

**PSG-confirmed OSA patients screened across 6 hospitals
(n=1023)**

Excluded (n=823)

- Missing key biomarker data (TG, glucose, HDL-C, albumin, leukocyte differential): n=322
- Missing base clinical covariates: n=190
Observation time < 5 years or unavailable
5-year vital status: n=260
- Duplicate records, data quality issues,
or other prespecified exclusions: n=51

**Final external validation cohort
(n=200)**

All included patients had at least 5 years of
observation time from baseline assessment

**Alive at 5 years
(n=182)**

**Dead at 5 years
(n=18)**