

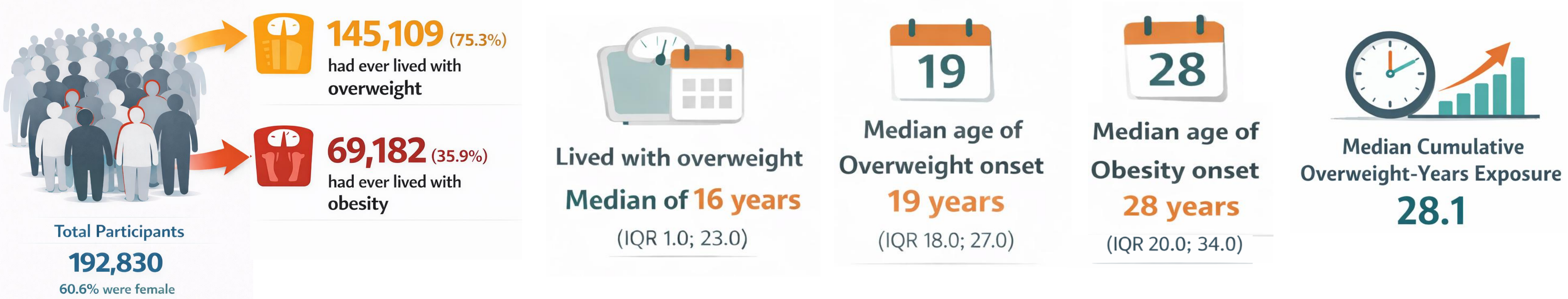
Longer duration and greater cumulative exposure to overweight and obesity in early adulthood were associated with higher risk of all-cause mortality among individuals with obesity-related cancer

Early adulthood adiposity trajectory and all-cause mortality among obesity-related cancer patients in Catalonia, Spain

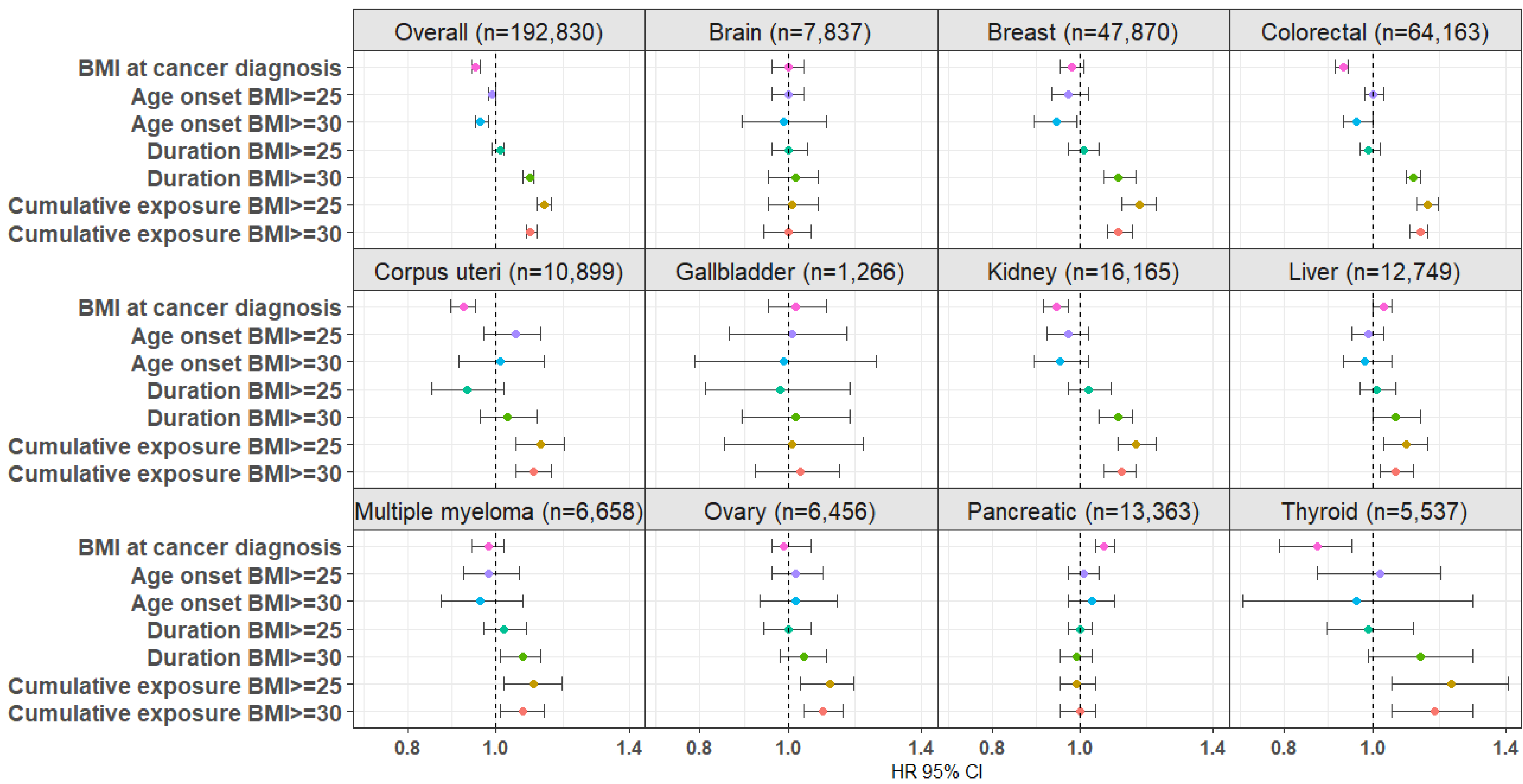
Background

Excessive adiposity and body weight are established risk factors for several types of cancer and have also been associated with increased overall and cancer-specific mortality. This study aims to investigate the association between early adulthood adiposity trajectory and risk of all-cause mortality in individuals diagnosed with 11 obesity-related cancers using data from SIDIAP database mapped to OMOP.

Result 1: Characteristics of the individuals with obesity-related cancer diagnosis



Result 2: Association between BMI-derived exposures and all-cause mortality per an increase of 1-SD in individuals diagnosed with obesity-related cancer overall and by each cancer type



Methods

Data source

SIDIAP (2010–2023) – Catalonia, Spain

Population

18–40 years: BMI trajectories
41–90 years: Obesity-related cancer diagnosis

Overweight/obesity exposures

Age at Onset
Duration (years)
Cumulative exposure
BMI at diagnosis

Outcome

All-cause mortality

Data processing

Multilevel time raster imputation (BMI trajectories)
Multiple imputation (smoking status, alcohol risk, MEDEA deprivation index)

Analysis

Cox models (HR, 95% CI)
Adjusted + Stratified
Pooled results – Rubin’s rule

Limitation: Use of multiple imputed BMI measurements due to the extensive 13-year follow-up. Each participant's BMI values were imputed using their existing measurements and those of similar individuals.

