# Integrated Care Approaches For Anabolic Steroid Use Disorder: A Swiss Perspective On Public Health And Harm Reduction

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#### Rationale/Aims

- The use of anabolic androgenic steroids (AAS) and image- and performance-enhancing drugs (IPEDs) have become a major global substance use disorder (SUD) and growing public health threat particularly among young males in recreational sport.
- Side effects of AAS/IPED use are multiple and may be severe, affecting physical, mental, and social well-being.
- Healthcare services for this population are scarce.
- Acquisition of AAS/IPEDs most often occur from unregulated drug markets - leading to possible counterfeiting.
- Aims: The aim of this pilot project in Zurich was to evaluate the feasibility of implementing drug checking services (DCS) for people using AAS, as well as implementing best current medical practice for this population in a Swiss primary care practice.

#### Results

- Feasibility outcomes: Excellent results regarding loyalty towards and patient satisfaction with the received services were achieved for both services (i.e., practice and DCS) measured with the applied metrics (i.e., NPS and CSAT score).
- Patient/client characteristics: Patients/Clients were commonly young professional males (30-40 years of age), with a higher education, were not competing in competitive sports, with the motivation to improve body image.
- Substance use characteristics: Acquisition of these substances occurred mostly through non-medical sources (i.e., Peers, the Internet). Patterns of AAS use were complex with extensive polypharmacy and concomitant illicit drug use.
- At the practice: Most patients (*N*=34) suffered from multiple physical and mental health complications some possibly severe regarding morbidity and mortality.
- At the DCS: Many different AAS substances were chemically assessed (Graph 1). The chemical analysis (*N*= *71 samples*) demonstrated that over half (52%) of submitted samples were misdeclarations or poor-quality samples (Graph 2).

