

Iran Hepatitis Network

Official Network of Iranian Research Centers in the Field of Hepatology and Viral Hepatitis

www.HEP.ir

سکه هماهنگ ایران

Factsheet: An Update on Treatment of Chronic Hepatitis C

Treatment of HCV Genotype 1 Infection

Non-cirrhotic and naïve patients

Recommendations

- A. Daily Sofosbuvir (400 mg) + weekly Pegylated Interferon α -2a (180 μ g) or -2b (1.5 μ g/Kg) + daily weight adjusted Ribavirin (1000-1200 mg) for 12 weeks
 - B. Daily Simeprevir^{a,b} (150 mg) + weekly Pegylated Interferon α -2a (180 μ g) or -2b (1.5 μ g/Kg) + daily weight adjusted Ribavirin (1000-1200 mg) for 12 weeks and an extra Pegylated Interferon + Ribavirin for 12 weeks
 - C. Daily Daclatasvir^a (60 mg) + daily Sofosbuvir (400 mg) for 12 weeks
 - D. Daily fixed dose combination of Ledipasvir (90 mg) and Sofosbuvir (400 mg) for 8-12^c weeks
 - E. Daily Simeprevir^{a,b} (150 mg) + daily Sofosbuvir (400 mg) for 12 weeks
 - F. Daily two tablets (used once) of fixed dose combination of Ombitasvir^a (12.5 mg), Paritaprevir^a (75 mg) and Ritonavir^a (50 mg) + daily two tablets (used twice) of Dasabuvir^a (250 mg) with or without daily weight adjusted Ribavirin^d (1000-1200 mg) for 12 weeks

Comments

^aDaclatasvir, Simeprevir, Ombitasvir, Paritaprevir, Ritonavir and Dasabuvir are not available in Iran.

^bIn patients with HCV genotype 1a infection, if the Q80K variant is detected the treatment with Simeprevir is not recommended.

Iran Hepatitis Network

Official Network of Iranian Research Centers in the Field of Hepatology and Viral Hepatitis

www.HEP.ir

سکھہ ہماقیت ایران

^cIf the HCV RNA is less than 6 million IU/mL and patient has no cirrhosis, the patient can be treated with 8-week regimen of Ledipasvir and Sofosbuvir.

^dPatients with HCV genotype 1a infection should receive Ribavirin in regimen of Ombitasvir, Paritaprevir, Ritonavir and Dasabuvir.

Non-cirrhotic and treatment experienced patients

Recommendations

- A. Daily Sofosbuvir (400 mg) + weekly Pegylated Interferon α-2a (180 µg) or -2b (1.5 µg/Kg) + daily weight adjusted Ribavirin (1000-1200 mg) for 12 weeks
 - B. Daily Simeprevir^{a,b} (150 mg) + weekly Pegylated Interferon α-2a (180 µg) or -2b (1.5 µg/Kg) + daily Ribavirin (1000-1200 mg) for 12 weeks and an extra Pegylated Interferon + Ribavirin for 12 or 36^c weeks
 - C. Daily Daclatasvir^a (60 mg) + daily Sofosbuvir (400 mg) for 12 weeks
 - D. Daily fixed dose combination of Ledipasvir (90 mg) and Sofosbuvir (400 mg) for 12 weeks
 - E. Daily Simeprevir^{a,b} (150 mg) + daily Sofosbuvir (400 mg) for 12 weeks
 - F. Daily two tablets (used once) of fixed dose combination of Ombitasvir^a (12.5 mg), Paritaprevir^a (75 mg) and Ritonavir^a (50 mg) + daily two tablets (used twice) of Dasabuvir^a (250 mg) with or without daily weight adjusted Ribavirin^d (1000-1200 mg) for 12 weeks

•

Comments

^aDaclatasvir, Simeprevir, Ombitasvir, Paritaprevir, Ritonavir and Dasabuvir are not available in Iran.

^bIn patients with HCV genotype 1 infection, if the Q80K variant is detected the treatment with Simeprevir is not recommended.

^cThe extension of Pegylated Interferon + Ribavirin should be 12 weeks in prior relapsers and 36 weeks in prior partial and null responders.

