

Eradicate Hep C:

High re-infection rates among PWIDs treated successfully for hepatitis C in a community needle and syringe programme

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Conflict of interest



BS acknowledges honoraria for lectures from Abbvie, MSD and Gilead

SH acknowledges honoraria for presentation from Gilead.

PV acknowledges honoraria for meetings and conferences from Gilead, MSD, Abbvie.

MH acknowledges honoraria for meetings and conferences from Gilead, MSD, Abbvie.

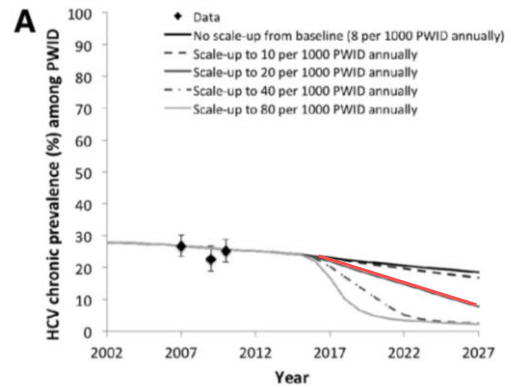
JFD has grant/research support from AbbVie, Bristol-Myers Squibb, Boehringer Ingelheim, Gilead Sciences, GlaxoSmithKline, Janssen, Merck Sharp & Dohme, Roche and received speakers honoraria from AbbVie, Bristol-Myers Squibb, Boehringer Ingelheim, Gilead Sciences, GlaxoSmithKline, Janssen, Merck Sharp & Dohme, Roche.

What was the study rationale?



- Testing ‘**Treatment as prevention**’
- Inclusion criteria- **injected in past week**.

Figure 2



(A) Edinburgh

1. Martin NK, Vickerman P, Grebely J, Hellard M, Hutchinson SJ, Lima VD et al. Hepatitis C virus treatment for prevention among people who inject drugs: Modeling treatment scale-up in the age of direct-acting antivirals. *Hepatology*. 2013 Nov;58(5):1598-609.

