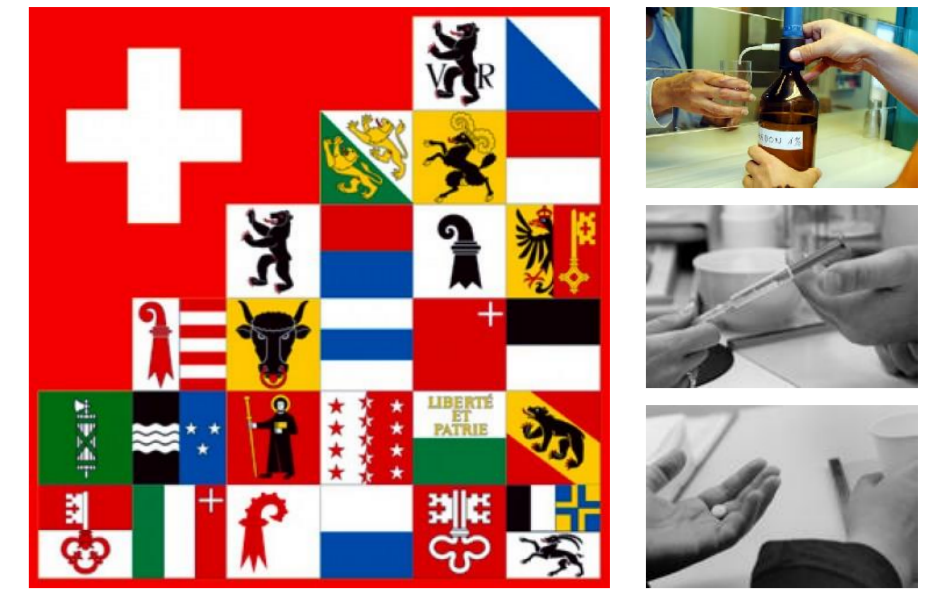


HIV and HCV cascade, RNA prevalence and new diagnoses in opioid agonist therapy (OAT) patients from the SAMMSU-cohort, Switzerland



Bregenger A¹, Bruggmann P², Castro E³, Della Santa P⁴, Hensel-Koch K⁵, Moriggia A^{6,7}, Scheidegger C⁸

¹Department of Infectious Diseases and Infection Prevention, Cantonal Hospital Aarau, ²Arud Centre for Addiction Medicine, Zurich, ³Private Practice, Lausanne, ⁴Fondation Phénix, Geneva, ⁵Stiftung Suchthilfe, St. Gallen, ⁶Ingrado Servizi per le Dipendenze, Lugano, ⁷Epatocentro Ticino SA, Lugano, ⁸Independent, Basel

BACKGROUND

- To end the HIV/AIDS-epidemic by 2030, until 2025, 95% of all people who live with HIV (PWLH) should be diagnosed, thereof 95% on antiretroviral treatment (ART) and thereof 95% virologically suppressed ("**95-95-95**"-targets of UNAIDS).
- To reach HCV-elimination by 2030, the WHO aims at **90%** of chronic hepatitis C (CHC) patients **diagnosed** and **80% treated** (WHO, 05/2016).
- We wanted to describe the current state of HIV and HCV elimination among patients of the Swiss Association for the Medical Management in Substance Users (SAMMSU)-cohort (www.sammsu.ch).

