

765

# TREATMENT PATTERNS, REAL-WORLD OUTCOMES, AND RESOURCE USE IN PATIENTS WITH NON-MSI-HIGH OR MISMATCH REPAIR PROFICIENT ADVANCED ENDOMETRIAL CANCER

<sup>1</sup>S Kelkar, <sup>1</sup>S Corman, <sup>2</sup>C Macahilig, <sup>3</sup>V Prabhu\*, <sup>4</sup>J Zhang, <sup>1</sup>N Rusibamayila, <sup>2</sup>S Odak, <sup>5</sup>L Duska. <sup>1</sup>OPEN Health, Evidence and Access, Bethesda, MD, USA; <sup>2</sup>RTI-Health Solutions, Surveys and Observational Studies, Research Triangle, NC, USA; <sup>3</sup>Merck and Co., Inc., Outcomes Research (Oncology-Cervical and Endometrial), Kenilworth, NJ, USA; <sup>4</sup>Eisai, Inc., US HEOR and RWE, Woodcliff Lake, NJ, USA; <sup>5</sup>University of Virginia Health System, Gynecologic Oncology Division Department of Obstetrics and Gynecology, Charlottesville, NC, USA

10.1136/ijgc-2021-ESGO.191

**Introduction/Background\*** Chemotherapy, the standard of care for patients with advanced endometrial cancer (aEC), has sub-optimal outcomes. In 2019, novel therapies specific to microsatellite instability (MSI)/mismatch repair (MMR) status changed the treatment landscape in the US. With sparse real-world outcomes data by MSI/MMR status, our study aimed to assess treatment patterns, real-world outcomes, and hospitalization stratified by treatment category, in aEC patients with non-MSI-high/MMR proficient (pMMR) tumors in the US.

**Methodology** Endometrial Cancer Health Outcomes (ECHO) is a multi-center, retrospective, chart review US study in which physicians consented to participate and provided de-identified data for adult women with inoperable non-MSI-high/pMMR aEC. Patients had  $\geq 1$  prior systemic therapy and progressed between July 1, 2016 and June 30, 2019. Data collected included patient demographics, clinical characteristics, treatment category, clinical outcomes and hospitalization. Kaplan-Meier analyses were performed to estimate time to treatment discontinuation, real-world progression-free survival (rwPFS) and overall survival (OS), stratified by chemotherapy (CT) or hormonal therapy (HT). The study protocol was IRB approved.

**Result(s)\*** The 139 patients included in this study were 64 years on average. About 64% were Caucasian, and 53% had ECOG  $\geq 2$ . For 2<sup>nd</sup>-line therapy, 114 patients received CT, and 25 received HT, with a median follow-up of 9 and 8 months, respectively. Median time to discontinuation was 6 and 4 months in the HT and CT groups, respectively (table 1). Median OS since 2<sup>nd</sup>-line therapy initiation in the HT and CT groups was 9 and 10 months, respectively, median rwPFS was 6 and 5 months, respectively, and best overall response to 2<sup>nd</sup>-line therapy was 24% and 42%, respectively. There were 16% patients with  $\geq 1$  hospitalization (mean length of stay, 6

**Abstract 765 Table 1** Time to treatment discontinuation, overall survival, and real-world progression free survival in non-MSI-High or pMMR aEC patients since initiation of 2nd line therapy overall and stratified by treatment category

	Hormonal Therapy (N = 25)	Chemotherapy (N = 114)
<b>Time to treatment discontinuation, median (95% CI), (months)</b>	6.0 (4.0, 30.0)	4.0 (3.0, 5.0)
Probability at 6 months (%)	66.7 (50.2, 88.5)	53.5 (45.1, 63.5)
Probability at 12 months (%)	48.9 (32.2, 74.1)	23.7 (17, 32.9)
Probability at 24 months (%)	0 (0, 0)	0 (0, 0)
<b>Overall survival, median (95% CI), (months)</b>	9.0 (6.0, NE)	10.0 (8.0, 14.0)
Probability at 6 months (%)	61.4 (44.5, 84.8)	60.2 (51.9, 70)
Probability at 12 months (%)	48.2 (31.6, 73.7)	50.3 (41.9, 60.5)
Probability at 24 months (%)	43.9 (27.6, 69.7)	41 (32.7, 51.3)
<b>Real-world progression-free survival, median (95% CI), (months)</b>	5.5 (3.0, 29.0)	5.0 (3.0, 7.0)
Probability at 6 months (%)	45.5 (28.8, 71.8)	41.2 (33.1, 51.3)
Probability at 12 months (%)	31.8 (17.3, 58.7)	32.2 (24.7, 42.1)
Probability at 24 months (%)	31.8 (17.3, 58.7)	22.3 (15.7, 31.5)

and 7 days for HT and CT groups, respectively), and 41% of those had intensive care unit stay (mean, 2 and 5 days for HT and CT groups, respectively).

