DO WE TEST-AND-TREAT OUR HCV PATIENTS IN THE SAME WAY? TIME FROM DIAGNOSIS TO TREATMENT AMONG PEOPLE INJECTING DRUGS VERSUS THE GENERAL POPULATION

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Disclosures

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Introduction

- Stigma and poor linkage to care are significant barriers to global HCV elimination for 'hard-to-reach' populations, such as PWID, that have been amplified during the COVID-19 pandemic[1–3]
- PWID are considered a priority population for testing and treatment because of the high risk of HCV transmission;[4,5] modelling studies suggest that treatment of HCV infection in PWID can significantly reduce HCV prevalence and transmission[6]
- Pan-genotypic DAA therapies such as SOF/VEL provide an effective approach to remove the requirement for HCV genotype testing enabling a simple same-day test-and-treat (TnT) strategy[7–9]
- This multinational, real-world analysis evaluated the ability to implement a TnT approach in active PWID versus the general population (GP)

1. EASL J Hepatol 2018;69:461–511; 2. Dore GJ, Bajis S. Nat Rev Gastroenterol Hepatol 2021;18:91–2; 3. Goodyear T, et al. Int J Drug Policy 2020;81:102766; 4. Day E, et al. Liver Int 2018;39:20–30; 5. Iversen J, et al. J Int Drug Policy 2017;47:77–85; 6. Grebely J, et al. J Drug Policy 2015;26:893–8; 7. Bajis S, et al. J Infect Dis 2020;222:S758–72; 8. Applegate TL, et al. Infect Dis Clin N Am 2018;32:425–45; 9. Lazarus JV, et al. BMJ Open 2020;10:doi:10.1136/bmjopen-2020-039724;

DAA, direct-acting antiviral, HCV, hepatitis C virus; PWID, people who inject drugs, SOF/VEL, sofosbuvir/velpatasvir.

Time to treat in different HCV-infected populations

Period	Study	Population	Outcome†
Jun–Dec 2015 Jan 2016–Mar 2017	USA (before and after introduction of an LTCC)*	Newly diagnosed HCV-infected patients[1] • Before LTCC (n=27) • After LTCC (n=70)	Mean TT (SD), days 332 ±303 237 ±155
Jul 2016–Aug 2018	USA, randomised controlled trial*	HIV/HCV-coinfected patients[2] • Usual care (n=8) • Nurse case management (n=4)	Median TT (IQR), days 110 (72.5–130) 85.5 (58.5–100)
Mar 2017–Mar 2018	USA, pharmacy-driven pretreatment process	HCV-infected patients[3] • Traditional model (n=235) • Pharmacist driven (n=46)	Mean TT (SD), days 184.1 ±27.6 42.2 ±7.5
Up to Nov 2019	Real-world analysis of vulnerable populations across 8 countries	HCV-infected patients[4] General population (n=937) Homeless patients (n=149) Incarcerated patients (n=468) Patients with mental health disorders (n=895)	Median TT (IQR), days 55 (23–107) 27 (13–71) 63 (25–149) 66 (32–134)

