

# Real-world treatment data from a needle exchange with a high prevalence of HCV and amphetamine use

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**Background:** The Stockholm Needle Exchange Program (NEP) has since the start in 2013 enrolled over 3,500 participants. Annually, around 1,800 persons make 26,000 visits at the Stockholm NEP. 43% inject mainly heroin and 43% amphetamine. Mean age is 39 years and mean duration of injection drug use is 18 years. 21% are homeless. The viremic HCV prevalence is 55%. Although injection risk behaviors decrease significantly over time among participants, HCV incidence remains high with an incidence rate of 22/100 person years.

**Method:** Since January 1st 2018 participants at the Stockholm NEP are offered HCV treatment with no reimbursement restrictions. Fibrosis stages F0-F3 are mainly treated with 8 weeks of sofosbuvir/ledispavir or glecaprevir/pibentasvir and F4 mainly with 12 weeks of sofosbuvir/velpatasvir. Patients were HCV RNA tested at EOT, SVR12 and every 6 months post SVR.

**Results:** So far 124 participants (>75% amphetamine users) have initiated HCV treatment. 100/114 (88%) were HCV RNA negative at end of treatment (EOT), 10 participants dropped out 1-2 weeks after treatment initiation and two after 6-7 weeks. Another two participants were lost to follow-up. Thus, all participants who completed treatment, with a follow-up HCV test (n=100), were HCV RNA negative at EOT.

Overall, 73/95 (77%) reached SVR12 (12 drop-outs and 10 lost to follow-up). All with a follow-up test at SVR12+ (n=73) were HCV RNA negative. 5 reinfections post-SVR occurred, corresponding to a reinfection rate of 10.6/100 PY. One reinfection was spontaneously cleared, leaving a persistent reinfection rate of 8.5/100 PY.

On a parallel level, there were 146 new HCV infections (seroconversions/reinfections) in the non-treated cohort during the study period.

