Vereinfachung der HCV-Therapie als Grundlage für Eliminationsstrategien
München, 17. Juli, 2020

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Universitätsklinikum Frankfurt a.M.
Disclosures

- Advisory boards: AbbVie, Bristol-Myers Squibb, Gilead Sciences, Janssen, Merck Sharp & Dohme
- Speaker: AbbVie, Gilead Sciences, Merck Sharp & Dohme
Burden of Disease
Global burden of HCV

- Estimated that 80 million people are living with chronic HCV worldwide

- Annually ~700,000 people die from HCV-related complications such as cirrhosis and hepatocellular carcinoma

**Viraemic prevalence**

- 0.00–<0.75%
- 0.75–<1.25%
- 1.25–<1.75%
- 1.75–<2.5%
- ≥2.5%


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Global burden of viral hepatitis

- Viral hepatitis is the 7th leading cause of death in the world
  - 1.5 million deaths attributable to viral hepatitis in 2013
- Unlike most communicable diseases, the absolute burden of viral hepatitis continues to increase

Burden of hepatitis from 1990–2013:
data from the Global Burden of Disease study

- Deaths: 0.9 (1990) vs. 1.5 (2013)
  - 600,000 more deaths/year

- Years lived with disability: 0.7 (1990) vs. 0.9 (2013)

- Years of life lost: 31 (1990) vs. 42 (2013)
  - 11 million more years of life lost

- Disability-adjusted life-years: 32 (1990) vs. 42 (2013)

SVR is associated with reduced mortality, HCC and transplant

Meta-analysis of 129 studies of IFN-based therapy in 34,563 HCV patients

Achieving SVR was associated with:

- **62–84%** reduction in all-cause mortality
- **68–79%** reduction in risk of HCC
- **90%** reduction in risk of liver transplant

Saleem J, et al. AASLD 2014; Poster #44

HCC: hepatocellular carcinoma; IFN: interferon; SVR: sustained virological response
HCV Cure Decreases Mortality from Both Hepatic and Non-hepatic Diseases

23,820 adults in Taiwan; 1095 anti-HCV positive, 69.4% with detectable HCV RNA

Extrahepatic Manifestations of Chronic HCV Infection

1. Neuropsychiatric manifestations
2. Ocular manifestations
3. Hematological disorders/malignancies
4. Mixed cryoglobulinemia
5. Skin manifestations
6. Peripheral neuropathy
7. Thyroid dysfunction
8. Pulmonary fibrosis
9. Cardiovascular/metabolic diseases
10. Renal impairment
11. Reduced fertility
12. Musculoskeletal and connective tissue disorders

Extrahepatic disease can be present in up to **74%** of individuals with chronic HCV.

Treatment of HCV Is Associated with Lymphoma Remission and Reduced Incidence for Lymphoma

Multicentric study of 116 HCV infected patients with B-NHL. 70/116 (60%) patients were treated with pegIFN + RBV, 6 of which also received a protease inhibitor.

- SVR achieved in 61% patients with MZL and 53% with DLBCL
- Outcome analysis showed a favourable association between Overall Survival and AT in all patients

Risk of lymphoma in patients without SVR is 7 × higher than in patients with SVR

Mechanism of HCV-induced lymphomagenesis is unknown but may be related to chronic stimulation of B cells by viral antigens.

MZL, Marginal Zone Lymphoma; DLBCL, diffuse large B-cell lymphoma.

Retrospective study of HCV-infected patients: 501 untreated and 2708 treated with IFN therapy²

- SVR achieved in 61% patients with MZL and 53% with DLBCL
- Outcome analysis showed a favourable association between Overall Survival and AT in all patients

Risk of lymphoma in patients without SVR is 7 × higher than in patients with SVR

Mechanism of HCV-induced lymphomagenesis is unknown but may be related to chronic stimulation of B cells by viral antigens.

MZL, Marginal Zone Lymphoma; DLBCL, diffuse large B-cell lymphoma.

