

# ASSOCIATION OF OPIOID AGONIST TREATMENT WITH ALL-CAUSE MORTALITY AND SPECIFIC CAUSES OF DEATH AMONG PEOPLE WITH OPIOID DEPENDENCE: A SYSTEMATIC REVIEW AND META-ANALYSIS

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## Background:

Mortality among people with opioid dependence is higher than that of the general population. Opioid agonist treatment (OAT) is an effective treatment for opioid dependence; however, there has not yet been a systematic review on the relationship between OAT and specific causes of mortality.

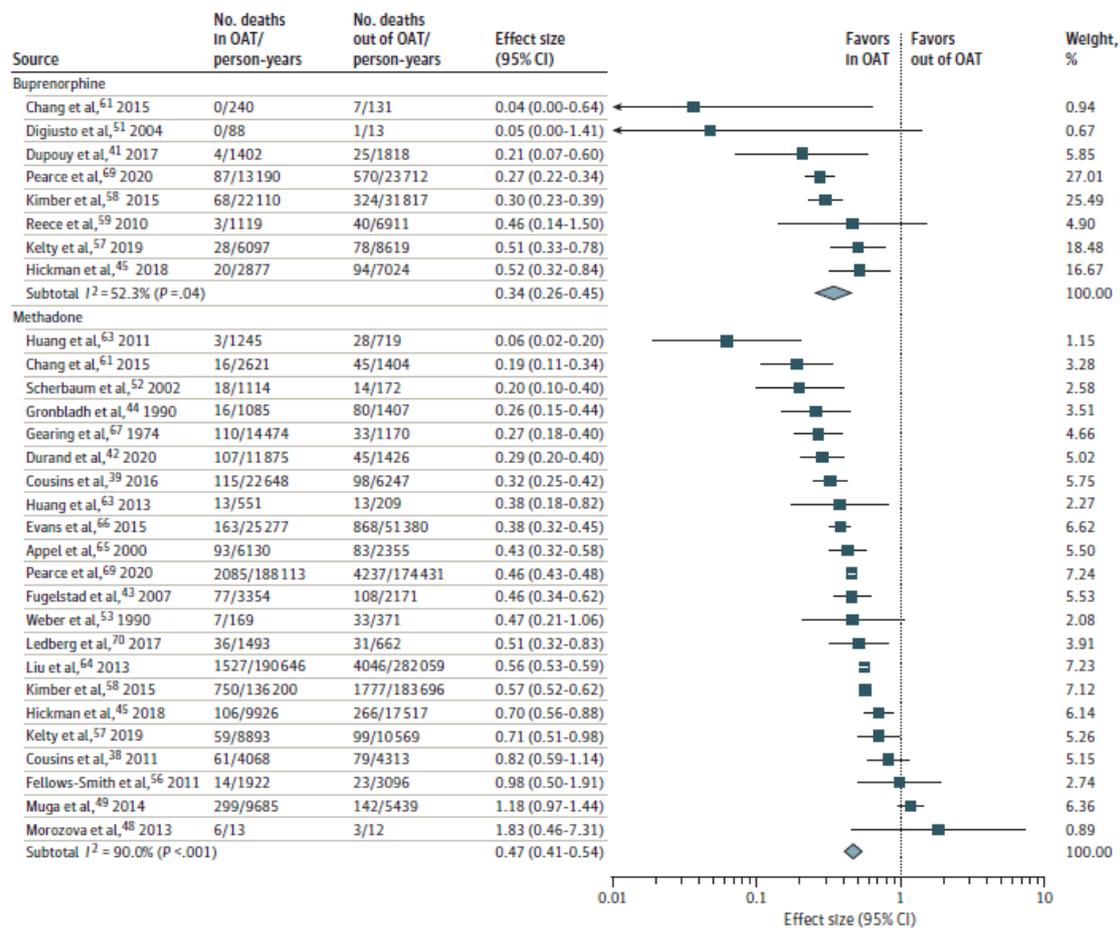
## Methods:

We searched Embase, MEDLINE, and PsycINFO databases for observational studies that collected data on mortality among people with opioid dependence while receiving and not receiving OAT. Data on study, participant, and treatment characteristics were extracted; person-years, all-cause mortality, and cause-specific mortality were calculated. Crude mortality rates and rate ratios (RRs) were pooled using random-effects meta-analyses.

## Results:

We included data from 36 cohort studies with 749,634 participants. The rate of all-cause mortality during OAT was more than half of the rate seen during time out of OAT (RR, 0.47; 95%CI, 0.42-0.53). This association between receiving OAT and all-cause mortality was consistent regardless of patient sex, age, geographic location, HIV status, hepatitis C virus status, and history of injecting drug use. There was lower risk of suicide (RR, 0.48; 95%CI, 0.37-0.61), cancer (RR, 0.72; 95%CI, 0.52-0.98), drug-related (RR, 0.41; 95%CI, 0.33-0.52), alcohol-related (RR, 0.59; 95%CI, 0.49-0.72), and cardiovascular-related (RR, 0.69; 95%CI, 0.60-0.79) mortality during OAT. All-cause mortality was 6 times higher in the 4 weeks after OAT cessation (RR, 6.01; 95%CI, 4.32-8.36), remaining double the rate for the remainder of time not receiving OAT (RR, 1.81; 95%CI, 1.50-2.18). OAT was associated with a lower risk of mortality during incarceration (RR, 0.06; 95%CI, 0.01-0.46) and after release from incarceration (RR, 0.09; 95%CI, 0.02-0.56).

Figure. Studies on the Association of Opioid Agonist Treatment (OAT) With All-Cause Mortality From Randomized Clinical Trials and Cohort Studies by Administration of Buprenorphine or Methadone



Weights are from random-effects analysis.

### Conclusion:

OAT was associated with lower rates of mortality. However, access to OAT remains limited, and coverage remains low. Work to improve access globally may have important population-level benefits.

### Disclosure of Interest Statement:

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Figure: Prevalence estimates of child maltreatment in people with opioid dependence by gender

