

## *New HCV reimbursement criteria 01-2018*

- Chronic hepatitis C with  $\geq$  F2 fibrosis stage
- Chronic hepatitis C regardless of fibrosis stage if:
  - HIV-HCV coinfection
  - HBV-HCV coinfection
  - Listed for or post-solid organ transplantation
  - Listed for or post hematopoietic stem cell/bone marrow transplantation
  - Severe extrahepatic manifestation: diffuse large cell lymphoma B, immunomedi­ated vasculitis, renal disease related to mixed cryoglobulinemia
  - Patient on dialysis
  - Hemophilia or other coagulation disorder
  - Hemoglobinopathy
  - Pregnancy (however contra-indicated in all smpc, and IFN free combinations never tested in pregnant women): BASL recommendation is to never treat a pregnant woman

## *New HCV reimbursement criteria 01-2018*

- Prescription by a Specialist in Gastroenterology or Internal Medicine
  - Attached to an academic centre if 580, 588 or 987
  - Attached to academic **or** non academic hospital if 650, 651 or 659
  - Training in Hepatology (**15 CME/year**, see details on next slide)
  - Agrees to record follow-up data of treated patients
- Trough e-health platform
- According to international Recommendations

## ***How to obtain 15 CME credits in Hepatology?***

- BASL winter meeting: 6 CME credits
- BASL Liver course: 3 CME credits
- Belgian Week (BASL session-specific accreditation): 6 CME credits
- EASL meeting: 27 CME credits
- AASLD meeting: 40.5 CME credits
- EPU journée d'Hépatologie de l'hôpital Beaujon: 6 CME credits
- Erasmus Liver day Rotterdam: 6 CME credits

This is the responsibility of each prescriber to be able to demonstrate his/her credits in Hepatology

## ***How to obtain 15 CME credits in Hepatology?***

- Paris Hepatitis conference (2 days): 12 CME credits
- Barcelona Liver course (every 2 years, 3 days): 18 CME credits
- Other international or foreign national liver meetings not mentioned above like EASL monothematic conferences, Dutch Liver week, AFEF meeting in France... are also accepted CME credits in Hepatology
- Other national meetings, not mentioned above, and focused on liver diseases are also accepted CME credits in Hepatology

This is the responsibility of each prescriber to be able to demonstrate his/her credits in Hepatology

# ***METAVIR F2-F3-F4 criteria consensus***

***(agreed at RIZIV-INAMI 01.12.2016)***

***EITHER A LIVER BIOPSY, or***

***EITHER 1 ELASTOGRAPHY TEST (CUT-OFFS SEE NEXT SLIDE)***

***+ 1 BIOLOGICAL FIBROSIS SCORE (CUT-OFFS SEE NEXT SLIDE)***

***TESTS***                      ***MAXIMUM AGE OF ELASTOGRAPHY AND LAB VALUES TO BE USED FOR BIOLOGICAL***  
***= 1 YEAR***  
***RESULTS TO BE KEPT IN FILE OF PATIENT (SCORES & LAB VALUES USED FOR THE***  
***TEST)***

cut-offs of **ELASTOGRAFY for fibrosis assessment F2-F3-F4**  
**chronic hepatitis C**

(agreed at RIZIV-INAMI 01.12.2016)

**1. FIBROSCAN<sup>1</sup>**

Valid if 10 correct measurements, success rate > 60%, IQR < 30%

**F2 ≥ 7.1 kPA**

**F3 ≥ 9.5 kPA**

**F4 ≥ 12.5 kPA**

**2. SHEAR WAVE ELASTOGRAFIE<sup>2</sup>**

**F2 ≥ 7.1 kPA**

**F3 ≥ 8.7 kPA**

**F4 ≥ 10.4 kPA**

**3. ACOUSTIC RADIATION FORCE IMPULSE (ARFI, SIEMENS TECHNIQUE)<sup>3,4</sup>**

**F2 ≥ 1.22 m/s**

**F3 ≥ 1,55 m/s**

**F4 ≥ 1,80 m/s**

<sup>1</sup>Castera et al. Gastroenterology 2005

<sup>2</sup>Ferraioli et al Hepatology 2012

<sup>3</sup>Friedrich-Rust et al J Viral Hepat 2012

<sup>4</sup>Ferraioli et al J Ultrasound Med 2014

cut-offs of ***BIOLOGICAL FIBROSIS-SCORES*** for assessment  
***F2-F3-F4 in chronic hepatitis C***  
(agreed at RIZIV-INAMI 01.12.2016)

