



Trends of opioid agonist therapies and QT prolongation in the Swiss Association for the Medical Management in Substance Users (SAMMSU) cohort 2013-2024

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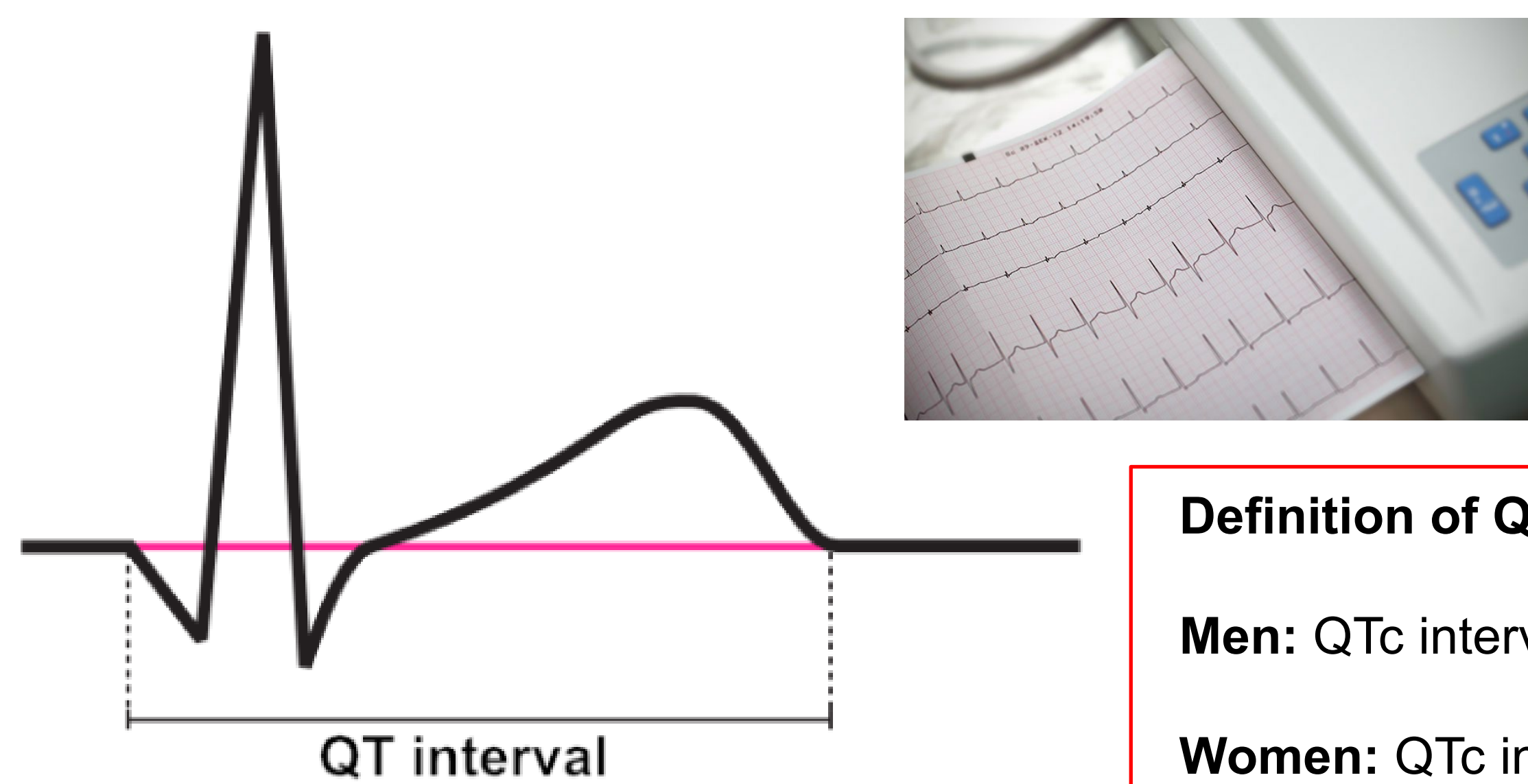
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BACKGROUND

- For years, **methadone** with its **well-known risk of QT prolongation** was the **predominant opioid agonist therapy (OAT)** in Switzerland.
- In the past 10 years, OAT diversity has increased, which might have reduced the QT prolongation prevalence.

