

# Assessing Molecular Point-of-Care Testing and DBS for HCV Screening in PWID: A Pilot Study

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# Disclosure of Interest

**Stéphane Chevaliez**

## **FINANCIAL DISCLOSURES**

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# Background

- **Injecting drug use is a major of hepatitis C virus (HCV) spread worldwide**
  - Prevalence of active infection in PWID was estimated to be 40% in Western Europe and 48% in France
- **International clinical guidelines recommend DAA treatment for all patients with hepatitis C infection**
  - PWID receiving or not opioid agonist therapy and undergoing DDA regimens achieve cure
- **Recent developments including rapid point-of care HCV RNA and DBS for blood collection provide promise in the diagnostic field**

# Objectives

- **The aims of the present study were to assess the feasibility and acceptability of the on-site POC capillary whole blood collection for HCV RNA detection and fingerstick DBS testing in social-medical risk-reduction centers and to describe the cascade of care among PWID in Paris**

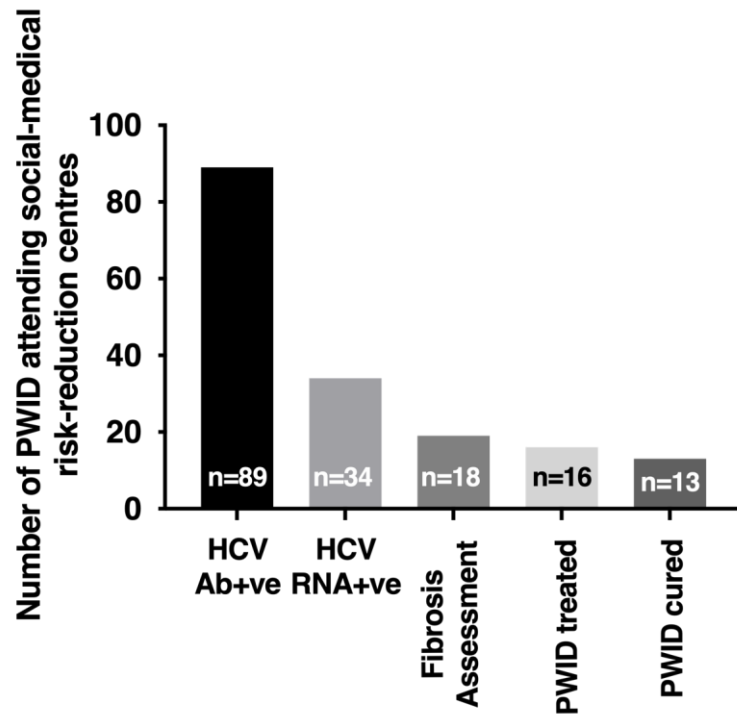
# Characteristics of the Study Participants

	N=89
<b>Age</b> , years [median (range)]	39 (21-62)
<b>Male sex</b> [n (%)]	80 (89.9)
<b>Positive HCV RNA</b> [n (%)] (n=88)	34 (38.6)
<b>HCV genotype</b> [n (%)] (n=22)	
1a	10 (45.4)
1b	3 (13.6)
3a	8 (36.4)
4a	1 (4.6)
<b>Distribution of fibrosis stage according to LSM</b> [n (%)] (n=53)	
Moderate fibrosis	8 (14.8)
Severe fibrosis	4 (7.4)
Cirrhosis	6 (11.1)
<b>Prior HCV treatment</b> [n (%)] (n=53)	28 (52.8)
<b>HBsAg positive</b> [n (%)] (n=46)	3 (6.5)
<b>HIV infection</b> [n (%)] (n=87)	2 (2.3)

# HCV RNA Screening Using Fingerstick POC HCV RNA Testing or DBS Sampling

- **Among 89 participants enrolled, ALL had a fingerstick whole blood sample available**
  - 82 had POC HCV RNA testing using Xpert HCV Viral Load Fingerstick
  - 83 had DBS sampling
- **HCV RNA was detected in 30 and 27 HCV-seropositive PWID by Xpert HCV Viral Load Fingerstick and DBS sampling**
  - HCV RNA was not detected in 3 patients from whole blood collected on DBS

# Hepatitis C Virus Cascade of Care



# Reasons for the Absence of Starting Antiviral Treatment

	No. Of Patients (n=18)
Lost of follow-up	13
Death	1
Return to the country of origin	2
Lack of health insurance coverage	1
Denial of antiviral therapy	1



# Summary

- **This study shows that fingerstick whole blood RNA testing is feasible among PWID in France**
- **The rate of invalid results using rapid molecular POC for HCV RNA detection was below 10%**
- **The screening strategy based on the detection of HCV RNA from DBS sample is useful with a high degree concordance compared to molecular POC HCV RNA testing**
- **A large proportion of PWID who were eligible for antiviral treatment were lost of follow-up, highlighting for the removal of prescriber-type restrictions for DAA therapies**