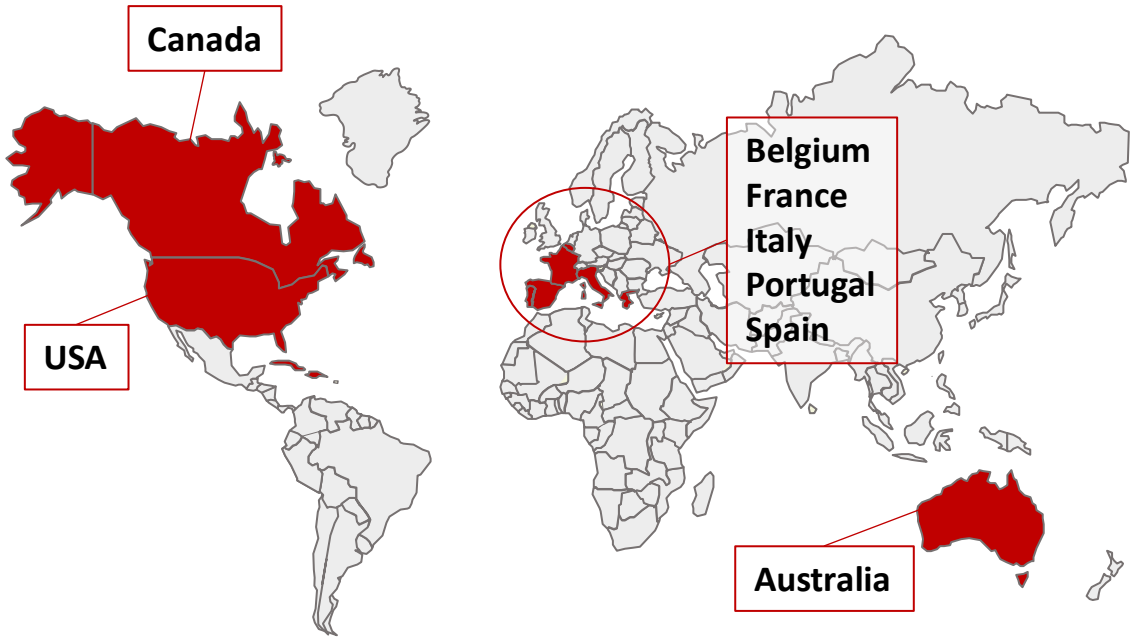
Previous studies have analysed TT data in different HCV-infected populations
Although previous information exists for some vulnerable populations, it is not available for active PWID

1. Battle B, et al. OFID 2019; abstract 313; 2. Starbird L, et al. J Viral Hepatitis 2020;27:376–86;
3. Houck K, et al. J Am Pharm Assoc 2019;59:710–6; 4. Khalili M, et al. AASLD 2020; poster #994.

*Studies measuring time from diagnosis to treatment; †Study outcomes are not directly comparable as they reported mean and median TT. HIV, human immunodeficiency virus; IQR, interquartile range; LTCC, linkage to care coordinator, TT, time to treat.

Real-world analysis included 1178 individuals treated with SOF/VEL for 12 weeks

GP: 29 cohorts from 8 countries
Active PWID: 22 cohorts from 7 countries (exc. USA)



Individuals with HCV (N=1178)

- Treated with SOF/VEL without ribavirin for 12 weeks
- No history of decompensation or HCC
- No prior NS5A inhibitor exposure

Assessments

- Patient demographics
- TT, defined as the time from most recent HCV RNA diagnosis to SOF/VEL treatment start

Populations

- **GP**: patients were not homeless, incarcerated or having mental health disorders. Past or active PWID were not excluded from analysis
- **Active PWID**: PWID patients belonging to vulnerable populations who actively injected IV drugs within 6 months prior to SOF/VEL treatment

