**Table S5. Risk of endometrial cancer incidence associated with metabolic health-defined body size phenotypes using anthropometric and C-peptide tertile cut-points** **when including only 1) cases diagnosed after the first 2 y of follow-up; 2) post-menopausal women; 3) endometrial cancer type 1; 4) women without diabetes; 5) Mercodia sample (phase 2);** **6) non exogenous hormone users; and 7) fasting subjects**

|  |  |  |  |
| --- | --- | --- | --- |
| **Metabolic health by:** | **Metabolically healthy** | **Metabolically unhealthy** | P |
| Normal weight1 | Overweight/Obesity2 | Normal weight3 | Overweight/Obesity4 |
| **Cases diagnosed after the first 2 y of follow-up** |  |
| **BMI**  | N cases/controls | 106/179 | 71/94 | 151/228 | 407/316 |  |
|  | Adjusted model  | 1.00 | 1.30 (0.83-2.03) | 1.14 (0.80-1.63) | **2.44 (1.75-3.41)** | <.0001 |
|  |  |  | **0.37 (0.21-0.65)** |  | 1.00 | 0.0006 |
| **WC**  | N cases/controls | 97/180 | 71/84 | 155/205 | 358/290 |  |
|  | Adjusted model  | 1.00 | **1.73 (1.08-2.77)** | 1.43 (0.99-2.05) | **2.75 (1.93-3.90)** | <.0001 |
|  |  |  | 0.65 (0.39-1.10) |  | 1.00 | 0.1124 |
| **WHR** | N cases/controls | 110/173 | 58/91 | 205/207 | 308/288 |  |
|  | Adjusted model  | 1.00 | 1.04 (0.66-1.65) | **1.63 (1.16-2.30)** | **1.88 (1.34-2.64)** | <.0001 |
|  |  |  | **0.33 (0.18-0.62)** |  | 1.00 | 0.0006 |
| **Post-menopausal women only** |  |
| **BMI** | N cases/controls | 60/90 | 100/151 | 50/49 | 286/206 |  |
|  | Adjusted model  | 1.00 | 1.03 (0.65-1.62) | 1.67 (0.93-3.03) | **2.44 (1.58-3.76)** | 0.0001 |
|  |  |  | **0.33 (0.20-0.54)** |  | 1.00 | <.0001 |
| **WC**  | N cases/controls | 55/92 | 101/128 | 49/43 | 250/192 |  |
|  | Adjusted model  | 1.00 | 1.45 (0.91-2.30) | **2.35 (1.25-4.41)** | **2.63 (1.68-4.14)** | 0.0001 |
|  |  |  | **0.54 (0.34-0.85)** |  | 1.00 | 0.0073 |
| **WHR**  | N cases/controls | 59/87 | 133/130 | 45/48 | 218/190 |  |
|  | Adjusted model  | 1.00 | **1.68 (1.06-2.64)** | 1.56 (0.83-2.93) | **1.88 (1.20-2.93)** | 0.0068 |
|  |  |  | 0.84 (0.53-1.33) |  | 1.00 | 0.4481 |
| **Endometrial cancer type 1 only** |  |
| **BMI**  | N cases/controls | 107/164 | 70/86 | 150/199 | 401/279 |  |
|  | Adjusted model  | 1.00 | 1.34 (0.85-2.11) | 1.23 (0.85-1.77) | **2.52 (1.79-3.54)** | <.0001 |
|  |  |  | **0.34 (0.19-0.62)** |  | 1.00 | 0.0003 |
| **WC**  | N cases/controls | 96/166 | 73/76 | 152/182 | 357/254 |  |
|  | Adjusted model  | 1.00 | **2.00 (1.24-3.21)** | **1.62 (1.12-2.35)** | **2.98 (2.08-4.27)** | <.0001 |
|  |  |  | 0.67 (0.39-1.13) |  | 1.00 | 0.1352 |
| **WHR** | N cases/controls | 110/156 | 59/86 | 201/180 | 308/256 |  |
|  | Adjusted model  | 1.00 | 1.07 (0.67-1.70) | **1.77 (1.25-2.52)** | **1.90 (1.34–2.69)** | <.0001 |
|  |  |  | **0.35 (0.19-0.66)** |  | 1.00 | 0.0011 |
| **Women without diabetes only** |  |
| **BMI** | N cases/controls | 114/169 | 71/86 | 165/220 | 415/190 |  |
|  | Adjusted model  | 1.00 | 1.39 (0.89-2.16) | 1.21 (0.85-1.71) | **2.46 (1.77-3.40)** | <.0001 |
|  |  |  | **0.39 (0.22-0.70)** |  | 1.00 | 0.0013 |
