

# Swiss Hepatitis C Symposium 2018

## **MSM: micro-elimination – a promising approach to ending hepatitis C**

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# Disclosures

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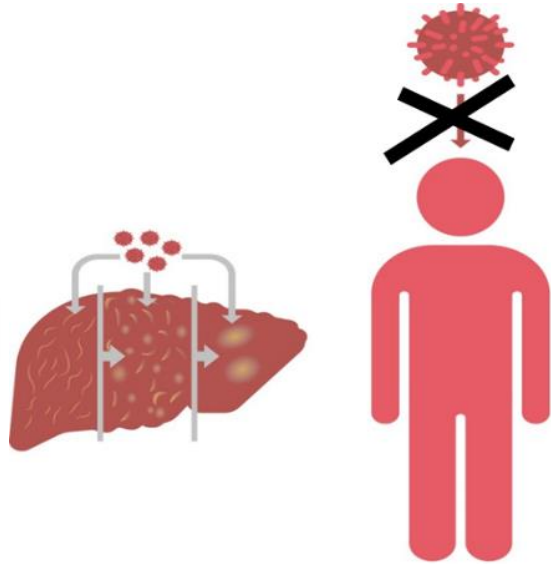
# Micro-elimination

## A path to global elimination of hepatitis C

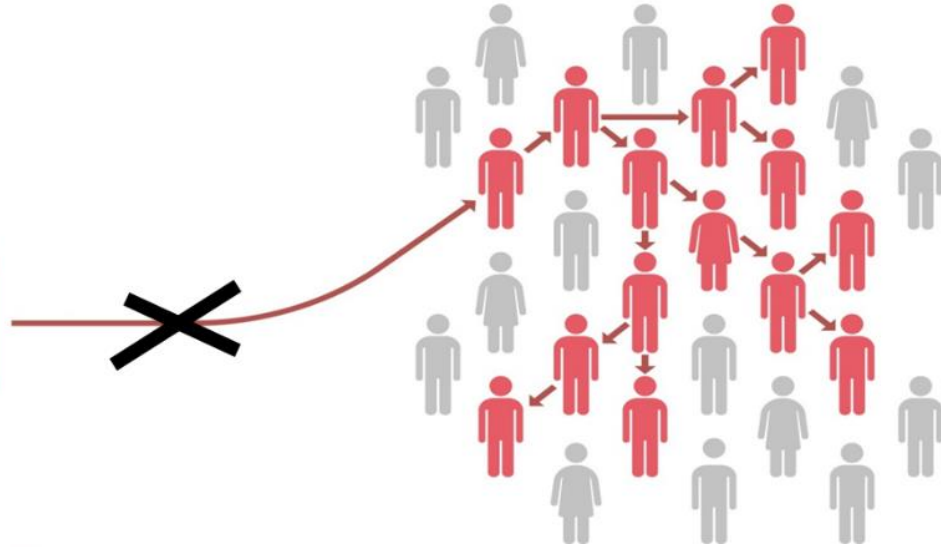
- Global strategy on viral hepatitis elimination released by WHO in May 2016.
- Elimination defined as **90% reduction in new HCV infections** and 65% reduction in HCV mortality by 2030.
- Micro-elimination of HCV infection from defined populations proposed as a strategy to assist the WHO goals
  - MSM, prisoners, hemophilic patients
  - Baby boomer generation
  - Geographic areas

