

were used to meta-analyze the association between insulin resistance components and EC.

Results Twenty-five studies satisfied our inclusion criteria. Fasting insulin levels (13 studies, n=4088) were higher in women with EC (mean difference [MD] 33.94 pmol/L, 95% confidence interval [CI] 15.04–52.85, p=0.0004). No differences were seen in postmenopausal versus pre- and postmenopausal subgroup analysis. Similarly, non-fasting/fasting C-peptide levels (five studies, n=1938) were also higher in women with EC (MD 0.14 nmol/L, 95% CI 0.08–0.21, p<0.00001). Homeostatic model assessment – insulin resistance (HOMA-IR) values (six studies, n=1859) in EC patients were significantly higher than in women without EC (MD 1.13, 95% CI 0.20–2.06, p=0.02). There was moderate-to-high heterogeneity among the included studies.

Conclusion Currently available epidemiologic evidence is suggestive of significantly higher risk of EC in women with high fasting insulin, non-fasting/fasting C-peptide and HOMA-IR values.

ID: 43 **INSULIN RESISTANCE AND ENDOMETRIAL CANCER RISK: A SYSTEMATIC REVIEW AND META-ANALYSIS**

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Aim It has been suggested that chronic hyperinsulinemia from insulin resistance is involved in the etiology of endometrial cancer (EC). We performed a systematic review and meta-analysis to assess whether insulin resistance is associated with the risk of EC.

Methods We searched PubMed-Medline, Embase, Scopus, and Web of Science for articles published from database inception through 30th September 2014. We included all observational studies evaluating components defining insulin resistance in women with and without EC. Quality of the included studies was assessed by Newcastle-Ottawa scale. Random effects models and inverse variance method