ACTIVATE

Kirby Institute | UNSW

Changes in risk behaviours during and following treatment for hepatitis C virus infection among people who inject drugs: The ACTIVATE Study

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Akershus universitetssykehus

UiO : University of Oslo

Disclosures

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Background

- The potential risk of HCV reinfection due to continued injecting risk behaviours is of considerable interest
- Concern has been raised that side effects of interferon-based treatment could promote injecting risk behaviours
- Interaction with health care providers could enhance patient empowerment and lead to behavioural change
- There is very limited data on the relationship between HCV treatment and risk behaviours

3

Aims of the study

Primary aim

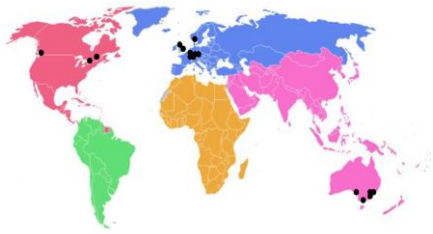
To evaluate changes in recent (past month) injecting drug use during and following HCV treatment among participants enrolled in the ACTIVATE study

Secondary aims

To evaluate changes in recent (past month) injecting risk behaviours, non-injecting drug use, hazardous alcohol use and opioid substitution treatment

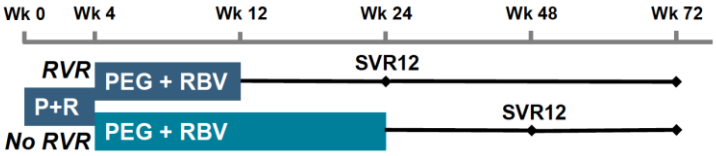
4

ACTIVATE: Participants and study design



Inclusion criteria

- Chronic HCV GT2/3 treatment naïve
- Active injection drug use (within 24 weeks prior to enrolment) or currently receiving OST
- Compensated liver disease
- 93 participants included
- 17 sites, 7 countries



5

Assessments and outcomes

Self-administered questionnaire

- Enrolment, baseline, on-treatment, 12 and 24 wks of post-treatment follow-up
- Socio-demographics, drug and alcohol use, injecting risk behaviours

Study outcomes

1. Injecting drug use
2. Daily injecting drug use
3. Use of non-sterile needles
4. Injecting paraphernalia sharing
5. Non-injecting drug use
6. Hazardous alcohol use
7. Opioid substitution treatment

Study outcomes measured longitudinally at each study visit

Generalized Estimating Equations used to evaluate impact of time in study

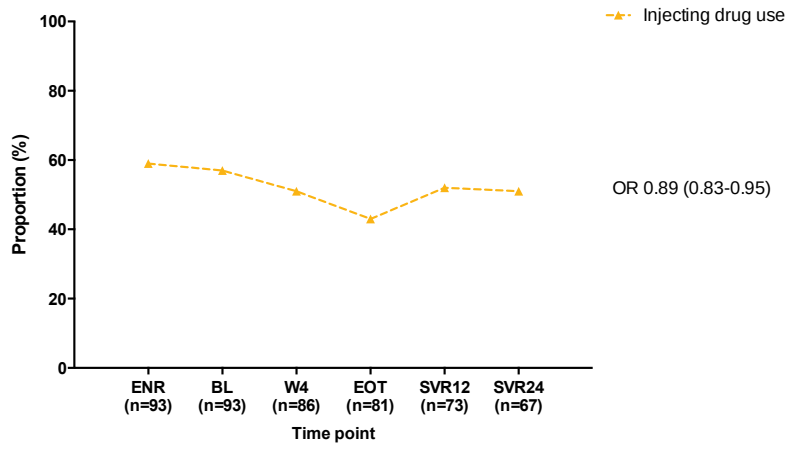
6

Characteristics at enrolment (n=93)

Age, median (IQR)	41 (35-50)
Male sex, n (%)	77 (83)
High school or higher education, n (%)	62 (69)
Stable housing, n (%)	71 (76)
Part- or full time employment, n (%)	14 (15)
History of imprisonment, n (%)	66 (71)
OST past month, n (%)	66 (71)
Injecting drug use past month, n (%)	55 (59)
Hazardous alcohol use past month, n (%)	15 (17)

