

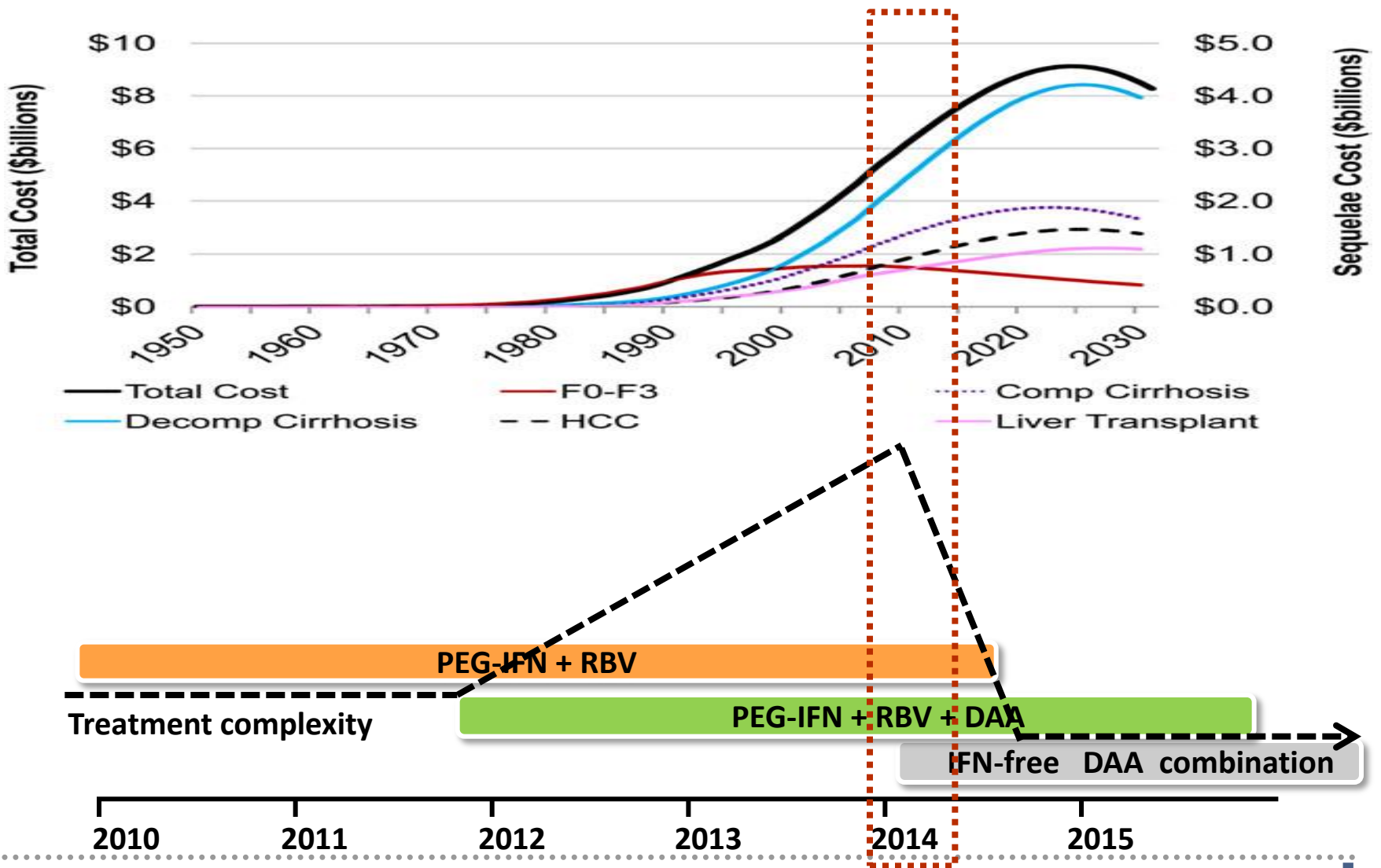
Prevention, treatment and care of hepatitis C among people who inject drugs

**UNODC Scientific Event
Science Addressing Drugs And Health:
State of the Art
11 March 2014, Vienna, Austria**

Philip Bruggmann, Arud Centres for Addiction Medicine, Switzerland

Jason Grebely, Kirby Institute, University of New Southwales, Australia

Hepatitis C: why act now?



