HEPATITIS C VIRUS TREATMENTS (Part 1 of 2)

Characteristics of Persons for Whom Therapy is Widely Accepted:

- Age ≥18yrs; Hepatitis C Virus (HCV)-RNA serum positive
- Compensated liver disease (total serum bilirubin <1.5g/dL; INR 1.5; serum albumin >3.4; platelet count 75,000mm; and no evidence of hepatic decompensation (hepatic encephalopathy or ascites)
- Acceptable hematological and biochemical indices: Hemoglobin 13g/dL for men and 12g/dL for women; neutrophil count 1500/mm^3 and serum creatinine <1.5mg/dL

Brand	Generic	Usual Initial Dosage
DUAL THERAPY		
Daklinza[1] + **Sovaldi**	daclatasvir + sofosbuvir	**Adults:** ≥18yrs: 60mg once daily + Sovaldi 400mg once daily for 12wks. *Concomitant CYP3A substrates:* Adjust Daklinza dose to 30mg once daily (strong inhibitors) or 90mg once daily (moderate inducers). **Children: <18yrs: Not established.**
Intron A + **Rebetol**[3]	interferon alfa-2b + ribavirin	**Adults:** ≥18yrs: 3million IU SC three times weekly + Rebetol 1000mg (≤75kg) or 1200mg (>75kg) in 2 divided doses for 48wks (genotype 1) or 24wks (genotype 2,3); *Retreatment:* 24wks. **Children:** ≥3yrs: 25–61kg: 3million IU/m^2 SC three times weekly + Rebetol 15mg/kg/day in 2 divided doses for 48wks (genotype 1) or 24wks (genotype 2,3).
Pegasys[2] + **Copegus**[3]	peginterferon alfa-2a + ribavirin	**Adults:** ≥18yrs: *Genotype 1,4:* 180mcg SC once weekly + Copegus 1000mg (<75kg) or 1200mg (≥75kg) in 2 divided doses for 48wks. *Genotype 2,3:* 180mcg SC once weekly + Copegus 800mg in 2 divided doses for 24wks. **Children:** ≥5yrs: 180mcg/1.73m^2 × BSA SC once weekly + Copegus 15mg/kg/day divided in AM & PM for 48wks (genotype 1,4) or 24wks (genotype 2,3); see full labeling.
PegIntron[2] + **Rebetol**[3]	peginterferon alfa-2b + ribavirin	**Adults:** ≥18yrs: 1.5mcg/kg/wk SC + Rebetol 800mg (<66kg) or 1000mg (66–80kg) or 1200mg (81–105kg) or 1400mg (>105kg) in 2 divided doses for 48wks (genotype 1) or 24wks (genotype 2,3). *Retreatment:* 48wks. *Prior treatment failure:* Add HCV NS3/4A Protease Inhibitor (unless contraindicated); treat for 48wks. **Children:** 3–17yrs: 60mcg/m^2/wk SC + Rebetol 15mg/kg/day in 2 divided doses for 48wks (genotype 1) or 24wks (genotype 2, 3).
TRIPLE THERAPY		
Olysio[4,6] + peginterferon alfa & ribavirin	simeprevir	**Adults:** Take with food. 150mg once daily. *Treatment-naive and prior relapsers, including patients with or without cirrhosis:* treat for 12wks (simeprevir + peginterferon + ribavirin), followed by additional 12wks of peginterferon + ribavirin (total treatment = 24wks). *Prior non-responders (partial and null), including patients with or without cirrhosis:* treat for 12wks (simeprevir + peginterferon + ribavirin), followed by additional 36wks of peginterferon + ribavirin (total treatment = 48wks). *Treatment-naive or treatment-experienced without cirrhosis:* treat for 12wks (simeprevir + sofosbuvir). *Treatment-naive or treatment-experienced with cirrhosis:* treat for 24wks (simeprevir + sofosbuvir). **Children: <18yrs: Not established.**
Sovaldi + peginterferon alfa & ribavirin	sofosbuvir	**Adults:** 400mg once daily. *Genotype 1:* treat for 12wks with PegIFN alfa + RBV or 24wks with RBV if interferon-based regimen ineligible. *Genotype 2:* treat for 12wks with RBV. *Genotype 3:* treat for 24wks with RBV. *Genotype 4:* treat for 12wks with PegIFN alfa + RBV. *Hepatocellular carcinoma:* treat up to 48wks with RBV or until time of liver transplant, whichever occurs first. **Children: <18yrs: Not established.**
Victrelis[4] + peginterferon alfa & ribavirin	boceprevir	**Adults:** Initiate peginterferon alfa + ribavirin for 4wks. Then add 800mg Victrelis three times daily to therapy. *Patients without cirrhosis:* continue treatment as indicated by HCV-RNA levels at Weeks 8, 12, and 24 (*see literature*). *With cirrhosis:* continue for 44wks. **Children: <18yrs: Not established.**
COMBINATION THERAPY		
Technivie[7] + ribavirin	ombitasvir/ paritaprevir/ ritonavir + ribavirin	**Adults:** Take with food. ≥18yrs: 2 tabs once daily in the AM for 12wks with ribavirin. *Treatment-naive (or ribavirin intolerant):* may consider administering without ribavirin for 12wks. **Children: <18yrs: Not established.**
Viekira Pak[8] +/– ribavirin	ombitasvir/ paritaprevir/ ritonavir + dasabuvir +/– ribavirin	**Adults:** Take with food. Give 2 ombitasvir/paritaprevir/ritonavir tabs once daily (in AM) and 1 dasabuvir tab twice daily (AM & PM). *Genotype 1a without cirrhosis or genotype 1b with cirrhosis:* treat for 12wks with ribavirin. *Genotype 1a with cirrhosis:* treat for 24wks with ribavirin (12wks may be considered for some). *Genotype 1b without cirrhosis:* treat for 12wks. *Liver transplant recipients (with mild fibrosis):* treat for 24wks with ribavirin In combination with ribavirin: see full labeling. **Children: <18yrs: Not established.**

