

High rates of sustained virological response in people who inject drugs treated with sofosbuvir-based regimens in Ukraine

Authors: Yeromina GI, Barnard TP, Burgay OS, Filippovych SA. ICF “Alliance for Public Health”, Ukraine

BACKGROUND

Starting from June 2015, ICF “Alliance for Public Health” (Alliance) has been implementing HCV treatment with SOFOSBUVIR-based (SOF) regimens for most-at-risk populations. As of April 1, 2016, 633 patients had access to HCV treatment. 80% (N=511) are people who inject drugs (PWIDs), of them 47% (N=238) completed full course of treatment, 50% (N=259) continue their treatment, 3% (N=14) discontinued.

METHODS:

Main treatment regimens: SOF+RBV+Peg-IFN 12W in 73% (N=373), SOF+RBV 24W in 17% (N=88), SOF+RBV 12W in 6% (N=32). Database of HCV patients has been developed; detailed medical records for all patients are collected monthly in depersonified form including demographic data; HIV status; ART, OST, HCV treatment regimens; genotype; fibrosis stage; RNA HCV W4, W12(24), 12 weeks after the EOT.



RESULTS:

As of April 1, 2016 there were 127 results of RNA HCV testing 12 weeks after the EOT available for PWIDs cohort.

Male	82% (N=104)
HIV/HCV	98% (N=124)
HIV/HCV/HBV	8% (N=10)
TB experienced	24% (N=30)

82% (N=104) are male, mean age is 38 y.o., G1 and G3 are prevalent (46% and 43% correspondingly), fibrosis stage in 86% of patients is \geq F2. 6% are on OST (methadone n=5, buprenorphine n=3). 12 (9%) patients did not reach SVR12 (RVR was not reached in 6 patients, EOT was not reached in 3 patients. 5 patients had RVR and EOT but have not reached SVR12 (SOF+RBV+PEG 12w; 4 of them have G1; 2 patients are Peg-IFN experienced; 1 reported case of reinfection, relapse to IDU).

115 patients (91%) of 127 reached SVR12, 22 (19%) of them were Peg-IFN treatment-experienced.

