

Supplementary Table 5 – Non-linear associations of endogenous progestogens and estrogens with glycemic deterioration.

Sex Hormones	P-value for non-linear fit		
	Men	Women	Women**
17-OHP	0.103	0.568	0.356
Progesterone	0.794	0.665	0.344
Total E2	0.464	0.997	0.696
Free E2	0.922	0.108	0.324

Multivariate adjusted* logistic regression models exploring sex hormone levels and associations with glycemic deterioration were entered into the model as a restricted cubic spline. Knots were placed at the 30th, 60th, and 90th percentiles. The shaded grey area represents the 95% CI of the spline estimation. *Adjusted for age, waist circumference, height, triglycerides, total cholesterol/HDL-cholesterol ratio, hypertension, statin use, smoking, alcohol consumption, physical activity, CRP, eGFR (creatinine-based), TSH, and parental diabetes history. Additionally, models for progesterone are adjusted for albumin, and models for E2 are adjusted for SHBG. **Sensitivity analyses performed where perimenopausal women (n = 66; 15 cases and 51 non-cases) were excluded. Abbreviations: 17-OHP: 17 α -hydroxyprogesterone, CRP: C-reactive protein, eGFR: Estimated glomerular filtration rate, SHBG: Sex hormone-binding globulin, TSH: Thyroid-stimulating hormone.