Methodology A study was performed on obese patients with EC treated between March and October 2022 in Santa Maria Annunziata Hospital (Florence) using REAL 3D-MIC device (group 1). Prior to surgery, we performed a 3D imaging reconstruction of pelvic lymph nodes used to guide the intraoperatively lymphadenectomy. This group was compared with a historical series of EC patients treated without the 3D model (group 2).

Results The two groups (group1=13 patients and group2=11 patients) showed homogeneous clinical characteristics. The correspondence between virtual 3D model and real anatomy was analyzed comparing lymph nodes location in virtual 3D model and operative data. We recorded a consistency of 85% (85% for group 1 vs 45% for group 2, p=0.06). In REAL 3D MIC group we found one nodal EC metastasis and one case of B cells Lymphoma synchronous to EC.

Conclusion REAL-3D MIC could improve the identification of lymph nodes simultaneously with surgery, especially in obese women. Further studies are needed to demonstrate the effectiveness of REAL- 3D MIC in lymph nodal mapping.

Disclosures The Authors have no conflicts of interests to declare.

Abstract #736 Figure 1 Analysis of decision curves. Net benefit curves (A) and net reduction in explosions (B). The abscissa axis represents the threshold probability, the limit risk from which the performance of the SLNB would be considered. The net benefit is equivalent to the proportion of true positives in absence of false positives. Thus, for example, the prediction model has a net benefit of around 0.03 at the threshold probability of 10%, which would be equivalent to detecting 3 patients with aortic lymph node involvement without indicating any necessary SLNB for every 100 patients. The maximum value of the net benefit is equal to the prevalence, which occurs when the threshold risk is 0, or at whatever threshold in which classification is perfect (no false positives or false negatives). The net reduction in burst on the other hand is equivalent to the proportion of true negatives in the absence of false negatives. For example, at a threshold probability of 10%, performing SLNB based on the risk estimated according to the prediction model is equivalent to a strategy that reduces the rate of aortic SLNB by around 62% without overlooking any affected aortic SLN.

Introduction/Background Clinical guidelines for pelvic SLNB in endometrial cancer (EC) do not address the need for evaluation of the aortic region. Isolated aortic involvement in EC is rare. However, in selected groups, the incidence increases, nearly 25%. Moreover, >50% of the cases with pelvic involvement also exhibit aortic involvement. The objective of this study is to develop a prediction model for aortic involvement to guide SLNB, based on preoperative risk factors.

Methodology We evaluated the area under the ROC curve of a prediction model for aortic lymph node involvement using logistic regression, constructed with 376 women who underwent surgery for EC at the University Hospital Donostia (August 2014 - July 2022).

Results The prediction model demonstrated good discrimination, with a c-index of 0.82, and explained 29.33% of the variability in aortic lymph node involvement.

To assess the clinical utility of the model, a decision curve analysis was conducted. Firstly, the net benefit graph was created, not performing aortic lymph node assessment in any patient. It can be observed that the strategy of performing aortic BSGC based on the risk predicted by the prediction model is superior to performing it only in patients with preoperative risks. The use of the model is also superior for the majority of the probability ranges, until the match at 3%. This is because 3% is the minimum predicted probability by the model, so its results are the same as performing BSGC in all cases. Moreover, the net true negatives graph was created, using the strategy of performing aortic BSGC in all patients, as is done at the University Hospital Donostia.

Conclusion The graph demonstrates that using the prediction model to restrict aortic lymph node assessment to patients with a predicted risk above a certain threshold would result in a significant reduction of unnecessary evaluations.

Abstract #740 EVOLUTION OF AORTIC AND PELVIC DETECTION RATES AFTER VALIDATION OF THE SENTINEL LYMPH NODE BIOPSY IN ENDOMETRIAL CANCER

Introduction/Background The systematization of sentinel lymph node technique by a dedicated team implies an improvement in detection rates and a decrease in the acquisition of 'empty' nodes. The number of procedures necessary to acquire this experience has been studied in several publications, demonstrating the importance of the surgeon’s experience to achieve good sensitivity of the technique. Cutoff points have been established between 10 and 40 procedures to reach a plateau.

The improvement in detection rates by abandoning research and validation protocols with sentinel lymph node and lymphadenectomy, and exclusively using sentinel lymph node technique by a dedicated team after a number of procedures exceeding 100–300, including aortic territory, has not been studied.

The objective of this study is to compare changes in detection rates after validation of the sentinel lymph node technique in a high number of procedures at our hospital.