Menopause is under-represented in RWD and needs a specific phenotype algorithm to define a representative cohort.

Developing a phenotype algorithm to identify natural menopausal women in secondary data: A multi-country, large-scale OHDSI network study

**Background:** Around 47 million women enter menopause each year globally with up to 80% experiencing vasomotor symptoms (VMS) which can negatively impact their quality of life. Menopause research has been impeded by inadequate capture and inconsistent definitions, resulting in varied epidemiological data. This study aims to identify women in natural menopause by developing a common phenotype algorithm across multiple data sources and countries.

**Results:** Age distributions are representative of natural menopause cohort with more specific inclusion criteria.

**Methods**

This was a retrospective observational cohort study to define a phenotype algorithm to identify natural menopausal women aged 40–65 from January 2009 up to the latest available date in administrative claims and EHR databases including more than 312 million women from five countries: France, Germany, Japan, UK and US.

OHDSI ‘Cohort Diagnostics’ and ‘FeatureExtraction’ packages were used which was followed by manual comparison of age, comorbidities and medication use for each phenotype algorithm. PheValuator was used to support the review of results (not shown).

**Conclusions:** This OHDSI network study worked towards establishing a menopause phenotype algorithm by using more specific criteria for identifying natural menopausal women in RWD. Limitations include under-reporting and suboptimal coding practices in menopause. The results will help develop a consistent definition of menopause for future research in secondary databases.