TRANSMISSION
EPIDEMIOLOGY
PREVENTION
TREATMENT
BARRIERS
CONCLUSION

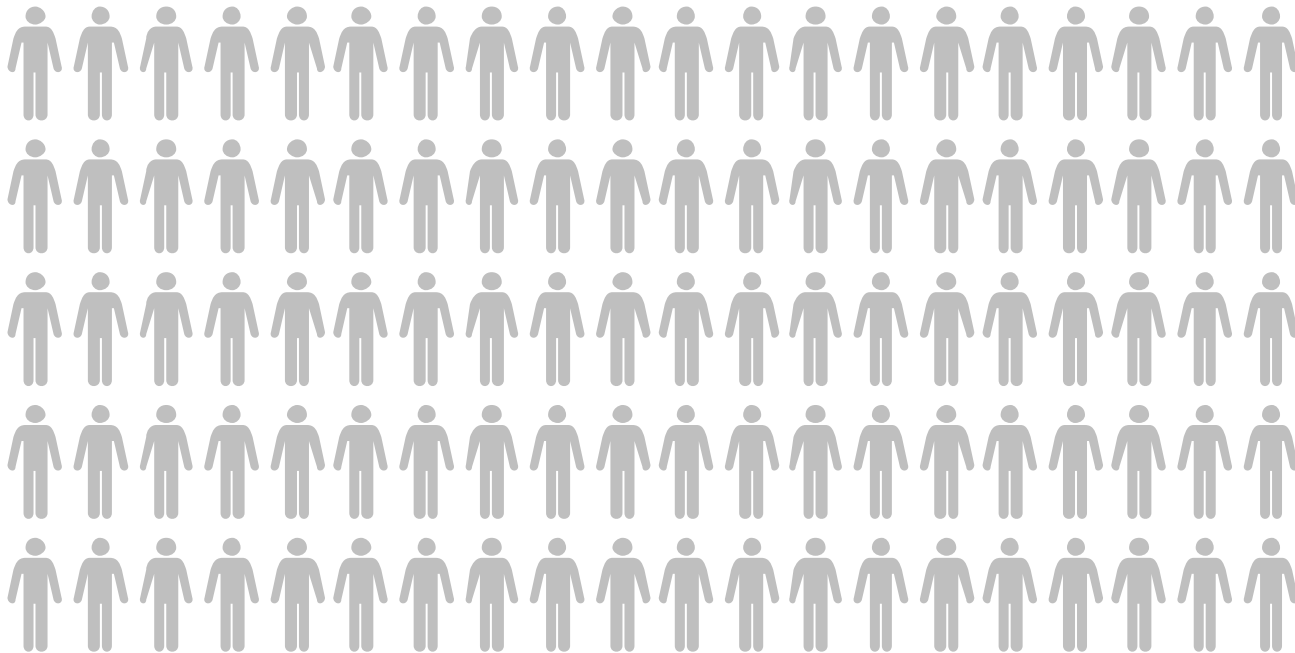
Transmission of HCV

Hepatitis C: blood borne virus

- Transmission via blood to blood contacts
 - ↳ transfusion of blood products
 - ↳ medical procedures
 - ↳ sharing equipment for preparing injection drugs
 - ↳ others: tattoos, piercings, sniffed drugs, sexual

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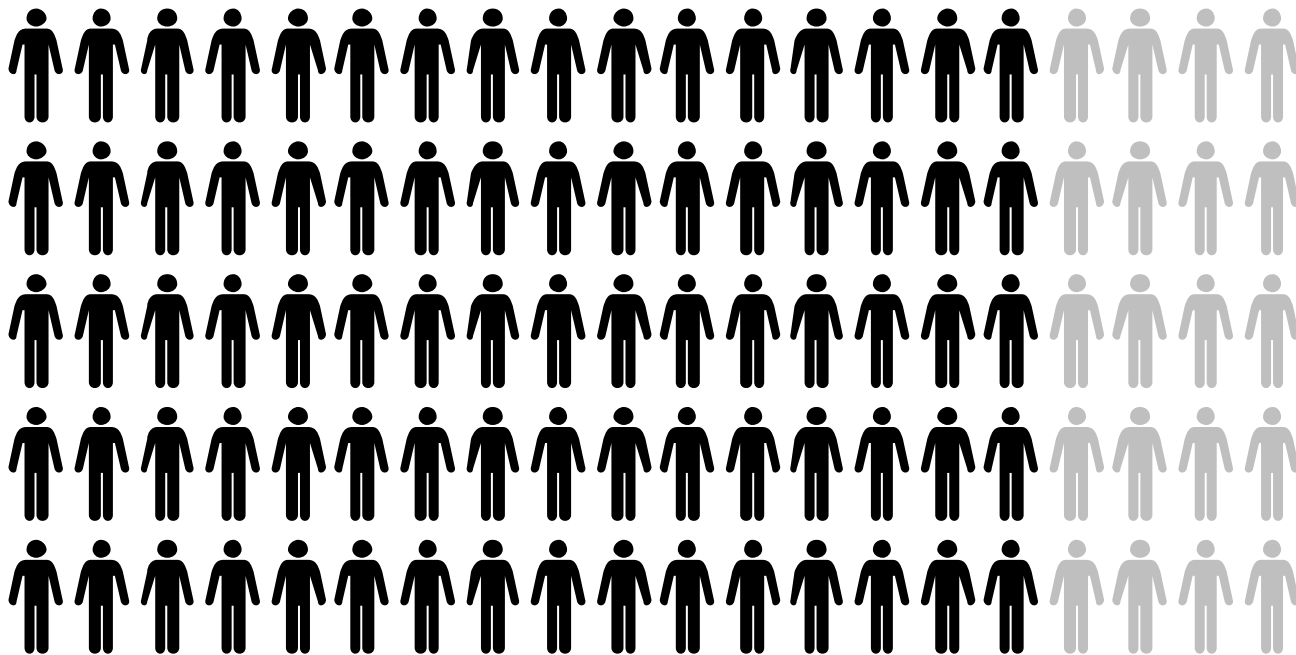
PWID are at the core of the HCV epidemic