7

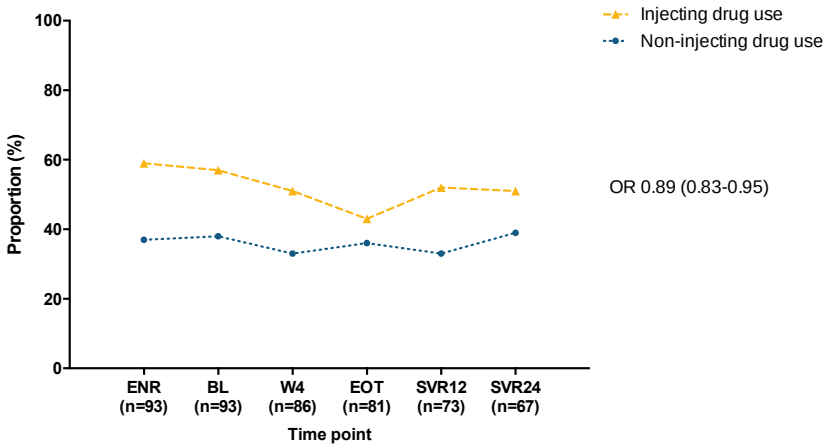
Results: Injecting drug use



ENR, enrolment; BL, baseline; W4, treatment week 4; EOT, end of treatment;
SVR12,12 weeks post-treatment follow-up; SVR24, 24 weeks post-treatment follow-up.

8

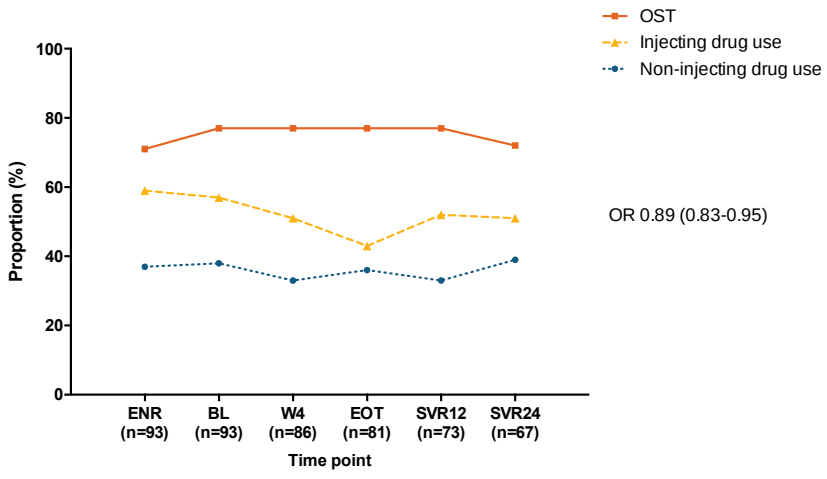
Results: Non-injecting drug use



ENR, enrolment; BL, baseline; W4, treatment week 4; EOT, end of treatment; SVR12,12 weeks post-treatment follow-up; SVR24, 24 weeks post-treatment follow-up.

9

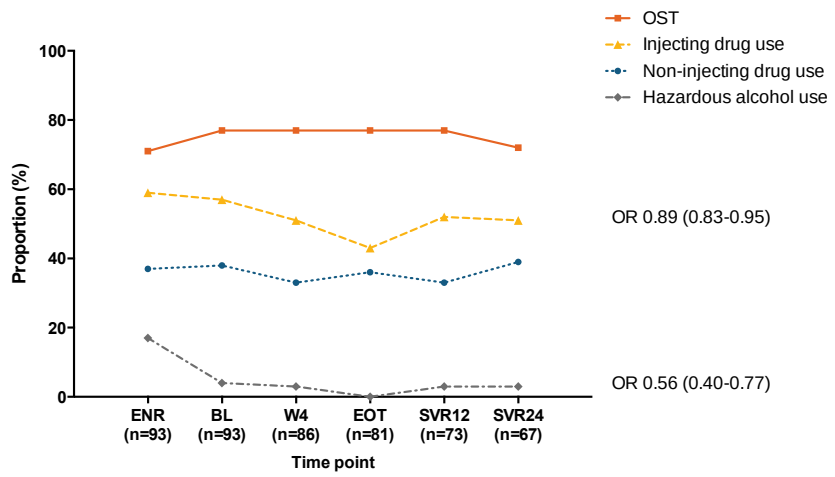
Results: Opioid substitution treatment



ENR, enrolment; BL, baseline; W4, treatment week 4; EOT, end of treatment; SVR12,12 weeks post-treatment follow-up; SVR24, 24 weeks post-treatment follow-up.

