

# RECURRING SEVERE INJECTION-RELATED INFECTIONS IN PEOPLE WHO INJECT DRUGS AND THE NEED FOR SAFE INJECTION SITES IN MADRID, SPAIN

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# BACKGROUND

- ▶ Madrid currently has no safe injection sites. these sites were closed 10 years ago.
- ▶ An estimated 68,297 people with opioid use disorder engaged in opioid agonist therapy in Spain during 2017.
- ▶ We aimed to calculate the incidence of severe injection-related infections in people who inject drugs (PWID) engaged in opioid agonist therapy (OAT) in harm reduction settings without a safe consumption space (SCS).



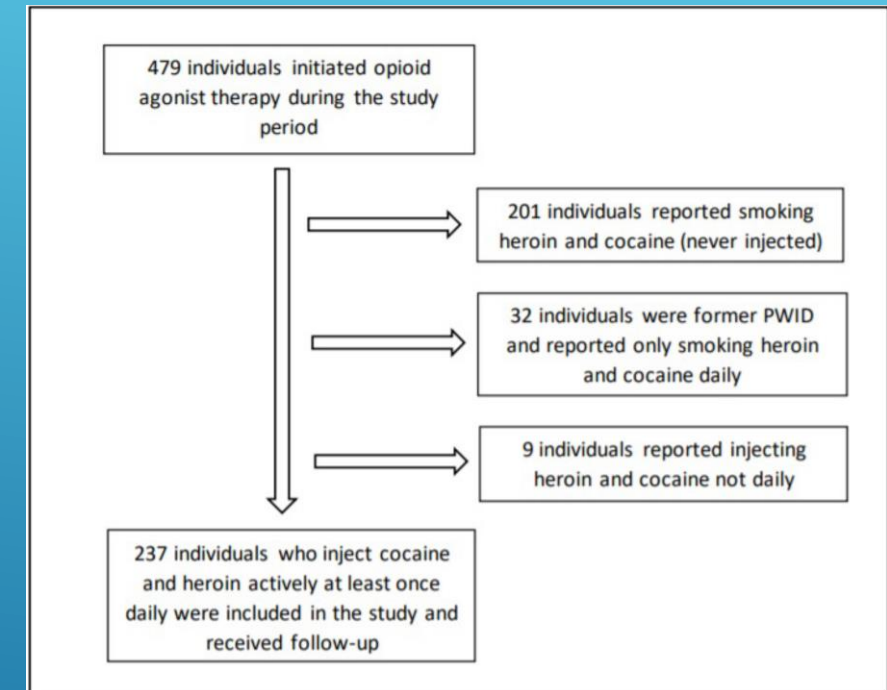
# METHODS:

- ▶ A retrospective cohort study was performed in PWID engaged in (OAT) and in a mobile harm reduction unit to quantify admissions to a referral hospital for any severe injection-related infections between 1 January 2016 and 31 December 2019.
- ▶ A Cox proportional hazard regression analysis was used to assess factors associated with any severe injection-related infection.



# RESULTS I:

- ▶ 237 PWID who engaged in OAT were included in the study.
- ▶ After a median follow-up of 5.5 months (IQR 1.3–22.7), a total of 104 episodes of severe injection-related infections occurred among 56 individuals, and admission due to a second event occurred in 35.7% of this same group.
- ▶ The median hospital length of stay was six days (IQR 2.0-11.0)
- ▶ Fifty-three (53.8%) of all the episodes were patient-directed discharge, and people who had two or more hospital admissions had a higher PDD frequency.





## KAPLAN-MEIER CURVES STRATIFIED BY TYPE OF SEVERE INJECTION-RELATED INFECTION OF ALL PATIENTS IN THE COHORT.

. Overall, we found that 160 (67.5%) individuals included in the study period, presented in follow-up with at least one [median range 4.5 (range: 1-8)] non-complicated SSTI that did not require hospitalization and they were treated with oral antibiotics at the mobile harm reduction unit.

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# RESULTS II:

**Table 2**

Type of IDU-related infections that required hospital admission	Nº episodes	Incidence density
Global severe injection-related infection	104	26.8 (20.2–34.8) episodes per 100 PY
Bacteremia	11	3.0 (1.3–6.0) episodes per 100 PY
Infective endocarditis	8	2.3 (0.8–5.0) episodes per 100 PY
Bacteremia plus any infection with a non-cardiac location	21	7.7 (4.6–12.0) episodes per 100 PY
Complicated SSTIs	64	20.4 (15.0–27.3) episodes per 100 PY

