Successful implementation of HCV treatment in two large HIV clinics in Amsterdam: HCV treatment cascade of care

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Disclosures

- J. Saris: nothing to disclose
Introduction

• The availability of direct antiviral agents (DAA) has dramatically improved treatment success of hepatitis C infected individuals

• DAA treatment was introduced in October 2014 and became available in the Netherlands for all HCV patients in November 2015 regardless of the extent of liver fibrosis

• Objectives:
  o Evaluate the implementation of DAA treatment in HIV-HCV patients
  o Describe patients at risk for HCV transmission who were not treated yet with DAA in detail
Methods

• All HIV-HCV co-infected patients in care who were treated with DAA included from October 2014 until August 2016

• Sustained viral response (SVR12) was defined as undetectable HCV-RNA 12 weeks after end of treatment

• Reasons for not initiating HCV treatment were retrospectively assessed
HCV prevalence

4647 chronic HIV-infected

260 (5.6%) HIV-HCV co-infected (194 MSM)
HCV treatment

4647 chronic HIV-infected

260 (5,6%) HIV-HCV co-infected (194 MSM)

236 (90,7%) (Planned for) DAA treatment
24 (9,3%) No DAA treatment

224 (86,1%) Started with DAA treatment
12 (4,6%) Will start treatment soon
### Characteristics of HIV-HCV co-infected patients

<table>
<thead>
<tr>
<th></th>
<th>(Planned for) DAA treatment</th>
<th>No DAA treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n=236)</td>
<td>(n=24)</td>
</tr>
<tr>
<td>N (%)</td>
<td>236</td>
<td>24</td>
</tr>
<tr>
<td>Male (%)</td>
<td>69,1%</td>
<td>84,2%</td>
</tr>
<tr>
<td>Age at start (years, median; range)</td>
<td>50,1 (range: 27 – 77)</td>
<td>49,5 (range: 33 – 67)</td>
</tr>
<tr>
<td>Baseline HCV-RNA (IU/mL, median)</td>
<td>1.570.000 (range: 132 – 32,500.000)</td>
<td></td>
</tr>
<tr>
<td>HIV-1 RNA undetectable (%)</td>
<td>95,8%</td>
<td>92,1%</td>
</tr>
<tr>
<td>CD4 count (median +/- IQR)</td>
<td>650 (range: 868-460)</td>
<td>590 (range: 783-453)</td>
</tr>
<tr>
<td>Fibroscan (kPa, median) (range, n)</td>
<td>6,6 (range: 2 – 48,8; n=175)</td>
<td>5,4 (range: 3,5 – 20; n=23)</td>
</tr>
<tr>
<td>Cirrhosis* (%)</td>
<td>9,1%</td>
<td>8,7%</td>
</tr>
</tbody>
</table>

*Clinical diagnosis or Fibroscan score > 14,5 kPa*
<table>
<thead>
<tr>
<th>HCV genotype (%)</th>
<th>(Planned for) DAA treatment (n=236)</th>
<th>No DAA treatment (n=24)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- <strong>1a / 1b / other</strong></td>
<td>61,0% / 5,5% / 3,8%</td>
<td>33,3% / 4,2% / 4,2%</td>
</tr>
<tr>
<td>- <strong>2</strong></td>
<td>3,4%</td>
<td>12,5%</td>
</tr>
<tr>
<td>- <strong>3</strong></td>
<td>5,5%</td>
<td>20,8%</td>
</tr>
<tr>
<td>- <strong>4</strong></td>
<td>19,1%</td>
<td>16,7%</td>
</tr>
<tr>
<td>- <strong>other</strong></td>
<td>1,7%</td>
<td>8,3%</td>
</tr>
</tbody>
</table>
HIV transmission route (n=260)

(Planned for) DAA (N=236)
- MSM: 75.4%
- IVD: 14.8%
- hetero: 6.4%
- other: 3.4%

No DAA (N=24)
- MSM: 62.5%
- IVD: 25.0%
- hetero: 8.3%
- other: 4.2%
HCV treatment cascade of care

- Chronic HCV: 260 patients
- Planned for DAA: 236 patients
- Started with DAA: 224 patients
- Virologic outcome: 147 patients

- SVR12
- Pending
- Failed
DAA regimens (n=224)

- 55% sofosbuvir/ledipasvir
- 27% sofosbuvir/daclatasvir
- 8% sofosbuvir/simeprevir
- 10% other regimens
DAA treatment uptake

Number of patients

Time

Reasons for not starting DAA treatment (n=24)