SVR is associated with improved quality of life

Improvements in patient-reported outcomes in the ION study programme of LDV/SOF ± RBV

Younossi ZM, et al. AASLD 2014; Oral #77;
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CLDQ: Quality of Life Index for Patients with Chronic Liver Disease; FACIT-F: Functional Assessment of Chronic Illness Therapy – Fatigue; LDV: ledipasvir; MCS: mental component summary; PCS: physical component summary; RBV: ribavirin; SF-36: short form 36; SOF: sofosbuvir; SVR: sustained virological response; WPAI: Work Productivity and Activity Index
SVR has a positive impact on work and productivity variables: Canadian survey

<table>
<thead>
<tr>
<th>Patients (%)</th>
<th>Missed work</th>
<th>Missed volunteer opportunities</th>
<th>Missed chores</th>
<th>Missed work/volunteer opportunities and/or chores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment failures (n=103)</td>
<td>14%</td>
<td>3%</td>
<td>31%</td>
<td>44%</td>
</tr>
<tr>
<td>Sustained responders (n=133)</td>
<td>3%</td>
<td>2%</td>
<td>8%</td>
<td>9%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patients (%)</th>
<th>Treatment failures (n=102)</th>
<th>Sustained responders (n=133)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed</td>
<td>51%</td>
<td>67%</td>
<td>0.02</td>
</tr>
<tr>
<td>Social assistance income</td>
<td>36%</td>
<td>26%</td>
<td>0.1</td>
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SVR: sustained virological response
Treatment Options
# Posology of dual antiviral combinations

<table>
<thead>
<tr>
<th>Combination</th>
<th>Dose per tablet</th>
<th>Number of tablets</th>
<th>Food effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sofosbuvir + Ledipasvir</td>
<td>400 mg / 90 mg</td>
<td>1 tablet / day</td>
<td>with or without</td>
</tr>
<tr>
<td>Sofosbuvir + Velpatasvir</td>
<td>400 mg / 100 mg</td>
<td>1 tablet / day</td>
<td>with or without</td>
</tr>
<tr>
<td>Grazoprevir + Elbasvir</td>
<td>100 mg / 50 mg</td>
<td>1 tablet / day</td>
<td>with or without</td>
</tr>
<tr>
<td>Glecaprevir + Pibrentasvir</td>
<td>100 mg / 40 mg</td>
<td>3 tablets / day</td>
<td>with food</td>
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</tbody>
</table>
# Efficacy, safety, and tolerability of dual antiviral combinations

<table>
<thead>
<tr>
<th>Combinations</th>
<th>SVR</th>
<th>Side effects</th>
<th>Laboratory abnormalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sofosbuvir + Ledipasvir</td>
<td>&gt; 95%</td>
<td>headache, fatigue</td>
<td>amylase, CK</td>
</tr>
<tr>
<td>Sofosbuvir + Velpatasvir</td>
<td>&gt; 95%</td>
<td>headache, fatigue, sickness</td>
<td>amylase, CK</td>
</tr>
<tr>
<td>Grazoprevir + Elbasvir</td>
<td>&gt; 95%</td>
<td>Reduced appetite, sleeplessness, anxiety, vertigo, headache, sickness, diarrhea, u.a., pruritus, arthralgia, asthenia, irritibility</td>
<td>bilirubin, ALT</td>
</tr>
<tr>
<td>Glecaprevir + Pibrentasvir</td>
<td>&gt; 95%</td>
<td>headache, diarrhea, sickness, fatigue</td>
<td>bilirubin, ALT</td>
</tr>
</tbody>
</table>
## Important drug-drug interactions* (DDI) of dual antiviral combinations

<table>
<thead>
<tr>
<th>Combination</th>
<th>DDI</th>
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</thead>
<tbody>
<tr>
<td>Sofosbuvir + Ledipasvir</td>
<td>Amiodaron, anticonvulsants, antacids, PPI (high dose), rifampicin, St John’s Worth, statins</td>
</tr>
<tr>
<td>Sofosbuvir + Velpatasvir</td>
<td>Amiodaron, anticonvulsants, antacids, PPI (high dose), rifampicin, efavirenz, St John’s Worth, statins</td>
</tr>
<tr>
<td>Grazoprevir + Elbasvir</td>
<td>Dabigatran, anticonvulsants, antimycotics, bosentan, St John’s Worth, atazanavir, darunavir, lopinavir, u.a., efavirenz, statins, ciclosporin, modafinil</td>
</tr>
<tr>
<td>Glecaprevir + Pibrentasvir</td>
<td>Dabigatran, anticonvulsants, rifampicin, ethinylestradiol, St John’s Worth, atazanavir, darunavir, efavirenz, statins, ciclosporin, omeprazol</td>
</tr>
</tbody>
</table>