PEOPLE LIVING WITH HCV INFECTION

PWID are at the core of the HCV epidemic

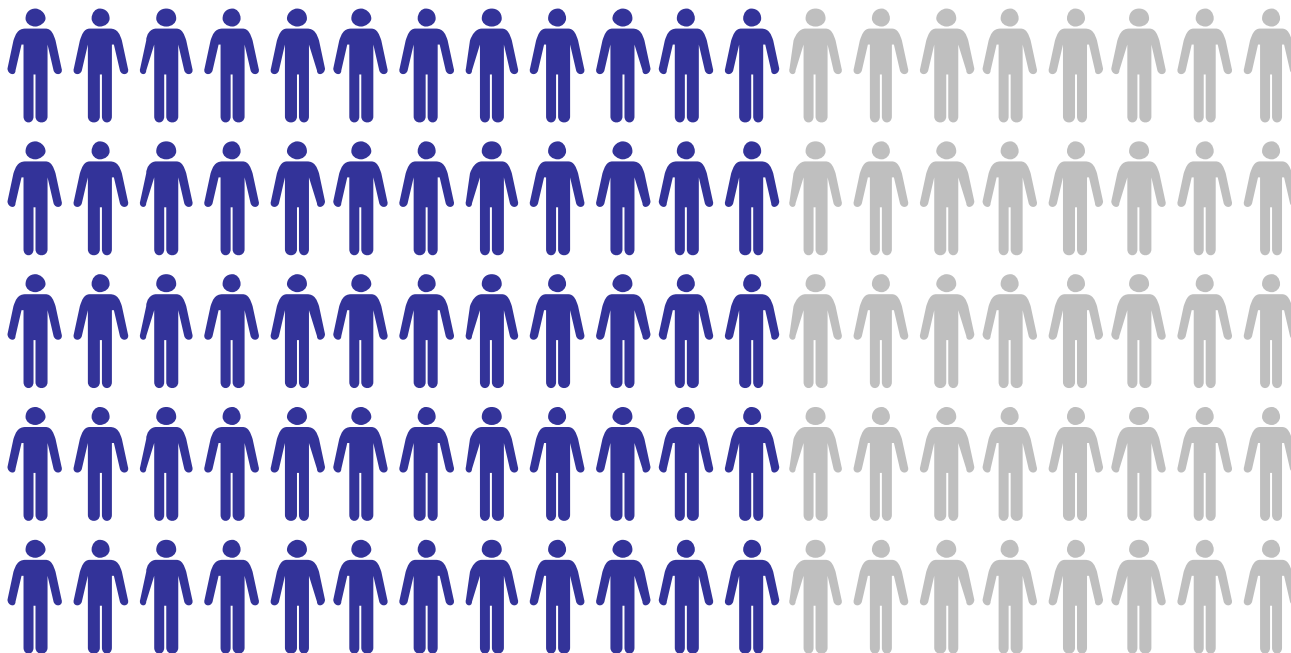
80% OF NEW INFECTIONS OCCUR
AMONG CURRENT PWID



PEOPLE LIVING WITH HCV INFECTION

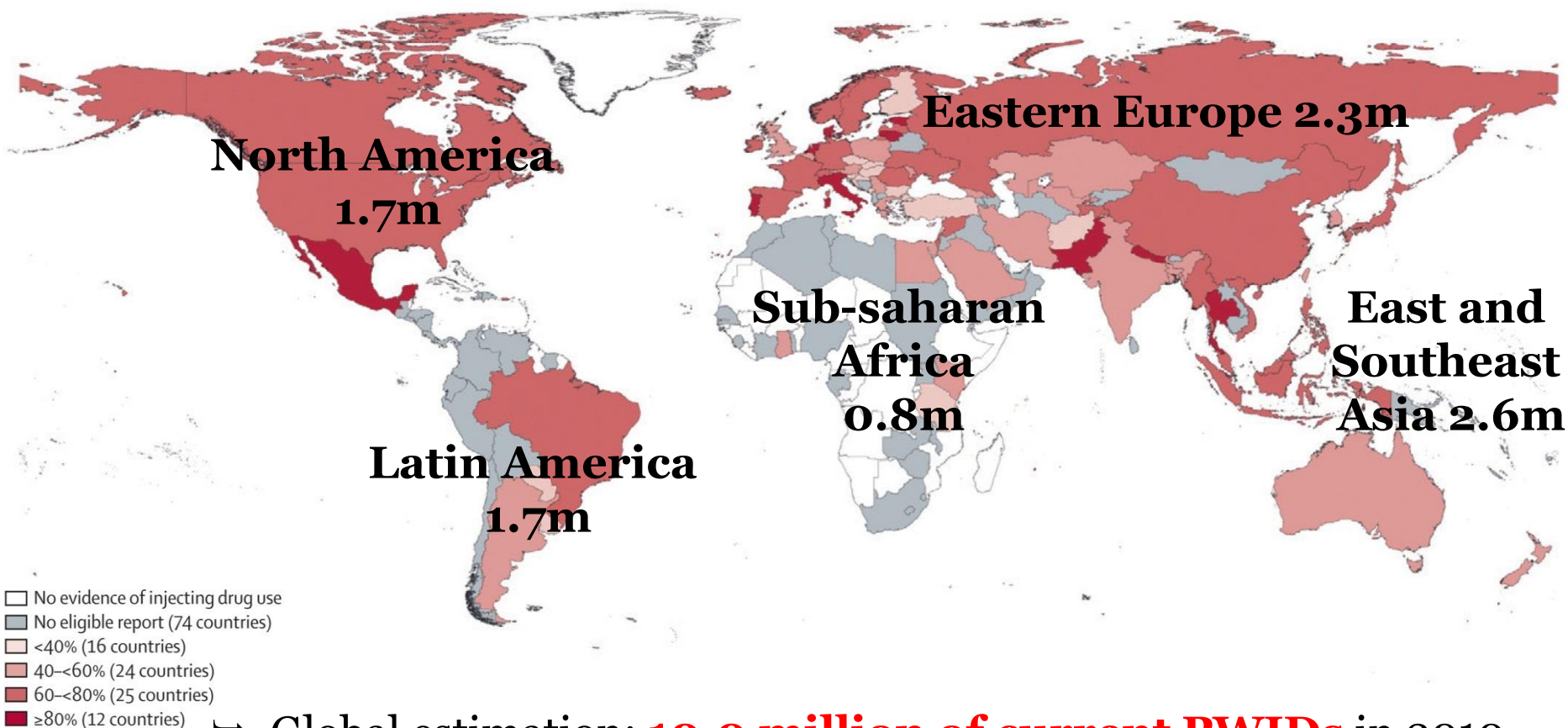
PWID are at the core of the HCV epidemic

60% OF EXISTING INFECTIONS ARE
AMONG CURRENT & FORMER PWID



PEOPLE LIVING WITH HCV INFECTION

HCV is a major public health problem among PWID



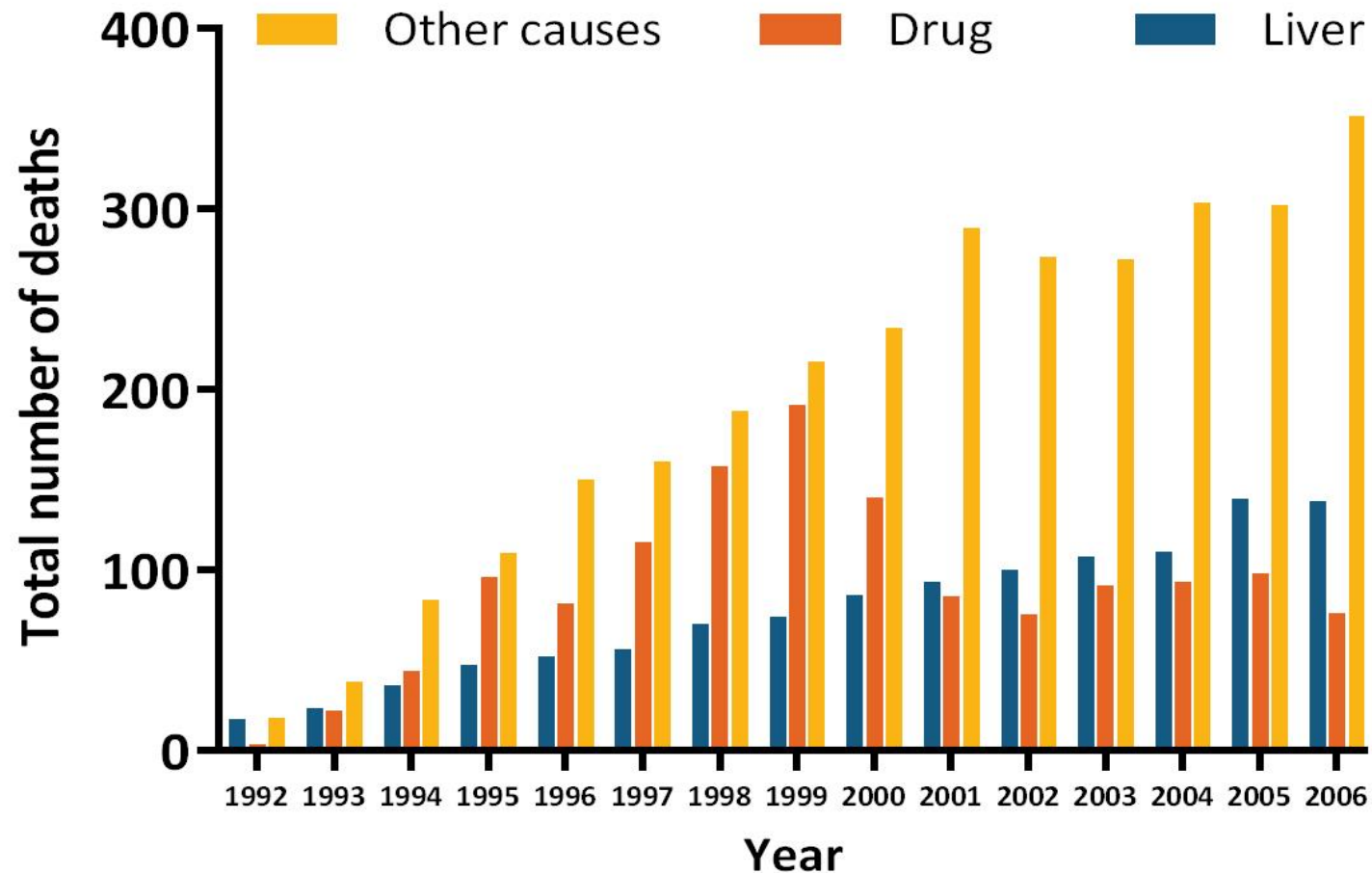
→ Global estimation: **10.0 million of current PWIDs** in 2010 were HCV antibody positive