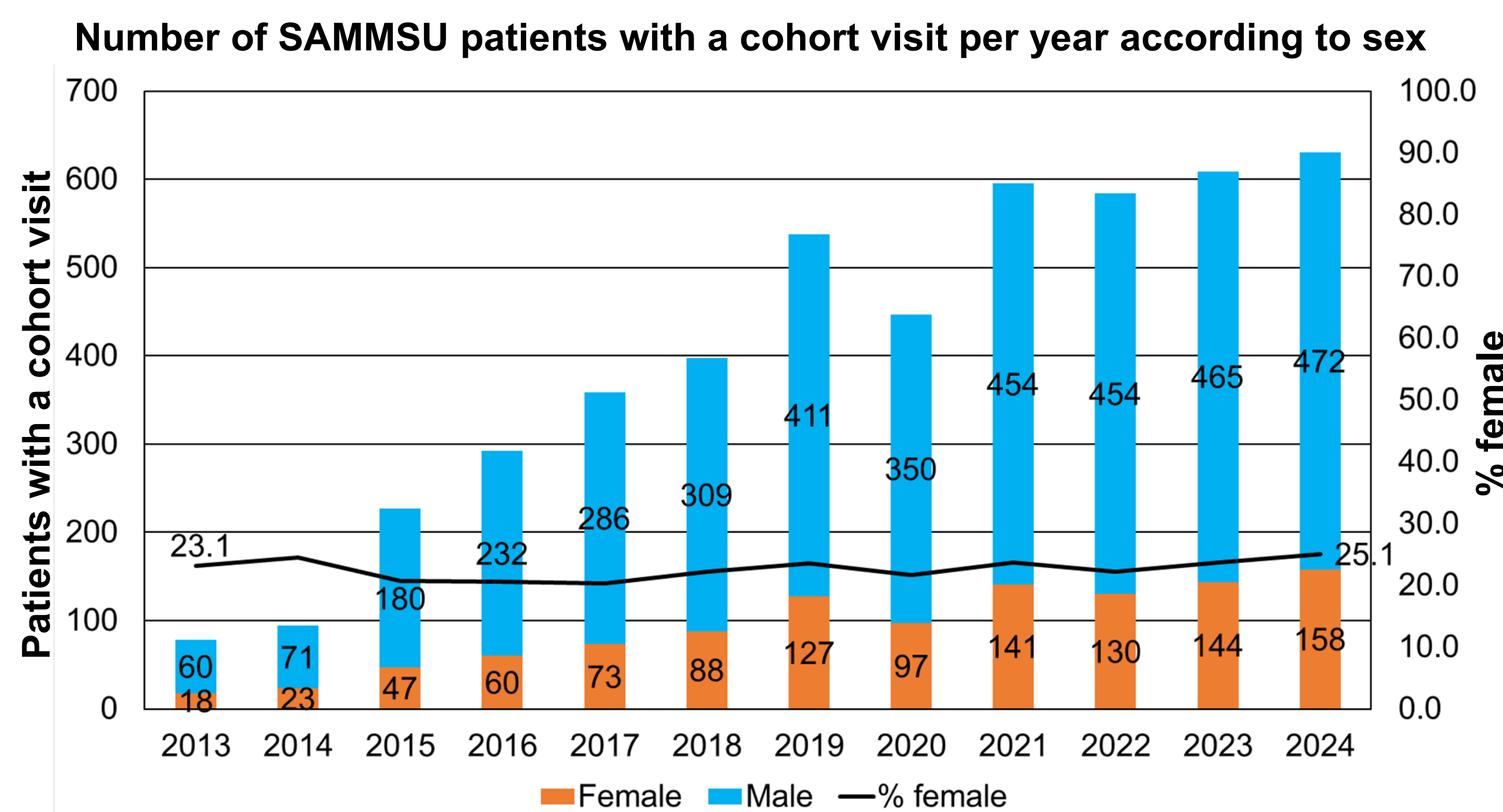
METHODS

- The SAMMSU-cohort is an open cohort with yearly follow-up, enrolling **>18-year-old patients with current/previous OAT** in eight different centers throughout Switzerland since 2013.
- By 06/01/2025, 1,500 patients** have been **enrolled** (76% male, median age (at registration): 44 years, 73% ever intravenous drug use, 57% HCV-antibody-positive, 9% HIV-antibody-positive).
- OAT distribution** was described for all patients who had a visit (registration/follow-up) in the respective year (2013-2024).
- Prevalence of QT prolongation** (QTc interval >450ms in men and >470ms in women, respectively ([Mayet, 2011](#), [Rabkin, 2015](#))) was determined in all patients who had an electrocardiogram in the **respective year**.



RESULTS (1)

- Between 2013 and 2024, the yearly number of visits increased from 78 to 630, with the proportion of females remaining stable at about a quarter.



