MORTALITY AMONG INDIVIDUALS PRESCRIBED LONG-ACTING INJECTABLE BUPRENORPHINE (LAIB) IN SCOTLAND, 2020-2023: A NATIONAL RETROSPECTIVE COHORT STUDY.

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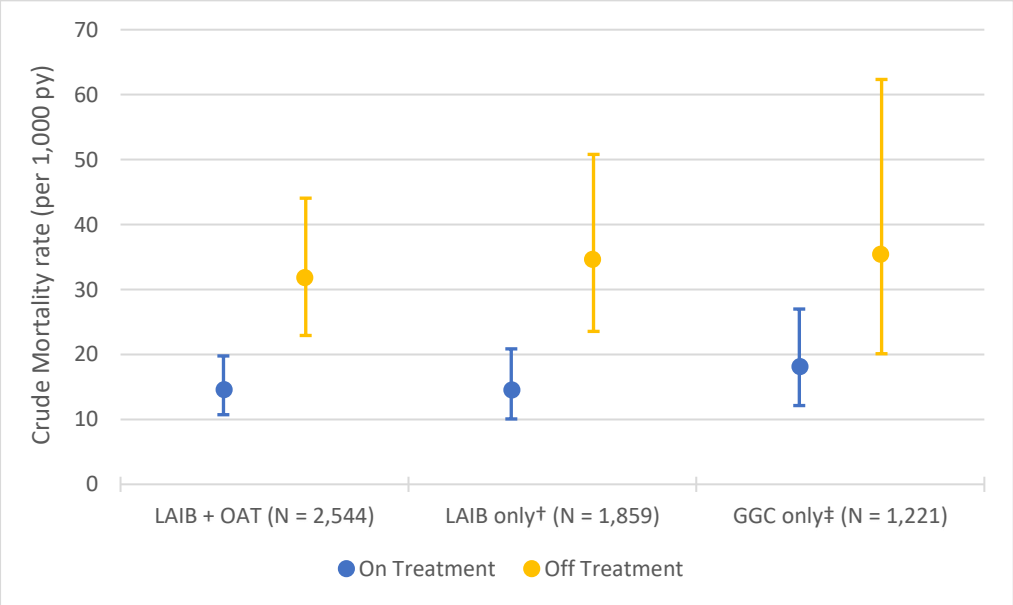
Background:
Long-acting injectable buprenorphine (LAIB), introduced in Scotland in 2019, has the potential to address issues associated with other opioid agonist therapy (OAT) medicines, with initial studies reporting improved rates of retention and adherence compared to sublingual buprenorphine. There is however comparatively little investigation of LAIB impact on population-level outcomes. In this study, we estimated the risk of all-cause mortality (ACM) in people prescribed LAIB in Scotland.

Methods:
We undertook a national retrospective cohort study of individuals in Scotland prescribed LAIB between February 2020 and April 2023. Records were linked to mortality data from National Records of Scotland, and other healthcare datasets held by Public Health Scotland. We fitted multivariable cox proportional hazard models to estimate if LAIB exposure is protective against ACM, adjusting for sex, age and comorbidity.

Results:
The cohort consisted of 2,544 individuals with at least one LAIB prescription and around 3,950 person-years of follow-up. There were 77 deaths from any cause (25 of which were drug-related), with an overall crude mortality rate (CMR) of 19.49 (95% CI = 15.59-24.37) per 1,000 person-years. The CMR on LAIB was 14.55 (95% CI = 10.72-19.77) and the CMR off LAIB was 31.78 (95% CI = 22.92-44.06). After adjustment, LAIB was shown to be protective against ACM, with risk more than two times greater off LAIB (adjusted HR: 2.36, 95% CI = 1.50-3.72) than on LAIB.

Figure 1: Crude mortality rates, split by treatment exposure:



†Removing patients that received a prescription for any other OAT within the study period.
‡Greater Glasgow & Clyde health board only.

Conclusion:
This is the first cohort study to examine mortality in those prescribed LAIB at a national level. Our results provide evidence that mortality risk is lower among those on LAIB and are consistent with other forms of OAT in Scotland. However, mortality rates overall and both on and off treatment remain high, indicating that additional interventions are required to reduce mortality in those with opioid use disorder.

Disclosure of Interest Statement:
No conflicts of interest to declare.