

# Supplementary Figure 1

**Step 1:** Search literature for Mendelian randomisation studies of BMI and disease



**Step 2:** Perform Mendelian randomisation of BMI and body fat percentage with disease



**Step 3:** Confirm whether causal effect was due to fat mass rather than fat free mass



**Step 4:** Perform Mendelian randomisation of metabolically favourable and unfavourable adiposity with disease



**Step 5:** Identify whether evidence of metabolic, non-metabolic, combination (predominantly metabolic) or combination (predominantly non-metabolic) causal effect

■ Favourable adiposity ■ Unfavourable adiposity

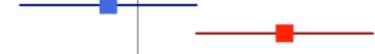
Metabolic



Non-metabolic



Combination - predominantly metabolic



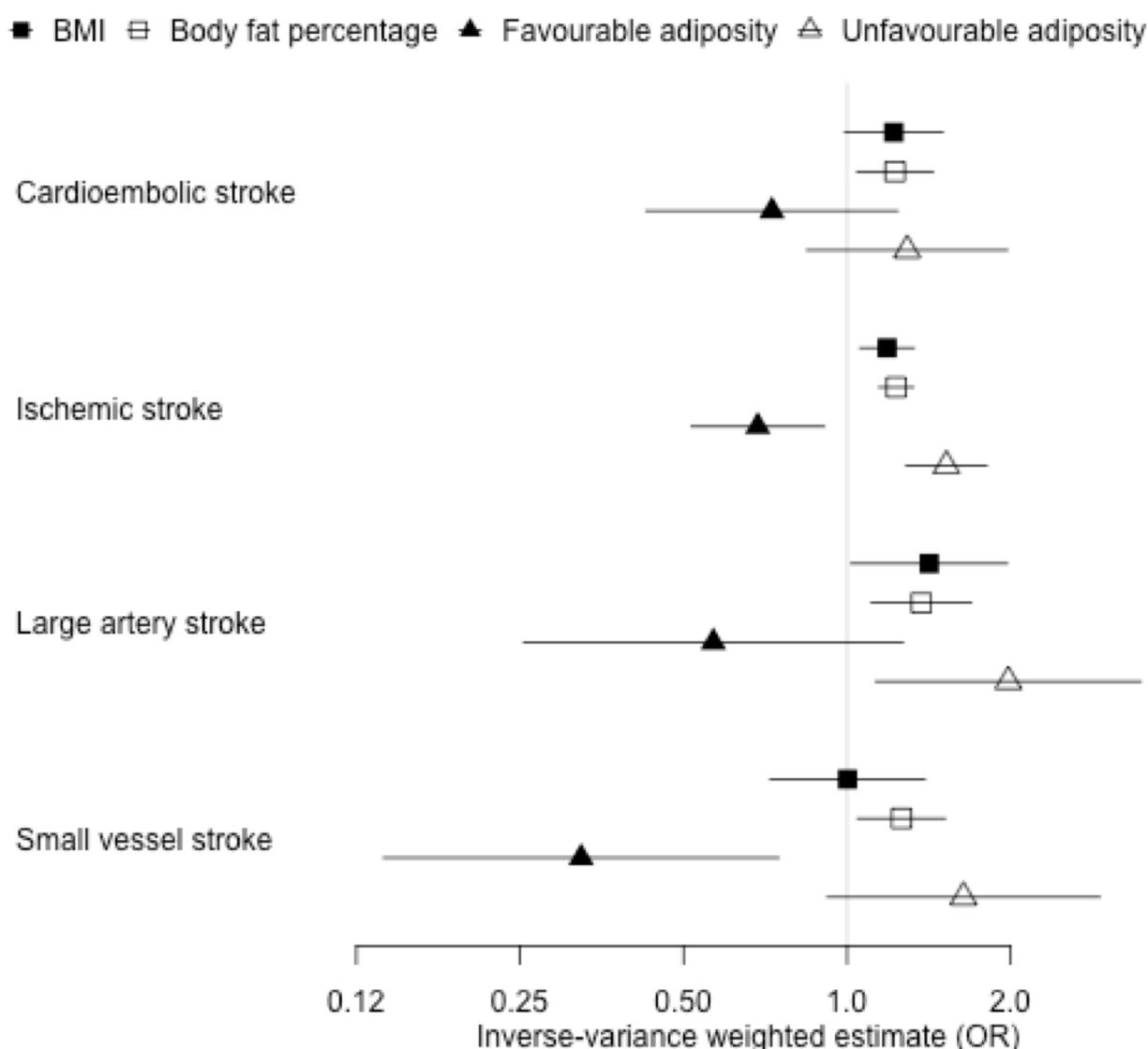
Combination - predominantly non-metabolic