**1. FIBROTEST (BIOPREDICTIVE):**

Elements :  $\alpha$ 2 macroglobulin, haptoglobin, apolipoprotein A1, total bilirubin, GGT

F2 :  $\geq 0.49$

F3: 0.59-0.72

F3-F4: 0.73-0.74

F4:  $\geq 0.75$

**2. APRI (AST-PLATELET RATIO)**

In a pure HCV cohort

F2: APRI not to use for detection of F2

F3:  $\geq 1$

F4:  $\geq 1.6$

Reference: Holmberg, Clin Infect Dis 2013

**3. FIB-4** (age, AST,ALT, platelets)

F2  $\geq 1.45$

F3:  $\geq 2.1$

F3-F4:  $\geq 3.25$

F4:  $\geq 3.85$

References: Vallet-Pichard, Hepatology 2007, Holmberg, Clin Infect Dis 2013, Martinez APT 2011

Useful website: [www.hepatitisc.uw.edu/page/clinical-calculators](http://www.hepatitisc.uw.edu/page/clinical-calculators)

# Treatment options for antiviral therapy in Belgium

## Update 06-2018

	<b>Genotype 1a</b>	<b>Genotype 1b</b>
<b>Non-cirrhotic</b>	<p>Sofosbuvir + Daclatasvir 12 wk                      Glecaprevir/Pibrentasvir 8 wk                      Ledipasvir/Sofosbuvir 12 wk*                      Velpatasvir/Sofosbuvir 12 wk                      Elbasvir/Grazoprevir 12 wk**</p> <p>*consider 8 wk if naïve and HCVRNA &lt; 6.10<sup>6</sup> IU/mL                      **consider 16 wk + RBV if HCVRNA&gt;800.000 IU/mL or if baseline NS5a RAs</p>	<p>Sofosbuvir + Daclatasvir 12 wk                      Glecaprevir/Pibrentasvir 8 wk                      Ledipasvir/Sofosbuvir 12 wk*                      Velpatasvir/Sofosbuvir 12 wk                      Elbasvir/Grazoprevir 12 wk</p> <p>*consider 8 wk if naïve and HCVRNA &lt; 6.10<sup>6</sup> IU/mL</p>
<b>Cirrhotic compensated</b>	<p>Sofosbuvir + Daclatasvir + RBV 12 wk*                      Ledipasvir/Sofosbuvir + RBV 12 wk*                      Glecaprevir/Pibrentasvir 12 wk                      Velpatasvir/Sofosbuvir 12 wk                      Elbasvir/Grazoprevir 12 wk**</p> <p>*In case of poor RBV tolerance, prolong to 24 wk without RBV                      **consider 16 wk + RBV if HCVRNA&gt;800.000 IU/mL or if baseline NS5a RAs</p>	<p>Sofosbuvir + Daclatasvir +/- RBV 12 wk*                      Glecaprevir/Pibrentasvir 12 wk                      Ledipasvir/Sofosbuvir +/- RBV 12 wk*                      Velpatasvir/Sofosbuvir 12 wk                      Elbasvir/Grazoprevir 12 wk</p> <p>*In case of poor RBV tolerance, prolong to 24 wk without RBV</p>
<b>PI experienced</b>	<p>Sofosbuvir + Daclatasvir + RBV 12 wk                      Ledipasvir/Sofosbuvir + RBV 12 wk                      Velpatasvir/Sofosbuvir + RBV 12 wk</p> <p>Consider 24 wk + RBV in F3-F4 patients</p>	<p>Sofosbuvir + Daclatasvir + RBV 12 wk                      Ledipasvir/Sofosbuvir + RBV 12 wk                      Velpatasvir/Sofosbuvir + RBV 12 wk</p> <p>Consider 24 wk + RBV in F3-F4 patients</p>
<b>NS5a experienced</b>	<p>Sofosbuvir/Velpatasvir/Voxilaprèvir 12 wk                      (contraindicated in decompensated cirrhosis)</p>	<p>Sofosbuvir/Velpatasvir/Voxilaprèvir 12 wk                      (contraindicated in decompensated cirrhosis)</p>

