# Re

## SCIENCE SPOTLIGHT™

# Reinfection with HCV in MSM in Germany - Results from the German NoCo cohort

## **Christoph Boesecke**

Bonn University Hospital Bonn Cormonic





# Introduction



### Background:

- Reinfection with the hepatitis C virus (HCV) after cure has been identified as a major challenge for HCV micro-elimination targets in high-risk groups
- In men who have sex with men (MSM), even multiple HCV reinfections have been described, and a specific risk behavior pattern may have a significant impact on management and prevention

### Study objective:

To assess factors associated with HCV reinfection(s) among MSM in Germany



# Results



Figure 1. # of HCV episodes per case (n= 222)

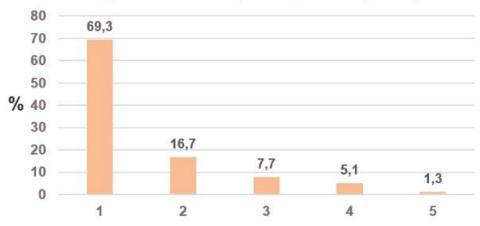


Table 1. Outcome of previous HCV infection

	No	Yes	Total
CUREHCV			
Spontaneous clearance	0 (NaN%)	12 (15.38%)	12 (15.38%)
SVR with DAAs	0 (NaN%)	37 (47.44%)	37 (47.44%)
SVR with PEG/RBV	0 (NaN%)	26 (33.33%)	26 (33.33%)
unknown	0 (NaN%)	3 (3.85%)	3 (3.85%)
Total	0 (NaN%)	78 (100%)	78 (100%)

Table 2. Reinfection incidence rate

Nevent	PersonYears	Incidence/100PersonYear	CI.Lower	CI.Upper
98	513	19.087	15.496	23.261

Table 3. Univariate analysis

	OR	OR.Lower	OR.Upper	P
AGE	1.0487	1.0178	1.0805	0.002

	OR	OR.Lower	OR.Upper	Р
HIVCOYes	5.4876	1.229	24.5022	0.026

	OR	OR.Lower	OR.Upper	Р
DRUGTYPECMU	1.8333	0.3667	9.1663	0.460
DRUGTYPECMY*	6.6000	1.2291	35.4394	0.028

	OR	OR.Lower	OR.Upper	Р
m 110 m 1 11 m 10 m 10	1.3714	0.3528	5.3305	0.648
DRUGTYPEKETY*	6.0000	0.8591	41.9030	0.071

### Main findings:

- Compared to patients with primary HCV infection, reinfection cases were older, more often coinfe
  declared more often the use of crystal methamphetamine and had a trend towards declared ketar
- Compared to patients with a single HCV reinfection patients with multiple reinfections were not significantly with regards to demographics, STD history, mode of HCV transmission, or substance use.



# Methods





- The German NoCo cohort consists of patients from six German HIV and hepatitis treatment sites providing care for more than 8,000 HIV-positive MSM and serving as primary care providers for HIV-negative MSM and HIV preexposure prophylaxis (PrEP) sites
- Virologic data, HCV treatment data, risk factors, and behavior as well as liver disease status are assessed regularly
- In this analysis, patients who were diagnosed with recently acquired HCV reinfection since 2014 were evaluated as a subgroup and compared to patients with a single HCV infection

# Conclusion



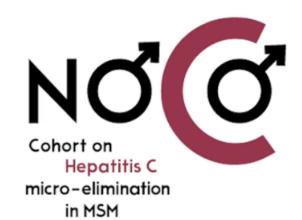
- In the German NoCo cohort, HCV reinfection is frequent, especially in an aging HIV coinfected population with methamphetamine use
- The role of recreational ketamine in this setting needs further study, as well as the (so far) infrequent detection of HCV reinfection in the HIV-negative MSM population
- No specific behaviour pattern could be identified for patients with multiple HCV reinfections

# Acknowledgements

### Coauthors:

Knud C. Schewe, Thomas Lutz, Stefan Mauss, Stefan Christensen, Sonia Jain, Feng He, Michael Sabranski, Stephan Grunwald, Markus Bickel, Natasha K. Martin, Jürgen K. Rockstroh, Patrick Ingiliz

- Special thanks to all cohort participants as well as study nurses and physicians at the participating centres
- The NoCo Cohort has been funded by Gilead Sciences (Project No. IN-DE-987-4637)



ZIBP Berlin: Axel Baumgarten, Ivanka Krznaric, Nicole Gersbacher-Runge

University of Bonn:

ICH Hamburg: Susanne Heesch, Michael Sabranski

CIM Münster: Sabine Offermann

HIV Center Düsseldorf: Florian Berger

Infektiologikum Frankfurt: Markus Bickel, Annette Haas University of Freiburg: Maike Hofmann, Robert Thimme

Institute for Genetics Kaiserslautern: Martin Däumer, Alexander Thielen

LSHTM: Axel J. Schmidt, Peter Weatherburn

UCSD: Sonia Jain, Feng He