# From eradication to elimination

**Goal: Eradication**



**Goal: Elimination**



# HCV epidemic among HIV-diagnosed MSM

## HCV incidence in HIV positive Swiss MSM

- 18-fold increase since 2002<sup>1</sup>
- Strong decrease in IDU's

## HCV in HIV negative Swiss MSM

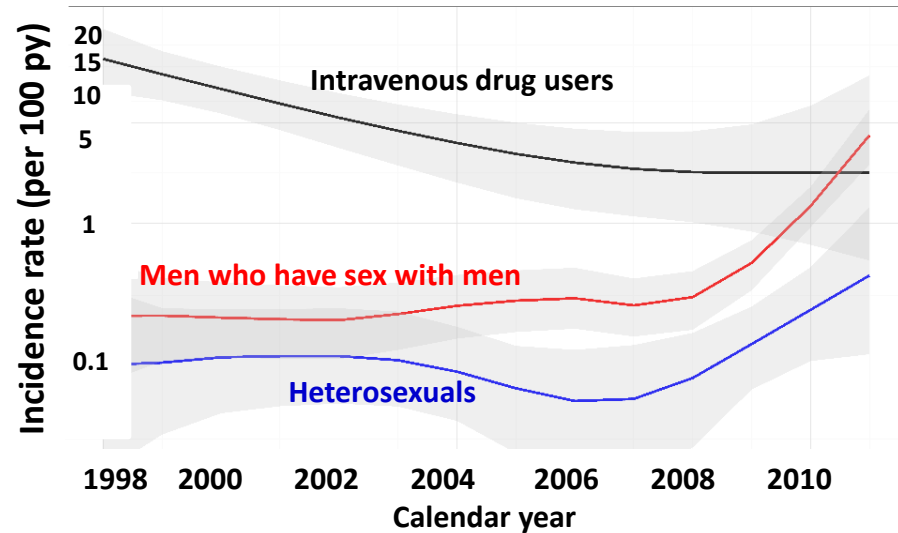
- HCV prevalence (0.32%) similar to general population<sup>2</sup>

## Reaching WHO elimination targets by 2030<sup>3</sup>

- Early Identification and treatment of potential HCV transmitters

## Aim of the Swiss HCVree Trial

To test the feasibility of a HCV micro-elimination approach among HIV/HCV + MSM

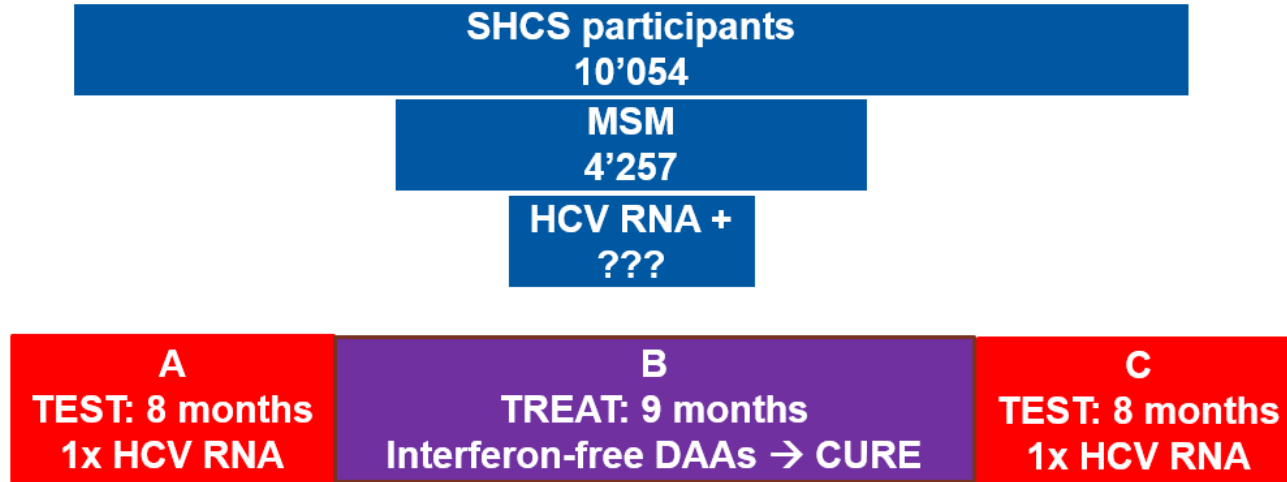


<sup>1</sup>Wandeler G et al, Clin Infect Dis 2012;55:1408-16

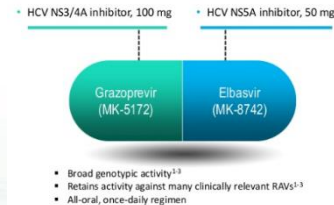
<sup>2</sup>Schmidt AJ et al, BMC Public Health 2014;14:3