**Conclusion\*** This study evaluated real-world treatment patterns, clinical outcomes, and hospitalization, stratified by treatment category in non-MSI-high/pMMR aEC patients in the US prior to July 2019. There continued to be significant clinical unmet need, indicating the need for novel therapies that delay progression, improve overall survival, and/or reduce hospitalization.

767

# TRANSVAGINAL ULTRASOUND FOR ASSESSING MYOMETRIAL INFILTRATION IN ENDOMETRIOD ENDOMETRIAL CANCER: LEARNING CURVE

<sup>1</sup>BR Gastón Moreno\*, <sup>2</sup>JL Alcazar, <sup>1</sup>JC Muruzábal Torquemada, <sup>1</sup>AI Modroño Blanco, <sup>1</sup>I Gómez Gutiérrez-Solana, <sup>1</sup>C Pérez Sanz, <sup>1</sup>A García-Barberena Unzu, <sup>2</sup>N Abián Franco. <sup>1</sup>Complejo Hospitalario de Navarra, Obstetrics and Gynecology, Pamplona, Spain; <sup>2</sup>Clínica Universidad de Navarra, Obstetrics and Gynecology, Pamplona, Spain; <sup>3</sup>Hospital Reina Sofía, Obstetrics and Gynecology, Tudela, Spain

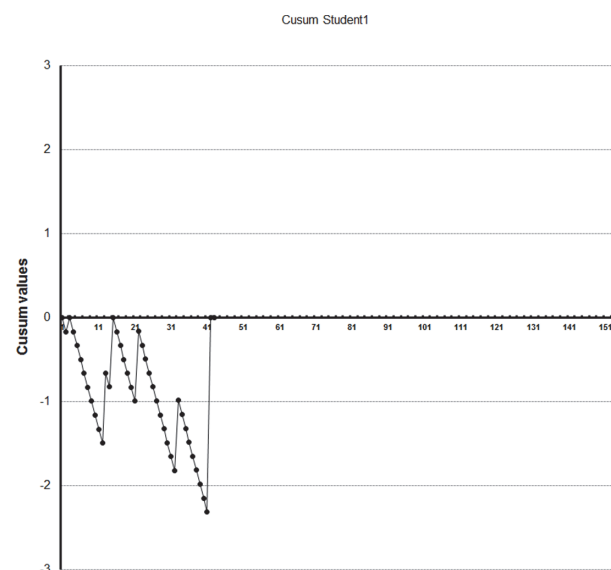
10.1136/ijgc-2021-ESGO.192

**Introduction/Background\*** Determining the degree of myometrial infiltration allows establishing the best therapeutic approach for each patient as it is an important factor in predicting nodal metastases.

Few prospective studies comparing the diagnostic performance of transvaginal ultrasound (TVS) and magnetic resonance imaging (MRI) in the preoperative local staging of endometrial carcinoma have been reported. In fact, a recent meta-analysis has shown that both techniques have similar diagnostic accuracy. However, to the best of our knowledge, there has been no prospective comparison of the diagnostic performance of TVS and MRI in the same group of patients with low-grade endometrial cancer.

The aim of this study was to analyse the learning curve when assessing myometrial infiltration by transvaginal ultrasound.

**Methodology** Observational prospective study performed at a single tertiary care centre from 2016 to 2020, comprising 156



**Abstract 767 Figure 1**

consecutive patients diagnosed by endometrial sampling as having an endometrioid grade 1/grade2 endometrial cancer. TVS and MRI were performed prior to surgical staging for assessing MI, which was estimated using subjective examiner's impression and Karlsson's method for both TVS and MRI. During surgery, intraoperative assessment of MI was also performed. Definitive pathological study considered as reference standard.

CUSUM graphs have been used to determine the number of necessary cases to reach the competence, admitting an error rate of between 10% and 25% as the expected precision of an expert is approximately 85%.

**Result(s)\*** The main sonographer of this study achieved proficiency after having sonographically evaluated 39 patients.

**Conclusion\*** There is a learning process for the ultrasound assessment of the degree of myometrial infiltration that influences the diagnostic performance of transvaginal ultrasound. The learning curve of the lead sonographer in this study showed that she reached proficiency after sonographic study of 39 patients.