→ Global prevalence: **67.0%**

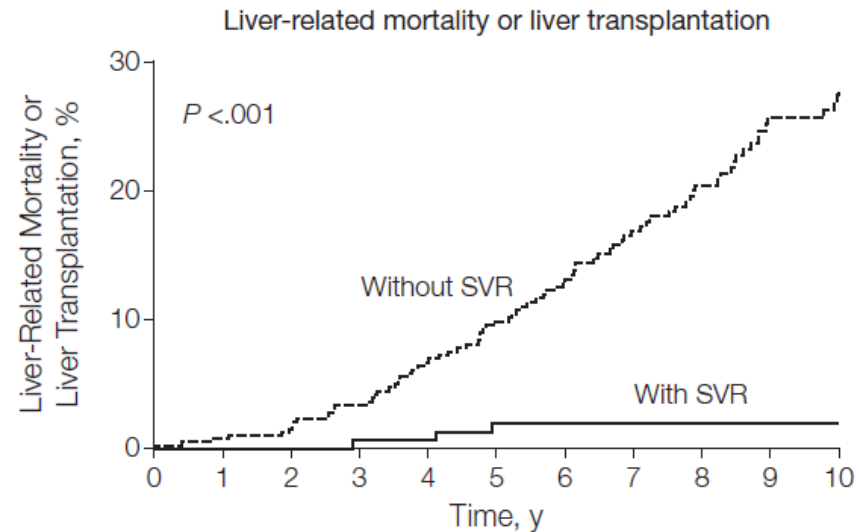
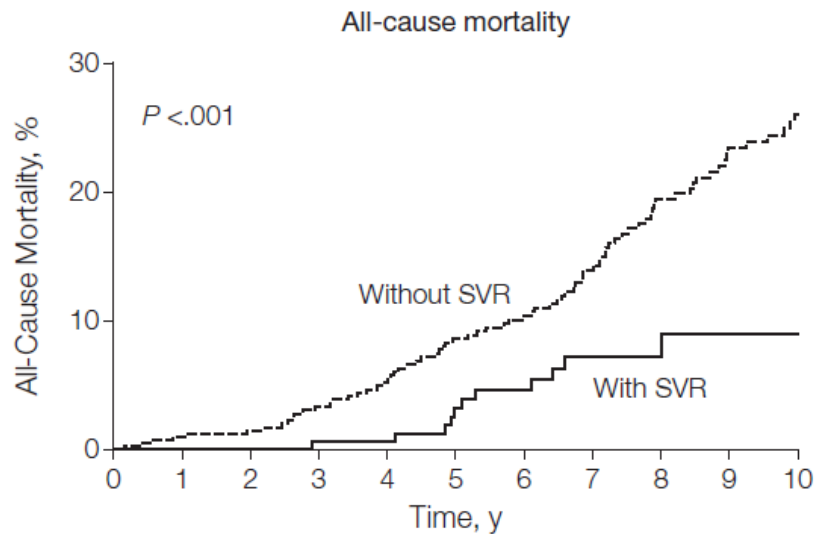
Incidence

- incidence of HCV infection among PWID ranges from 5% to 45% per annum
- HCV incidence is highest among new injectors:
 - 32% HCV @ 1 year post IDU onset in developed countries
 - 59% HCV @ 1 year post IDU in developing/transitional countries
- poor detection rates, insufficient surveillance
 - underreporting