<sup>3</sup>[www.who.int/hepatitis/publications/global-hepatitis-report2017](http://www.who.int/hepatitis/publications/global-hepatitis-report2017)

# The Swiss HCVfree Trial: Micro-elimination among HIV-diagnosed MSM



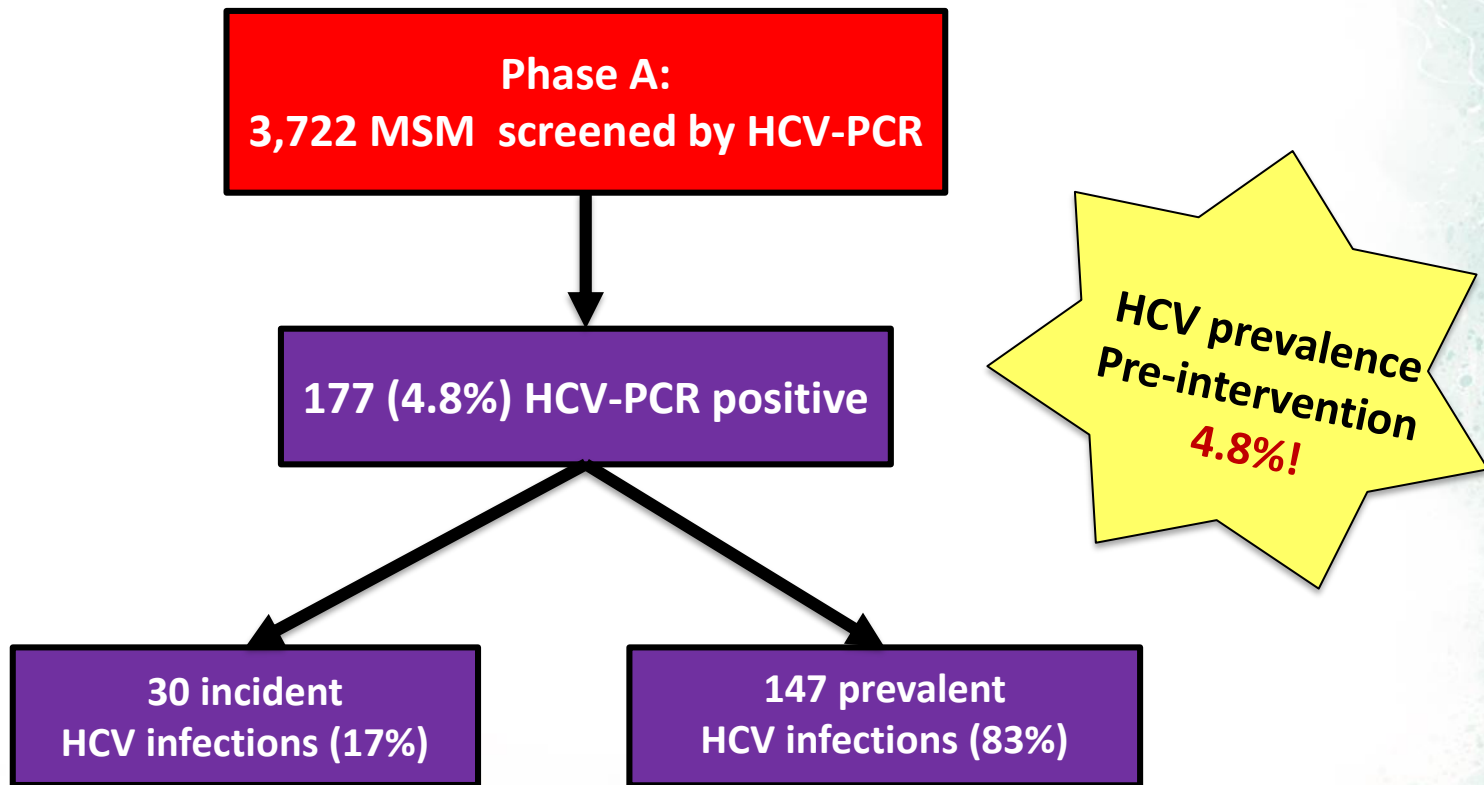
**SWISS**  
**HC** ✓ **free**  
**TRIAL**



