**Table S6. Risk of endometrial cancer incidence associated with metabolic health-defined body size phenotypes using anthropometric and C-peptide cut-points by 1) quartiles; and 2) median**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Metabolically healthy** | **Metabolically unhealthy** | **p** |
| Normal weight1 | Overweight/Obesity2 | Normal weight3 | Overweight/Obesity4 |
| **Cut-points by C-peptide quartile 1** |
| **BMI** | N cases/controls | 93/134 | 58/71  | 194/273 | 472/339 |  |
|  | Adjusted model | 1.00 | 1.26 (0.77-2.05) |  1.04 (0.72-1.49) | **2.18 (1.55-3.08)** | <.0001 |
|  |  |  | **0.44 (0.25-0.78)** |  | 1.00 | 0.0053 |
| **WC** | N cases/controls | 85/136 | 57/63 | 194/249 | 423/311 |  |
|  | Adjusted model | 1.00 | **1.78 (1.05-3.00)** |  1.32 (0.91-1.91) | **2.54 (1.76-3.65)** | <.0001 |
|  |  |  | 0.77 (0.45-1.34) |  | 1.00 | 0.3574 |
| **WHR** | N cases/controls | 94/134 | 48/65 | 256/246 | 361/314 |  |
|  | Adjusted model | 1.00 | 1.18 (0.72-1.94) |  **1.58 (1.12-2.24)** | **1.78 (1.25-2.53)** | 0.0006 |
|  |  |  | **0.40 (0.22- 0.76)** |  | 1.00 | 0.0047 |
| **Cut-points by C-peptide median** |  |
| **BMI** | N cases/controls | 178/245 | 172/164 | 109/162 | 358/246 |  |
|  | Adjusted model | 1.00 | **1.64 (1.17-2.28)** |  0.98 (0.68-1.41) | **2.20 (1.62-3.00)** | <.0001 |
|  |  |  | **0.66 (0.42-1.02)** |  | 1.00 | 0.0617 |
| **WC** | N cases/controls | 172/247 | 164/146 | 107/138 | 316/228 |  |
|  | Adjusted model  | 1.00 | **1.90 (1.34-2.68)** |  1.17 (0.80-1.70) | **2.31 (1.67-3.18)** | <.0001 |
|  |  |  | 0.89 (0.58-1.36) |  | 1.00 | 0.5834 |
| **WHR** | N cases/controls | 198/232 | 138/161 | 152/148 | 271/218 |  |
|  | Adjusted model  | 1.00 | 1.08 (0.77-1.51) |  1.26 (0.90-1.77) | **1.55 (1.13-2.12)** | 0.0045 |
|  |  |  | **0.60 (0.37-0.96)** |  | 1.00 | 0.0333 |

**Note.** Values are OR (95% CI). Adjusted model was conditioned on matching factors with additional adjustment for age at menopause, age at menarche, parity, hormone use, physical activity index, smoking status, educational level, alcohol intake, height, total energy intake and diabetes. Model 3 was further adjusted for BMI. P-value for trend. BMI=Body Mass Index. WC=Waist Circumference. WHR=Waist-to-Hip ratio. 1Metabolically healthy/normal weight (BMI <25 kg/m2 or Waist circumference <80 cm or Waist-to-hip ratio <0.8) plus below quartile 1 of C-peptide or below C-peptide median. 2Metabolically healthy/overweight (BMI ≥25 kg/m2, or Waist circumference ≥80 cm or Waist-to-hip ratio ≥0.8), plus below quartile 1 of C-peptide or below C-peptide median. 3Metabolically unhealthy/normal weight (BMI <25 kg/m2 or Waist circumference <80 cm or Waist-to-hip ratio <0.8), plus above quartile 1 of C-peptide or above C-peptide median. 4Metabolically unhealthy/overweight (BMI ≥25 kg/m2, or Waist circumference ≥80 cm or Waist-to-hip ratio ≥0.8), plus above quartile 1 of C-peptide or above C-peptide median.