No priority in the listing

## Treatment options for antiviral therapy in Belgium Update 06-2018

<p><b>Cirrhotic decompensated</b></p>	<p>Sofosbuvir + Daclatasvir + RBV 12 wk* Ledipasvir/Sofosbuvir + RBV 12 wk* Velpatasvir/Sofosbuvir + RBV 12 wk*</p> <p>*In case of poor RBV tolerance, prolong to 24 wk without RBV</p> <p>consider treating after Tx if MELD &gt; 18</p>	<p>Sofosbuvir + Daclatasvir + RBV 12 wk* Ledipasvir/Sofosbuvir + RBV 12 wk* Velpatasvir/Sofosbuvir + RBV 12 wk*</p> <p>*In case of poor RBV tolerance, prolong to 24 wk without RBV</p> <p>consider treating after Tx if MELD &gt; 18</p>
<p><b>Post-organ transplant</b></p>	<p>Same recommendations than non transplanted patients</p> <p>RBV should be considered in all patients. However, the need for RBV in non-cirrhotic patients has not been established</p> <p>However, potential drug-drug interactions with immunosuppressant agents requires careful selection of agents</p>	<p>Same recommendations than non transplanted patients</p> <p>RBV should be considered in all patients. However, the need for RBV in non-cirrhotic patients has not been established</p> <p>However, potential drug-drug interactions with immunosuppressant agents requires careful selection of agents</p>
<p><b>HIV-HCV coinfectd</b></p>	<p>Same recommendations than monoinfected HCV patients</p> <p>However, potential drug-drug interactions in patients receiving antiretroviral agents requires careful selection of agents</p>	<p>Same recommendations than monoinfected HCV patients</p> <p>However, potential drug-drug interactions in patients receiving antiretroviral agents requires careful selection of agents</p>

No priority in the listing

# Treatment options for antiviral therapy in Belgium

## Update 06-2018

	<b>Genotype 2</b>
Non-cirrhotic	<p>Sofosbuvir + Velpatasvir 12 wk  Sofosbuvir + Daclatasvir 12 wk  Glecaprevir/Pibrentasvir 8 wk</p> <p>If previous failure of Sofosbuvir + Ribavirin:  Glecaprevir/Pibrentasvir 8 wk or Sofosbuvir + Velpatasvir or  Daclatasvir + Ribavirin 12 weeks</p>
Cirrhotic compensated	<p>Sofosbuvir + Velpatasvir 12 weeks  Sofosbuvir + Daclatasvir 12 weeks  Glecaprevir/Pibrentasvir 12 wk</p> <p>If previous failure of Sofosbuvir + Ribavirin:  Glecaprevir/Pibrentasvir 12 wk or Sofosbuvir + Velpatasvir or  Daclatasvir + Ribavirin 24 weeks</p>
PI experienced	<p>1. Not applicable</p>
NS5a experienced	<p>Sofosbuvir/Velpatasvir/Voxilaprévir 12 wk  (contraindicated in decompensated cirrhosis)</p>

**No priority in the listing**

# Treatment options for antiviral therapy in Belgium

## Update 06-2018

	<b>Genotype 2</b>
Cirrhotic decompensated	<p>Sofosbuvir + Velpatasvir + Ribavirin 12 weeks Sofosbuvir + Daclatasvir + Ribavirin 12 weeks</p> <p>*In case of poor RBV tolerance, prolong to 24 wk without RBV consider treating after Tx if MELD &gt; 18</p>
Post-organ transplant	<p>Same recommendations than non transplanted patients</p> <p>RBV should be considered in all patients. However, the need for RBV in non-cirrhotic patients has not been established</p> <p>However, potential drug-drug interactions with immunosuppressant agents requires careful selection of agents</p>
HIV-HCV coinfectd	<p>Same recommendations than monoinfected HCV patients</p> <p>However, potential drug-drug interactions in patients receiving antiretroviral agents requires careful selection of agents</p> <p><b>No priority in the listing</b></p>

