in malignant tumor compared to the control group. The intensity of lipid peroxidation was increasing ~ 1,5 times in benign and ~ 2,2 times in malignant tumor compared to the control group.
Conclusions On the background intensification of lipid peroxidation ongoing enhanced use of antioxidants, that reflects on the alteration of organism' antioxidant system activity.

IGCS19-0187

256 DETECTION OF NCOA2/3 GENE FUSIONS IN UTERINE TUMORS RESEMBLING OVARIAN SEX CORD TUMORS (UTROSCT)

[1]A Pinto*, [2]RR Lastra, [2]LL Ritterhouse, [2]J Segal, [2]T Krausz, [2]JA Bennett. *[1]University of Miami, Pathology, Miami, USA; [2]University of Chicago, Pathology, Chicago, USA*

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Objectives Uterine tumors resembling ovarian sex cord tumors (UTROSCT) are rare mesenchymal neoplasms of uncertain histogenesis that are challenging to diagnose due to their morphological and immunohistochemical overlap with more conventional entities. While DNA sequencing has failed to identify recurring mutations in these tumors, RNA sequencing recently detected *NCOA2/3* fusions in two small series. The objective of this study was to further describe the characteristics of two UTROSCTs.
Methods We retrospectively evaluated the clinicopathological and immunohistochemical features of two UTROSCTs, and performed RNA sequencing to detect gene fusions.
Results The patients were 52 and 57 years old, tumors measured 5 and 12 cm, and were confined to the myometrium. Both showed multiple histologic patterns including diffuse, cord-like, and trabecular, with rhabdoid cells focally present. One UTROSCT had significant cytologic atypia and brisk mitotic activity, but both lacked necrosis and lymphovascular invasion. Variable immunohistochemical expression for calretinin, inhibin, WT-1, ER, CD10, and pankeratin was noted. RNA sequencing detected an *ESR1-NCOA3* fusion in one tumor, whereas the other had a *GREB1-NCOA2* rearrangement. The former patient is alive and well five months after diagnosis, while the latter recurred two years later, and is currently alive with disease (six years after original diagnosis).
Conclusions The detection of *NCOA2/3* fusions in two additional UTROSCTs further supports this rearrangement as a characteristic finding in these rare tumors. Additional studies are warranted to determine its sensitivity and specificity in UTROSCTs compared to other gynecologic neoplasms.

IGCS19-0268

257 ATYPICAL ENDOMETRIAL HYPERPLASIA, LOW-GRADE: 'MUCH ADO ABOUT NOTHING'

[1]E D'Angelo, [2]I Espinosa, [3]V Cipriani, [4]M Barbareschi, [5]J Prat*. *[1]University of L'Aquila, Life-Health and Enviromental Sciences, L'Aquila, Italy; [2]Clinica Universitaria de Navarra, Pathology, Madrid, Spain; [3]Queen Mary University, The William Harvey Research Institute, London, UK; [4]Presidio Ospedaliero Santa Chiara, U.O. Multizonale di Anatomia Patologica, Trento, Italy; [5]Autonomous University of Barcelona Medical School, Pathology, Barcelona, Spain*

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Objectives Atypical endometrial hyperplasia (AEH) is considered precursor of endometrioid endometrial carcinoma. The 2014 WHO classification divides endometrial hyperplasia into two categories: hyperplasia without atypia and atypical hyperplasia. However, this classification ignores the degree of nuclear atypia. The objective of this study was to show the importance of grading nuclear atypia (low vs high-grade) and find out the risk of developing endometrial carcinoma following a diagnosis of AEH. In addition, we investigated the potential role of genes known to be involved in endometrial carcinogenesis such as *ARID1A*, *PIK3CA*, *PTEN*, *KRAS*, *CTNNB1* and mismatch repair genes.
Methods We reviewed 91 biopsies of AEH from 91 patients who subsequently underwent hysterectomy within 1 year interval. The association between the grade of nuclear atypia at biopsy and findings at hysterectomy was assessed via a Fisher's exact test. Targeted sequencing was performed in 30 cases.
Results The grade of nuclear atypia at biopsy was highly predictive of the findings at hysterectomy (P=5.0x10–25), with none of the low-grade AEH having a diagnosis of high-grade AEH/carcinoma at hysterectomy, whereas 9 (29%) of the high-grade AEH had high-grade AEH and 22 (71%) FIGO grade-1 carcinoma. None of the genes tested showed a mutational load significantly associated with the degree of nuclear atypia.
Conclusions In AEH is crucial to assess the degree (low or high) of nuclear atypia. Our data strongly support that low-grade AEH is inconsequential, questioning the need of hysterectomy for such patients.

IGCS19-0255

258 THE CHALLENGES OF CREATING A FELLOWSHIP IN GYNECOLOGIC ONCOLOGY IN MOZAMBIQUE, A COUNTRY WITH NO FORMAL TRAINING PROGRAM IN GYNECOLOGIC ONCOLOGY

[1]R Rangeiro*, [1]D Changule, [2]S Daude, [2]M Ribeiro, [2]E Luis, [2]F Mabota, [3]G Cintra, [4]R Moretti-Marques, [5]A Lopes, [6]M Vieira, [7]M Salcedo, [8]H Baker, [9]C Lorenzoni, [10]K Schmeler. *[1]Hospital Central de Maputo, Departamento de Ginecologia e Obstetrícia, Maputo, Mozambique; [2]Hospital Central de Maputo, Departamento de Ginecologia e Obstetricia, Maputo, Mozambique; [3]Hospital Sirio Libanes, Ginecologia Oncologica, Brasilia, Brazil; [4]Hospital Albert Einstein, Ginecologia Oncologica, Sao Paulo, Brazil; [5]Instituto Brasileiro de Controle do Cancer, Ginecologia Oncologica, Sao Paulo, Brazil; [6]Hospital de Cancer de Barretos, Ginecologia Oncologica, Barretos, Brazil; [7]Universidade Federal de Ciencias de Saude de Porto Alegre/Irmandade Santa Casa de Misericordia, Ginecologia Oncologica, Porto Alegre, Brazil; [8]MD Anderson Cancer Center, The Departament of Gynecologic Oncology and Reprodutive Medicine of the University of Texas, Houston, USA; [9]Ministerio da Saude de Mocambique, Ginecologia Oncologica, Maputo, Mozambique; [10]MD Anderson Cancer Center, The Department of Gynecologic Oncology and Reprodutive Medicine from the University of Texas, Houston, USA*

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Objectives Mozambique has a high prevalence of gynecologic cancers and has no trained gynecologic oncologist or specialized training program. There are challenges associated with creating a training program.
Methods The International Gynecologic Cancer Society (IGCS) *Gynecologic Oncology Global Curriculum & Mentorship Program*, a two-year program to train gynecologists in gynecologic oncology in countries without training programs,