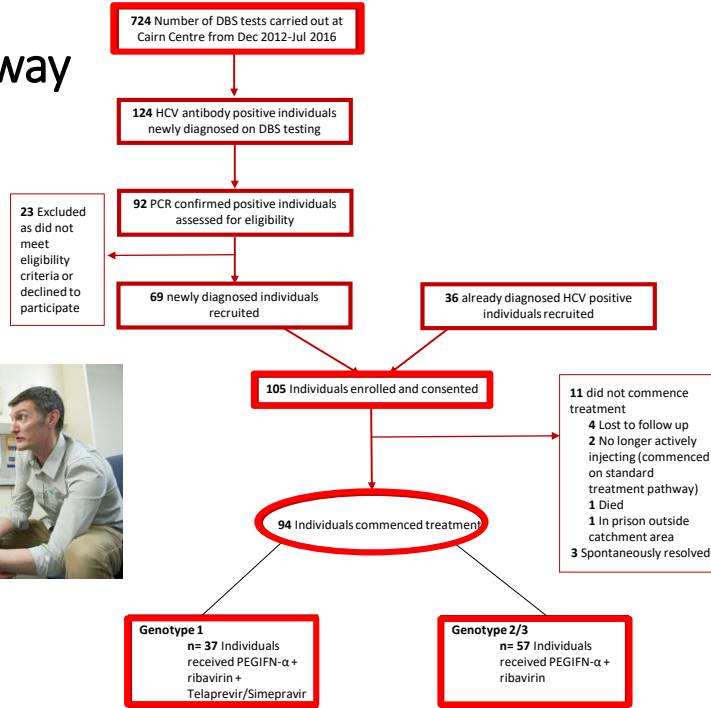
Study aims



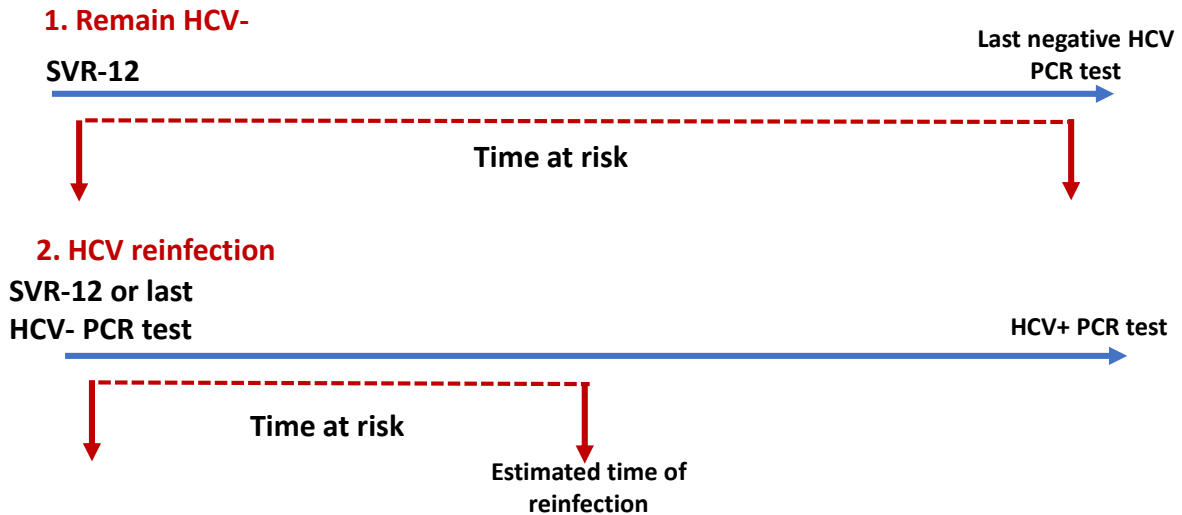
1. Can 100 HCV+ **highly** active PWIDs be successfully recruited and treated for HCV through a NSP?

2. What are rates of **reinfection**?

Study pathway



Calculating reinfection



- Exclusions: 'Did not achieve SVR-12' or died prior to 6-month follow-up

Key Results



Demographics

- Mean age 34 years, 71% male.
- 94% unemployed
- 1/5 homeless/unstable housing, 12.8 % in prison during study
- 18% significant fibrosis (F2-F4)



Injecting practices

- Inject median 6.5 times/week
- 54.3% inject \geq day

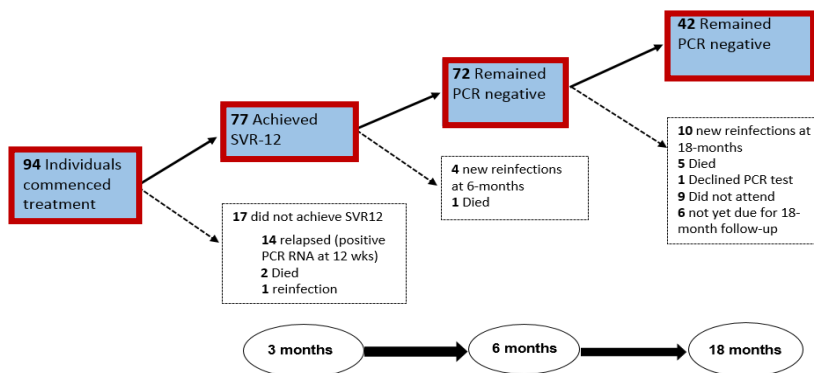


Harm reduction

- 82% had 100% NSP coverage
- 63% on OST prior to enrolment



Key study outcomes



1. SVR-12: **82%** (77/94)
2. \geq 80% Treatment adherence: **71.3%** (67/94)

Reinfection rate



6-month reinfection rate: **23.53/100 p-yrs** (95% CI 9.80-56.54) (5/77 participants). Total follow-up time 21.25 p-yrs.

18-month reinfection rate: **21.5/100 p-yrs** (95% CI 13.00-35.65)(15/77 participants). Total follow up time 69.79 p-yrs.

18-month mortality rate: 5.55/100 p-yrs (95% CI 2.77-11.09) (8/94). Total follow up time 144.24 p-yrs.

Why are reinfection rates so high?



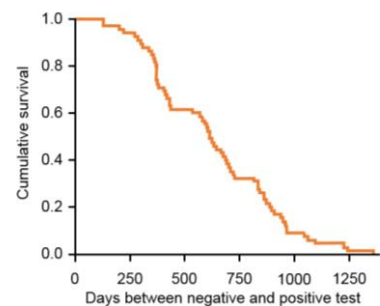
- Current estimates among PWIDs:
 - 2 Meta-analyses: pooled re-infection rate: **1.77/100pyrs** to **2.4/100pyrs** (Simmons 2016, Aspinall 2013).
 - **4.9/100 pyrs**- relapsed PWID (Midgard 2016)
 - **5.7/100 pyrs**- individuals hospitalised for drug-related cause (Weir 2016).

- **But...different study population**

Previous studies define 'active' = injected last 6-12 months

(Grebely 2016, Newman 2013, Weir 2016, Islam 2017, Midgard 2016, Dalgard 2002, Greebly 2010, Marco 2013)

- (or 3-months- Hilsden 2013).



Implications?



- This is a **high risk** population
- No **behaviour change** following treatment?
- **NSP** and **OST** not enough?
- Treating the reinfections

Conclusions



- Successful **pathway of care** for 'hard to reach' population
- High **reinfection rate**

Acknowledgements



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Thank you to study staff and participants.

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Questions?