+ Behavior  
Intervention

# Phase A

## Systematic population-based HCV screening



# DAA treatment not reimbursed for majority of HCV-infected MSM

	N=122
Age, median, in years	46.7 (27-68)
Fibrosis stage at baseline (Fibroscan®)	
Metavir F0-F1	95 (78)
Metavir F2	15 (12)
Metavir F3	4 (3)
Metavir F 4	4 (3)
Missing data	5 (4)
Time since HCV diagnosis, months	36 (2-273)

DAA treatment reimbursed by health insurances for individuals with fibrosis METAVIR  $\geq 2$



# Phase B

## Universal DAA treatment

### Treatment with DAA during phase B

- Grazoprevir/elbasvir provided by Merck, Sharp & Dohme
- Standard of care DAA for participants with contraindication to grazoprevir/elbasvir

Treatment	N (%)	SVR 12 rate
Grazoprevir/elbasvir	122 (69)	99%
Standard of care DAA	39 (22)	100%



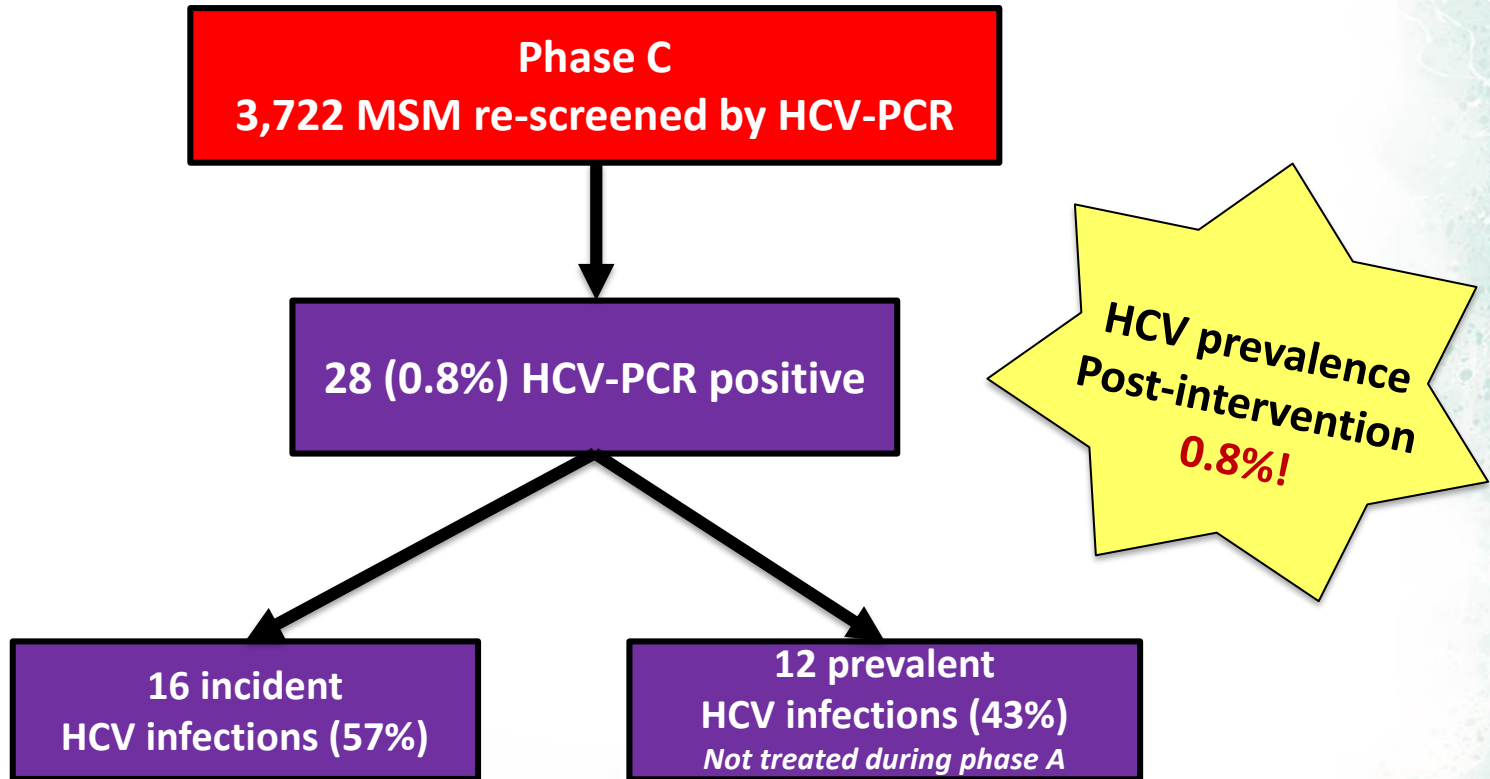
# Phase B: Behavioral counseling intervention