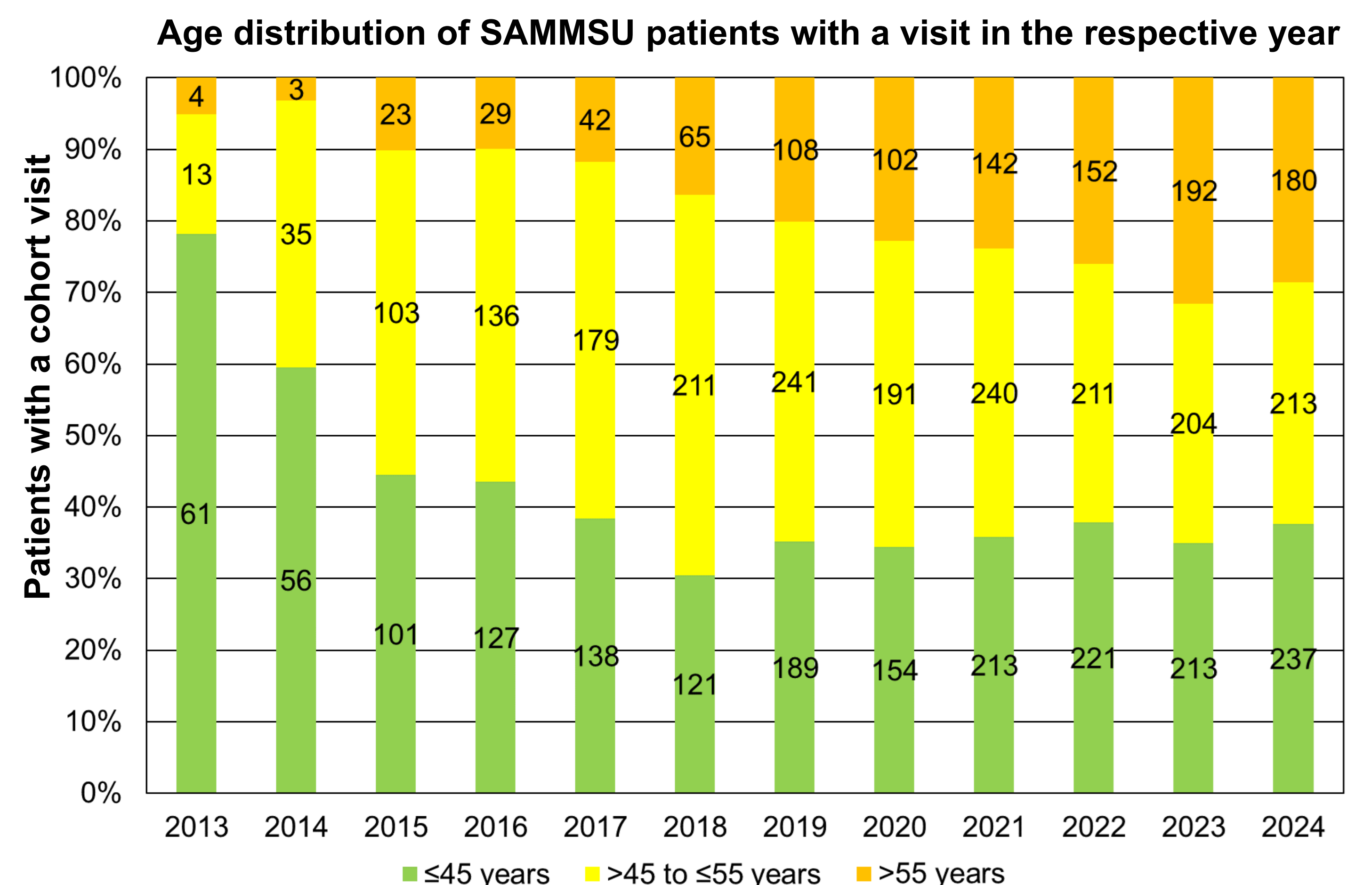
ACKNOWLEDGEMENT/SPONSORING

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RESULTS (2)