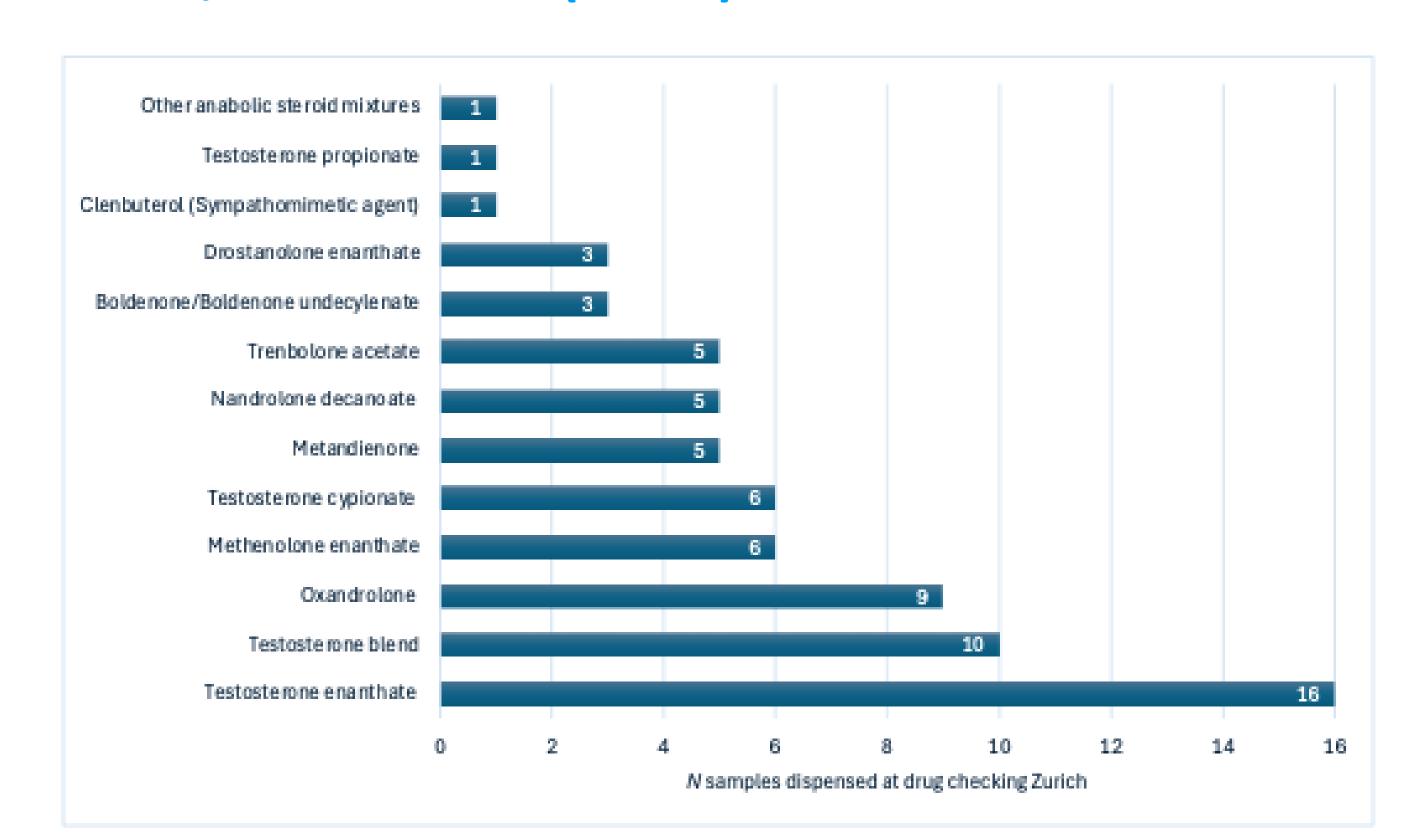
#### Conclusions

- The integration of current best medical practice into primary care, as well as delivery of DCS for people who are using AAS appear to be feasible with high acceptance in a Swiss context.
- Patients/Clients may engage in high-risk behaviours and suffer from a high prevalence of comorbid medical conditions.
- Patients likely benefit from integrated medical care provided and coordinated in a primary health care setting.
- DCS for AAS appear to be a feasible harm reduction tool for this population. Chemical analysis reveals that many samples were with low qualitative and quantitative properties, which may confront this population with unpredictable health risks.
- Antidoping laws demonstrated to be a major limitation to provision of medical care changes in legislation are crucial to adequately treat this SUD and avert this public health threat.

#### Methods

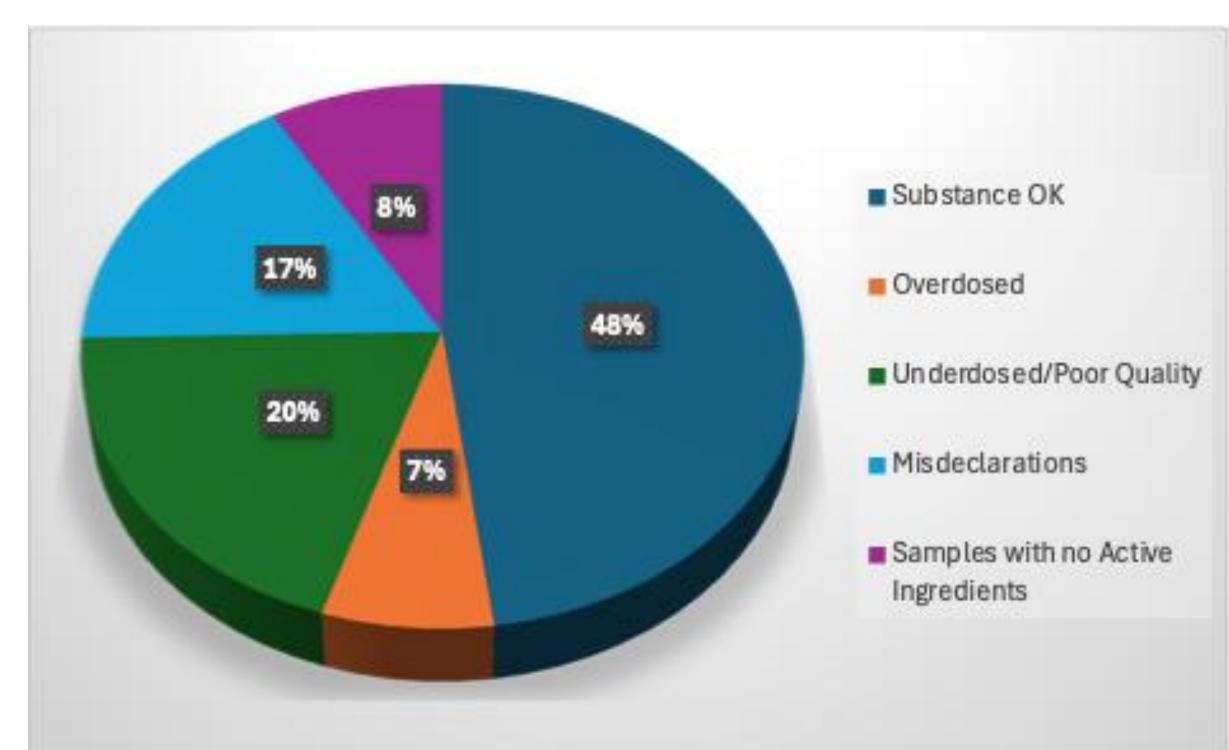
- Feasibility outcomes: Satisfaction with as well as loyalty towards the services received (i.e., NPS and CSAT score).
- Other assessments: Patient/Client characteristics, health outcomes, and substance use behaviours.
- At the practice: Patients could access these medical services from June 2023 onwards. Eligibility criteria were based on legal restrictions regarding Antidoping laws. Patients received physical, psychometric, instrumental, and laboratory exams.
- At the DCS: Customers could access DCS from August 2023 onwards by providing a voluntary user questionnaire, receiving counselling (i.e., substance use, safer-use, motivations) and providing samples of AAS for chemical analysis (GC-MS).
- Observation period: 06-12/23 (practice); 08/23-10/24 (DCS)
- Statistics: Data sets summarized using descriptive statistics.

### **Graph 1: Anabolic samples dispensed at the DCS in Zurich, Switzerland (N=71)**



Cross-sectional analysis of N=71 AAS samples dispensed at drug checking Zurich during the observation period.

## Graph 2: Qualitative and quantitative chemical analysis of dispensed anabolic samples (N=71)



Cross-sectional analysis of qualitative and quantitative chemical analysis results of N=71 AAS samples dispensed at drug checking Zurich during the observation period.

#### References

- Magnolini R et al., Feasibility of implementing current best clinical practice for people who are using anabolic androgenic steroids within a Swiss primary care practice: a quality assurance study. Swiss Med Wkly. 2025
- Magnolini R, et al., Evaluation of implementing drug checking services for anabolic androgenic steroids in Switzerland: a pilot study. Harm Reduct J. 2025