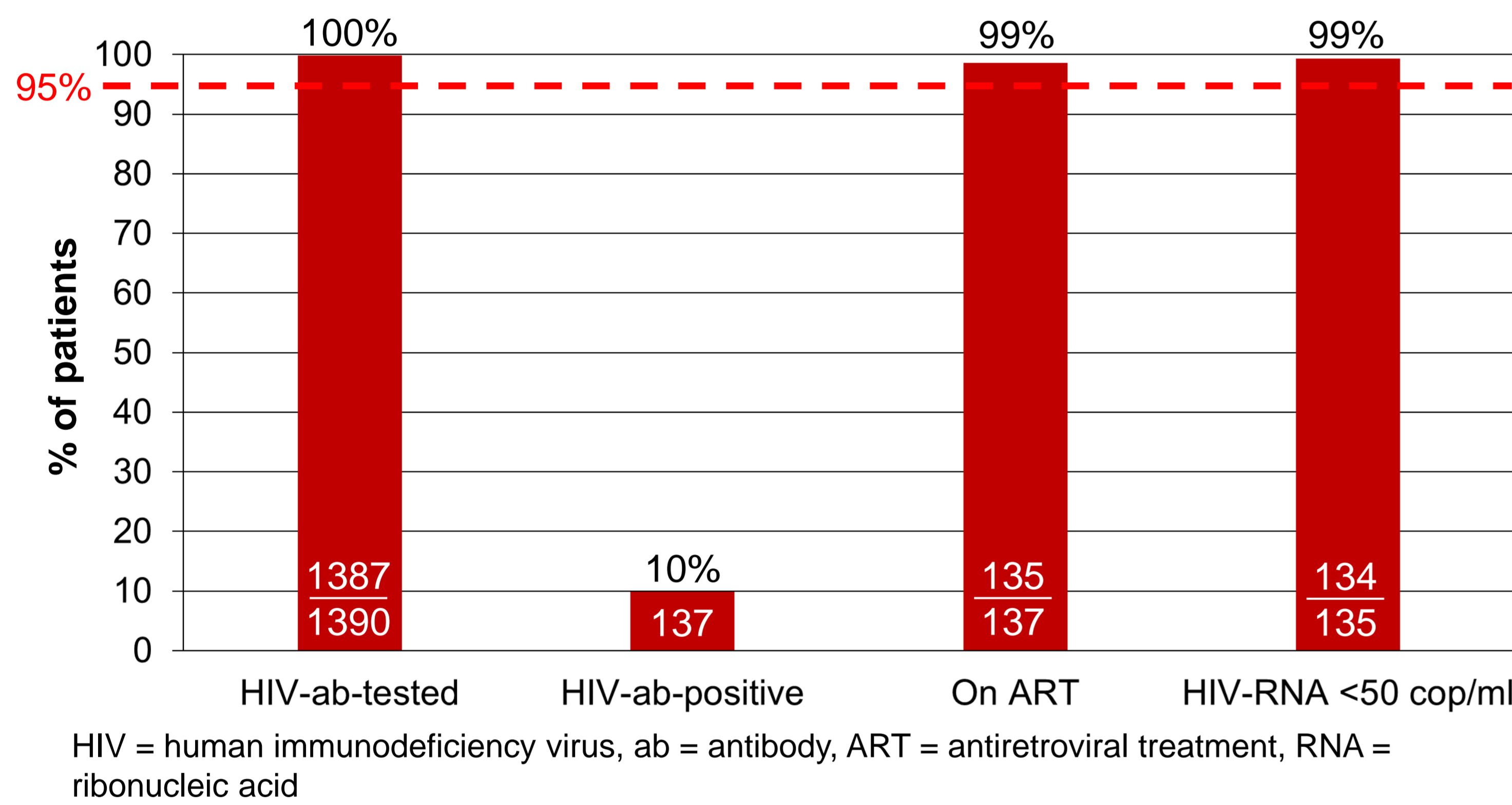
METHODS

- The SAMMSU-cohort is an open cohort with yearly follow-up, enrolling >18-year-old patients with current or previous OAT in eight different centers throughout Switzerland since 2014.