Iran Hepatitis Network

Official Network of Iranian Research Centers in the Field of Hepatology and Viral Hepatitis

www.HEP.ir

سکھہ ہماقیت ایران

جمهوری اسلامی ایران
وزارت بهداشت، درمان
و آموزش پزشکی

تاسیس ۱۳۹۰ شت ۱۵۸۱/۰۹/۲۵

^dPatients with HCV genotype 1a infection should receive Ribavirin in regimen of Ombitasvir, Paritaprevir, Ritonavir and Dasabuvir.

Compensated cirrhosis (child A)

Recommendations

- A. Daily Sofosbuvir (400 mg) + weekly Pegylated Interferon α -2a (180 μ g) or -2b (1.5 μ g/Kg) + daily weight adjusted Ribavirin (1000-1200 mg) for 12 weeks
 - B. Daily Simeprevir^{a,b} (150 mg) + weekly Pegylated Interferon α -2a (180 μ g) or -2b (1.5 μ g/Kg) + daily weight adjusted Ribavirin (1000-1200 mg) for 12 weeks and an extra Pegylated Interferon + Ribavirin for 12 or 36^c weeks
 - C. Daily fixed dose combination of Ledipasvir (90 mg) and Sofosbuvir (400 mg) for 12 or 24 weeks with or without daily weight adjusted Ribavirin^d (1000-1200 mg)
 - D. Daily Daclatasvir^a (60 mg) + daily Sofosbuvir (400 mg) for 12 weeks with daily weight adjusted Ribavirin (1000-1200 mg) or 24 weeks without Ribavirin
 - E. Daily two tablets (used once) of fixed dose combination of Ombitasvir^a (12.5 mg), Paritaprevir^a (75 mg) and Ritonavir^a (50 mg) + daily two tablets (used twice) of Dasabuvir^a (250 mg) + daily weight adjusted Ribavirin (1000-1200 mg) for 12 or 24^e weeks
 - F. Daily Simeprevir^{a,b} (150 mg) + daily Sofosbuvir (400 mg) for 12 weeks with daily weight adjusted Ribavirin (1000-1200 mg) or 24 weeks without Ribavirin



Comments

^aDaclatasvir, Simeprevir, Omibitasvir, Paritaprevir, Ritonavir and Dasabuvir are not available in Iran.

^bIn patients with HCV genotype 1 infection, if the Q80K variant is detected the treatment with Simeprevir is not recommended.

Iran Hepatitis Network

Official Network of Iranian Research Centers in the Field of Hepatology and Viral Hepatitis

www.HEP.ir

^cThe extension of Pegylated Interferon + Ribavirin should be 12 weeks in prior relapsers and 36 weeks in prior partial and null responders.

^dPatients with cirrhosis should be treated with Ledipasvir + Sofosbuvir for 24 weeks or 12 weeks with Ribavirin. However, if the patient has negative predictors the treatment with Ledipasvir + Sofosbuvir + Ribavirin for 24 weeks is recommended.

^cPatients with HCV genotype 1a infection should receive the regimen for 24 weeks and patients with HCV genotype 1b infection should receive the regimen for 12 weeks.

Decompensated cirrhosis (child B or C)

Recommendations

- A. Daily fixed dose combination of Ledipasvir (90 mg) and Sofosbuvir (400 mg) for 12 weeks with daily weight adjusted Ribavirin (1000-1200 mg) or 24 weeks without Ribavirin^a
 - B. Daily Daclatasvir^b (60 mg) + daily Sofosbuvir (400 mg) for 12 weeks with daily weight adjusted Ribavirin (1000-1200 mg) or 24 weeks without Ribavirin^a

Comments

^aIn patients with contraindication for Ribavirin, the 24-week treatment is recommended.

^bDaclatasvir is not available in Iran.

iv

Iran Hepatitis Network

Official Network of Iranian Research Centers in the Field of Hepatology and Viral Hepatitis

www.HEP.ir

Treatment of HCV Genotype 2 Infection

Non-cirrhotic and naïve patients

Recommendations

- A. Weekly Pegylated Interferon α -2a (180 μ g) or -2b (1.5 μ g/Kg) + daily weight adjusted Ribavirin (800 mg) for 24 weeks
 - B. Daily Sofosbuvir (400 mg) + weekly Pegylated Interferon α -2a (180 μ g) Or -2b (1.5 μ g/Kg) + daily weight adjusted Ribavirin (1000-1200 mg) for 12 weeks
 - C. Daily Sofosbuvir (400 mg) + daily weight adjusted Ribavirin (1000-1200 mg) for 12 weeks
 - D. Daily Daclatasvir^a (60 mg) + daily Sofosbuvir (400 mg) for 12 weeks

Comments

^aDaclatasvir is not available in Iran.

