

**Supplementary material 3.** Certainty of evidence and summary effect estimates assessed by GRADE (grading of recommendations, assessment, development, and evaluation)

Outcomes	Summary of studies		Quality assessment					Certainty of evidence
	No of studies	Outcomes	Study design*	Inconsistency#	Indirectness@	Imprecision^	Other consideration	
Association of metabolic syndrome with uterine/ endometrial cancer	9 (Case-Control) 4 (Cross-sectional) 4 (Cohort)	OR-1.94 (95% CI: 1.61-2.245) OR-2.64 (95% CI: 1.26-5.52) HR-1.45 (95% CI: 1.35-1.56)	Not serious	Serious	Serious	Not serious	None	VERY LOW
Association of metabolic syndrome with ovarian cancer	4 (Case-Control) 3 (Cohort) 2 (Cohort)	OR-3.44 (95% CI: 1.61-2.245) OR-1.02 (95% CI: 0.90-1.15) HR-1.02 (95% CI: 0.91-1.14)	Not serious	Serious	Serious	Not serious	None	VERY LOW
Association of metabolic syndrome with cervical cancer	4 (Cohort)	HR-1.26 (95% CI: 1.09-1.46), adjusted HR-1.27 (95%CI, 1.10-1.47)	Not serious	Serious	Serious	Not serious	None	VERY LOW

CI, confidence interval; OR, odds ratio; HR, hazard ratio