0.25 0.50 1.0 2.0 4.0  
Effect (OR) and 95% CI

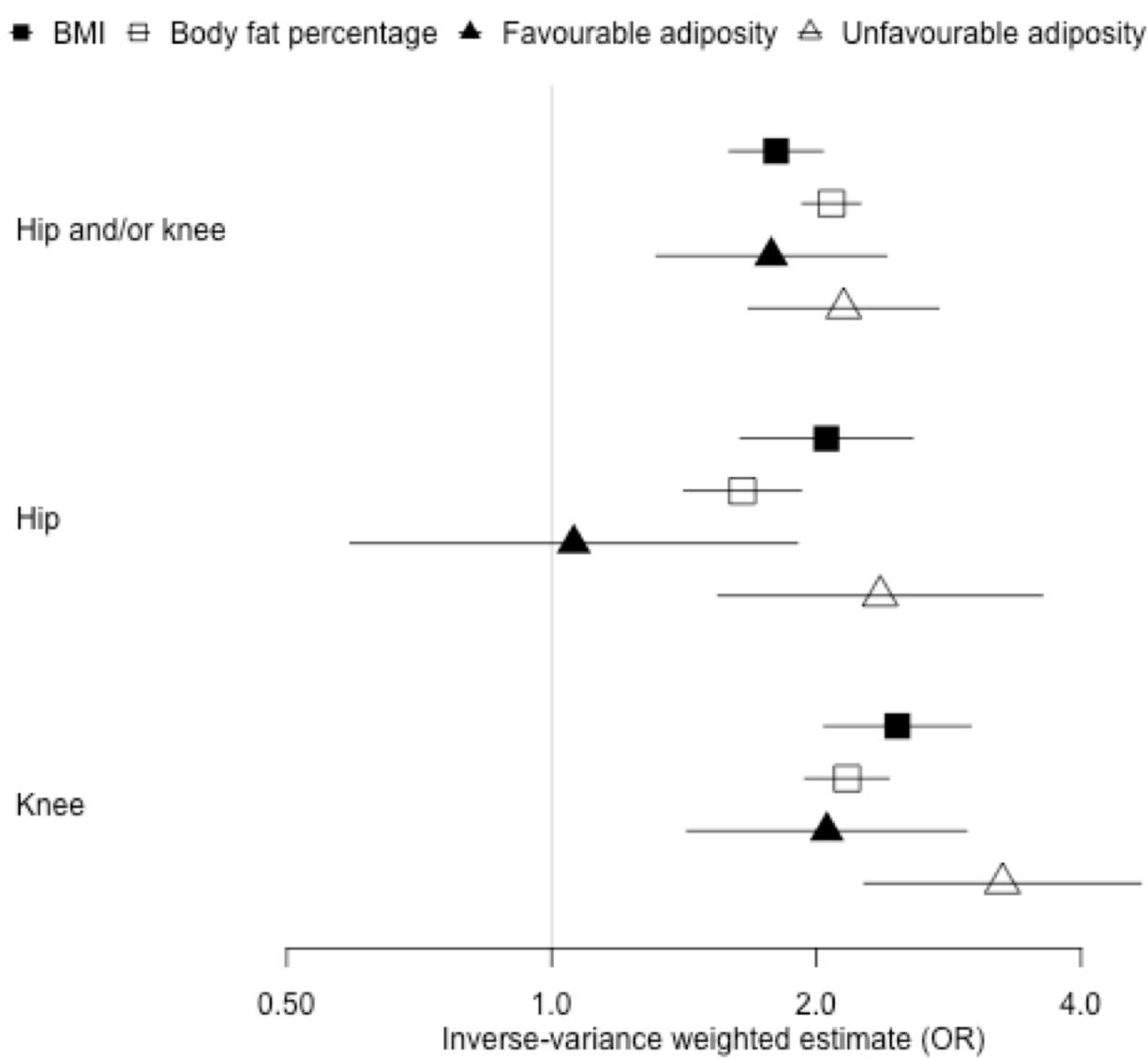
## Supplementary Figure 2a

### Stroke