Non-cirrhotic and treatment experienced patients

Recommendations

- A. Daily Sofosbuvir (400 mg) + weekly PEGylated Interferon α-2a (180 µg) or -2b (1.5 µg/Kg) + daily weight adjusted Ribavirin (1000-1200 mg) for 12 weeks
 - B. Daily Sofosbuvir (400 mg) + daily weight adjusted Ribavirin (1000-1200 mg) for 12 weeks
 - C. Daily Daclatasvir^a (60 mg) + daily Sofosbuvir (400 mg) for 12 weeks

Comments

^aDaclatasvir is not available in Iran.

Iran Hepatitis Network

Official Network of Iranian Research Centers in the Field of Hepatology and Viral Hepatitis

www.HEP.ir

سکھہ ہماقٹ ایران

Compensated cirrhosis (child A)

Recommendations

- A. Daily Sofosbuvir (400 mg) + weekly PEGylated Interferon α -2a (180 μ g) Or -2b (1.5 μ g/Kg) + daily weight adjusted Ribavirin (1000-1200 mg) for 12 weeks
 - B. Daily Sofosbuvir (400 mg) + daily weight adjusted Ribavirin (1000-1200 mg) for 16 to 20 weeks
 - C. Daily Daclatasvir^a (60 mg) + daily Sofosbuvir (400 mg) for 12 weeks

Comments

^aDaclatasvir is not available in Iran.

Decompensated cirrhosis (child B or C)

Recommendations

- A. Daily Sofosbuvir (400 mg) + daily weight adjusted Ribavirin (1000-1200 mg) for 16 to 20 weeks
 - B. Daily Daclatasvir^a (60 mg) + daily Sofosbuvir (400 mg) for 12 weeks with daily weight adjusted Ribavirin (1000-1200 mg) or 24 weeks without Ribavirin^b

vi

Comments

^aDaclatasvir is not available in Iran.

^bIn patients with contraindication for Ribavirin, the 24-week treatment is recommended.

Iran Hepatitis Network

Official Network of Iranian Research Centers in the Field of Hepatology and Viral Hepatitis

www.HEP.ir

سلسلہ ہمایت ایران

Treatment of HCV Genotype 3 Infection

Non-cirrhotic and naïve patients

Recommendations

- A. Weekly Pegylated Interferon α -2a (180 μ g) or -2b (1.5 μ g/Kg) + daily weight adjusted Ribavirin (800 mg) for 24 weeks
 - B. Daily Sofosbuvir (400 mg) + weekly Pegylated Interferon α -2a (180 μ g) or -2b (1.5 μ g/Kg) + daily weight adjusted Ribavirin (1000-1200 mg) for 12 weeks
 - C. Daily Sofosbuvir (400 mg) + daily weight adjusted Ribavirin (1000-1200 mg) for 24 weeks
 - D. Daily Daclatasvir^a (60 mg) + daily Sofosbuvir (400 mg) for 12 weeks

Comments

^aDaclatasvir is not available in Iran.

Non-cirrhotic and treatment experienced patients

Recommendations

- A. Daily Sofosbuvir (400 mg) + weekly PEGylated Interferon α -2a (180 μ g) or -2b (1.5 μ g/Kg) + daily weight adjusted Ribavirin (1000-1200 mg) for 12 weeks
 - B. Daily Sofosbuvir (400 mg) + daily weight adjusted Ribavirin (1000-1200 mg) for 24 weeks
 - C. Daily Daclatasvir^a (60 mg) + daily Sofosbuvir (400 mg) for 12 weeks

Comments

^aDaclatasvir is not available in Iran.

Iran Hepatitis Network

Official Network of Iranian Research Centers in the Field of Hepatology and Viral Hepatitis

www.HEP.ir

سکھہ ہماقیت ایران

Compensated cirrhosis (child A)

Recommendations

- A. Daily Sofosbuvir (400 mg) + weekly PEGylated Interferon α -2a (180 microgram) or -2b (1.5 microgram/Kg) + daily weight adjusted Ribavirin (1000-1200 mg) for 12 weeks
 - B. Daily Daclatasvir^a (60 mg) + daily Sofosbuvir (400 mg) + daily weight adjusted Ribavirin (1000-1200 mg) for 24 weeks

Comments

^aDaclatasvir is not available in Iran.

