

Removing prescriber restrictions for opioid agonist therapy can facilitate direct-acting antivirals scale-up in people with opioid use disorders: Results from the ANRS FANTASIO PROJECT

Fabienne MARCELLIN¹, Vincent DI BEO¹, Jessica DELORME², Camelia PROTOPODESCU¹, Philippe MATHURIN³, François BAILLY⁴, Morgane BUREAU¹, Nicolas AUTHIER², Patrizia CARRIERI¹, Benjamin ROLLAND⁵

¹ Aix Marseille Univ, INSERM, IRD, SESSTIM, Sciences Economiques & Sociales de la Santé & Traitement de l'Information Médicale, ISSPAM, Marseille, France.

² CHU Clermont-Ferrand, Neuro-Dol, Service de pharmacologie médicale, Centres addictovigilance et pharmacovigilance, Université Clermont Auvergne, Clermont-Ferrand, France.

³ Service des maladies de l'appareil digestif, CHU Lille, Université de Lille, Lille, France.

⁴ Service d'hépatologie et d'addictologie, Groupe hospitalier Nord, Hôpital de la Croix-Rousse, Lyon, France.

⁵ Service Universitaire d'Addictologie de Lyon (SUAL), CH Le Vinatier, Université de Lyon, Bron, France.



Background: the French national policy against hepatitis C

- Elimination of hepatitis C by 2025 as a public health objective for French authorities
 - « Plan Priorité Prévention » of the French Ministry of Health and Solidarities
- Universal access to direct-acting antivirals (DAA) since 2016
- Removal of hepatitis C treatment prescriber restrictions since May 2019



The FANTASIO projects

Factors associated with **A**ccess to **N**ew **T**herapy with **A**ntiviral drugs for hepatitis C: **S**tructural and **I**ndividual determinants & **O**pportunities for action

- **FANTASIO (2012 – 2016)**

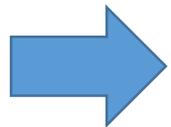
Access to HCV treatment among PWID with chronic HCV infection

- **FANTASIO 2 (2014 – 2021)**

Access to HCV treatment in all HCV-chronic patients & in vulnerable groups

- **Main data source:**

Databases from the French National Health System (SNDS)



Anonymous data on treatment delivery, long-term disease condition (administrative status: ALD), hospitalizations



Study aim

To test whether retention in opioid agonist therapy (OAT) could influence initiation of DAA among PWID with HCV

Methods

- ✓ Chronic HCV infection identified using the SNDS algorithm
- ✓ PWID identified using delivery of OAT (methadone or buprenorphine)
- ✓ Cox proportional hazards model (outcome: first delivery of DAA)
- ✓ Variables tested: **Percentage of time on OAT (no. of days with delivery of OAT/ no. of days of follow-up)**, sex, age, liver disease severity, complementary universal health coverage (CMU-c), alcohol use disorder (AUD)
- ✓ Study period: between 2014 (for individuals HCV-diagnosed before this date) or year of diagnosis and first delivery of DAA or censure (2016)



Results

→ **Study population** : 22,615 untreated HCV-chronic PWID

→ **3,438 (15.2%) initiated DAA during the study period**

Variables	% of individuals or mean (SD)	Univariable models		Multivariable model	
		HR [CI 95%]	<i>p</i>	aHR [CI 95%]	<i>p</i>
Female sex	21.8	0.79 [0.72-0.86]	<0.001	0.82 [0.76-0.90]	<0.001
Age (per 1-year increase)	46.4 (7.3)	1.04 [1.03-1.05]	<0.001	1.03 [1.03-1.04]	<0.001
CMU-c	28.7	0.82 [0.76-0.88]	<0.001	0.91 [0.84-0.98]	0.02
Liver disease severity					
No cirrhosis	95.7	1		1	
Cirrhosis	3.4	4.33 [3.83-4.90]	<0.001	4.01 [3.53-4.56]	<0.001
Liver cancer	0.8	3.78 [2.85-5.03]	<0.001	3.06 [2.29-4.10]	<0.001
Alcohol use disorder (AUD)					
No AUD	80.7	1		1	
Untreated AUD	15.2	1.06 [0.96-1.17]	0.22	0.91 [0.83-1.01]	0.08
Treated AUD	4.1	1.08 [0.91-1.27]	0.37	1.05 [0.89-1.25]	0.55
Percentage of time on OAT (per 10% unit increase)	14.6 (23.3)	1.02 [1.01-1.04]	0.003	1.02 [1.01-1.04]	0.001



Conclusions

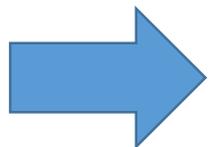
- **Low rate of DAA initiation among PWID with HCV**



National goal of HCV elimination by 2025



- **Need to facilitate entry into care for opioid dependence and to expand DAA prescription in OAT entry points**
- **Need for further research on a longer period of time**



FANTASIO 2 (2014 – 2021)



Acknowledgements

Funding:



Correspondence to: fabienne.marcellin@inserm.fr