# Treatment options for antiviral therapy in Belgium

## Update 06-2018

	Genotype 3
Non-cirrhotic	<p>Sofosbuvir + Daclatasvir 12 wk                      Velpatasvir/Sofosbuvir 12 wk                      Glecaprevir/Pibrentasvir 8 wk*</p> <p>both for treatment-experienced (IFN) or -naive patients                      *16 wk for patients who failed prior therapy with IFN-based therapy+/- SOF                      or SOF+RBV</p>
Cirrhotic compensated	<p>Sofosbuvir + Daclatasvir + RBV 24 wk* **                      Velpatasvir/Sofosbuvir 12 wk* + RBV**                      Glecaprevir/Pibrentasvir 12-16 wk***</p> <p>*treatment naive                      **treatment experienced (IFN)                      ***16 wk for patients who failed prior therapy with IFN-based therapy+/-                      SOF or SOF+RBV</p>
PI experienced	<p>Not applicable</p> <p>1.</p>
NS5A experienced	<p>Sofosbuvir/Velpatasvir/Voxilaprévir 12 wk                      (contraindicated in decompensated cirrhosis)</p>

**No priority in the listing**

# Treatment options for antiviral therapy in Belgium

## Update 06-2018

	<b>Genotype 3</b>
Cirrhotic decompensated	<p>Sofosbuvir + Daclatasvir + RBV 24 wk Velpatasvir/Sofosbuvir + RBV 12 wk</p> <p>consider treating after Tx if MELD &gt; 18</p>
Post-organ transplant	<p>Same recommendations than non transplanted patients</p> <p>RBV should be considered in all patients. However, the need for RBV in non-cirrhotic patients has not been established</p> <p>Potential drug-drug interactions with immunosuppressant agents requires careful selection of agents</p>
HIV-HCV coinfectd	<p>Same recommendations than monoinfected HCV patients</p> <p>Potential drug-drug interactions in patients receiving antiretroviral agents requires careful selection of agents</p>

**No priority in the listing**

# Treatment options for antiviral therapy in Belgium

## Update 06-2018

	<b>Genotype 4</b>
Non-cirrhotic	<p>Sofosbuvir + Daclatasvir 12 wk                      Glecaprevir/Pibrentasvir 8 wk                      Ledipasvir/Sofosbuvir 12 wk                      Velpatasvir/Sofosbuvir 12 wk                      Elbasvir/Grazoprevir 12 wk</p>
Cirrhotic compensated	<p>Sofosbuvir + Daclatasvir 12 wk                      Glecaprevir/Pibrentasvir 12 wk                      Ledipasvir /Sofosbuvir 12 wk                      Velpatasvir/Sofosbuvir 12 wk                      Elbasvir/Grazoprevir 12 wk</p>
PI experienced	<p>Sofosbuvir + Daclatasvir + RBV 12 wk                      Ledipasvir/Sofosbuvir + RBV 12 wk                      Velpatasvir/Sofosbuvir + RBV 12 wk</p> <p>Consider 24 wk + RBV in F3-F4 patients</p>
NS5a experienced	<p>Sofosbuvir/Velpatasvir/Voxilaprèvir 12 wk                      (contraindicated in decompensated cirrhosis)</p>

**No priority in the listing**

# Treatment options for antiviral therapy in Belgium

## Update 06-2018

	<b>Genotype 4</b>
Cirrhotic decompensated	<p>Sofosbuvir + Daclatasvir + RBV 12 wk*</p> <p>Ledipasvir/Sofosbuvir + RBV 12 wk*</p> <p>Velpatasvir/Sofosbuvir + RBV 12 wk*</p> <p>*In case of poor RBV tolerance, prolong to 24 wk without RBV</p> <p>consider treating after Tx if MELD &gt; 18</p>
Post-organ transplant	<p>Same recommendations than non transplanted patients</p> <p>RBV should be considered in all patients. However, the need for RBV in non-cirrhotic patients has not been established</p> <p>However, potential drug-drug interactions with immunosuppressant agents requires careful selection of agents</p>
HIV-HCV coinfectd	<p>Same recommendations than monoinfected HCV patients</p> <p>However, potential drug-drug interactions in patients receiving antiretroviral agents requires careful selection of agents</p> <p><b>No priority in the listing</b></p>