Decompensated cirrhosis (child B or C)

Recommendations

- A. Daily Daclatasvir^a (60 mg) + daily Sofosbuvir (400 mg) for 24 weeks with daily weight adjusted Ribavirin (1000-1200 mg) or without Ribavirin^b

Comments

^aDaclatasvir is not available in Iran.

^bIn patients with contraindication for Ribavirin, the 24-week treatment is recommended.

Iran Hepatitis Network

Official Network of Iranian Research Centers in the Field of Hepatology and Viral Hepatitis

www.HEP.ir

Treatment of HCV Genotype 4 Infection

Non-cirrhotic and naïve patients

Recommendations

- A. Daily Sofosbuvir (400 mg) + weekly Pegylated Interferon α -2a (180 μ g) or -2b (1.5 μ g/Kg) + daily weight adjusted Ribavirin (1000-1200 mg) for 12 weeks
 - B. Daily Simeprevir^a (150 mg) + weekly Pegylated Interferon α -2a (180 μ g) or -2b (1.5 μ g/Kg) + daily weight adjusted Ribavirin (1000-1200 mg) for 12 weeks and an extra Pegylated Interferon + Ribavirin for 12 weeks
 - C. Daily Daclatasvir^a (60 mg) + daily Sofosbuvir (400 mg) for 12 weeks
 - D. Daily fixed dose combination of Ledipasvir (90 mg) and Sofosbuvir (400 mg) for 12 weeks
 - E. Daily Simeprevir^a (150 mg) + daily Sofosbuvir (400 mg) for 12 weeks
 - F. Daily two tablets (used once) of fixed dose combination of Ombitasvir^a (12.5 mg), Paritaprevir^a (75 mg) and Ritonavir^a (50 mg) + daily weight adjusted Ribavirin (1000-1200 mg) for 12 weeks

Comments

^aDaclatasvir, Simeprevir, Ombitasvir, Paritaprevir and Ritonavir are not available in Iran.

Non-cirrhotic and treatment experienced patients

Recommendations

- A. Daily Sofosbuvir (400 mg) + weekly Pegylated Interferon α -2a (180 μ g) or -2b (1.5 μ g/Kg) + daily weight adjusted Ribavirin (1000-1200 mg) for 12 weeks

Iran Hepatitis Network

Official Network of Iranian Research Centers in the Field of Hepatology and Viral Hepatitis

www.HEP.ir

- B. Daily Simeprevir^a (150 mg) + weekly Pegylated Interferon α-2a (180 µg) or -2b (1.5 µg/Kg) + daily weight adjusted Ribavirin (1000-1200 mg) for 12 weeks and an extra Pegylated Interferon + Ribavirin for 12 or 36^b weeks
 - C. Daily Daclatasvir^a (60 mg) + daily Sofosbuvir (400 mg) for 12 weeks
 - D. Daily fixed dose combination of Ledipasvir (90 mg) and Sofosbuvir (400 mg) for 12 weeks
 - E. Daily Simeprevir^a (150 mg) + daily Sofosbuvir (400 mg) for 12 weeks
 - F. Daily two tablets (used once) of fixed dose combination of Ombitasvir^a (12.5 mg), Paritaprevir^a (75 mg) and Ritonavir^a (50 mg) + daily weight adjusted Ribavirin (1000-1200 mg) for 12 weeks

Comments

^aDaclatasvir, Simeprevir, Ombitasvir, Paritaprevir and Ritonavir are not available in Iran.

^bThe extension of Pegylated Interferon + Ribavirin should be 12 weeks in prior relapsers and 36 weeks in prior partial and null responders.

Compensated cirrhosis (child A)

Recommendations

- A. Daily Sofosbuvir (400 mg) + weekly Pegylated Interferon α -2a (180 μ g) or -2b (1.5 μ g/Kg) + daily weight adjusted Ribavirin (1000-1200 mg) for 12 weeks
 - B. Daily Simeprevir^a (150 mg) + weekly Pegylated Interferon α -2a (180 μ g) Or -2b (1.5 μ g/Kg) + daily weight adjusted Ribavirin (1000-1200 mg) for 12 weeks and an extra Pegylated Interferon + Ribavirin for 12 or 36^b weeks
 - C. Daily fixed dose combination of Ledipasvir (90 mg) and Sofosbuvir (400 mg) for 12 or 24 weeks with or without daily weight adjusted Ribavirin^c (1000-1200 mg)