PWID: Liver-related mortality increases



The burden of HCV can be prevented through treatment



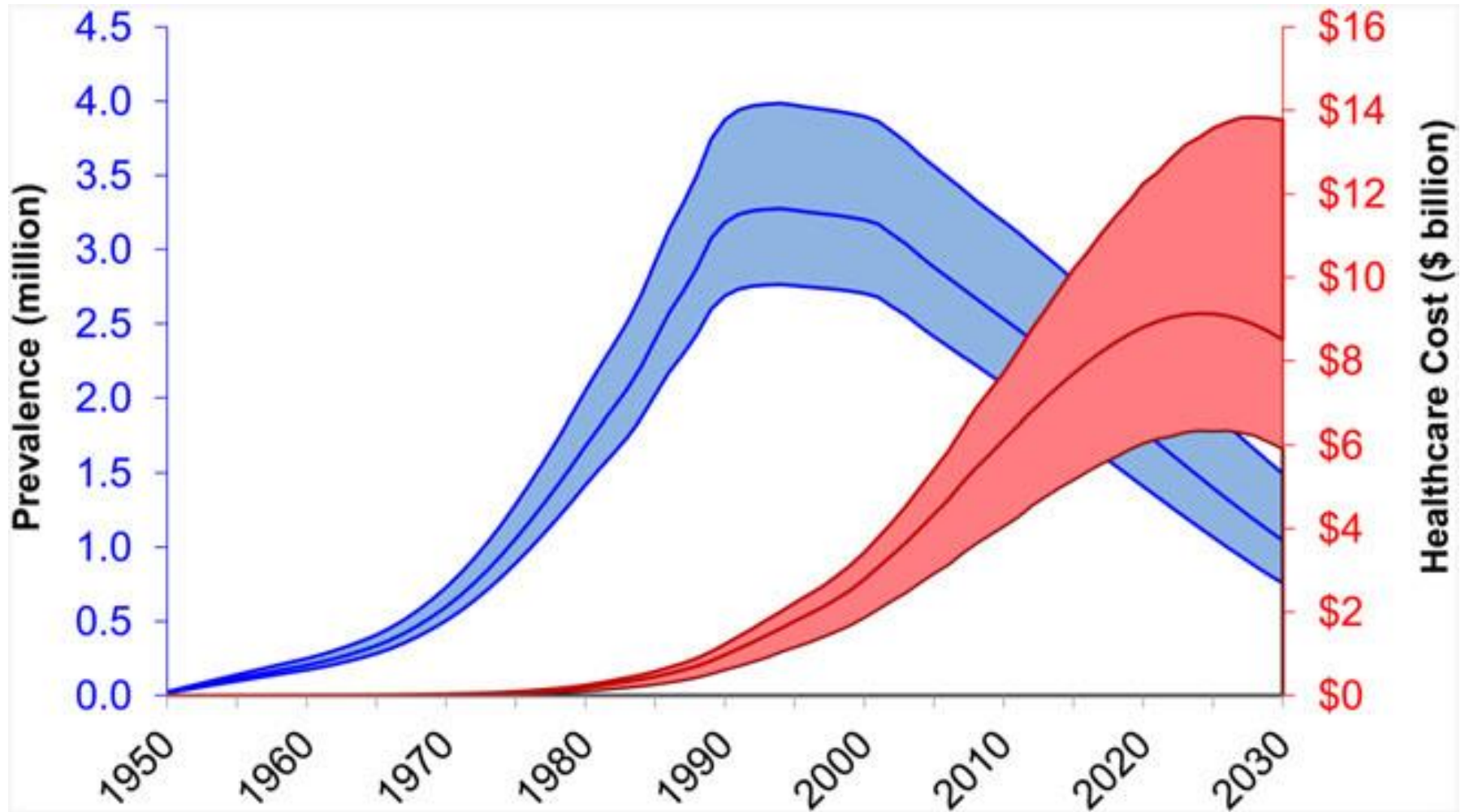
No. at risk

Without SVR	405	393	382	363	344	317	295	250	207	164	135
With SVR	192	181	168	162	155	144	125	88	56	40	28

No. at risk

Without SVR	405	392	380	358	334	305	277	229	187	146	119
With SVR	192	181	168	162	155	144	125	88	56	40	28

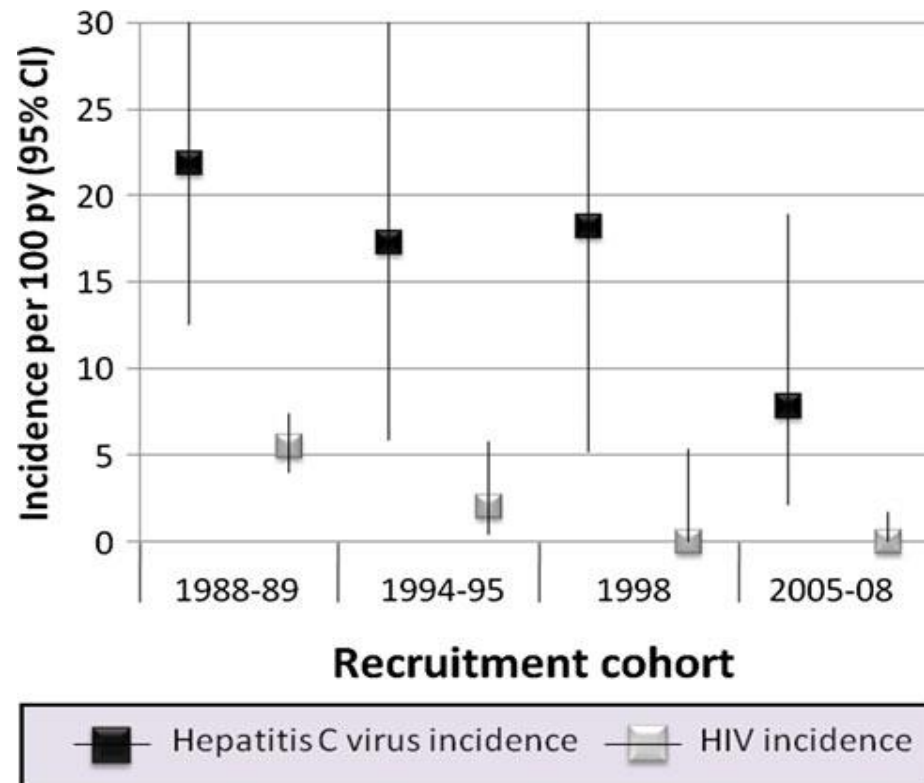
Projected HCV prevalence and costs: US



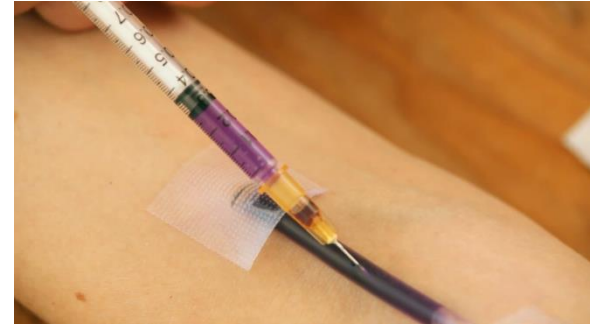
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Epidemiology: comparison with HIV

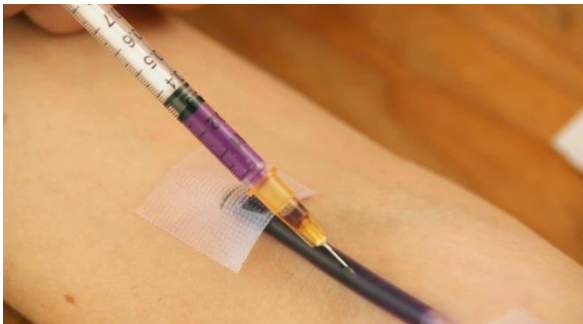
- ↳ Higher prevalence of HCV infection (67% vs. 20%)
- ↳ Higher risk of infection (3-5% for HCV vs 1-2% for HIV)