RESULTS

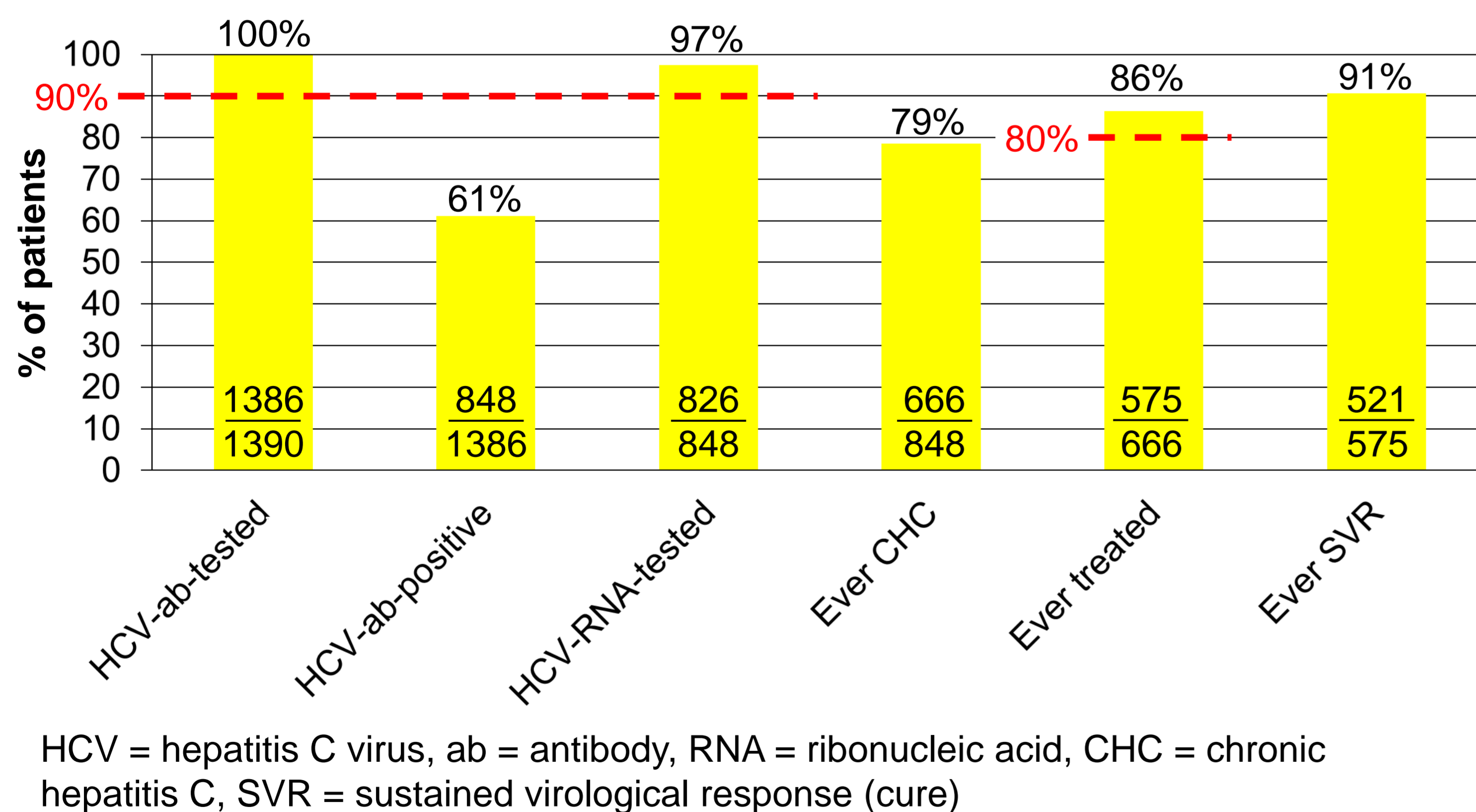
- Between 2014 and 02/01/2024, 1390 patients have been enrolled (76% (1059) male, median age: 44 (IQR: 36-51) years, 75% (1016/1361) ever intravenous drug use).

HIV cascade in the SAMMSU-cohort (02/01/2024, n=1390)



- HIV-serostatus** was known for **99.8%** (1387) of the 1390 SAMMSU-participants.
- Of the 1387 HIV-ab-tested patients, 9.9% (137) were HIV-antibody-positive.
- 98.5%** (135/137) were **on ART**, and thereof **99.3%** (134/135) **fully suppressed**.

HCV cascade in the SAMMSU-cohort (02/01/2024, n=1390)