(continued)

HEPATITIS C VIRUS TREATMENTS (Part 2 of 2)

Brand	Generic	Usual Initial Dosage
MONOTHERAPY		
Intron A	interferon alfa-2b	**Adults:** 3million IU SC or IM three times weekly for 16wks; if tolerated with normalization of ALT: continue 18–24mos (72–96wks). **Children: Monotherapy not recommended.**
Harvoni	ledipasvir/sofosbuvir	**Adults:** 1 tab once daily. *Treatment-naive without cirrhosis with pre-treatment HCV RNA <6 million IU/mL:* treat for 8wks. *Treatment-naive with or without cirrhosis, or treatment-experienced without cirrhosis:* treat for 12wks. *Treatment-experienced with cirrhosis:* treat for 24wks. **Children: <18yrs: Not established.**
Pegasys[2,5]	peginterferon alfa-2a	**Adults:** 180mcg SC once weekly for 48wks. **Children: Not recommended.**
PegIntron[2,5]	peginterferon alfa-2b	**Adults:** 1mcg/kg/wk SC for 1yr administered on same day of the week. **Children: Not recommended.**

NOTES

Key: SVR = sustained virologic response

[1]Indicated for the treatment of chronic hepatitis C genotype 3 infection in combination with sofosbuvir only.

[2]Patients who fail to achieve a 2 $\log_{10}$ drop at 12 weeks or undetectable HCV-RNA at Week 24 are highly unlikely to achieve SVR and discontinuation of therapy should be considered.

[3]Ribavirin should be taken orally with food. Do not use with creatinine clearance <50mL/min. Take in 2 divided doses (AM & PM): *see literature.*

[4]Indicated for the treatment of chronic hepatitis C genotype 1 infection for combination therapy only.

[5]Drug is not recommended as monotherapy unless patient cannot take ribavirin as combination treatment.

[6]Screen for HCV genotype 1a infection for NS3Q80K polymorphism prior to treatment initiation; consider alternative if Q80K polymorphism present.

[7]Indicated for the treatment of chronic hepatitis C genotype 4 infection without cirrhosis. Contraindicated in severe hepatic impairment and avoid in moderate hepatic impairment.

[8]Indicated for the treatment of chronic hepatitis C genotype 1 infection including those with compensated cirrhosis, with or without ribavirin. Contraindicated in severe hepatic impairment and avoid in decompensated liver disease.

Dose modifications: Not an inclusive list of medications, official indications and/or dosing details. For dose adjustments or reductions, please see drug monograph at www.eMPR.com and/or contact company for full drug labeling.

REFERENCES

Ghany MG, Strader DB, Thomas DL, Seeff LB. Diagnosis, Management, and Treatment of Hepatitis C: An Update. *Hepatology.* 2009; 49(4).

(Rev. 10/2015)