HCV prevention = HIV prevention



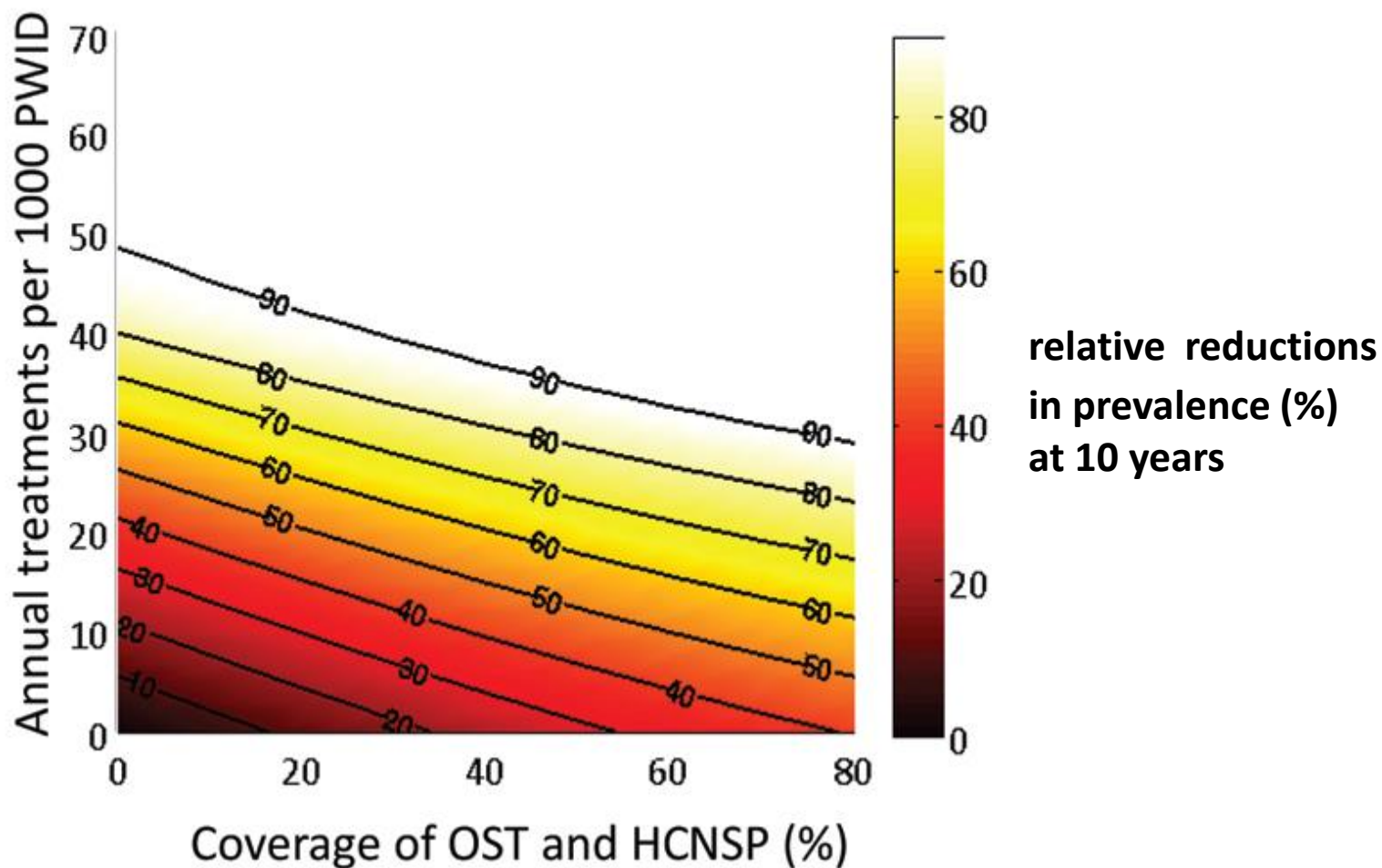
HIV prevention ≠ HCV prevention



Combination of OST, NSP and HCV treatment

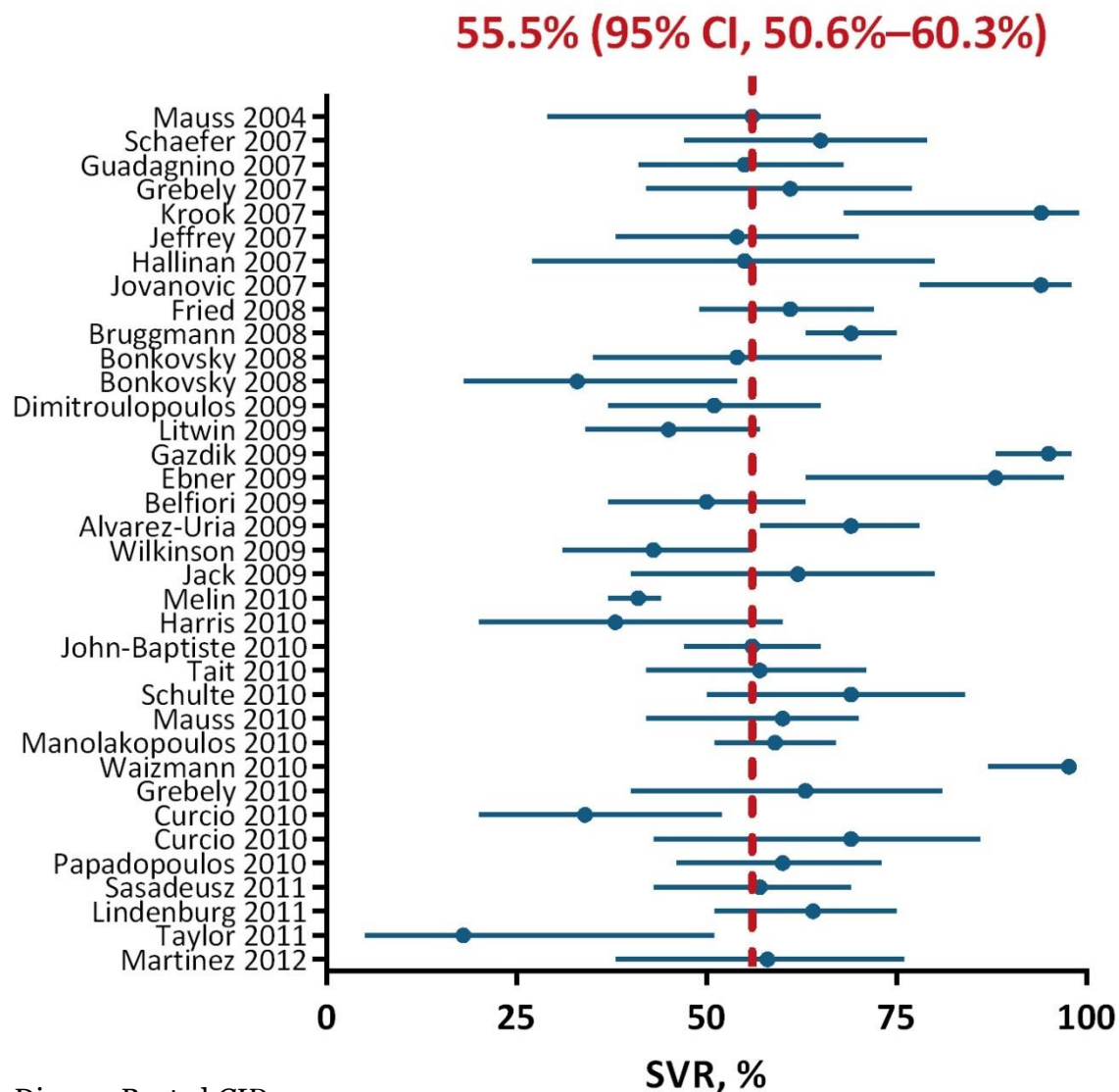
(INPegIFN/DAA\$)