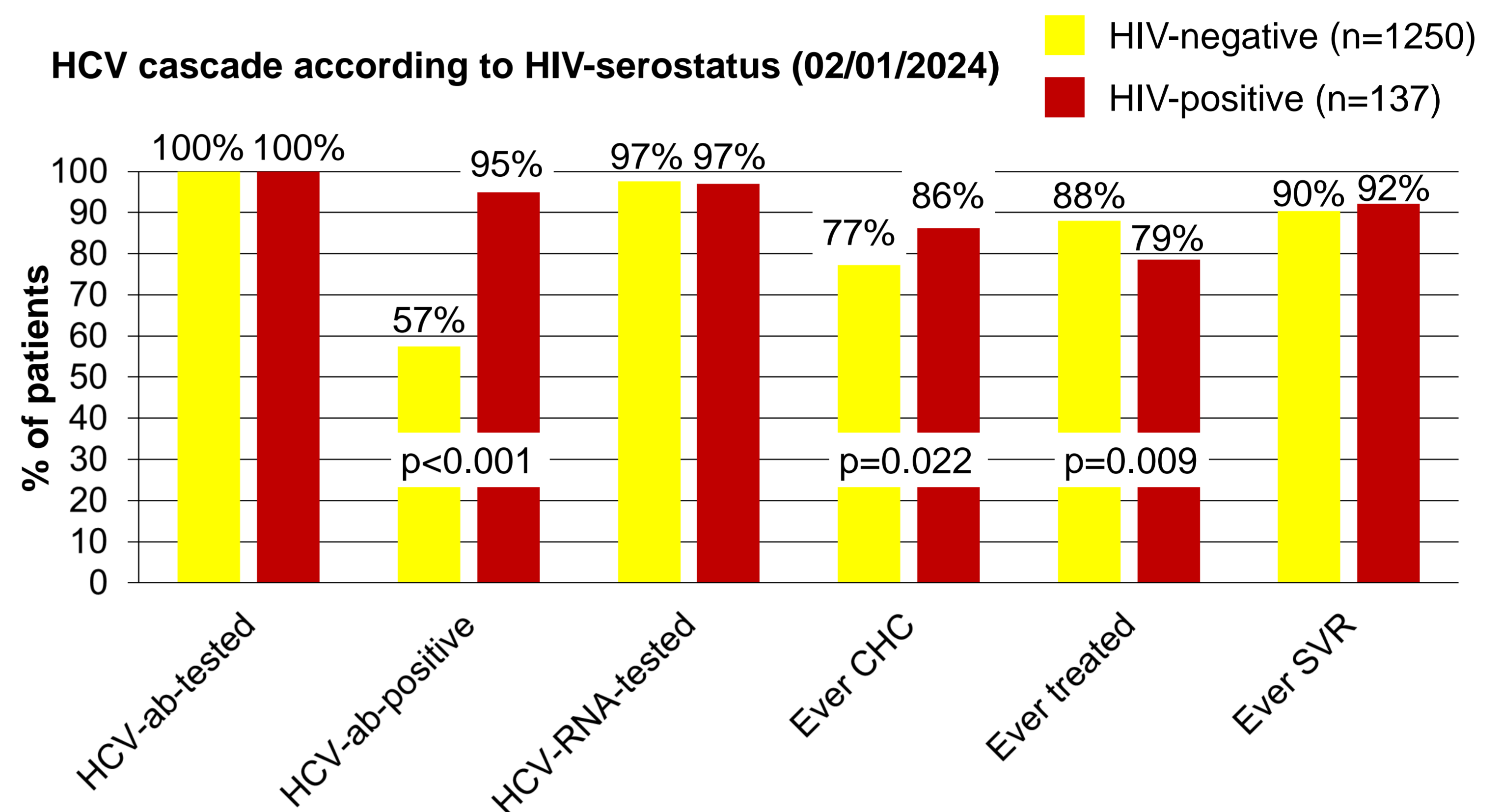


- HCV-serostatus** was known for **99.7%** (1386) of the 1390 SAMMSU-participants.
- Of the 1386 HCV-ab-tested patients, 61.2% (848) were HCV-antibody-positive.
- HCV-RNA** was available for **97.4%** (826/848) of the HCV-antibody-positive patients, and 78.5% (666/848) developed chronic hepatitis C.
- Among them, **86.3%** (575/666) have **ever** received **treatment**, whereof 90.6% (521/575) had documented SVR (HCV-RNA negative ≥ 12 weeks after treatment).
- 96.9% (557/575) had either an SVR or were HCV-RNA negative in their last test.