*HEP Drug Interactions, University of Liverpool: [http://www.hep-druginteractions.org](http://www.hep-druginteractions.org)

*HEP Mobile Apps (Apple, Android)
## Characteristics of dual antiviral combinations

<table>
<thead>
<tr>
<th>Combination</th>
<th>Genotypic activity</th>
<th>CKD-4,5</th>
<th>decompensated cirrhosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sofosbuvir + Ledipasvir</td>
<td>not GT-2 &amp; GT-3</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>Sofosbuvir + Velpatasvir</td>
<td>pangenotypic</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>Grazoprevir + Elbasvir</td>
<td>not GT-1 &amp; GT-4</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Glecaprevir + Pibrentasvir</td>
<td>pangenotypic</td>
<td>yes</td>
<td>no</td>
</tr>
</tbody>
</table>
SmPC (abbrev.): Sofosbuvir + Ledipasvir (Harvoni®)

Recommended treatment duration for Harvoni and the recommended use of co-administered ribavirin for certain subgroups

Excellent regimen, trials and real-world data support 8-wks treatment duration in non-cirrhotic patients infected with HCV-1

but

No unique characteristic not covered by the two pan-genotypic regimen

SmPC: Grazoprevir + Elbasvir (Zepatier®)

Recommended ZEPATIER therapy for treatment of chronic hepatitis C infection in patients with or without compensated cirrhosis (Child-Pugh A only)

Excellent regimen for patients infected with HCV-1b, limited data support 8-wks treatment duration in non-cirrhotic patients infected with HCV-1b

but

No unique characteristic not covered by the two pan-genotypic regimen

^ In the clinical studies, the dose of ribavirin was weight-based (< 66 kg = 800 mg/day, 66 to 80 kg = 1,000 mg/day, 81 to 105 kg = 1,200 mg/day, > 105 kg = 1,400 mg/day) administered in two divided doses with food.

**SmPC: Sofosbuvir + Velpatasvir (Epclusa®)**

Recommended treatment and duration for all HCV genotypes

<table>
<thead>
<tr>
<th>Patient population&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Treatment and duration</th>
</tr>
</thead>
</table>
| Patients without cirrhosis and patients with compensated cirrhosis | Epclusa for 12 weeks  
Addition of ribavirin may be considered for genotype 3 infected patients with compensated cirrhosis |
| Patients with decompensated cirrhosis | Epclusa + ribavirin<sup>b</sup> for 12 weeks |

<sup>a</sup> Includes patients co-infected with human immunodeficiency virus (HIV) and patients with recurrent HCV post-liver transplant

<sup>b</sup> RBV 1000-1200 mg/day in CPT B prior LTx;  
RBV 600 mg/day in CPT C prior LTx and CPT B or C after LTx

**SmPC: Glecaprevir + Pibrentasvir (Maviret®)**

(1) Recommended treatment duration for Maviret in treatment-naive patients

<table>
<thead>
<tr>
<th>Genotype</th>
<th>Recommended treatment duration w/o cirrhosis</th>
<th>with cirrhosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>GT 1, 2, 4-6</td>
<td>8 wks</td>
<td>8 wks</td>
</tr>
<tr>
<td>GT 3</td>
<td>8 wks</td>
<td>12 wks</td>
</tr>
</tbody>
</table>

(2) Recommended treatment duration for Maviret in patients, with peg-IFN + Ribavirin +/- Sofosbuvir or Sofosbuvir + Ribavirin non-response

<table>
<thead>
<tr>
<th>Genotype</th>
<th>Recommended treatment duration w/o cirrhosis</th>
<th>with cirrhosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>GT 1, 2, 4-6</td>
<td>8 wks</td>
<td>12 wks</td>
</tr>
<tr>
<td>GT 3</td>
<td>16 wks</td>
<td>16 wks</td>
</tr>
</tbody>
</table>

SmPC Maviret, September 2019
EXPEDITION-8 is a Phase 3, nonrandomized, single-arm, open-label study in adults with chronic HCV GT1–6 infection with compensated cirrhosis who are HCV treatment-naive.