- Refused treatment / other (n=14): 58.3%
- Not living in the Netherlands (n=3): 16.7%
- Lost to follow up (n=7): 29.1%
### MSM (n=8)

<table>
<thead>
<tr>
<th>Age</th>
<th>GT</th>
<th>Fibroscan (kPa)</th>
<th>Reason</th>
<th>DAA treatment after 1/8/16</th>
</tr>
</thead>
<tbody>
<tr>
<td>49</td>
<td>1a</td>
<td>6,4</td>
<td>Initially refused</td>
<td>Yes</td>
</tr>
<tr>
<td>53</td>
<td>1a</td>
<td>3,9</td>
<td>Initially refused</td>
<td>Yes</td>
</tr>
<tr>
<td>50</td>
<td>1</td>
<td>3,5</td>
<td>Other clinic</td>
<td>Yes</td>
</tr>
<tr>
<td>53</td>
<td>1a</td>
<td>4,3</td>
<td>Starts 2017</td>
<td>Planned</td>
</tr>
<tr>
<td>60</td>
<td>4d</td>
<td>9,4</td>
<td>Frequent NS</td>
<td>Planned</td>
</tr>
<tr>
<td>34</td>
<td>4d</td>
<td>6,3</td>
<td>Frequent NS</td>
<td>Planned</td>
</tr>
<tr>
<td>67</td>
<td>1a</td>
<td>8,8</td>
<td>Scared for side-effects</td>
<td>No</td>
</tr>
<tr>
<td>45</td>
<td>4</td>
<td>4,4</td>
<td>Refused</td>
<td>No</td>
</tr>
</tbody>
</table>
**Former IVD patients (n=6)**

<table>
<thead>
<tr>
<th>Patient</th>
<th>GT</th>
<th>Fibroscan (kPa)</th>
<th>Reason</th>
<th>DAA treatment after 1/8/16</th>
</tr>
</thead>
<tbody>
<tr>
<td>55 (F)</td>
<td>3a</td>
<td>20,0</td>
<td>Reimbursement issue</td>
<td>Planned</td>
</tr>
<tr>
<td>59 (M)</td>
<td>1b</td>
<td>5,4</td>
<td>No complaints</td>
<td>No</td>
</tr>
<tr>
<td>52 (M)</td>
<td>3a</td>
<td>N/A</td>
<td>Refused</td>
<td>No</td>
</tr>
<tr>
<td>58 (F)</td>
<td>1a</td>
<td>4,9</td>
<td>Refused</td>
<td>No</td>
</tr>
<tr>
<td>56 (M)</td>
<td>3a</td>
<td>N/A</td>
<td>Refused</td>
<td>No</td>
</tr>
<tr>
<td>64 (M)</td>
<td>3a</td>
<td>N/A</td>
<td>Refused</td>
<td>Died*</td>
</tr>
</tbody>
</table>

*Sepsis non liver related*
HCV reinfection rate

- One patient (0.7%) was known to be reinfected after reaching SVR12
- Median follow up of all patients with SVR12 until August 2016: 140 days
  - Time until reinfection: 191 days
HCV treatment was rapidly initiated in HIV-HCV co-infected patients

• Since DAA availability, the majority of HIV-HCV co-infected patients in care in AMC/OLVG Oost have successfully been treated without the need to upscale resources/personnel

• At the end of follow up, 8/194 MSM patients (4.1%) were not yet treated and therefore still at risk for transmitting HCV

• Of whom:
  o 6 patients are either planned or started DAA treatment
  o 2 patients (1%) did not receive DAA treatment yet
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BACK-UP SLIDES
MC free project: Amsterdam MSM hepatitis C-Free reduction of HCV incidence among MSM in Amsterdam
Other used regimens (22/224)

<table>
<thead>
<tr>
<th>Regimen used</th>
<th>Number of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>sofosbuvir/daclatasvir/ribavirine</td>
<td>4</td>
</tr>
<tr>
<td>sofosbuvir/ledipasvir/ribavirine</td>
<td>3</td>
</tr>
<tr>
<td>boceprevir/peginterferon alfa-2a/ribavirine</td>
<td>3</td>
</tr>
<tr>
<td>simeprevir/peginterferon alfa-2a/ribavirine</td>
<td>2</td>
</tr>
<tr>
<td>sofosbuvir/ribavirine</td>
<td>3</td>
</tr>
<tr>
<td>sofosbuvir/simeprevir/ribavirine</td>
<td>2</td>
</tr>
<tr>
<td>viekirax/exviera</td>
<td>1</td>
</tr>
<tr>
<td>viekirax/exviera/ribavirine</td>
<td>4</td>
</tr>
</tbody>
</table>