FUNDING

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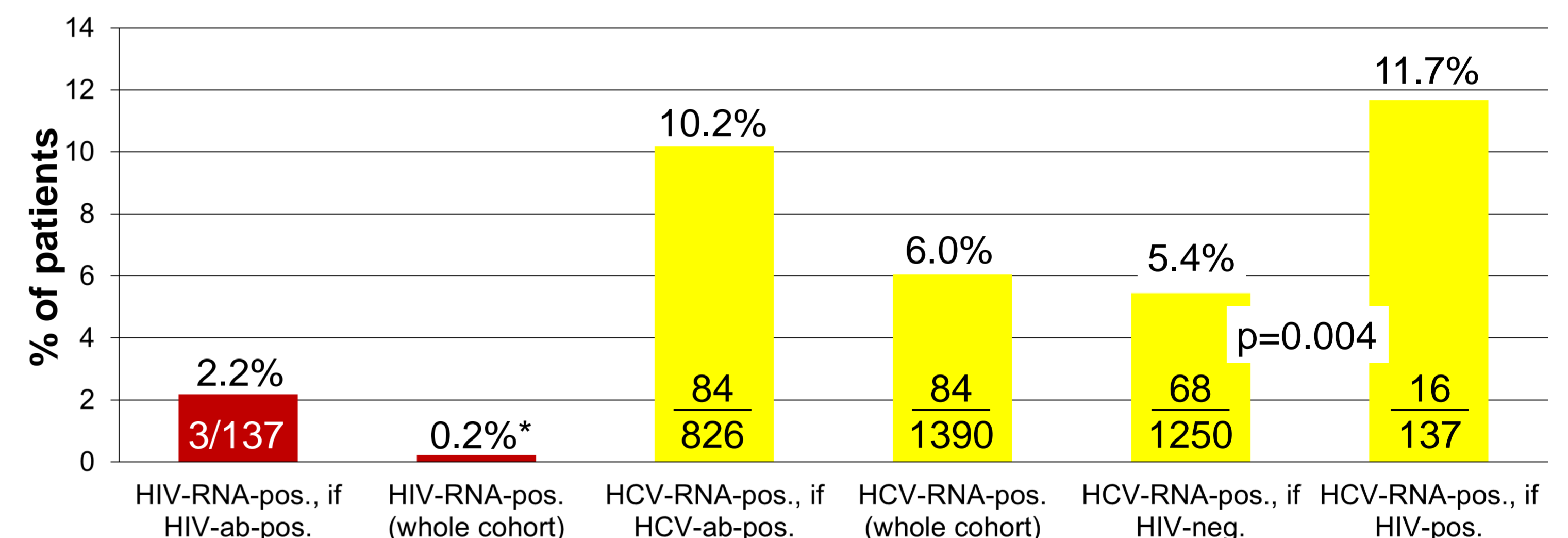
HCV cascade according to HIV-serostatus (02/01/2024)



HCV = hepatitis C virus, ab = antibody, RNA = ribonucleic acid, CHC = chronic hepatitis C, SVR = sustained virological response (cure)