10

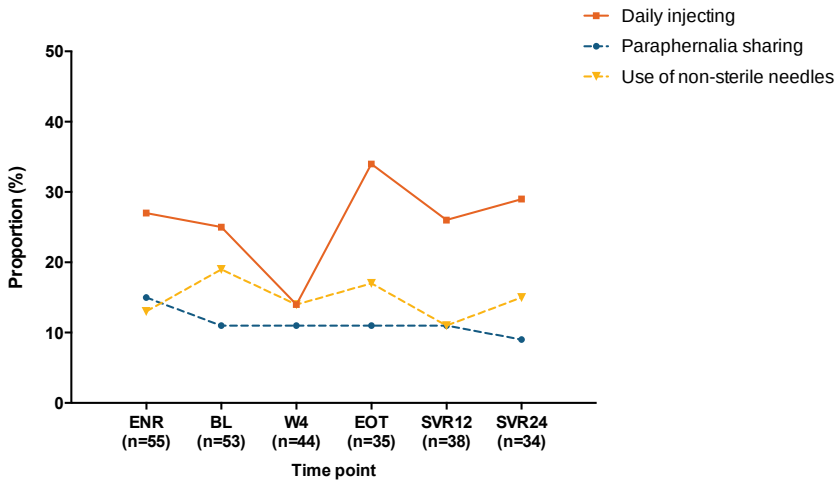
Results: Hazardous alcohol use



ENR, enrolment; BL, baseline; W4, treatment week 4; EOT, end of treatment; SVR12,12 weeks post-treatment follow-up; SVR24, 24 weeks post-treatment follow-up.

11

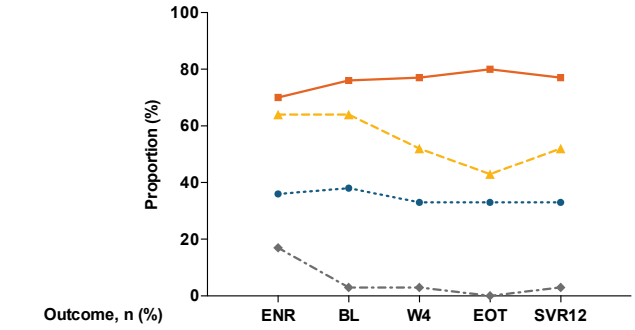
Results: Injecting risk behaviours



ENR, enrolment; BL, baseline; W4, treatment week 4; EOT, end of treatment; SVR12,12 weeks post-treatment follow-up; SVR24, 24 weeks post-treatment follow-up.

12

Results among individuals who remained in 12 weeks of follow-up (n=73)



Outcome, n (%)	ENR	BL	W4	EOT	SVR12
OST	51 (70)	54 (76)	56 (77)	57 (80)	56 (77)
Injecting drug use	47 (64)	47 (64)	38 (52)	31 (43)	38 (52)
Non-injecting drug use	26 (36)	28 (38)	24 (33)	24 (33)	24 (33)
Hazardous alcohol use	12 (17)	2 (3)	2 (3)	0 (0)	2 (3)

ENR, enrolment; BL, baseline; W4, treatment week 4; EOT, end of treatment; SVR12,12 weeks post-treatment follow-up.

13

Associated factors

- Injecting drug use not associated with any baseline factor
- Sharing of injecting paraphernalia associated with poorer social functioning at baseline
  - OR 1.14 per increase in SF score; 95% CI 1.06-1.23
- OST associated with stable housing at enrolment
  - OR 2.80; 95% CI 1.09-7.29
- Hazardous alcohol use not associated with any baseline factor

14

Conclusions

- Among PWID with ongoing injecting drug use or receiving OST
  - Injecting drug use and hazardous alcohol use decreased throughout treatment and follow-up
  - OST increased during treatment
  - Daily injecting, use of non-sterile needles and sharing of injecting paraphernalia remained stable
- These encouraging findings raise the hypothesis that engagement in HCV treatment may lead to health-promoting behavioural change
  - Could reduce the risk of HCV transmission
  - Could prevent liver disease progression
- Although derived from IFN-based therapy, these data support further expansion of HCV care among people with ongoing risk behaviour

15

Acknowledgements

Project Steering Committee

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- **Ms Pip Marks,** Kirby Institute, UNSW Australia
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