780

#### FREQUENCY AND DURATION OF POST-MENOPAUSAL BLEEDING – RISK STRATIFICATION FOR ENDOMETRIAL CANCER

L Honeyman, J Davies, S Kolhe, J Dasgupta, D Casayuran, A Phillips. *Derby Gynaecological Cancer Centre, Derby, UK*

10.1136/ijgc-2021-ESGO.193

**Introduction/Background\*** Recurrent bleeding can suggest a presence of cancer and has been incorporated into some risk prediction models for cancer in patients with PMB. However uniform descriptions of PMB are not consistently used. We aimed to assess if the frequency or duration of bleeding allows identification of women at higher risk of cancer undergoing hysteroscopy for PMB

**Methodology** A retrospective review of hysteroscopy records from Royal Derby Hospital. Bleeding was defined in terms of number of episodes (1, 2, 2+) and duration and was compared with histopathological records. Cases were identified between 2017 and 2019.

**Result(s)\*** Between 2017 and 2019, 1101 women underwent a hysteroscopy for PMB. Seven were excluded as histology results were not obtained. Of the 1094 women included, 98 cancers were identified (9%).

Regarding bleeding frequency; 184 women were excluded as there was insufficient data recorded. Of the remaining 910 women no significant difference was seen in the rate of cancer with different bleeding episodes; one episode (9.6%), two episodes (5.6%) or more than two episodes (9%) ( $p > 0.05$ ).

Regarding character of bleeding; 556 were excluded as they did not have an explicit duration of bleeding recorded. Of the remaining 538; 409 had a short ( $\leq 7$  days) duration, with 8 (2%) cancers identified, 108 had an intermediate (1-4 weeks) duration with 12 (11%) cancers identified, and of 21 with a long ( $> 4$  weeks) duration of bleeding 4 (19%) had a cancer identified. These results were highly significant ( $p = < 0.00001$ )

In women who described unspecified cyclical/regular bleeding ( $n=98$ ) 10 cancers were detected (10%)

**Conclusion\*** Accurately characterising bleeding duration is a more meaningful predictor of malignancy than episodes of bleeding. Standards should be developed to enable clinical history as well as radiological findings to triage care.

783

#### AKR1C3 – A POTENTIAL PROGNOSTIC BIOMARKER FOR PATIENTS WITH ENDOMETRIAL CARCINOMAS

<sup>1</sup>M Hojnik\*, <sup>2,3</sup>N Kenda Šuster, <sup>2,3</sup>S Smrkolj, <sup>4</sup>S Frković Grazio, <sup>2</sup>I Verdenik, <sup>1</sup>T Lanišnik Rižner. <sup>1</sup>Institute of Biochemistry, Faculty of Medicine, University of Ljubljana, 1000 Ljubljana, Slovenia; <sup>2</sup>Division of Gynecology, Department of Obstetrics and Gynecology, University Medical Centre Ljubljana, 1000 Ljubljana, Slovenia; <sup>3</sup>Chair for Gynecology and Obstetrics, Medical Faculty, University of Ljubljana, Slovenia; <sup>4</sup>Division of Gynecology, Department of Pathology, University Medical Centre Ljubljana, 1000 Ljubljana, Slovenia

10.1136/ijgc-2021-ESGO.194

**Introduction/Background\*** Endometrial cancer is the most common gynecological cancer diagnosis in developed countries. Personalized treatments for these cancers depend on identification of prognostic and predictive biomarkers that allow stratification of patients.

The aldo-keto reductase (AKR) superfamily is getting attention in cancer research, because of AKR's involvements in important biochemical processes. The enzyme AKR1C3 has many functions, which include production of prostaglandins, androgens, estrogens, and metabolism of different chemotherapeutics. AKR1C3 is thus implicated in the pathophysiology of different cancers.

**Methodology** In our study, we evaluated the immunohistochemical (IHC) staining of AKR1C3 in 123 paraffin-embedded samples of endometrial cancer and statistically examined possible correlations between expression of AKR1C3 and clinicopathological data (survival, stage of disease, lymphovascular invasion, menopausal status, parous status, smoking, use of hormone replacement therapy).

**Result(s)\*** In endometrioid endometrial carcinoma, high AKR1C3 IHC expression correlated with better overall survival ( $p = 0.008$ ) and with disease-free survival ( $p = 0.027$ ). Significantly higher percentages of positive epithelial cells were seen for adjacent nonneoplastic endometrium compared to endometrioid endometrial cancer ( $p = 1 \times 10^{-4}$ ).

**Conclusion\*** These results demonstrate the potential use of AKR1C3 as an independent prognostic biomarker in endometrioid endometrial cancer. Clinically, this might mean that levels of AKR1C3 in endometrioid endometrial cancer could be determined preoperatively on diagnostic tissue samples to allow prediction of the cancer behavior and stratification of the patients for more personalized treatments.

#### Disclosures

**Conflicts of Interest** The authors declare no conflict of interest. Study was supported by the grants J3-2535 to T.L.R. from the Slovenian Research Agency.

**Ethical Issues** The study was approved by the National Medical Ethics Committee of the Republic of Slovenia (0120-701/2017-6).