| **WC** | N cases/controls | 105/170 | 71/76 | 165/200 | 367/262 |  |
|  | Adjusted model  | 1.00 | **1.76 (1.10-2.82)** | **1.47 (1.03-2.10)** | **2.71 (1.92-3.82)** | <.0001 |
|  |  |  | 0.67 (0.39-1.15) |  | 1.00 | 0.1454 |
| **WHR** | N cases/controls | 118/165 | 58/81 | 224/201 | 308/261 |  |
|  | Adjusted model  | 1.00 | 1.15 (0.73-1.82) | **1.75 (1.25-2.45)** | **1.90 (1.36-2.67)** | <.0001 |
|  |  |  | **0.39 (0.21-0.72)** |  | 1.00 | 0.0028 |
| **Mercodia sample only (phase 2)** |  |
| **BMI** | N cases/controls | 91/143 | 61/67 | 136/175 | 338/241 |  |
|  | Adjusted model  | 1.00 | 1.53 (0.94-2.50) | 1.27 (0.87-1.85) | 2.43 (1.69-3.48) | <.0001 |
|  |  |  | **0.36 (0.18-0.69)** |  | 1.00 | 0.0022 |
| **WC** | N cases/controls | 85/144 | 58/57 | 131/162 | 294/205 |  |
|  | Adjusted model  | 1.00 | **1.97 (1.16-3.34)** | 1.37 (0.92-2.03) | **2.86 (1.94-4.22)** | <.0001 |
|  |  |  | 0.68 (0.37-1.25) |  | 1.00 | 0.2120 |
| **WHR** | N cases/controls | 92/134 | 51/67 | 177/164 | 248/203 |  |
|  | Adjusted model  | 1.00 | 1.23 (0.74-2.04) | **1.61 (1.11-2.33)** | **1.94 (1.34-2.82)** | 0.0002 |
|  |  |  | **0.35 (0.17-0.72)** |  | 1.00 | 0.0044 |
| **Non exogenous hormone users only** |
| **BMI** | N cases/controls | 94/138 | 68/79 | 111/174 | 377/259 |  |
|  | Adjusted model  | 1.00 | 1.41 (0.87-2.30) | 0.99 (0.66-1.49) | **2.43 (1.69-3.51)** | <.0001 |
|  |  |  | **0.55 (0.32-0.96)** |  | 1.00 | 0.0350 |
| **WC** | N cases/controls | 79/138 | 76/73 | 117/153 | 342/250 |  |
|  | Adjusted model  | 1.00 | **2.20 (1.33-3.64)** | 1.46 (0.96-2.21) | **2.79 (1.90-4.09)** | <.0001 |
|  |  |  | 0.93 (0.56-1.55) |  | 1.00 | 0.7769 |
| **WHR** | N cases/controls | 98/132 | 57/79 | 164/154 | 295/249 |  |
|  | Adjusted model  | 1.00 | 1.14 (0.70-1.84) | **1.58 (1.08-2.31)** | **1.77 (1.22-2.57)** | 0.0008 |
|  |  |  | **0.47 (0.26-0.85)** |  | 1.00 | 0.0134 |
| **Fasting subjects only** |
| **BMI** | N cases/controls | 47/67 | 31/34 | 49/63 | 176/138 |  |
|  | Adjusted model  | 1.00 | 1.49 (0.73-3.05) | 1.16 (0.66-2.04) | **2.06 (1.22-3.49)** | 0.0101 |
|  |  |  | 0.54 (0.25-1.17) |  | 1.00 | 0.1189 |
| **WC** | N cases/controls | 43/68 | 35/33 | 57/72 | 168/129 |  |
|  | Adjusted model  | 1.00 | 2.03 (0.94-4.40) | 1.35 (0.76-2.41) | **2.33 (1.34-4.08)** | 0.0078 |
|  |  |  | 1.02 (0.47-2.21) |  | 1.00 | 0.9605 |
| **WHR** | N cases/controls | 51/63 | 27/38 | 80/62 | 145/139 |  |
|  | Adjusted model  | 1.00 | 0.93 (0.47-1.83) | 1.71 (0.99-2.96) | 1.26 (0.76-2.12) | 0.1923 |
|  |  |  | 0.49 (0.19-1.26) |  | 1.00 | 0.1403 |

**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 tertile 1 of C-peptide. 2Metabolically healthy/overweight (BMI ≥25 kg/m2, or Waist circumference ≥80 cm or Waist-to-hip ratio ≥0.8), plus below tertile 1 of C-peptide. 3Metabolically unhealthy/normal weight (BMI <25 kg/m2 or Waist circumference <80 cm or Waist-to-hip ratio <0.8), plus above tertile 1 of C-peptide. 4Metabolically unhealthy/overweight (BMI ≥25 kg/m2, or Waist circumference ≥80 cm or Waist-to-hip ratio ≥0.8), plus above tertile 1 of C-peptide.