- G/P for 8 weeks was well tolerated with high SVR12 rates in TN patients with CC.
- No virologic failures to date to date.

Brown R. et al, AASLD 2018, LB-07 (oral presentation)
## Comparison of pangenotypic regimens

<table>
<thead>
<tr>
<th>Sofosbuvir + Velpatasvir</th>
<th>Glecaprevir + Pibrentasvir</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Treatment duration 12 weeks</td>
<td>✓ Treatment duration in Tx-naive patients 8 weeks (12 weeks in GT3 with CC)</td>
</tr>
<tr>
<td>✓ Decompensated cirrhosis</td>
<td>✓ Treatment of patients with renal impairment possible, but not of patients with decompensated cirrhosis</td>
</tr>
<tr>
<td>✓ CrCl &gt; 30 ml/min</td>
<td>✓ Treatment duration in TX-experienced patients between 8 wks (w/o cirrhosis), 12 wks (with cirrhosis) and 16 wks (GT3 w or w/o cirrhosis)</td>
</tr>
<tr>
<td>✓ RBV in GT3 patients with cirrhosis and all patients with decompensated cirrhosis</td>
<td>✓ No RBV for GT3-patients with cirrhosis</td>
</tr>
</tbody>
</table>
Treatment cascade simplification

Pre-treatment Phase

Treatment/Monitoring phase (doctor visits required)

Screen (anti HCV)

Confirmed Viral Load

HCV treater (see a specialist)

Genotype

Fibrosis Evaluation

Treatment choice

Week 4

Week 8

Week 12 if Cirrhotic

SVR 12 CURE

Key Barriers Along Patient Journey

Low disease awareness

Reflex RNA testing

Low patient motivation

Low priority among PCPs

Limited linkage to care

Sick funds control system capacity

APRI
HCV Elimination
Eradication and Elimination

**Eradication**

Permanent reduction to zero of the worldwide incidence of infection; intervention measures are no longer needed

*Example:* Smallpox

**Elimination**

Reduction to zero of the incidence of infection in a defined geographical area; continued intervention measures are required

*Example:* Poliomyelitis
Is elimination of HCV feasible?

- HCV meets all established criteria for elimination:
  - No non-human reservoir
  - Virus cannot amplify in the environment
  - Simple and accurate diagnostic tools
  - Practical interventions to interrupt transmission
  - Infection is curable
Many steps are required to move from cure of the individual to HCV elimination within a population.

SVR = sustained virological response

Viral elimination within a population.
Requirements for elimination

- Epidemiology/HCV surveillance
- HCV screening
- Diagnosis of HCV – linking patients into care and treatment
- Prevention of transmission
  - Harm reduction and treatment as prevention in high-risk populations
  - Change in unsafe medical practices to prevent iatrogenic transmission
- Collaboration between stakeholders
Total Viremic HCV Infections
Countries Responsible for 80% of Global Infections

Requirements for elimination

- Epidemiology/HCV surveillance
- HCV screening
- Diagnosis of HCV – linking patients into care and treatment
- Prevention of transmission
  - Harm reduction and treatment as prevention in high-risk populations
  - Change in unsafe medical practices to prevent iatrogenic transmission
- Collaboration between stakeholders
HCV screening

Three approaches to screening

General population screening
- Universal clinical screening is proposed by some authors to be cost-effective, but it is not currently recommended in any guidelines

Risk-based screening
- Risk-based screening is considered to be the most cost-effective approach and is recommended in guidelines

Aged-based screening (birth cohort)
- Screening of the US ‘baby boomer’ generation (adults born between 1945–1965) is recommended by guidelines as by the CDC and USPSTF


CDC: US Centers for Disease Control and Prevention; USPSTF: US Preventive Services Task Force
Different screening and management strategies are needed to satisfy societal and medical needs.

**SOCIETAL NEED**
Prioritising high incident populations (i.e. PWID) impacts incident infection, but does not stop new cases of severe liver morbidity.

**MEDICAL NEED**
Prioritising older patients with advanced liver fibrosis impacts severe liver morbidity, but does not reduce incident transmission.

Need management programmes to address both for optimal impact on HCV prevalence and reduction in HCV-related morbidity and mortality.