E 40% baseline chronic prevalence

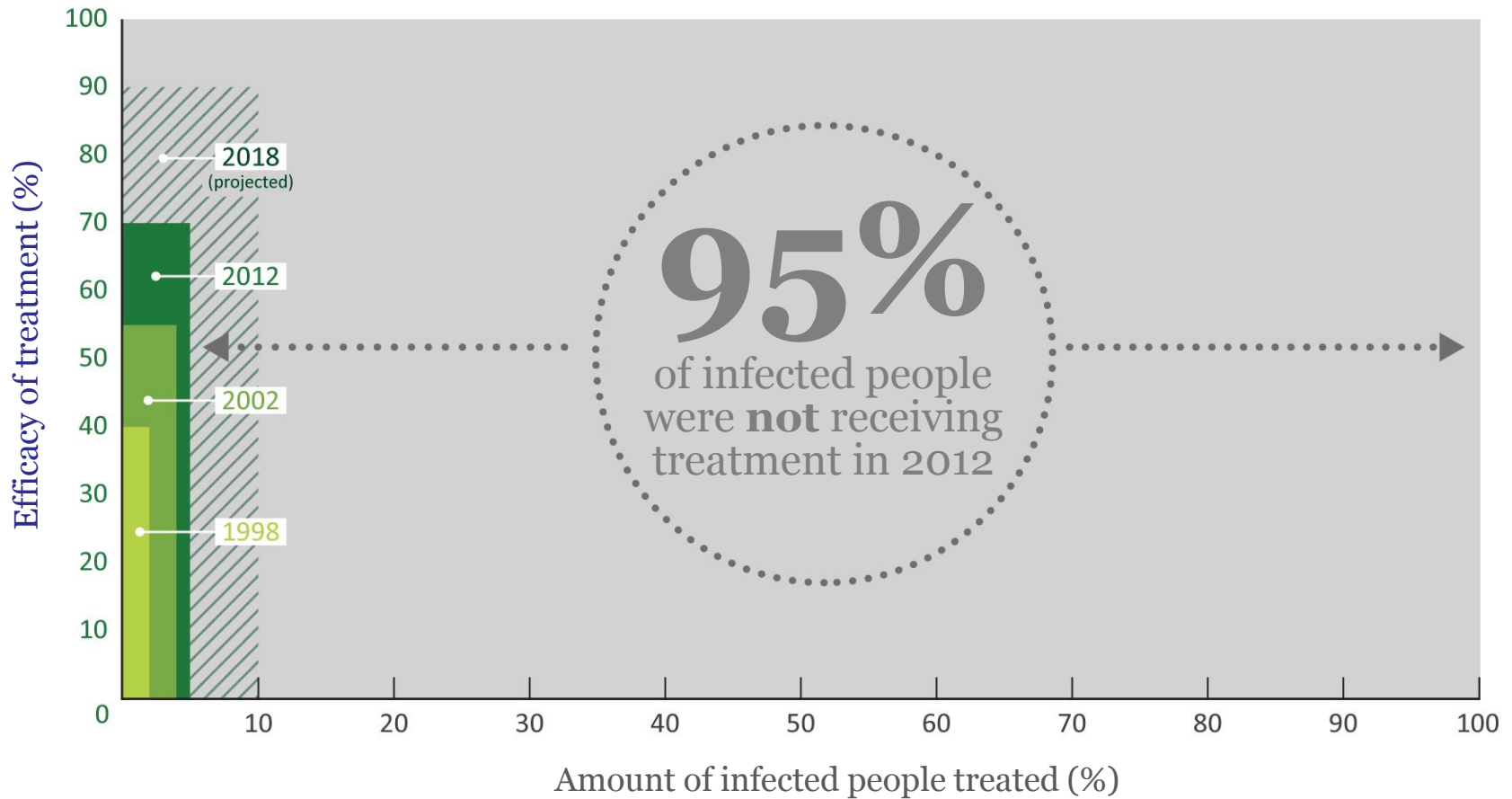


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HCV treatment is effective in PWID – PEG-IFN/RBV



Potential of new INF free treatment



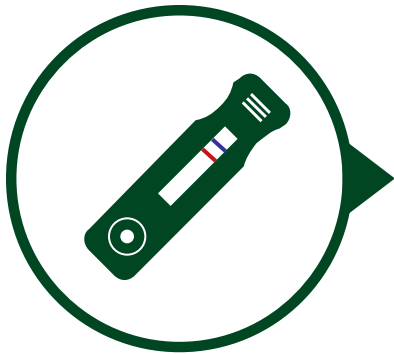
HCV treatment among PWID: high willingness, low uptake