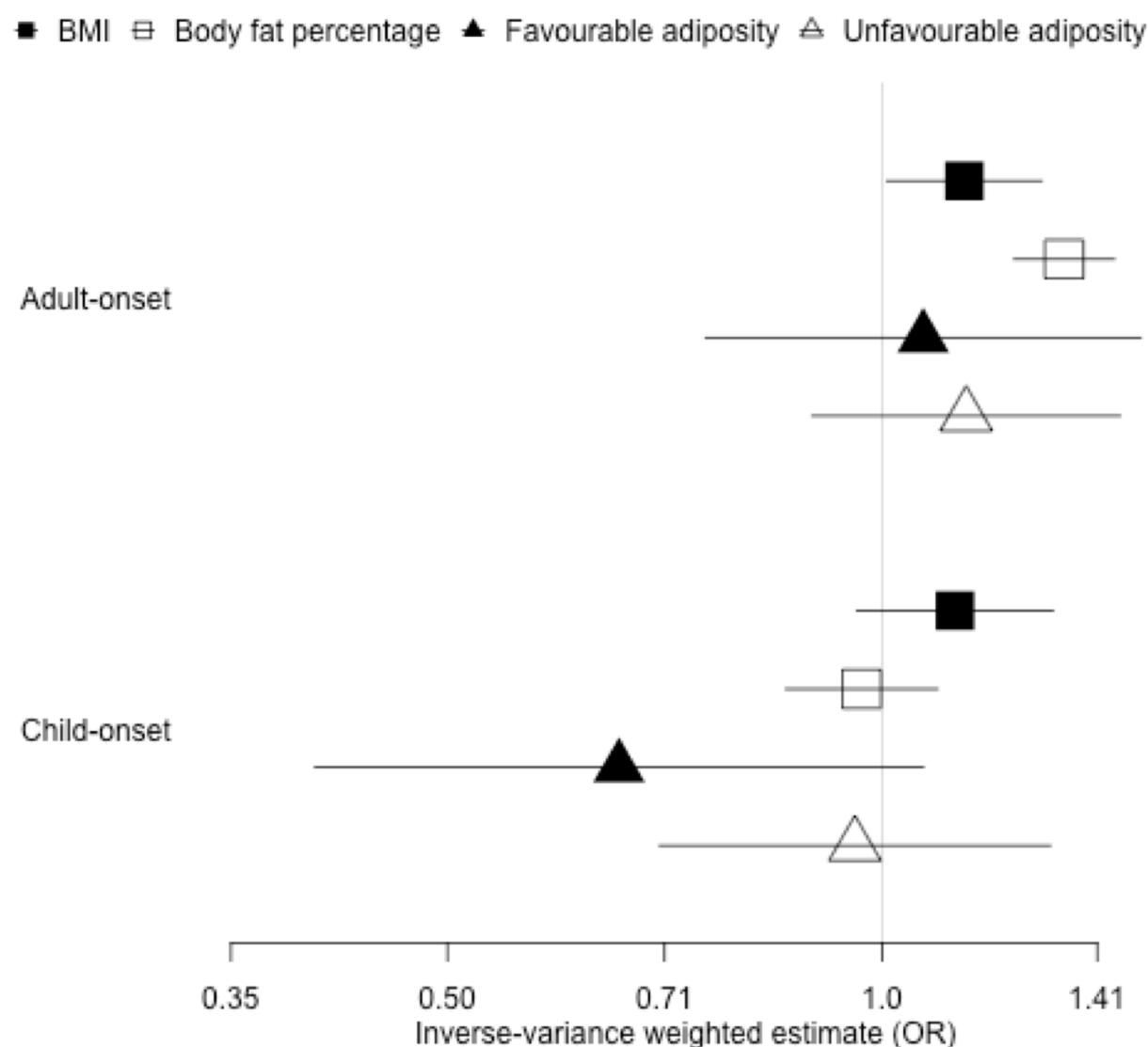
## Supplementary Figure 2b

### Osteoarthritis



## Supplementary Figure 2c