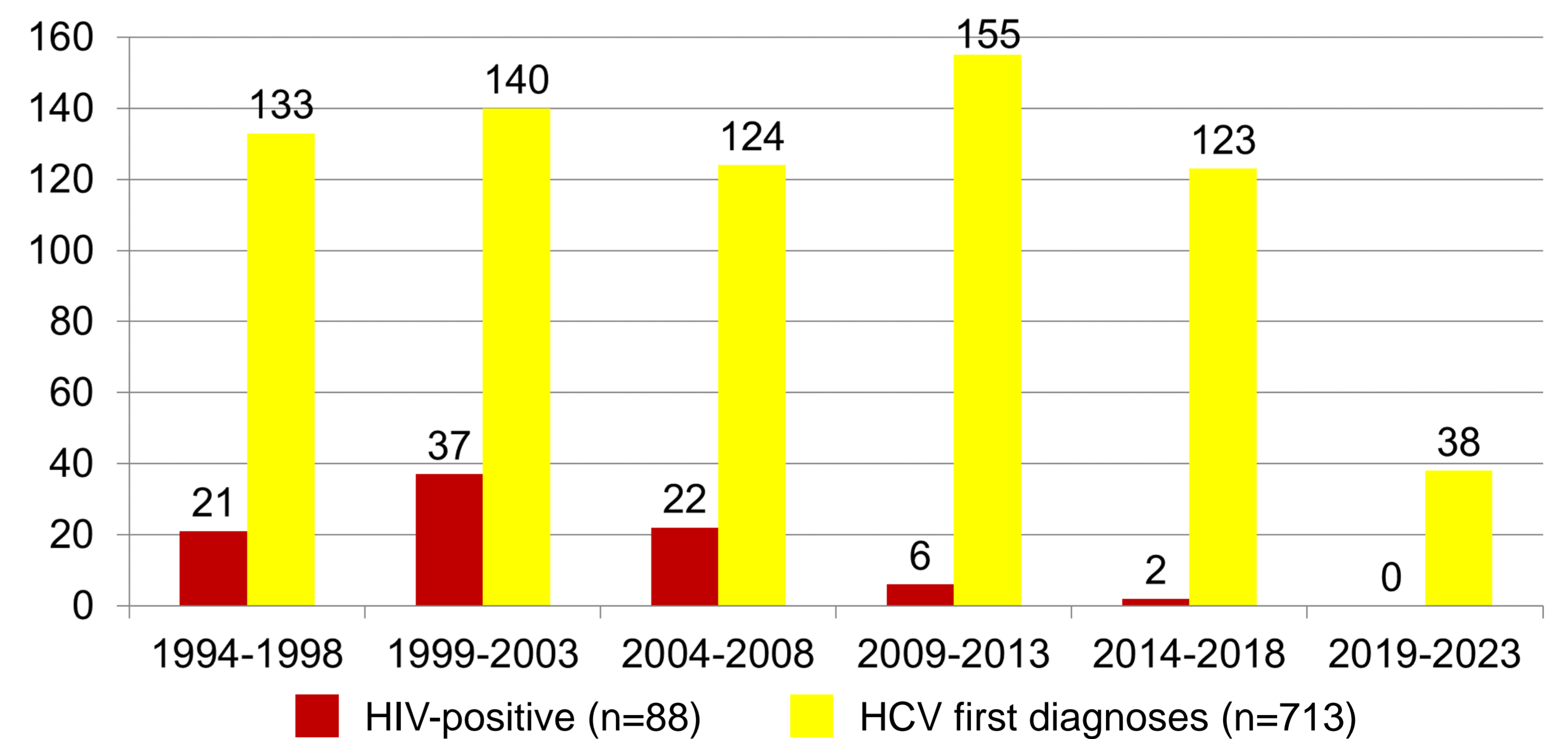
- HCV-antibody-prevalence was 57.5% (718/1249) in HIV-negative and 94.9% (130/137) in HIV-positive patients (p<0.001).
- In PWLH, chronicification was more frequent (86.2% (112/130) versus 77.2% (554/718), p=0.022), while treatment-uptake was lower (78.6% (88/112) versus 87.9% (487/554), p=0.009).
- With direct-acting antivirals, cure rates were 97%, irrespective of HIV-serostatus (96.7% (59/61) in HIV-negative and 97.0% (354/365) in HIV-positive patients).

HIV and HCV RNA prevalence in the SAMMSU-cohort (02/01/2024)



- HIV-RNA-prevalence** was 2.2% (3/137) in PWLH and 0.2% (3/1390) overall.
- HCV-RNA prevalence** was higher in HIV-positive compared to HIV-negative patients, i.e. 11.7% (16/137) versus 5.4% (68/1250), p=0.004.; overall: **6.0%** (84/1390).

Number of new HIV and HCV diagnoses per calendar period



- The number of HIV first diagnoses dropped from 37 in the five-year-period 1999-2003 to zero in 2019-2023 (last HIV first diagnosis in 2015).
- The number of HCV first diagnoses dropped from 155 in the five-year-period 2009-2013 to 38 in 2019-2023 (thereof 32/38 (84.2%) diagnosed at or before enrolment).

CONCLUSION

- The "95-95-95"-HIV-targets are already met in OAT patients in the SAMMSU-cohort.
- There were no new HIV diagnoses since eight years.
- With CHC diagnosis and cure rate at >95%, and treatment-uptake close to 90% for HIV-negative and nearly 80% for HIV-positive people, WHO targets for HCV are reached within the SAMMSU-cohort.
- However, ongoing enrolment of patients with newly diagnosed HCV infection shows that micro-elimination (within the cohort), but not yet macro-elimination is achieved.