Results The search identified 297 citations after excluding duplicates. After further exclusions, fourteen studies were ultimately included in the qualitative and quantitative syntheses, comprising 1776 women. Fourteen studies analyzed the presence of any type of UMA and seven by subgroups (septate uterus and/bicornuate uterus). The mean prevalence of UMA was 47% (range: 1%-97%). Overall, pooled sensitivity, specificity, positive and negative likelihood ratios are shown in table 1. Heterogeneity was high. According to the QUADAS-2 tool, most of the studies were considered high risk of bias for patient selection, and low risk for index test and reference standard and unclear for flow/timing.

Conclusion Our results confirm the high accuracy of 3D-TVS for diagnosing uterine mullerian anomalies. These data support the role of this technique as gold standard for detecting these anomalies.

Methodology The aim of this study is to evaluate the accuracy of three-dimensional transvaginal ultrasound (3D-TVS) for the diagnosis of uterine mullerian anomalies (UMA), using surgery as the reference standard.

Methodology A search was performed in PubMed/MEDLINE, CINAHLL, Scopus, Cochrane and Web of Science databases (January 1990 to December 2021) for studies evaluating the diagnostic performance of 3D-TVS for detecting UMA, using endoscopic findings as reference test. The Quality Assessment of Diagnostic Accuracy Studies-2 (QUADAS-2) tool was used to evaluate the quality of the studies. Pooled sensitivity, specificity, positive and negative likelihood ratio for 3D-TVS were calculated for all types of anomalies and separately for septate and bicornuate uterus, specifically. Arcuate uterus was considered as normal. Post-test probability of detecting UMA following a positive or negative test was determined.

Results 80 women were included. Seventeen patients were managed expectantly and 63 patients underwent surgery. 23 masses were malignant. Diagnostic performance of all three approaches is shown in table. Both US expert examination and MRI had significantly better diagnostic performance that ROMA. There was no difference in terms of diagnostic performance between US and MRI. Direct cost analysis of the test used was also performed.

Conclusion US expert examination is the best second step approach in inconclusive adnexal masses as determined by IOTA Simple Rules.