- For MSM reporting condomless sex with non-steady partners
- 4 sessions
- Provided by trained counselors
- Supported by E-health tool
- 71% of MSM completed all sessions



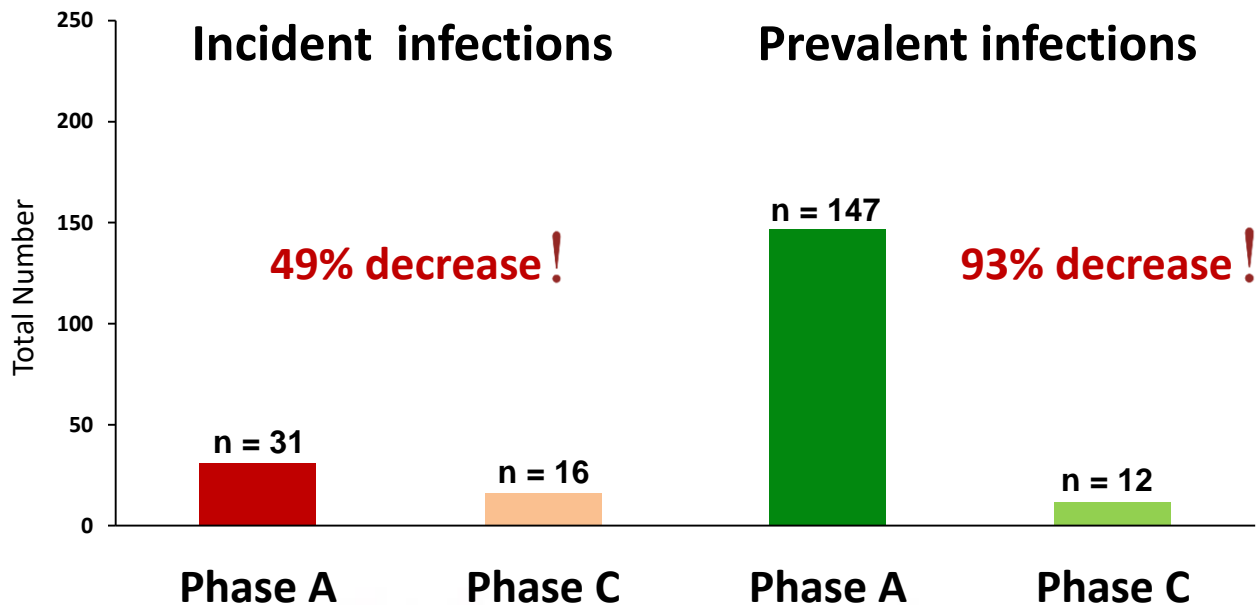
# Phase C

## HCV-PCR based re-screen of all MSM



# 49% reduction in incident HCV infections

## 93% reduction in prevalent infections



# Conclusions

- Systematic population-based HCV-PCR screening identified high number of potential HCV transmitters
- HCV prevalence declined from 4.8% to 0.8%
- Incident and prevalent HCV infections declined by 49% and 93%, respectively
- **Proposed model to reach WHO elimination targets**
- **Substantial number of incident infections acquired within international transmission networks → joint global efforts needed**

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