensated cirrhosis) who were treated with 12 weeks of sofosbuvir/velpatasvir (Mangia, 2020).

Related References

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Additional Reading

- Persons With HIV/HCV Coinfection
- Persons With Renal Impairment
- Management of Acute HCV Infection

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