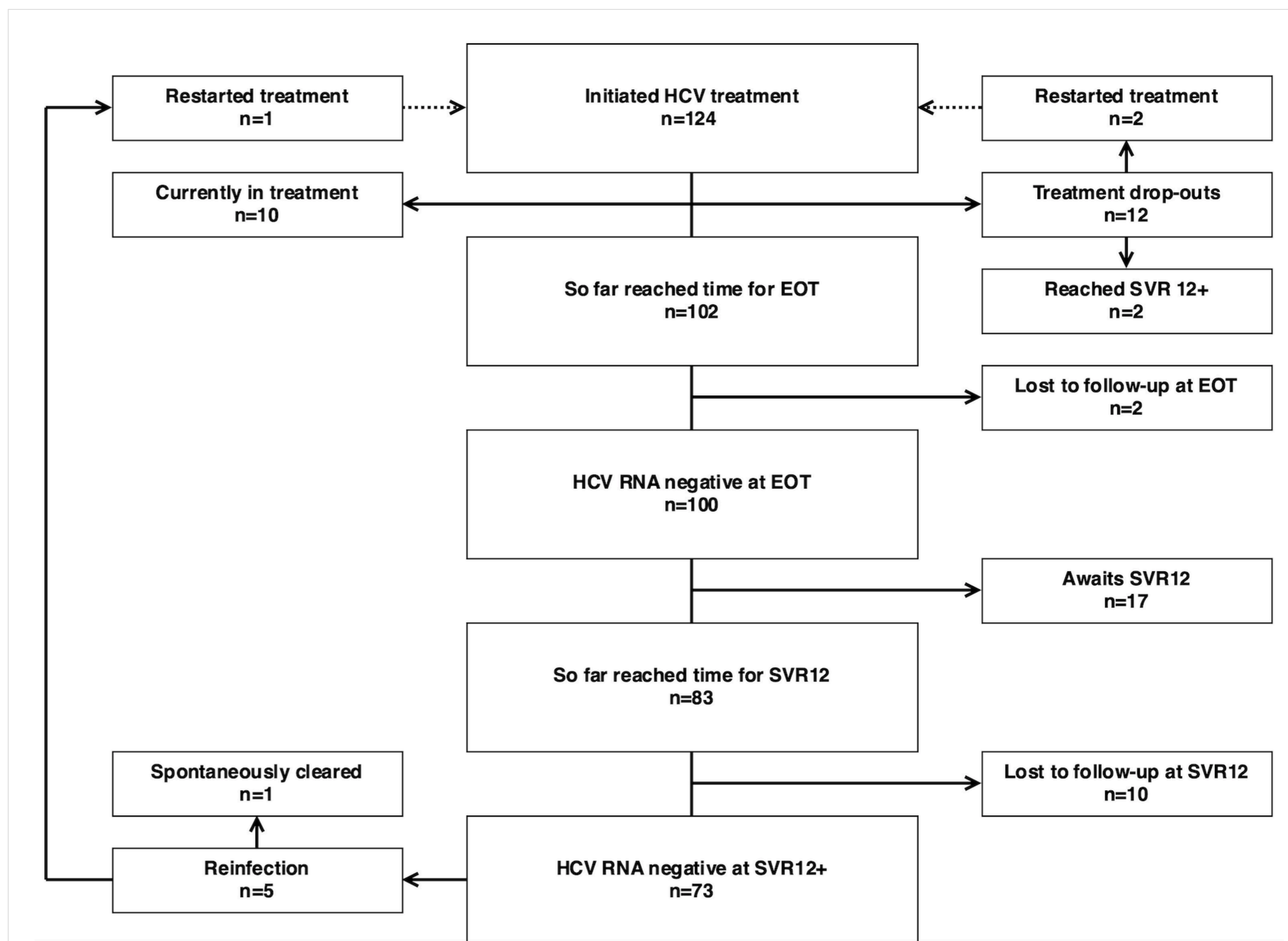
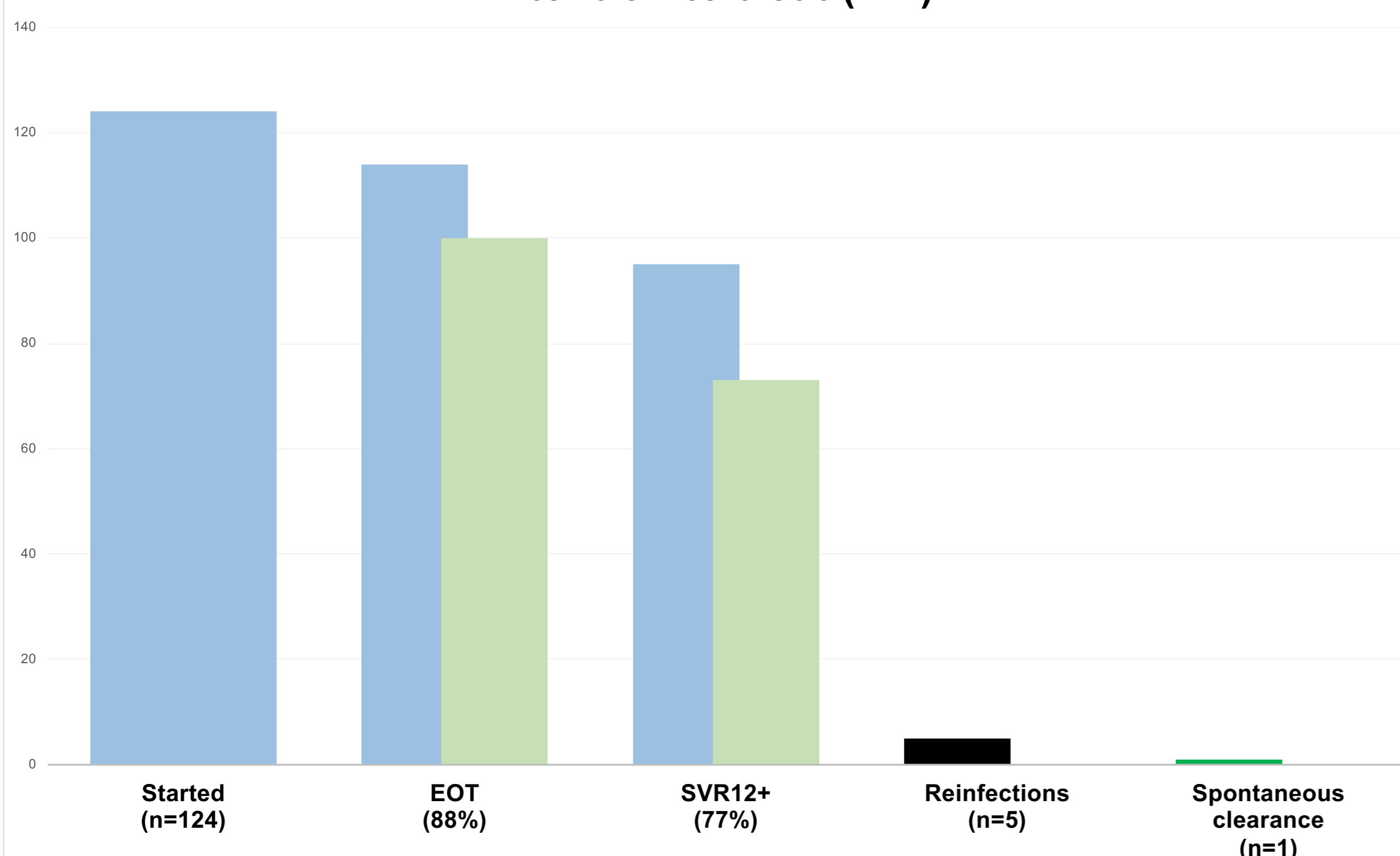
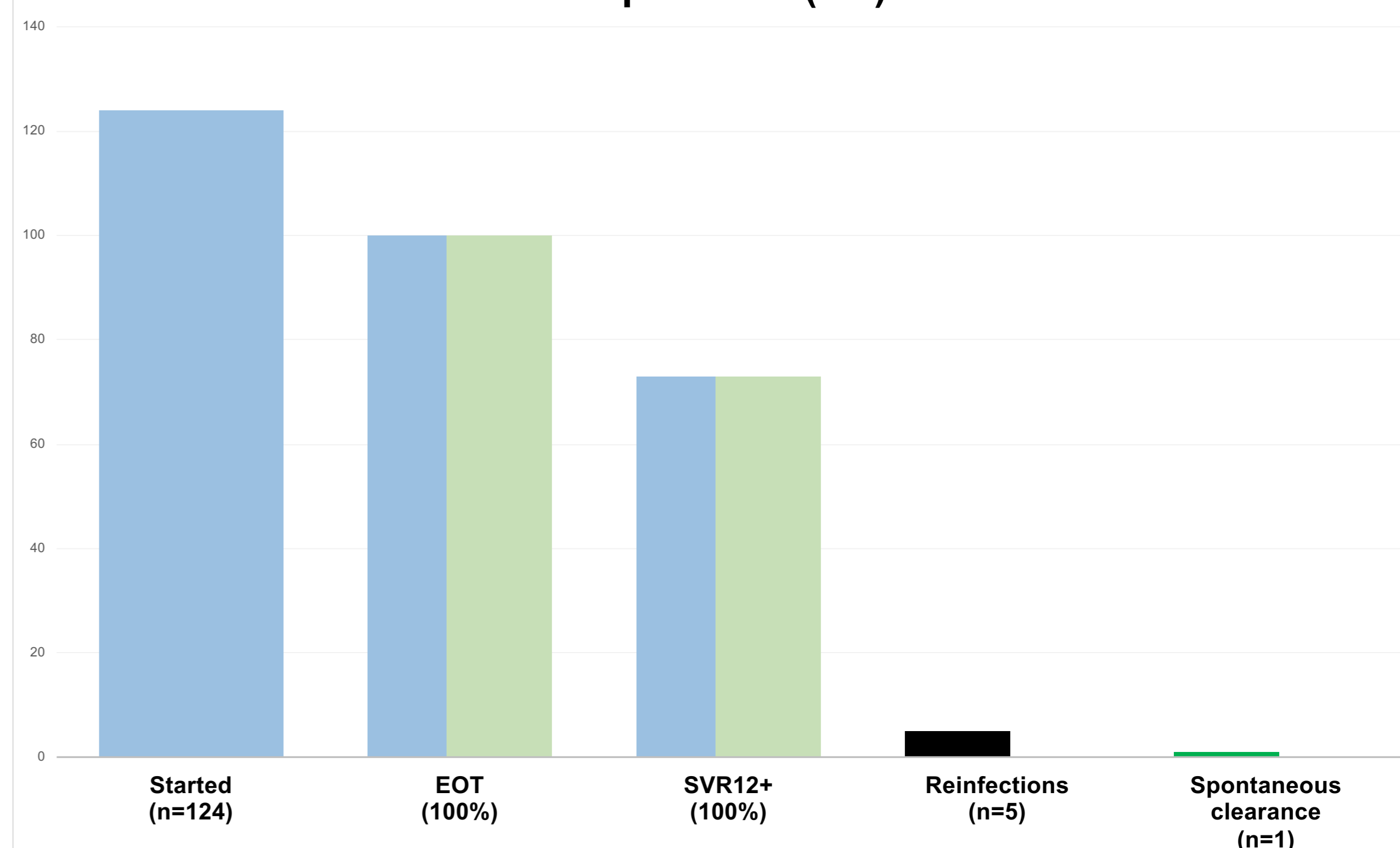


Fig 1. Flowchart of HCV treated patient at the Stockholm needle exchange. "SVR 12+" refers to a SVR test at week 12 or later.

Intention to treat (ITT)



Per protocol (PP)



**Discussion:** Even though 8-10% of the HCV viremic patients were treated annually at the Stockholm NEP, the number of new HCV infections were higher than the total number treated. A high prevalence of HCV and amphetamine users (not eligible for OST) thus constitutes a great challenge for HCV elimination.