1. Khalili M, et al. AASLD 2020; poster #994

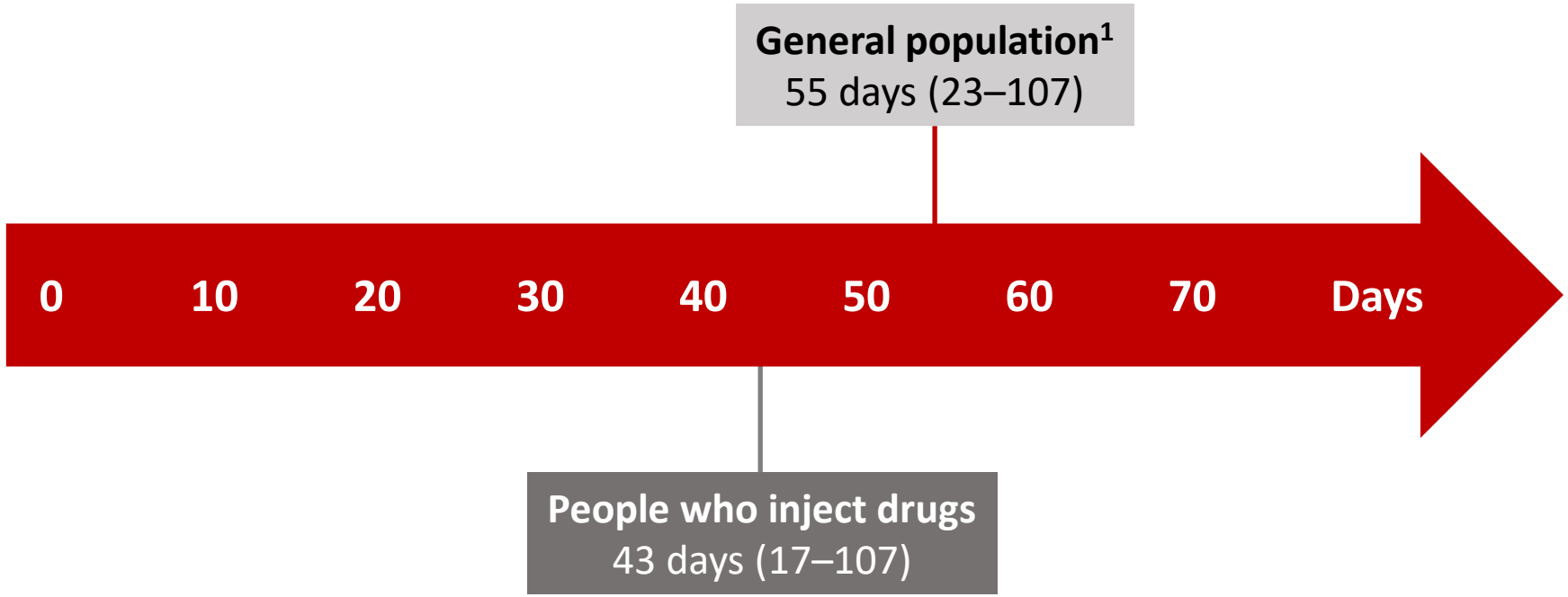
HCC, hepatocellular carcinoma

Baseline characteristics of HCV patients treated with SOF/VEL for 12 weeks

Baseline characteristics	TT population	
	GP[1] (n=937)	PWID (n=241)
Male, n (%)	543 (58)	201 (83)
Mean age, years (SD)	55 (14)	43 (10)
Compensated cirrhosis, n (%)	187 (20)	24 (10)
HCV genotype 3, n (%)	328 (35)	102 (42)

