TRENDS OF OPIOID AGONIST THERAPIES AND QT PROLONGATION IN THE SWISS ASSOCIATION FOR THE MEDICAL MANAGEMENT IN SUBSTANCE USERS (SAMMSU) COHORT 2013-2024

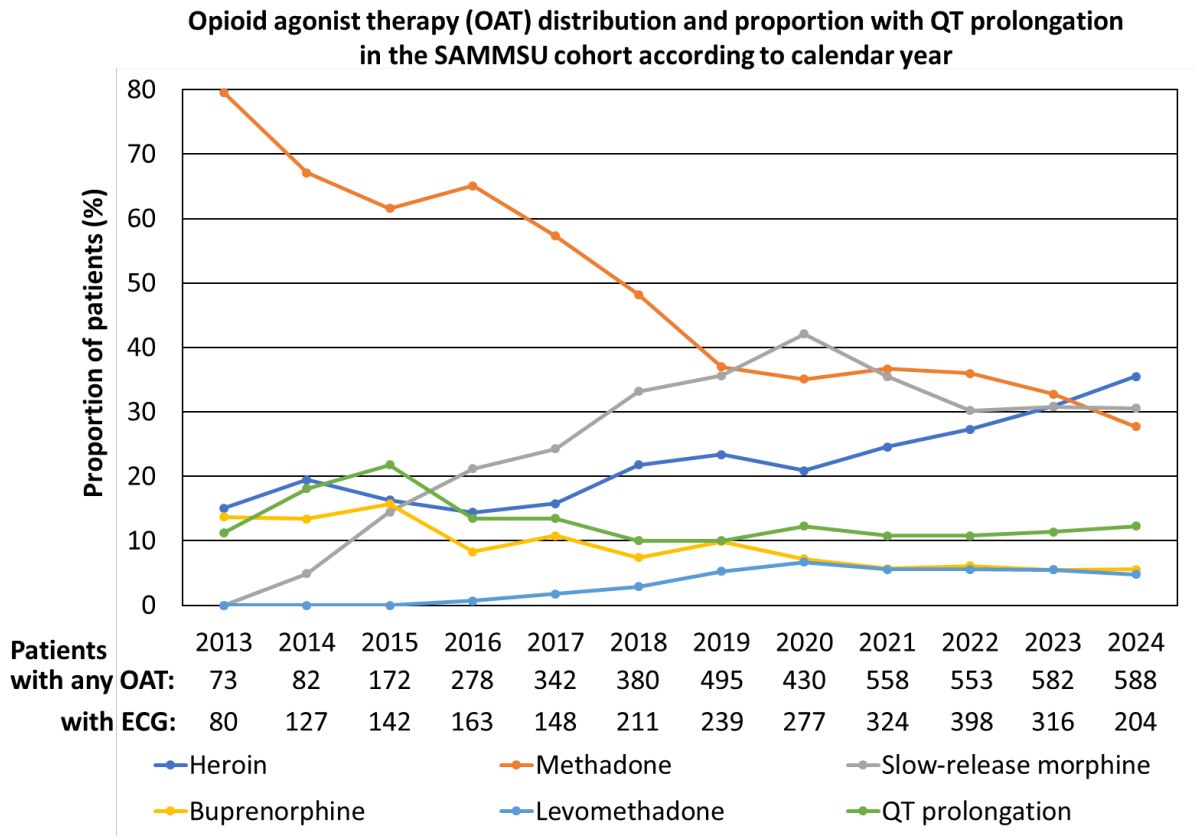
Authors:
Bregenzer A[1], Bruggmann P[2], Castro E[3], Hensel-Koch K[4], Moriggia A[5,6], Scheidegger C[7]

[1]Department of Infectious Diseases and Infection Prevention, Cantonal Hospital Aarau, [2]Arud Centre for Addiction Medicine, Zurich, [3]Medical Practice and HepC Virtual Clinic, Lausanne, [4]Stiftung Suchthilfe, St. Gallen, [5]Ingrado Servizi per le Dipendenze, Lugano, [6]Epatocentro Ticino SA, Lugano, [7]Independent, Basel

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) was determined in all patients who had an electrocardiogram in the respective year.

Results:
Between 2013 and 2024, the yearly number of visits increased from 78 to 630 and the median age from 39.2 (IQR: 33.8-44.5) to 49.2 (IQR: 39.8-56.1) years, with the proportion of >55-year-old patients rising from 5.1% to 28.6%.
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 ($p=0.017$).



Conclusion:
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.

Disclosure of Interest Statement: ***See example below:***
SAMMSU has been financed by Infodrog (on behalf of Swiss Federal Office of Public Health), Pharma industries (BMS, Abbvie, Gilead, Merck, Roche, ViiV, Lipomed), SSAM (Swiss Society for Addiction Medicine), SEVHep (Swiss Experts in Viral Hepatitis), Inselspital Bern, Kantonsspital St. Gallen, Kantonsspital Aarau, Arud Zentrum für Suchtmedizin, Zfs Zentrum für Suchtmedizin Basel, Universitätsspital Zürich.

Note: If accepted into the program you will be requested to include a disclosure of interest slide into your presentation or include such statements in your poster.