Chart #1 Patients' characteristics: Fibrosis stage

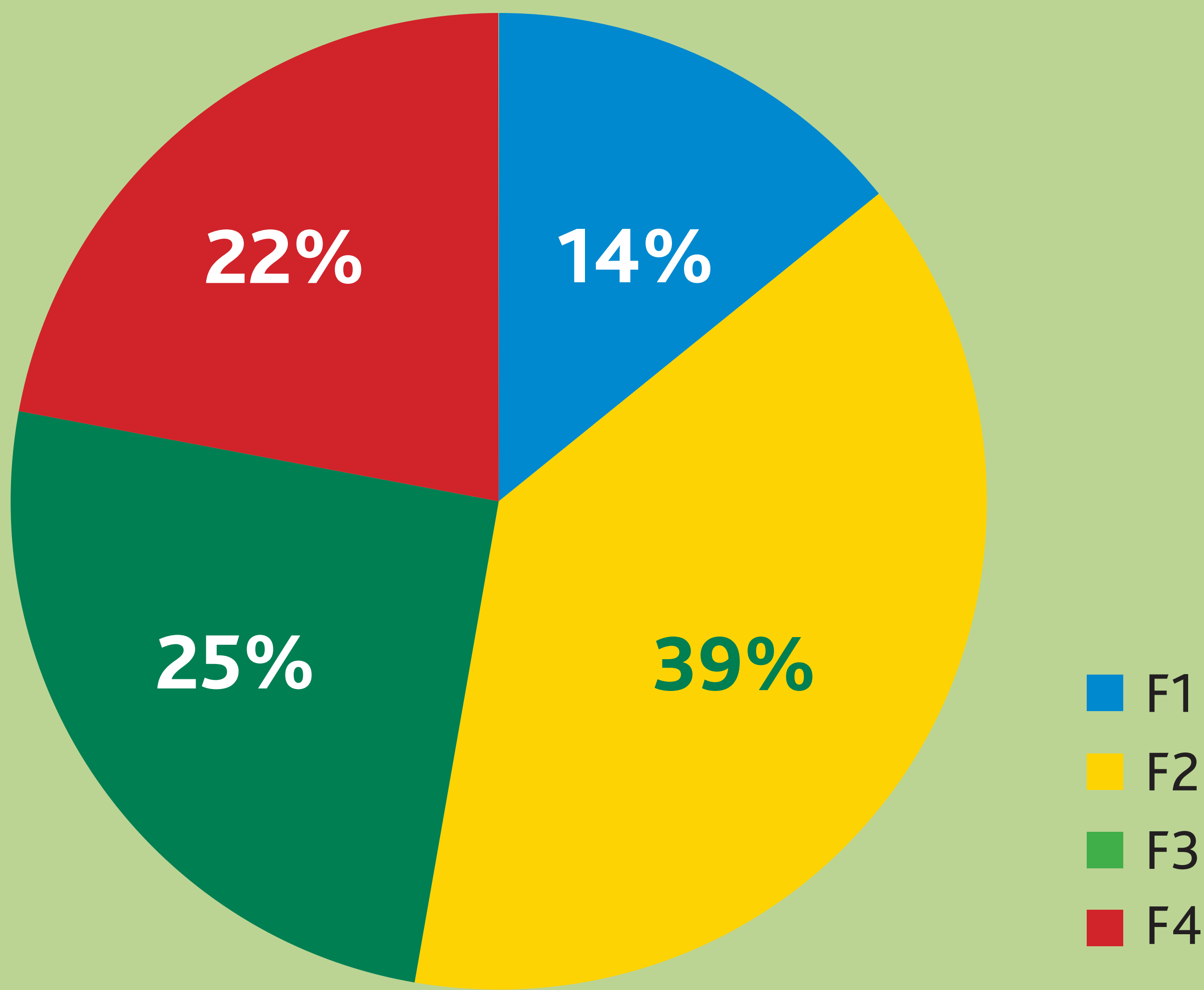


Chart #2 SVR12 by genotypes

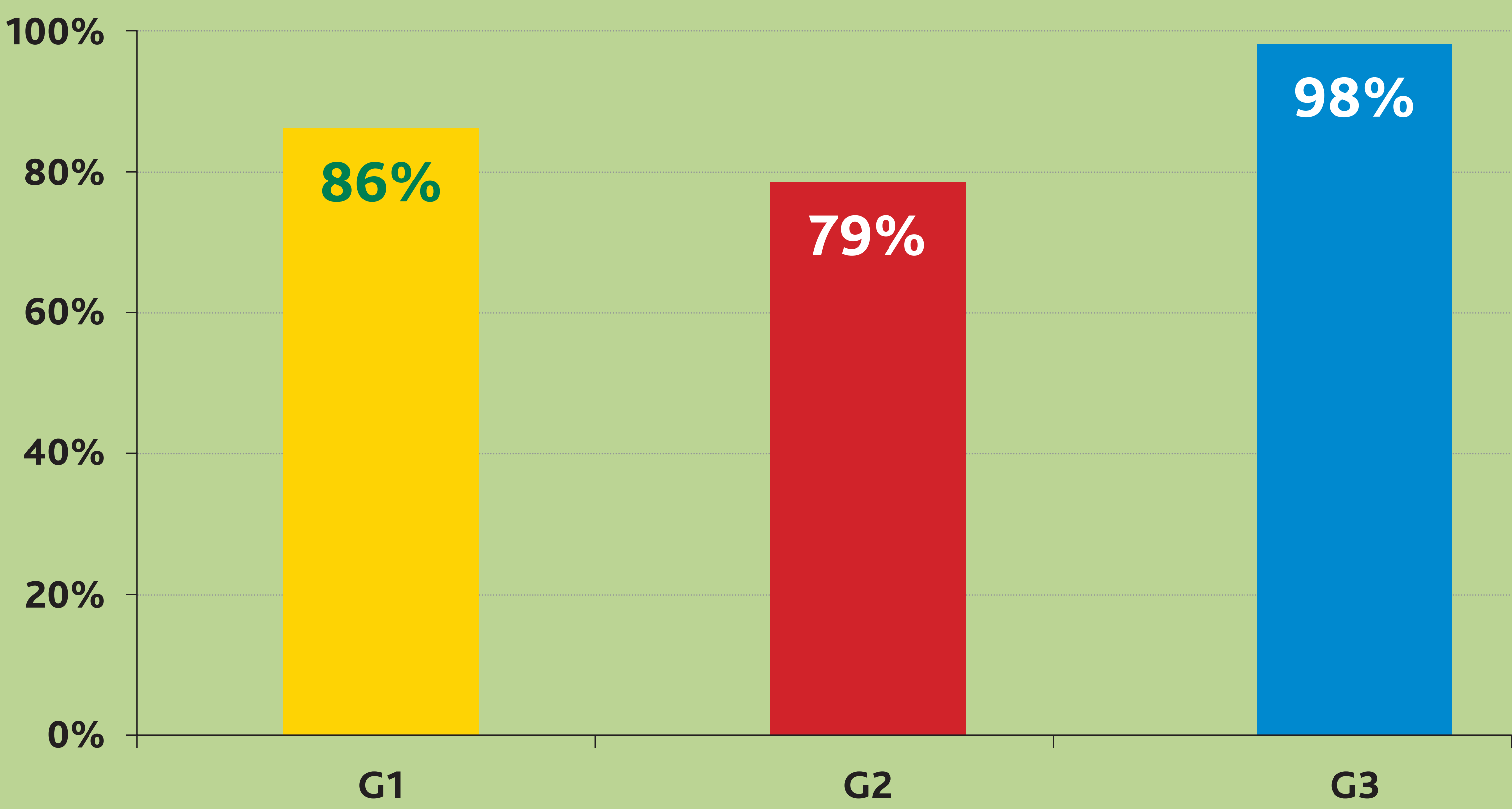


Chart #3 SVR12 by Tx regimens

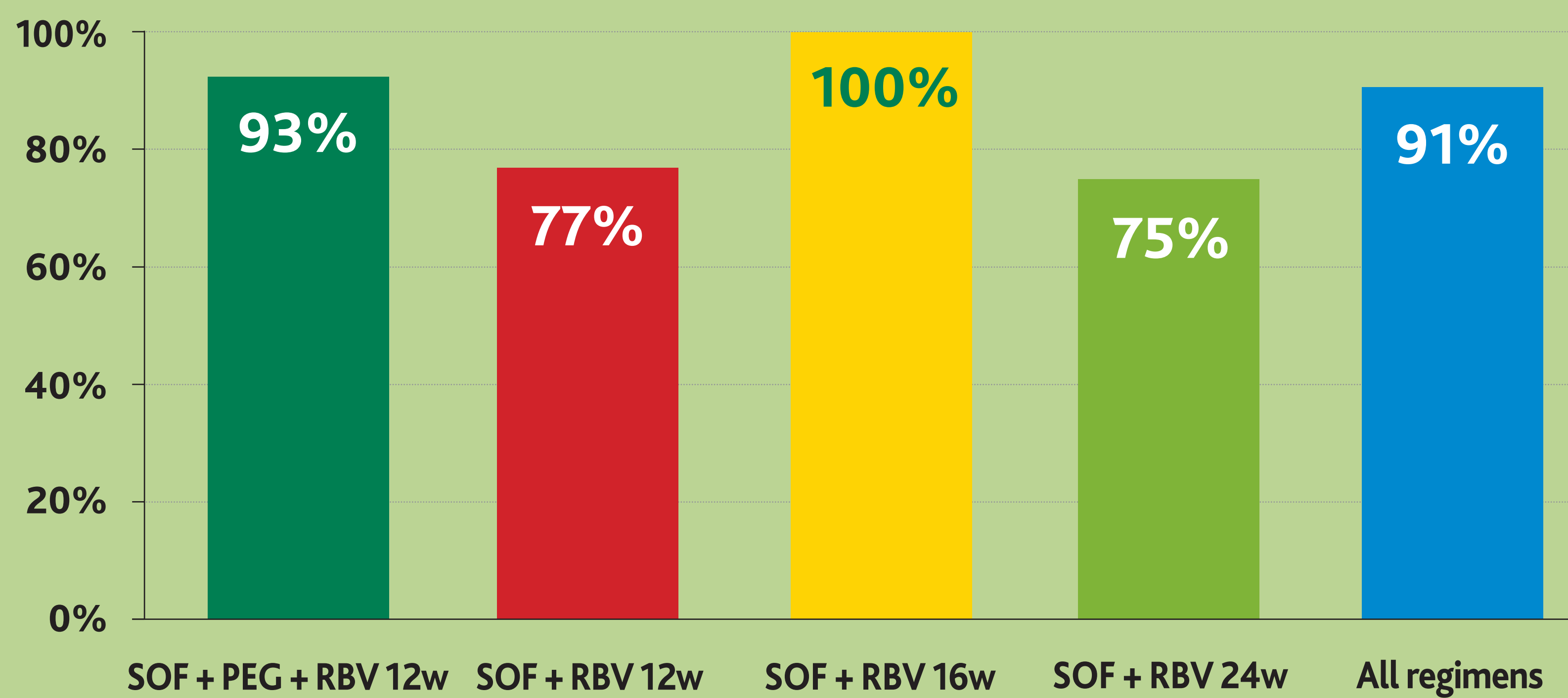


Table #1 Non-responders N12 (all male, HIV+)

GENOTYPE	FIBROSIS	TX REGIMEN	RVR	EOT
Peg-IFN treatment-experienced				
1	F4	SOF+PEG-IFN+RBV 12 W	Not detected	Not detected
1	F2	SOF+PEG-IFN+RBV 12 W	Detected	Not detected
Naïve				
1	F4	SOF+PEG-IFN+RBV 12 W	Not detected	Not detected
1	F3	SOF+PEG-IFN+RBV 12 W	Detected	Not detected
1	F3	SOF+PEG-IFN+RBV 12 W	Not detected	Detected
1	F2	SOF+PEG-IFN+RBV 12 W	Detected	Not detected
1	F2	SOF+PEG-IFN+RBV 12 W	Not detected	Not detected
1	F2	SOF+PEG-IFN+RBV 12 W	Not detected	Not detected
2	F3	SOF+RBV 12 W	Detected	Not detected
2	F2	SOF+RBV 12 W	Detected	Detected
2	F1	SOF+RBV 12 W	Not detected	Not detected
3	F4	SOF+RBV 24 W	Detected	Not detected

CONCLUSION:

Sofosbuvir- based HCV treatment in PWID population shows high cure rates. In G3 patients SVR 12 is higher than in G1 patients. Drop out from the treatment is low.

Social and peer support of PWIDs is important for recruiting and treatment adherence. Reinfection interventions should be included as one of the obligatory activities for active PWID and strongly recommended for PWID with different period of remission including OST patients.