OBJECTIVES

- **Main objective**: to compare the diagnostic accuracy of transvaginal ultrasound (TVS) for detecting myometrial infiltration (MI) in endometrioid endometrial neoplasms grade 1 and 2 with definitive pathologic anatomy (PA).
- **Secondary objectives**: to compare the MI assessed by magnetic resonance imaging (MRI) and the degree of endometrial vascularity with the definitive PA.

MATERIAL AND METHODS.

Retrospective study of 68 cases of endometrioid endometrial adenocarcinoma grade 1 and 2 diagnosed between January 2014 and February 2019 in Hospital de la Santa Creu i Sant Pau (Barcelona).

The degree of myometrial infiltration (<50% or ≥ 50%) was assessed by TVS using Karlsson approach (ratio between the maximum anteroposterior (AP) diameter of the endometrial lesion and the uterine AP diameter. MRI was performed in 48 of the patients in addition to the ultrasound to assess the MI.

RESULTS

- We did not observe statistical differences among TVS and MRI (table).
- **Endometrial vascularity examination** (TVS, evaluated using Power Doppler 2D) showed a tendency to obtain a median of 2 (Color Doppler Score) in cases of <50% MI in definitive PA and a median of 3 in the cases of ≥ 50% MI (p = 0.106).

CONCLUSIONS

- RMI shows a better diagnostic accuracy than TVS in assessing the degree of MI in patients with endometrial cancer, although the differences between the two tests are not statistically significant.
- There is a tendency to greater myometrial infiltration in cases with higher Color Doppler Score when assessing endometrial vascularity.
- Since the results of TVS and MRI are comparable in terms of the prediction of the degree of MI, ultrasound could be the first-line imaging test for its greater availability and lower cost.