Clinical-Molecular Correlations of Benefit of Adjuvant Radiotherapy

Introduction/Background Endometrial cancer (EC) is the most common gynecological tumor in developed countries, with more than 75% diagnosed at early stages. It is associated in 20–30% with microsatellite instability (MSI) due to mutations in the MMR genes, which can be sporadic (80–90%) or hereditary (10–20%) such as Lynch syndrome (LS).

Objective: To establish the clinical-molecular profile of endometrial carcinoma and its implication for treatment.

Methodology Retrospective cross-sectional observational study. 162 patients diagnosed with EC during the period 2010–2020 and treated in Medical Oncology Service at the HUNSC were studied. Study variables: age, histology grade and type, stage, hormone receptors (HR), MSI, LS, overall survival. SPSS 25 was used for statistical analysis.

Results The median age was 64.51 years. The most frequent stages at diagnosis were IA (25.3%) and IB (24.7%). Histologically, endometrioid adenocarcinoma accounted for 51.2% and grade 3 for 41.4% of cases. Patients with LS were mainly diagnosed at stage III, being endometrioid or serous adenocarcinomas, and mainly grade 3 (60%). Overall survival was longer in the HR+ group (40.5 months). MSI-H was observed in 36.1% of the sample and the dMMR distribution: MLH1 (27.9%) and PMS2 (24.6%), MSH2 (16.4%), MSH6 (13.1%). Ten patients were diagnosed with LS.

Conclusion Multiple-classifier ECs represent 9% of the entire study population. Compared to previous studies, the higher proportion of ‘multiple-classifiers’ could be related to the extensive molecular analysis, comprising the evaluation of both p53 expression and TP53 mutations. More studies addressing the clinical implications on prognosis of ‘multiple-classifiers’ are needed.

Abstract 2022-RA-449-ESGO Figure 2

Conclusion Our EC and LS results are comparable to those published for other settings. There is a significant association between HR+ and longer overall survival. The percentage of dMMR/MSI-H is higher than reported in other studies. Further studies with a larger sample would be needed.