1. Khalili M, et al. AASLD 2020; poster #994

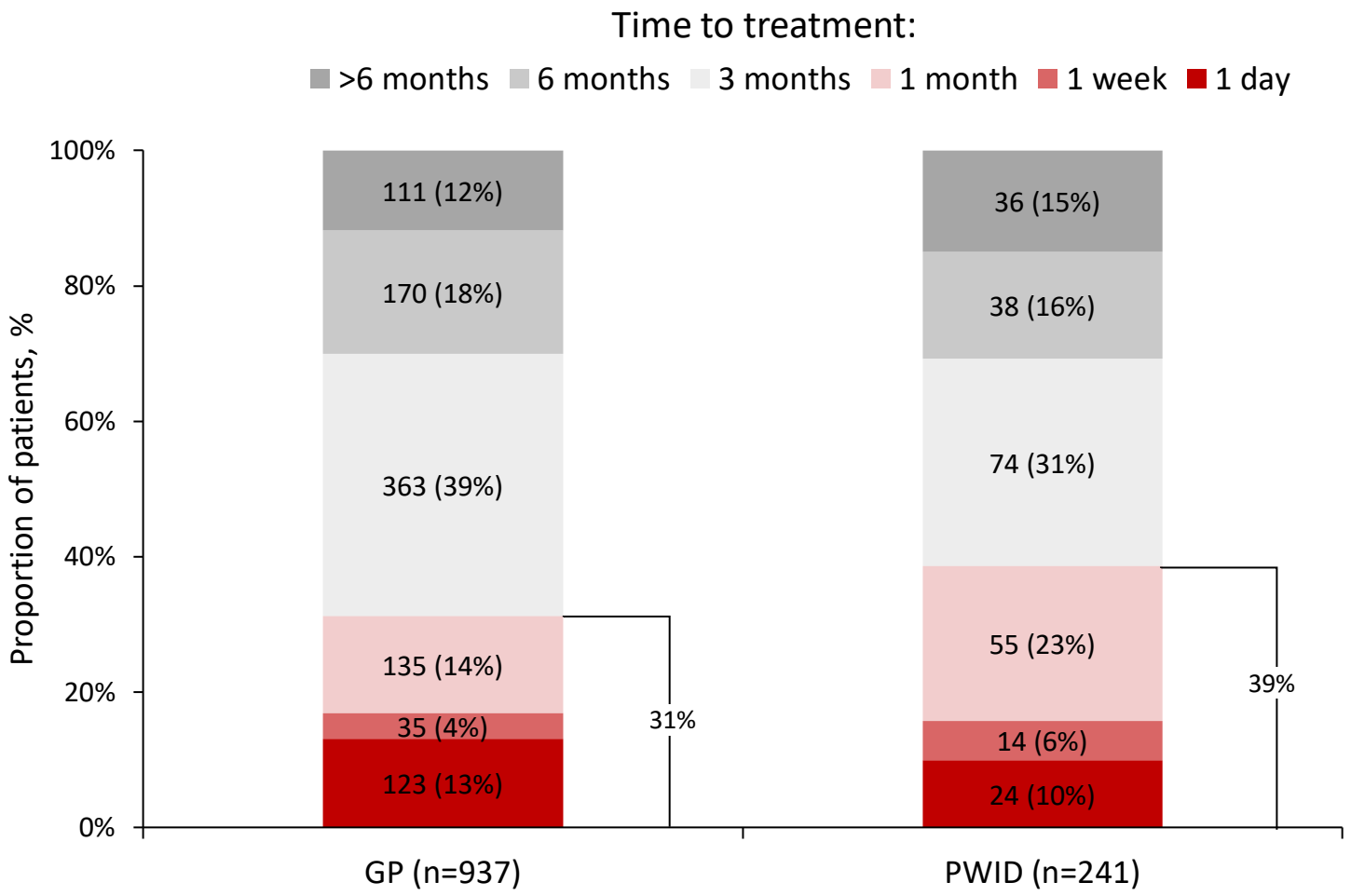
Median TT from HCV diagnosis



Median time [IQR] between HCV RNA diagnosis and start of treatment with SOF/VEL

1. Khalili M, et al. AASLD 2020; poster #994

Time from HCV RNA diagnosis to commencement of SOF/VEL treatment in GP[1*] and PWID



- **31% vs 39%** of GP and PWID, respectively, started treatment **within 1 month**
- **13% vs 10%** GP and PWID patients, respectively, started treatment on the **same day** of diagnosis
- **12% vs 15%** of patients in the GP and PWID populations, respectively, did not start treatment until **more than 6 months** after diagnosis

*GP analysis previously published by Khalili et al[1] but presented here for contextual purposes

1. Khalili M, et al. AASLD 2020; poster #994

Conclusion

- A simple, same-day test-and-treat strategy is feasible in PWID with SOF/VEL
- Ongoing efforts need to be focused on further implementing simplified patient care pathways to allow rapid treatment initiation in active PWID
  - In this real-world analysis, only 31% vs 39% of GP vs active PWID belonging to vulnerable populations, respectively, commenced treatment within 1 month of HCV diagnosis
  - 12% vs 15% of GP vs PWID, respectively, still had not commenced treatment more than 6 months after diagnosis
- The high risk of transmission in active PWID highlights the requirement for simplified patient pathways, with easily accessible, same-day test-and-treat strategies particularly desirable for treating active PWID

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