Iran Hepatitis Network

Official Network of Iranian Research Centers in the Field of Hepatology and Viral Hepatitis

www.HEP.ir

- D. Daily Daclatasvir^a (60 mg) + daily Sofosbuvir (400 mg) for 12 weeks with daily weight adjusted Ribavirin (1000-1200 mg) or 24 weeks without Ribavirin
 - E. Daily two tablets (used once) of fixed dose combination of Ombitasvir^a (12.5 mg), Paritaprevir^a (75 mg) and Ritonavir^a (50 mg) + daily weight adjusted Ribavirin (1000-1200 mg) for 24 weeks
 - F. Daily Simeprevir^a (150 mg) + daily Sofosbuvir (400 mg) for 12 weeks with daily weight adjusted Ribavirin (1000-1200 mg) or 24 weeks without Ribavirin

Comments

^aDaclatasvir, Simeprevir, Ombitasvir, Paritaprevir and Ritonavir are not available in Iran.

^bThe extension of Pegylated Interferon + Ribavirin should be 12 weeks in prior relapsers and 36 weeks in prior partial and null responders.

^cPatients with cirrhosis should be treated with Ledipasvir + Sofosbuvir for 24 weeks or 12 weeks with Ribavirin. However, if the patient has negative predictors the treatment with Ledipasvir + Sofosbuvir + Ribavirin for 24 weeks is recommended.

Decompensated cirrhosis (child B or C)

Recommendations

- A. Daily fixed dose combination of Ledipasvir (90 mg) and Sofosbuvir (400 mg) for 12 weeks with daily weight adjusted Ribavirin (1000-1200 mg) or 24 weeks without Ribavirin^a
 - B. Daily Daclatasvir^b (60 mg) + daily Sofosbuvir (400 mg) for 12 weeks with daily weight adjusted Ribavirin (1000-1200 mg) or 24 weeks without Ribavirin^a

Comments

^aIn patients with contraindication for Ribavirin, the 24-week treatment is recommended.

^bDaclatasvir is not available in Iran.

Iran Hepatitis Network

Official Network of Iranian Research Centers in the Field of Hepatology and Viral Hepatitis

www.HEP.ir

References

1. European Association for Study of L. EASL Recommendations on Treatment of Hepatitis C 2015. J Hepatol. 2015;63(1):199-236.
 2. Sulkowski MS, Gardiner DF, Rodriguez-Torres M, Reddy KR, Hassanein T, Jacobson I, et al. Daclatasvir plus sofosbuvir for previously treated or untreated chronic HCV infection. N Engl J Med. 2014;370(3):211-21.
 3. Lawitz E, Sulkowski MS, Ghalib R, Rodriguez-Torres M, Younossi ZM, Corregidor A, et al. Simeprevir plus sofosbuvir, with or without ribavirin, to treat chronic infection with hepatitis C virus genotype 1 in non-responders to pegylated interferon and ribavirin and treatment-naive patients: the COSMOS randomised study. Lancet. 2014;384(9956):1756-65.
 4. Afdhal N, Zeuzem S, Kwo P, Chojkier M, Gitlin N, Puoti M, et al. Ledipasvir and sofosbuvir for untreated HCV genotype 1 infection. N Engl J Med. 2014;370(20):1889-98.
 5. Afdhal N, Reddy KR, Nelson DR, Lawitz E, Gordon SC, Schiff E, et al. Ledipasvir and sofosbuvir for previously treated HCV genotype 1 infection. N Engl J Med. 2014;370(16):1483-93.
 6. Andreone P, Colombo MG, Enejosa JV, Koksal I, Ferenci P, Maierov A, et al. ABT-450, ritonavir, ombitasvir, and dasabuvir achieves 97% and 100% sustained virologic response with or without ribavirin in treatment-experienced patients with HCV genotype 1b infection. Gastroenterology. 2014;147(2):359-65 e1.
 7. Ferenci P, Bernstein D, Lalezari J, Cohen D, Luo Y, Cooper C, et al. ABT-450/r-ombitasvir and dasabuvir with or without ribavirin for HCV. N Engl J Med. 2014;370(21):1983-92.
 8. Zeuzem S, Dusheiko GM, Salupere R, Mangia A, Flisiak R, Hyland RH, et al. Sofosbuvir and ribavirin in HCV genotypes 2 and 3. N Engl J Med. 2014;370(21):1993-2001.