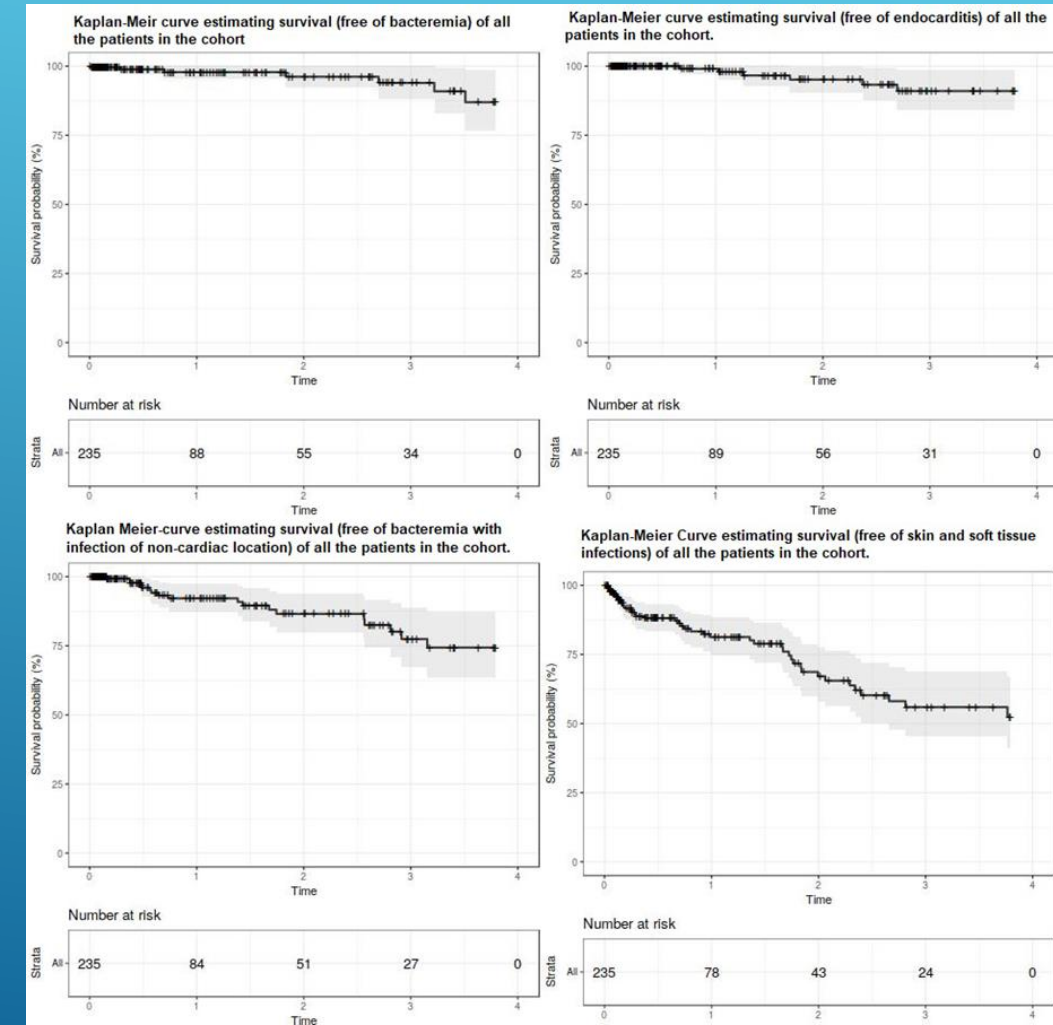
Abbreviations: SSTI: skin and soft tissue infection; IDU: injecting drug use; PY: person-years

## Microbiologic results


Characteristics	n (%)
Sites of SSTI	
limbs	29 (45.3%)
arms	18 (28.1%)
groin	10 (15.6%)
hands	4 (6.3%)
neck	3 (4.7%)
Microorganisms identified	
Staphylococcus aureus	32 (55.2%)
MSSA*	30 (93.7%)
MRSA*	2 (6.3%)
β-hemolytic streptococci	24 (41.4%)
Other Staphylococcus species	2 (3.4%)

\* percentages calculated of Staphylococcus aureus. Abbreviations: SSTI: skin and soft tissue infection; MSSA: methicillin-sensitive S. aureus; MRSA: methicillin-resistant S. aureus

Kaplan-Meier curves stratified by type of severe injection-related infection of all patients in the cohort.



# CONCLUSIONS:

- ▶ The incidence of severe injection-related infections that occurred among PWID on OAT in a harm reduction setting without a safe injection site was very high and the recurrence of noncomplicated SSTIs was highly prevalent in this setting.
  - ▶ Hospital readmissions for a new event of severe injection-related infection were frequent in a subgroup of higher-risk individuals who also presented more frequency of patient-directed discharge.
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