80% OF PWID ARE WILLING TO
RECEIVE HCV TREATMENT



PWID LIVING WITH HCV

HCV Care Cascade among PWID



**HCV
TESTING**

30%



**ASSESS &
MONITOR**

12%



**ENGAGE IN
TREATMENT**

1-2%

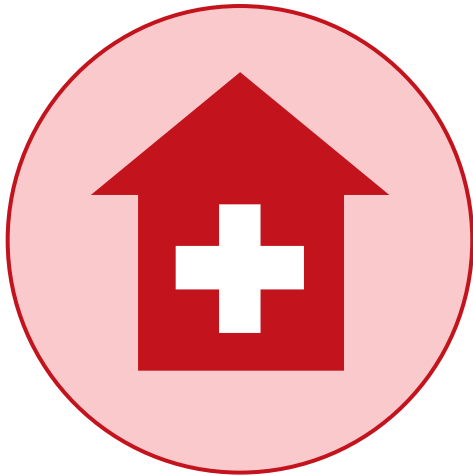


**ENHANCE
RESPONSE**

<1%

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Barriers to HCV care



SYSTEM



PROVIDER



PATIENT

Barriers to HCV care

Testing



Assessment
Therapy



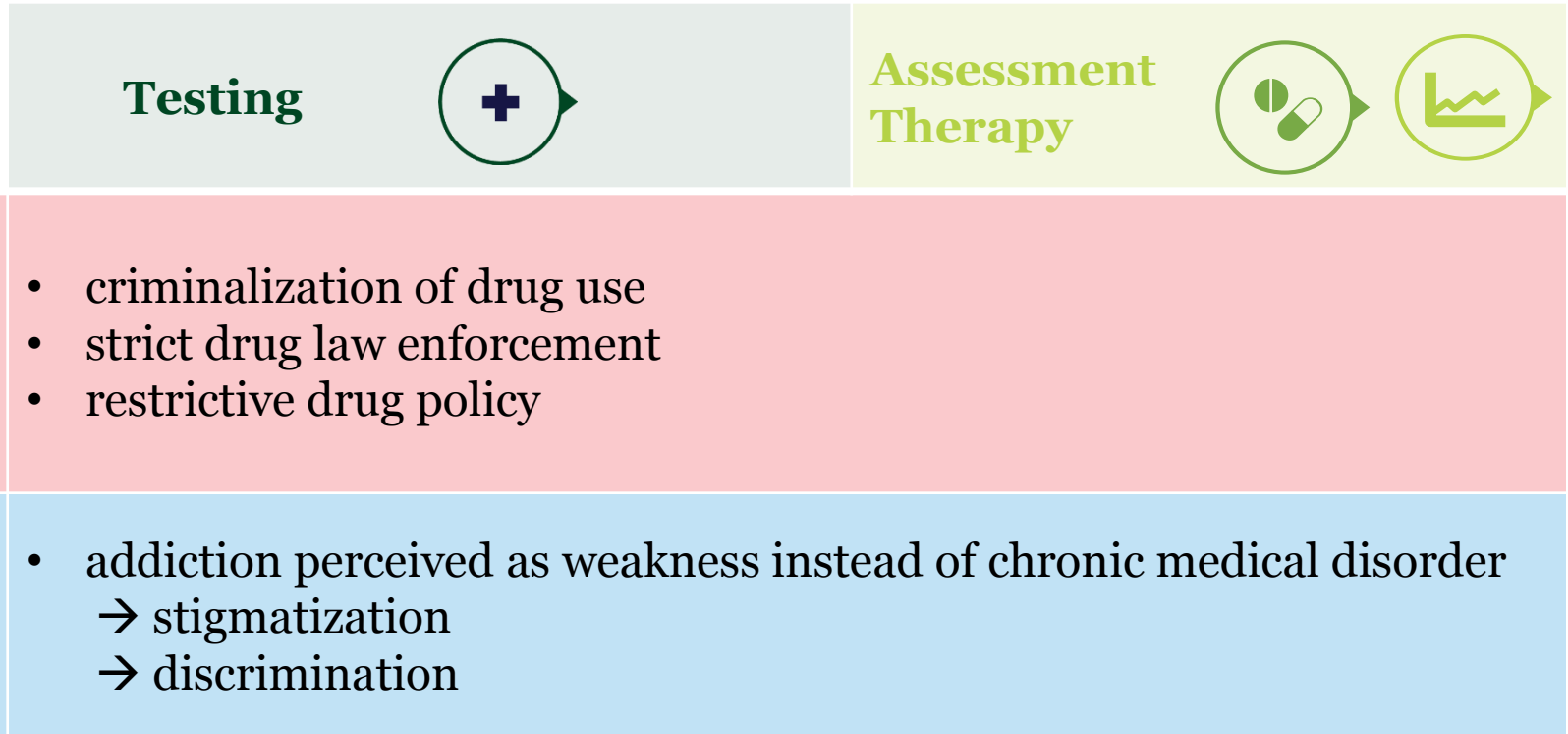
First global recommendations for HCV among PWID

SUPPLEMENT ARTICLE

Recommendations for the Management of Hepatitis C Virus Infection Among People Who Inject Drugs

Geert Robaeys,^{1,2,3,a} Jason Grebely,^{4,a} Stefan Mauss,⁵ Philip Bruggmann,⁶ Joseph Moussalli,^{7,8} Andrea De Gottardi,⁹ Tracy Swan,¹⁰ Amber Arain,^{1,3} Achim Kautz,¹¹ Heino Stöver,¹² Heiner Wedemeyer,¹³ Martin Schaefer,^{14,15} Lynn Taylor,¹⁶ Markus Backmund,^{17,18} Olav Dalgard,¹⁹ Maria Prins,^{20,21} and Gregory J. Dore,^{4,22} on behalf of the International Network on Hepatitis in Substance Users

Barriers to HCV care



Conclusion (1)

- ↳ HCV is highly prevalent among PWID
- ↳ Awareness is low, particularly in the regions most affected
- ↳ public health threat is considerable and will manifest itself in the next five years
- ↳ test rates and treatment uptake are unacceptably low, despite the evidence that treatment is effective.

Conclusion (2)

- ↳ restrictive drug policy and law enforcement are key drivers of the epidemic, in even greater magnitude than of HIV
- ↳ successful HCV prevention strategies combine high coverage of harm reduction measures with HCV treatment provision at the right scale
- ↳ integration of needs-adapted HCV treatment services into harm reductions services like opioid substitution treatment enhance therapy uptake and cure rates.
- ↳ Novel, well-tolerated and efficacious HCV treatment regimens bring along the potential of HCV elimination

Acknowledgements

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