# Treatment options for antiviral therapy in Belgium

## Update 06-2018

	<b>Genotype 5</b>	<b>Genotype 6</b>
<b>Non-cirrhotic</b>	<p>Glecaprevir/Pibrentasvir 8 wk  Sofosbuvir+Velpatasvir 12 wk  Sofosbuvir+Ledipasvir 12 wk  Sofosbuvir+Daclatasvir 12 wk</p>	<p>Glecaprevir/Pibrentasvir 8 wk  Sofosbuvir+Velpatasvir 12 wk  Sofosbuvir+Ledipasvir 12 wk  Sofosbuvir+Daclatasvir 12 wk</p>
<b>Cirrhotic compensated</b>	<p>Glecaprevir/Pibrentasvir 12 wk  Sofosbuvir+Velpatasvir 12 wk  Sofosbuvir+Ledipasvir 12 wk  Sofosbuvir+Daclatasvir 12 wk</p>	<p>Glecaprevir/Pibrentasvir 12 wk  Sofosbuvir+Velpatasvir 12 wk  Sofosbuvir+Ledipasvir 12 wk  Sofosbuvir+Daclatasvir 12 wk</p>
<b>PI experienced</b>	<p>1. Sofosbuvir+Velpatasvir 12 wk  Sofosbuvir+Ledipasvir 12 wk  Sofosbuvir+Daclatasvir 12 wk</p>	<p>Sofosbuvir+Velpatasvir 12 wk  Sofosbuvir+Ledipasvir 12 wk  Sofosbuvir+Daclatasvir 12 wk</p>
<b>NS5a experienced</b>	<p>Sofosbuvir/Velpatasvir/Voxilaprèvir 12 wk  (contraindicated in decompensated cirrhosis)</p>	<p>Sofosbuvir/Velpatasvir/Voxilaprèvir 12 wk  (contraindicated in decompensated cirrhosis)</p>

**No priority in the listing**

# Treatment options for antiviral therapy in Belgium

## Update 06-2018

	<b>Genotype 5</b>	<b>Genotype 6</b>
<b>Cirrhotic decompensated</b>	<p>Sofosbuvir+Velpatasvir+RBV* 12 wk Sofosbuvir+Ledipasvir+RBV* 12 wk Sofosbuvir+Daclatasvir+RBV*12 wk</p> <p>*In case of poor RBV tolerance, prolong to 24 wk without RBV</p> <p>consider treating after Tx if MELD &gt; 18</p>	<p>Sofosbuvir+Velpatasvir+RBV* 12 wk Sofosbuvir+Ledipasvir+RBV* 12 wk Sofosbuvir+Daclatasvir+RBV*12 wk</p> <p>*In case of poor RBV tolerance, prolong to 24 wk without RBV</p> <p>consider treating after Tx if MELD &gt; 18</p>
<b>Post-organ transplant</b>	<p>Same recommendations than non transplanted patients</p> <p>RBV should be considered in all patients. However, the need for RBV in non-cirrhotic patients has not been established</p> <p>However, potential drug-drug interactions with immunosuppressant agents requires careful selection of agents</p>	<p>Same recommendations than non transplanted patients</p> <p>RBV should be considered in all patients. However, the need for RBV in non-cirrhotic patients has not been established</p> <p>However, potential drug-drug interactions with immunosuppressant agents requires careful selection of agents</p>
<b>HIV-HCV coinfectd</b>	<p>Same recommendations than monoinfected HCV patients</p> <p>However, potential drug-drug interactions in patients receiving antiretroviral agents requires careful selection of agents</p>	<p>Same recommendations than monoinfected HCV patients</p> <p>However, potential drug-drug interactions in patients receiving antiretroviral agents requires careful selection of agents</p>

No priority in the listing