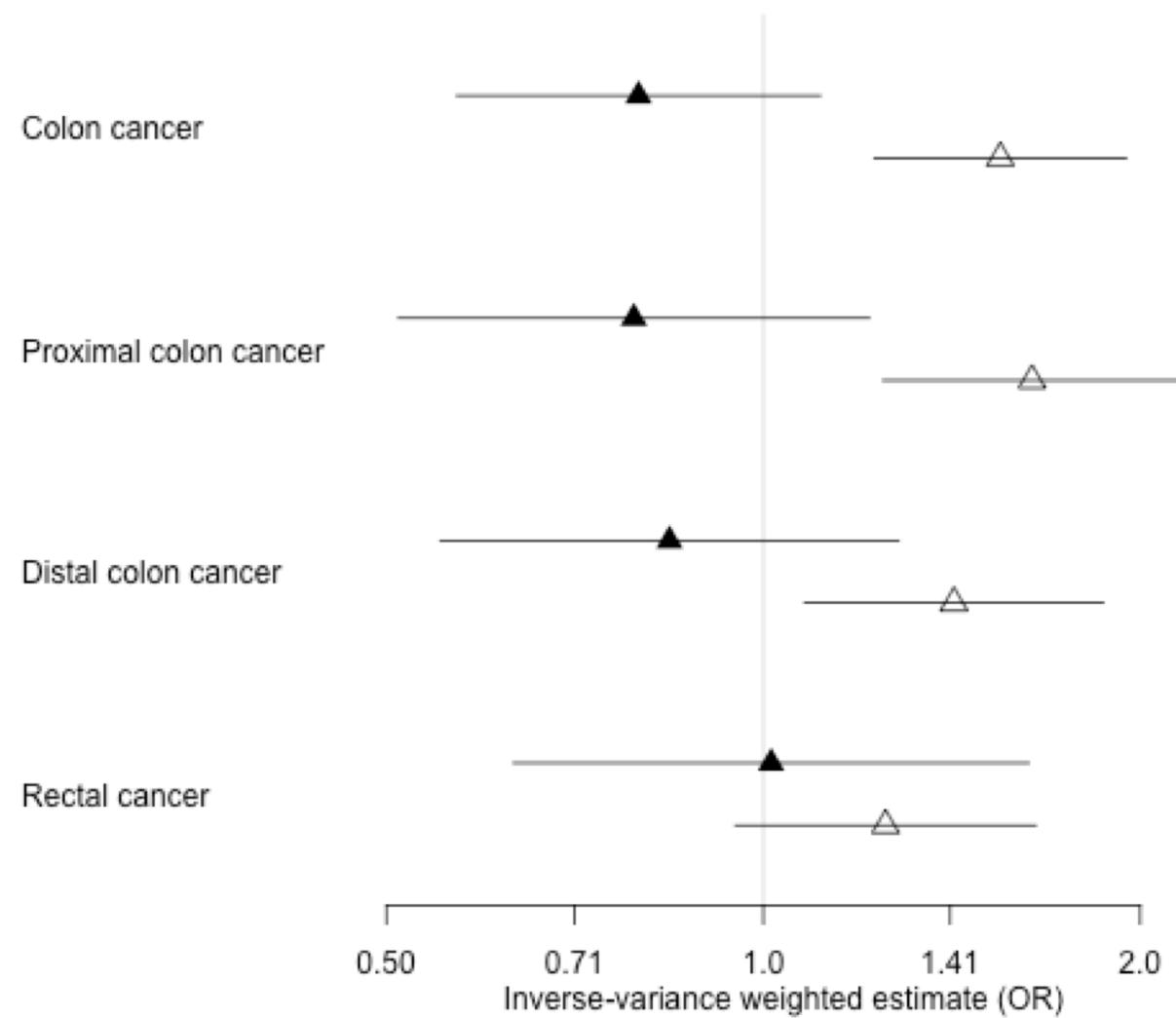
### Asthma



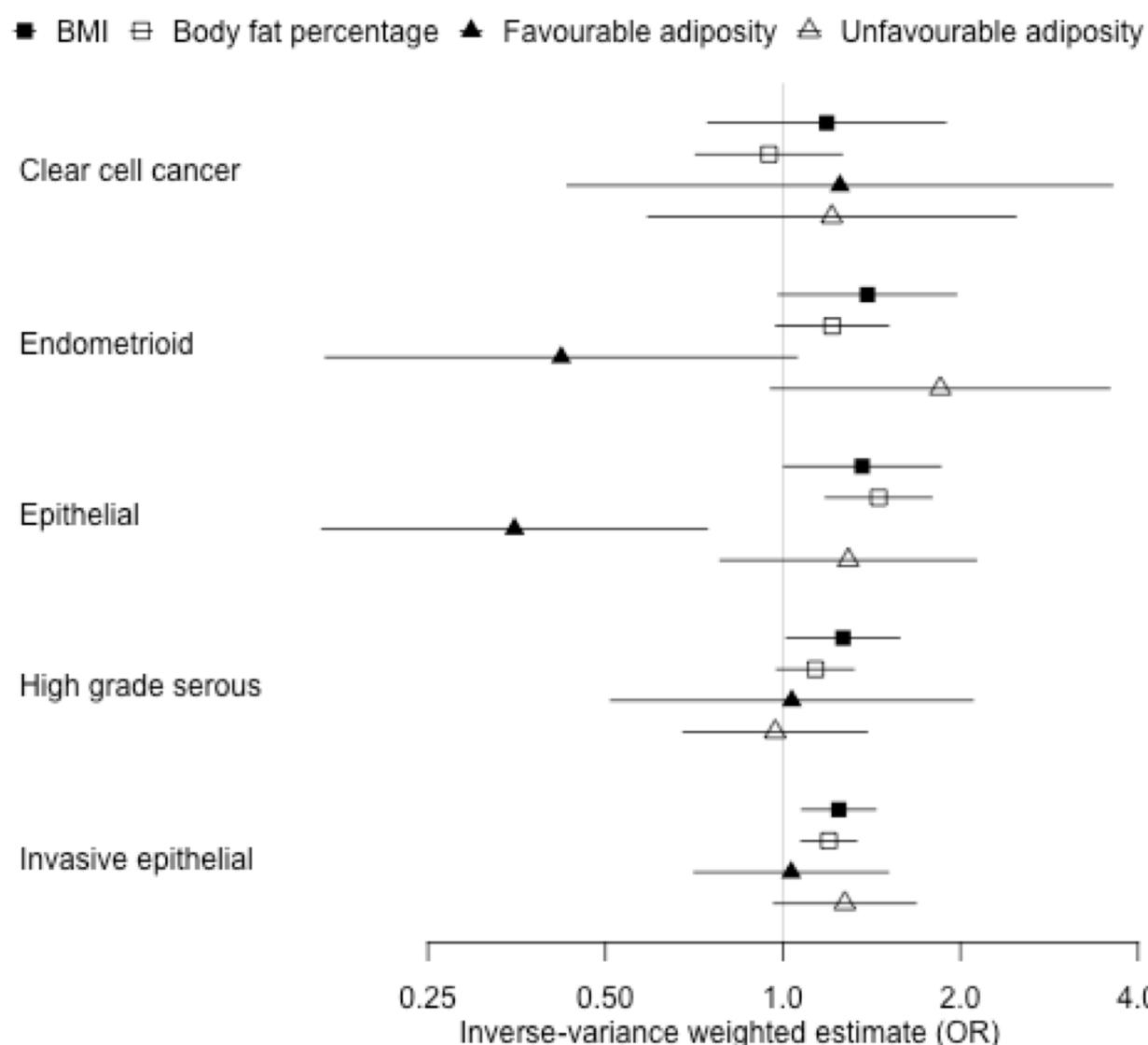
## Supplementary Figure 2d

### Colorectal Cancer

▲ Favourable adiposity △ Unfavourable adiposity



## Supplementary Figure 2e Ovarian Cancer



## Supplementary Figure 2f Ovarian Cancer

