Rapid On-HIV screening in HCV/HCV co-infected patients by screening and universal access to DAA: Baseline data from the first screening of NOCO (no confection) study

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for the NoCo Study of the Icona cohort

BACKGROUND & NOCO STUDY

• Major barriers to HCV elimination in HIV population: (i) proportion of individuals unaware of their HCV infection, (ii) costs of DAA treatments, (iii) high reinfection rates among high risk population like men sex with (MSM) and persons who inject drugs (PWID) and (iv) lack of targeting for vulnerable groups (immigrants, homeless, veterans).
• The NoCo study collects data on HCV screening and anti-HCV treatment, involving 40 Italian clinical sites, of the ICONA Network, aiming to cover 65,000 patients (>50% of PLWH in Italy)

Figure 1: Flowchart of 3-year HCV screening and DAA treatment program of NoCo Study

The aims of this analysis of the NoCo study are:
• To estimate the overall prevalence of HCV co-infection at study entry (first NoCo screening).
• To identify prevalence and predictors of HCV serocorrections at first NoCo screening.
• To estimate the prevalence of chronic active HCV infection (i.e. HCV RNA positive): at study entry, at second NoCo screening, overall at available HCV-RNA screening, and according to calendar year.

ACKNOWLEDGMENTS

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Table 1: Main baseline characteristics of total population and according to the first NoCo screening result

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, median (IQR)</td>
<td>48 (27-69)</td>
</tr>
<tr>
<td>Gender</td>
<td>48 (27-69)</td>
</tr>
<tr>
<td>HIV RNA</td>
<td>0.00 (0-0.01)</td>
</tr>
<tr>
<td>HCV positive at first screening</td>
<td>0.00 (0-0.01)</td>
</tr>
</tbody>
</table>

Table 2: Predictors of HCV serocorrections at first screening using a logistic regression model (*Adjusted for the factors showed in table 1*).

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Odds Ratio (95% CI)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, median (IQR)</td>
<td>0.00 (0-0.01)</td>
<td>0.00 (0-0.01)</td>
</tr>
</tbody>
</table>

Table 3: Categorization for 2nd screening ITT and OT analysis in subjects with 2nd HCV RNA test available (A), and without 2nd HCV RNA test available (B)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCV RNA status at 2nd screening</td>
<td>A</td>
</tr>
<tr>
<td>1st screening</td>
<td>1st screening</td>
</tr>
<tr>
<td>HCV RNA at 2nd screening</td>
<td>0.00 (0-0.01)</td>
</tr>
<tr>
<td>HCV RNA status at 2nd screening</td>
<td>0.00 (0-0.01)</td>
</tr>
</tbody>
</table>

Figure 2: Flowchart first NoCo screening

92/1,278 (7.2%) participants with unknown HCVAb status before first screening had resulted HCV Ab pos
(Fig:2)

-4.6% for MSM
-50.0% for PWID
-4.3% for Heterosexual
-8.3% for Other/Unknown

CONCLUSIONS

• At study entry, PWIDs were the group at highest risk of new HCV infection in Italy. Circulation of HCV among MSM appears lower than in other European countries.
• Overall, 79% of HCV patients have already achieved viral eradication, with an increase from 58% to 83% from 2017 to 2019.

Drugs

The major goals of our study were:

1. To evaluate the prevalence of HCV co-infection at study entry (first NoCo screening).
2. To identify prevalence and predictors of HCV serocorrections at first NoCo screening.
3. To estimate the prevalence of chronic active HCV infection (i.e. HCV RNA positive): at study entry, at second NoCo screening, overall at available HCV-RNA screening, and according to calendar year.

RESULTS

- 10,436 patients were screened for HCV and have been included in the analysis (87.8%) with a known HCV Ab serostatus (Fig. 1).
- At first NoCo screening 68.0% of patients (n=7,095) had HCV Ab negative and 32.0% (n=3,341) were HCV Ab positive (Fig. 1).
- Demographic characteristics at first NoCo screening are shown in Table 1.

Figure 3. HCV RNA status at first screening (A), at second screening (B), at second screening ITT (C) and according to calendar year (D).

A) First screening n=3,341 patients
B) Second screening ITT analysis n=2,205 patients
C) According to calendar year: 2016/2018: 33%

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4.3% for Heterosexual
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