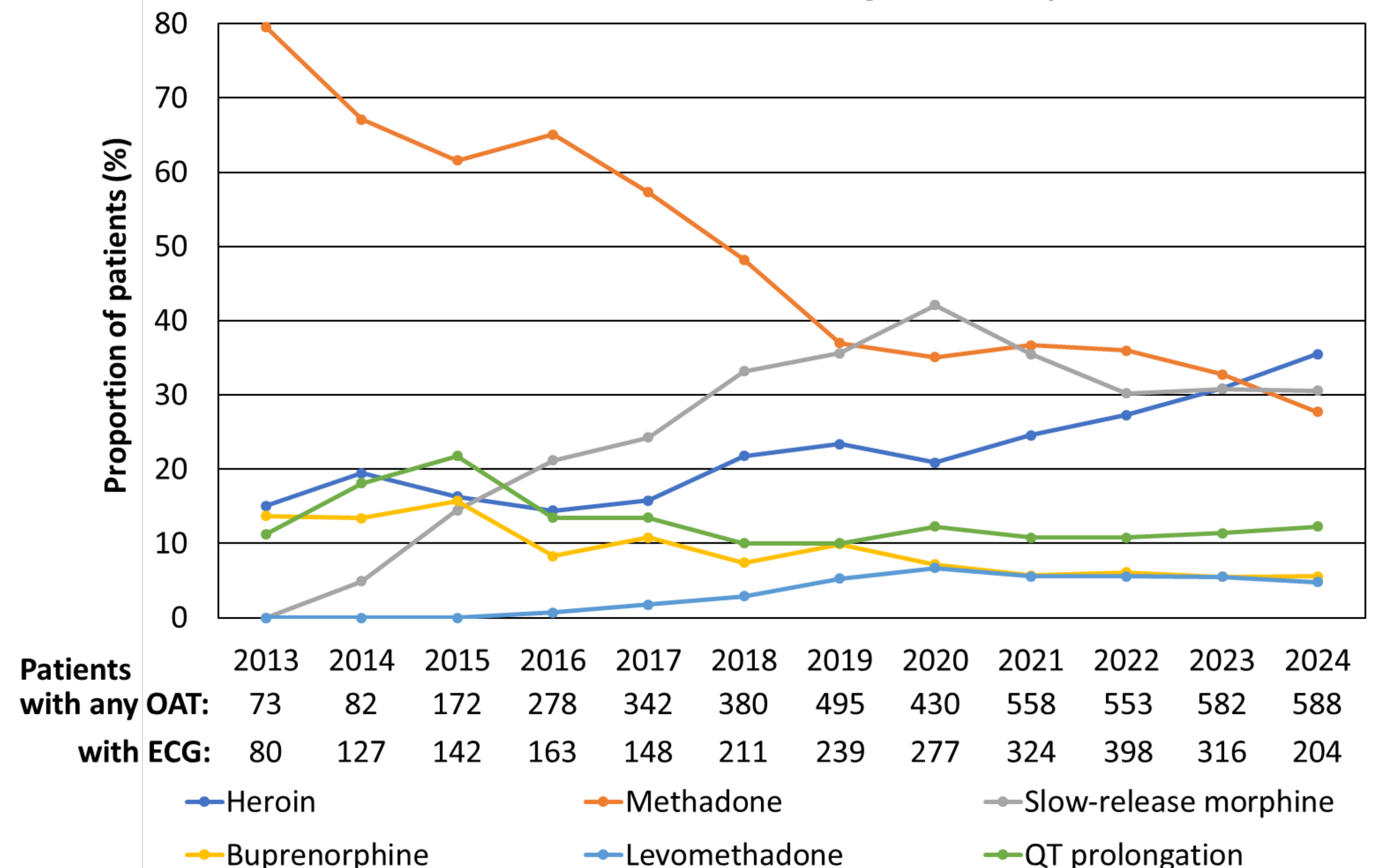
- The **median age** rose from **39.2** (IQR: 33.8-44.5) in 2013 to **49.2** (IQR: 39.8-56.1) years in 2024, with the **proportion of >55-year-old patients** rising from **5.1% to 28.6%**.



RESULTS (3)

- The proportion of patients with **methadone** as OAT **decreased** from **79.5%** (58/73) to **27.7%** (163/588) ($p < 0.001$), while the proportion with **diacetylmorphine/heroin** and **slow-release morphine** **increased** from **15.1%** (11/73) to **35.5%** (209/588) and **0% to 30.6%** (180/588), respectively.
- Buprenorphine** as OAT decreased (**13.7% to 5.6%**), whereas **levomethadone** increased (**0% to 4.8%**).
- Excluding patients on diacetylmorphine/heroin**, the development was as follows: methadone: 82.3% (51/62) to 40.4% (153/379), slow-release morphine: 0% to 42.7% (162/379), buprenorphine: 16.1% (10/62) to 8.7% (33/379), and levomethadone: 0% to 6.3% (24/379).
- The proportion of patients with a **QT prolongation** decreased from maximal **21.8%** (31/142) in 2015 to **12.3%** (25/204) in 2024 ($p = 0.017$).

Opioid agonist therapy (OAT) distribution and proportion with QT prolongation in the SAMMSU cohort according to calendar year



CONCLUSIONS

- In the SAMMSU-cohort 2013-2024, **methadone** as OAT-drug **decreased by 65%** in favour of slow-release morphine and diacetylmorphine/heroin.
- Since 2015, the **proportion with QT prolongation** has approximately **halved**.