

OCURRENCE AND OUTCOME OF HEPATITIS C REINFECTIONS IN OPIOID AGONIST THERAPY PATIENTS OF THE SAMMSU COHORT

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Background:

Direct-acting antivirals (DAAs), achieving chronic hepatitis C cure rates of nearly 100%, are reimbursed without liver fibrosis restriction in Switzerland since 2017. However, a high reinfection rate could hamper HCV elimination efforts.

Methods:

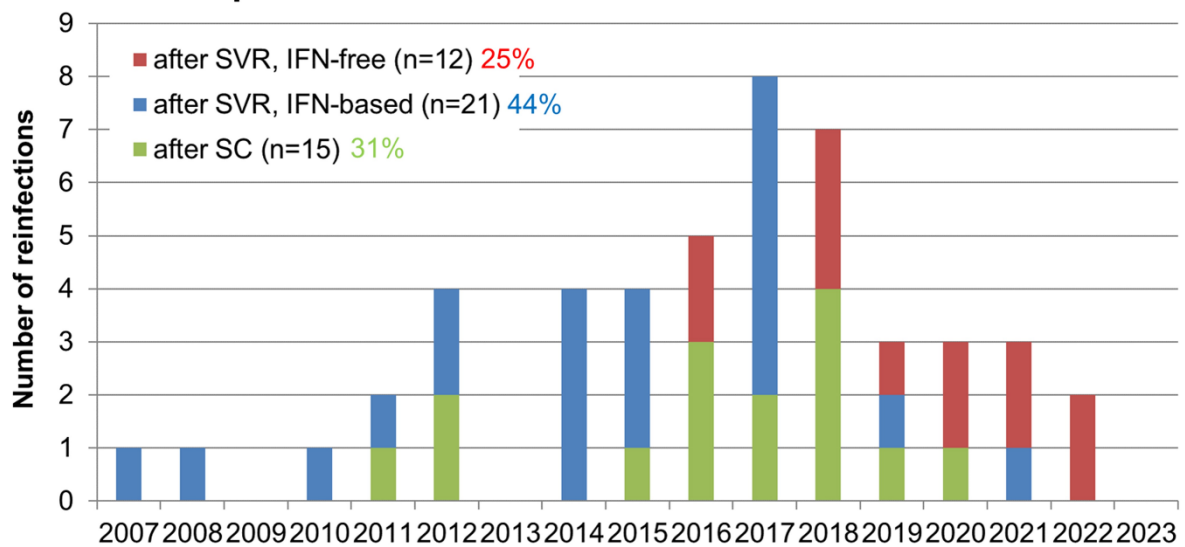
Between 2014 and 02/03/2023, the Swiss Association for the Medical Management in Substance Users (SAMMSU) cohort has recruited 1346 >18-year-old opioid agonist therapy (OAT) patients (75% ever intravenous drug use, 59% HCV-antibody-positive, yearly follow-up). Regarding reinfection, follow-up time was from the end-of-treatment to the first positive HCV-RNA or the last negative HCV-RNA, if no reinfection occurred.

Results:

Among the 48 reinfections in 44 patients documented within the SAMMSU cohort, 31% (15) were after spontaneous clearance, 44% (21) after IFN-based and 25% (12) after IFN-free HCV-treatment (Figure 1). The proportion of patients developing chronic infection was significantly lower after spontaneous clearance than after successful treatment (60% (9/15) versus 94% (31/33), $p < 0.001$), with no difference between IFN-based and IFN-free treatment (90% (19/21) versus 100% (12/12), $p = 0.270$).

In 1988-2023, 33 HCV reinfections occurred in 486 treated patients (median follow-up time: 2.82 (IQR: 0.94-5.00) years, cumulative reinfection rate: 6.8%). With a total follow-up time of 1904.16 years, the reinfection rate was 1.73 (95% CI: 1.23-2.44)/100 person-years. It was similar after IFN-based and IFN-free treatment (1.98 (95% CI: 1.28-3.07) versus 1.45 (95% CI: 0.84-2.51)/100 person-years, $p = 0.385$). Total follow-up time was 1010.46 years after IFN-based treatment (median: 7.60 (IQR: 4.26-11.52) years) and 893.69 years after IFN-free treatment (median: 2.25 (IQR: 0.63-3.70) years). The cumulative reinfection rate was 17.1% (20/117) after IFN-based and 3.5% (13/369) after IFN-free treatment.

Hepatitis C reinfections in the SAMMSU cohort



Status: 02.03.2023, n=1346, 48 reinfections in 44 patients

SC = spontaneous clearance, SVR = sustained virological response, IFN = interferon

Conclusion:

With a low reinfection rate of <2 per 100 person-years, reinfections do not compromise HCV elimination efforts in Swiss OAT-patients. While >90% of patients reinfected after successful HCV treatment develop chronic infection, patients reinfected after spontaneous clearance should be monitored regarding another spontaneous clearance.

Disclosure of Interest Statement:

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