PWID: people who inject drugs
Requirements for elimination

- Epidemiology/HCV surveillance
- HCV screening
- Diagnosis of HCV – linking patients into care and treatment
- Prevention of transmission
  - Harm reduction and treatment as prevention in high-risk populations
  - Change in unsafe medical practices to prevent iatrogenic transmission
- Collaboration between stakeholders
HCV treatment: linkage to care

- Enhanced HCV screening and diagnosis
- Expanded models of HCV treatment and care
- Specific strategies for highly marginalised patients
- National HCV strategies and political leadership
- Removal of restrictions on access to IFN-free DAA therapy
- Increased and broadened HCV prescribers

DAA: direct-acting antiviral agent; IFN: interferon
Taking the right steps, the incidence of HCV in Europe could decrease over the next 10 years...

Model includes both prevalence and incident populations.

Wedemeyer H et al. J Viral Hepat 2014;21(Suppl 1):60–89
... and the incidence of HCV-associated liver-related mortality could also decrease

Liver-related deaths 2013–2030

Spain

Germany

France

England

SVR (%) 50 90 90
Rx rate (%) 2.1 2.1 4.5

SVR (%) 55 90 90
Rx rate (%) 4.7 4.7 9.9

SVR (%) 60 90 90
Rx rate (%) 5.2 5.2 10.3

SVR (%) 70 93 93
Rx rate (%) 3.8 3.8 14.2

Model includes both prevalence and incident populations.
Rx: treatment; SVR: sustained virological response

Wedemeyer H et al. J Viral Hepat 2014;21(Suppl 1):60–89
Improving Linkage to Care by Testing and Treatment on the Same Day of Screening: A Pilot Study

Pilot study assessing a same day “test-and-treat” program using a simplified care model and several POC tools for HCV infection in a rural village in Egypt (N = 475)

This “test-and-treat” HCV program achieved almost complete linkage to care and treatment initiation; this model is effective and feasible in treating rural populations, however, additional studies are required.

Ab, antibody; pts, patients; POC, point of care; RDT, rapid diagnostic test; TE, treatment-experienced; Tx, treatment; +ve, positive.

Identifying Patients with Poor Linkage to Care

3. Miller L, *et al.* AASLD 2016 (abstract 763);

PWUD, people who use drugs.
Requirements for elimination

- Epidemiology/HCV surveillance
- HCV screening
- Diagnosis of HCV – linking patients into care and treatment
- Prevention of transmission
  - Harm reduction and treatment as prevention in high-risk populations
  - Change in unsafe medical practices to prevent iatrogenic transmission
- Collaboration between stakeholders
Strategies to minimise onward transmission – iatrogenic

- Universal screening of blood and blood products
- Universal implementation of safe injection devices
- Education of HCPs and public on iatrogenic HCV transmission
Strategies to minimise onward transmission – high-risk behaviours

**Education:**
- HCV awareness
- Prevent transmitting to others
- Safe injection practices
- Sexual risk reduction

**Harm reduction interventions:**
- Opioid substitution therapy
- Needle syringe exchange
- Pre-exposure prophylaxis in MSM

**Access to treatment:**
- New DAA regimens for HCV
- Treatment as prevention


Same trends as countries depicted across Europe.

DAA: direct-acting antiviral agent; MSM: men who have sex with men
Populations such as PWID, prisoners or MSM are at high risk of becoming infected and of infecting others.

Most common route of transmission was injecting drug use – 81% of all cases¹

HCV prevalence in prisons ranges from 3.1–38%*²

Proportion of acute HCV cases among MSM continues to rise – 0.8% in 2006³ to 14% in 2013¹


*According to HCV endemicity in the geographical location of the prison and in the countries of origin of the foreign prisons and to the prevalence of intravenous drug use.

MSM: men who have sex with men; PWID: people who inject drugs
Scaling-up HCV treatment in high-risk populations such as PWID will reduce HCV prevalence

**Dynamic HCV transmission model***

*Values for all parameters included in the model are derived from the data published by Martin NK, et al. Hepatology 2013;58:1598–609 and are based on PWID population of Edinburgh. Current treatment = PEG-IFN + RBV up to 2012 and addition of telaprevir or boceprevir since 2012.

PEG-IFN: pegylated interferon; SVR: sustained virological response

Relatively low HCV re-infection rates have been reported among PWID.


