

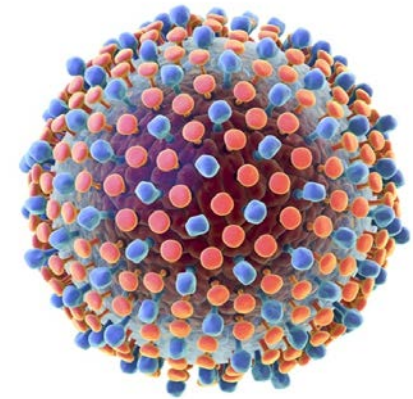
SEROPREVALENCE OF HEPATITIS C IN THE BELGIAN GENERAL POPULATION

Scientific seminar on infectious diseases (SsID), 17 May 2018

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Epidemiology of infectious diseases, Sciensano

Hepatitis C

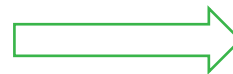


- Discovered in 1989 (non-A non-B)
- No vaccine available
- Transmission through blood

- Acute phase (90% asymptomatic)

↓ 80%

- Chronic phase
 - Fibrosis
 - Liver cirrhosis
 - Hepatocellular carcinoma
 - Liver decompensation



Global mortality
~ 0.7 million/year
(source: WHO)

Revolutionary treatment: Direct acting antivirals

- ↓ side effects, ↓ treatment duration
- ↑ efficacy: 95% sustained virological response (SVR)
- Expensive (~ 40 000€)
 - Strict Belgian reimbursement guidelines
 - 2015: F3 - F4 fibrosis, liver transplant patients
 - 2017: + F2, + risk factors (HIV, HBV, organ transplant)
+ genotypes
+ additional drugs
- No recent Belgian data on prevalence of seropositivity and infection

Aim of the HCV seroprevalence study

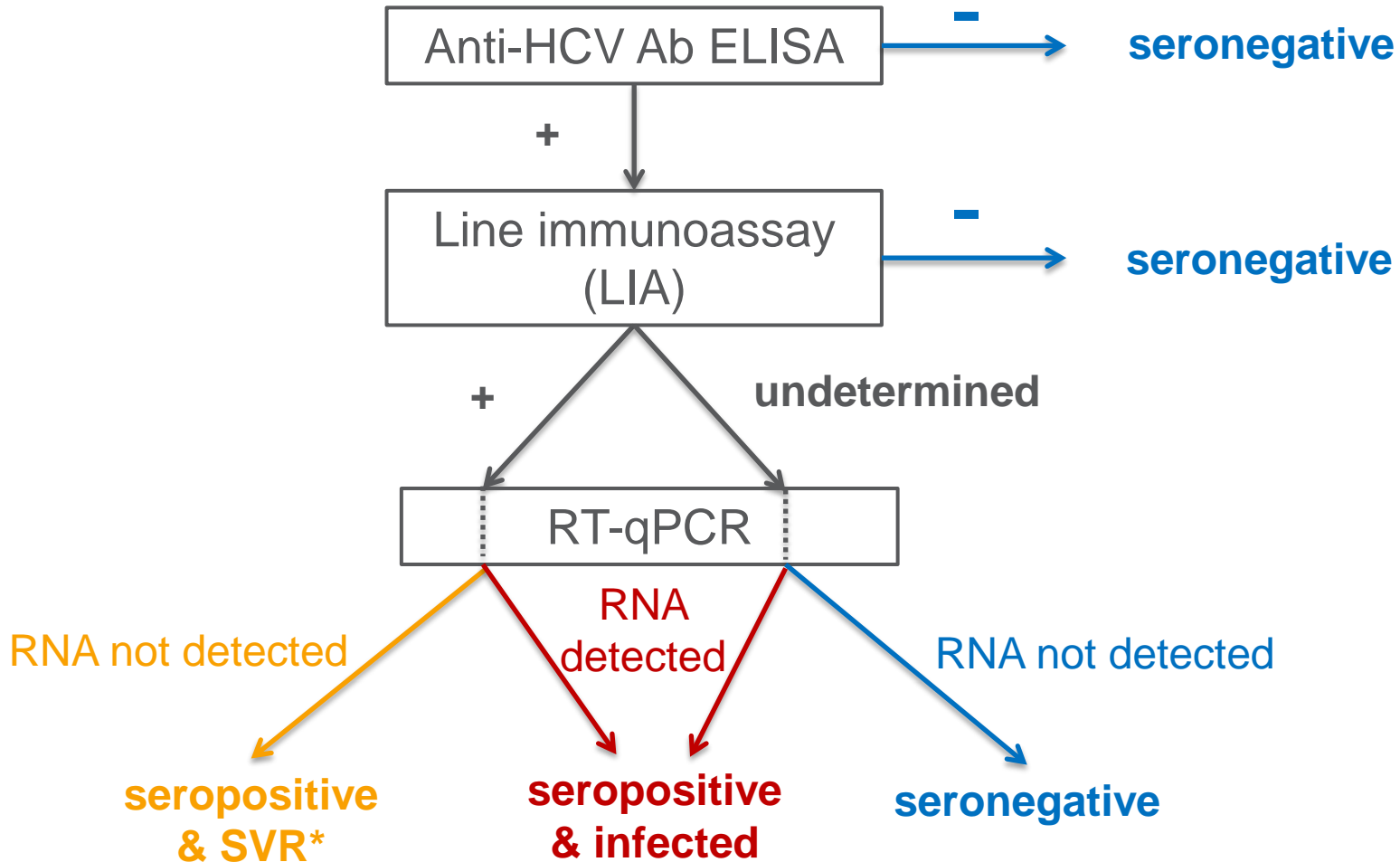
Estimate the prevalence of HCV seropositivity and infection in the general Belgian population in order to provide data to guide policy makers in:

- ✓ Treatment reimbursement strategy
- ✓ Screening policies
- ✓ Prevention strategies

Sample collection

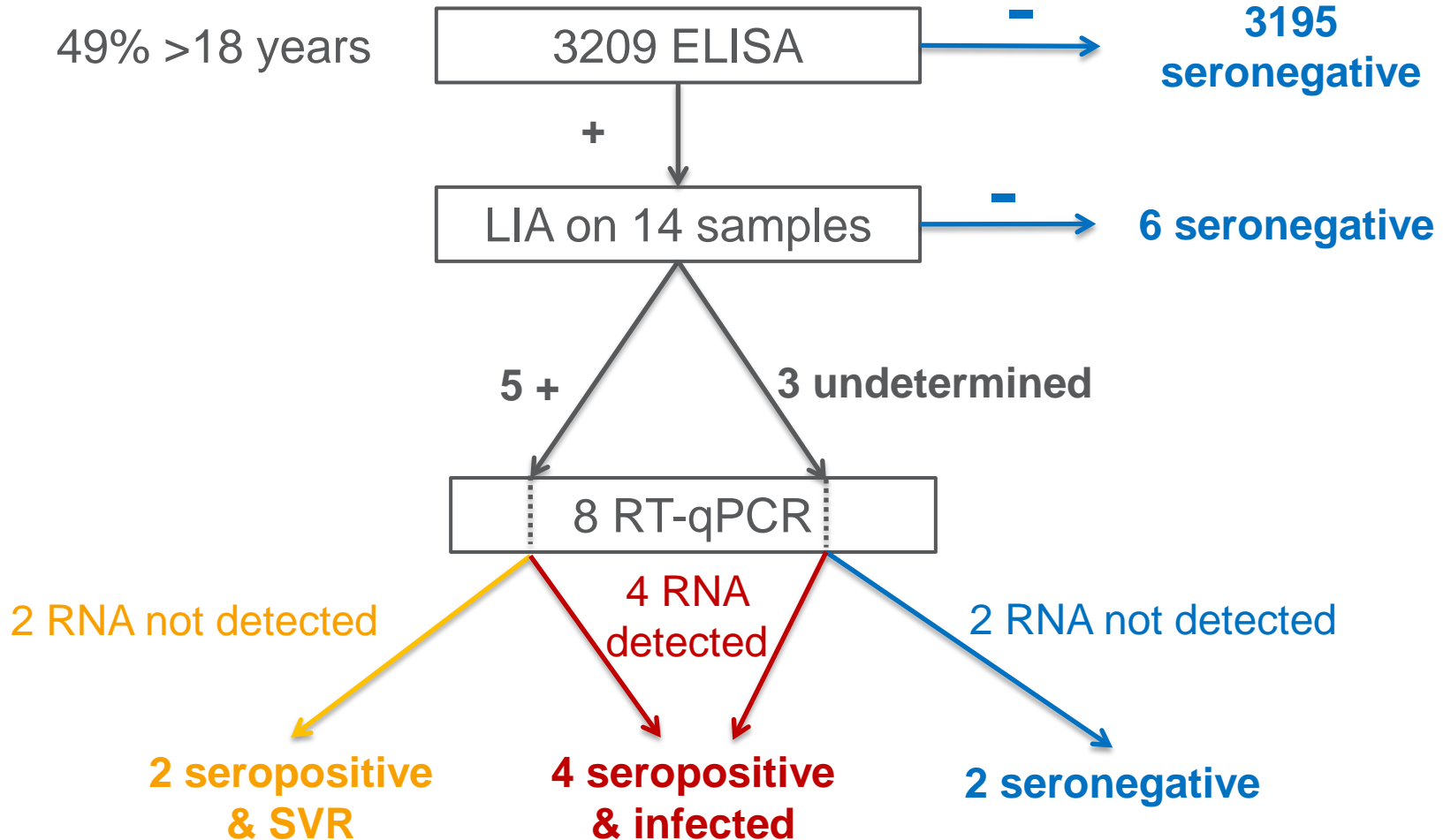
- June 2013-January 2015
- 28 laboratories in Belgium
- Residual serum samples
 - Preferably orthopedic, surgery, otorhinolaryngology, emergency
 - Exclusion of known immunosuppressed individuals
- Data on age, postcode and sex
 - No data on risk behaviour, awareness of infection status, ...
- Oversampling 0-20 year olds

HCV testing strategy



*SVR= sustained virological response

Results HCV testing



HCV prevalence of seropositivity and infection in the general Belgian population

		Seropositive all (screening & prevention)	Seropositive & infected (treatment)
Belgium		0.26% (95%CI 0.11-0.65) ~ 28600 patients	0.16% (95%CI 0.05-0.54) ~ 17600 patients
Age	>18y	0.32% (95%CI 0.13-0.8)	0.19% (95%CI 0.05-0.65)
	≤ 18y	0.06% (95%CI 0.008-0.43)	0.06% (95%CI 0.008-0.43)
Sex	Female	0.18% (95%CI 0.04-0.75)	0.09% (95%CI 0.01-0.72)
	Male	0.35% (95%CI 0.1-1.2)	0.23% (95%CI 0.05-1)

Note: these results are weighted for age, sex and population and adjusted for clustered sampling

Limitations

1. Oversampling of children
→ less precise estimates in adult age group
2. Unknown representation of risk groups
→ Impact of exclusion criteria unknown
3. No information on risk factors (IDU, HIV, prisoners, ...)

Conclusions

1. Estimated prevalence of HCV seropositivity (0.26%) and infection (0.16%) in Belgian general population is low
2. 33% of seropositive individuals had a sustained virological response
→ Not to be considered in treatment cost estimations



Together with data on specific risk groups, useful information for treatment, screening and prevention strategies

Acknowledgements

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Thank you for your attention!
Any questions?