### HCV re-infection rates post-SVR among PWID

<table>
<thead>
<tr>
<th>Study</th>
<th>Rate (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midgard H, et al. Relapsed to IDU</td>
<td>4.9 (2.3–8.9)</td>
</tr>
<tr>
<td>Dore G, et al. ~50% cohort with ongoing illicit drug use</td>
<td>4.0 (1.7–8.0)</td>
</tr>
<tr>
<td>Simmons B, et al. High risk including PWID and prisoners</td>
<td>2.2 (1.3–3.3)</td>
</tr>
<tr>
<td>Midgard H, et al. History of IDU</td>
<td>1.7 (0.8–3.1)</td>
</tr>
<tr>
<td>Weir A, et al. History of IDU</td>
<td>1.7 (0.7–3.5)</td>
</tr>
</tbody>
</table>

- Strategies to prevent HCV re-infection are required for people with ongoing risk behaviour.

CI: confidence interval
However more needs to be done for this population.

Key recommendations:

- HCV screening for those with high-risk factors
- HCV awareness education to increase testing uptake
- Provision of OST and injection equipment
- Counselling to avoid transmission
- Close collaboration between prison and public/community health services to ensure continued treatment and care
Requirements for elimination

- Epidemiology/HCV surveillance
- HCV screening
- Diagnosis of HCV – linking patients into care and treatment
- Prevention of transmission
  - Harm reduction and treatment as prevention in high-risk populations
  - Change in unsafe medical practices to prevent iatrogenic transmission
- Collaboration between stakeholders
A collaborative approach from all stakeholders is necessary to achieve HCV elimination.

HCP: healthcare provider; WHO: World Health Organization
Global targets achieved if viral hepatitis is controlled by 2030

90% reduction in new cases of chronic hepatitis B and C

80% of treatment eligible people with chronic hepatitis B and C treated

65% reduction in hepatitis B and C deaths

Iceland National HCV action plan

- Population: ~333,000
- Anti-HCV+: 1500
- Chronic HCV: 800–1000
- Historically, 20–30 patients treated per year

National plan: treat all HCV patients according to Icelandic guidelines over 3 years
  - 200 patients/4 months
  - Prioritise active PWID, patients with moderate-to-severe fibrosis

Number of patients treated

Gottfredsson F, et al. HIV and Hepatitis Nordic Conference 2016; Abstract #O5
Global timing of hepatitis C virus elimination: Estimating the year countries will achieve the World Health Organization elimination targets

Year of HCV elimination by country or territory

<table>
<thead>
<tr>
<th>Country</th>
<th>Year of elimination</th>
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<tbody>
<tr>
<td>Iceland</td>
<td>2020</td>
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<td>Spain</td>
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<td>France</td>
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<td>Australia</td>
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<td>Japan</td>
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<td>Italy</td>
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<td>Switzerland</td>
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Razavi H, et al. EASL 2019, Vienna, Austria. #SAT-260
Towards eradication of HCV infection in the Veterans Affairs National Healthcare System

Moon A, et al. AASLD 2016, Oral #227

Projections are that the Veterans Affairs National Healthcare System has the capacity to cure the majority of HCV-infected veterans in ~3 years

Surface Transportation and Veterans Health Care Choice Improvement Act of 2015

Fiscal year 2015

LDV/SOF
OMV/PTV/RTV + DSV

Projections are that the Veterans Affairs National Healthcare System has the capacity to cure the majority of HCV-infected veterans in ~3 years

Moon A, et al. AASLD 2016, Oral #227
Summary

- SVR is now possible in a broad spectrum of patients
- Pan-genotypic regimen are preferred treatment options
- We **CAN** eliminate this virus – but to do so we will need:
  - Rigorous national HCV surveillance across all countries
  - Effective screening programmes and improved linkage into care for diagnosed patients
  - Increased treatment uptake with high efficacy therapies
  - To identify and close gaps in diagnosis, treatment and infrastructure
  - Country-specific tailored disease prevention programmes
  - Target high incidence populations such as MSM, PWID, prisoners and migrants
  - Collaboration between physicians, patients, governments, NGOs and Pharma to bring about the changes required to deliver ‘cure’ to more patients

NGO: non-governmental organisation; SVR: sustained virological response