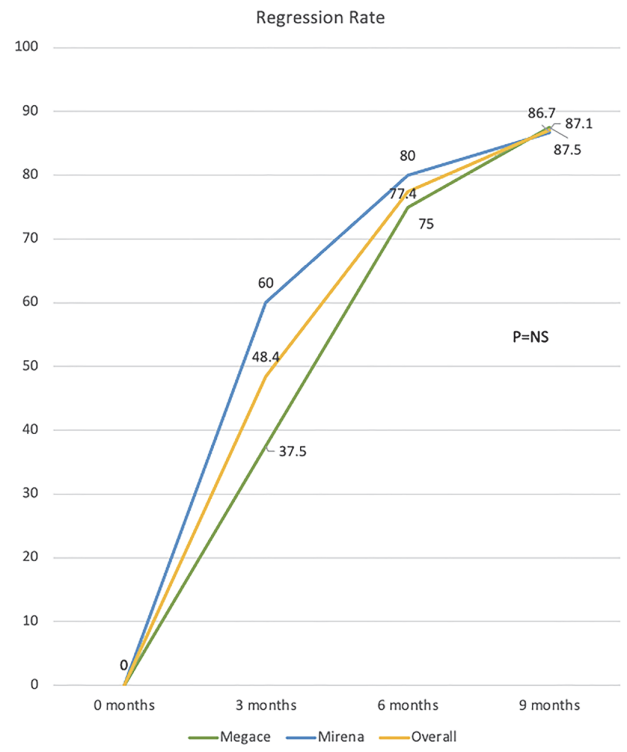

Abstract PR078/#804 Figure 1

was 36.2 (range: 20 – 55.9). There were 31 patients who completed the study. The overall regression rate was 87.1% by 9 months with no significant difference between the two arms. There was no significant difference in side effects and weight change in both arms.

Conclusion/Implications Our study confirms a high regression rate of AH with medical treatment. Mirena is a non-inferior treatment compared to megestrol acetate.

AS15. Rare tumors

PR080/#375 GENOMIC EVOLUTION OF UTERINE LEIOMYOSARCOMA: A STUDY OF SERIAL RECURRENCES

[1]Tiffany Sia*, [1]Kathryn Miller, [1]David Brown, [2]Pier Selenica, [3]Arrnaud Da Cruz Paula, [1]Nadeem Abu-Rustum, [1]Mario Leitao, [2]Sarah Chiang, [2]Britta Weigelt, [4]Martee Hensley. *[1]Memorial Sloan Kettering Cancer Center, Gynecology Service, Department of Surgery, New York, USA; [2]Memorial Sloan Kettering Cancer Center, Pathology, New York, USA; [3]Memorial Sloan Kettering Cancer Center, Department of Pathology, New York, USA; [4]Memorial Sloan Kettering Cancer Center, Gynecologic Medical Oncology, New York, USA*

10.1136/ijgc-2023-IGCS.118

Introduction Uterine leiomyosarcomas (uLMS) have high recurrence rates and frequently harbor structural aberrations in TP53 and RB1. We sought to compare molecular profiles of primary uLMS and matched serial recurrences to assess tumor evolution over time.

Methods Patients diagnosed with uLMS between 1/1/2000 – 11/31/2020 who had primary tumor, ≥2 serial recurrences, and normal tissue available were identified. All slides were reviewed by an expert gynecologic pathologist. Samples were microdissected to enhance for tumor purity and subjected to tumor-normal targeted DNA next-generation sequencing (NGS).

Results Tumor-normal NGS was performed on 42 tumor samples from 10 patients. The median age at diagnosis was 54 (range 30–69). The median number of recurrences was 3 (range 2–7); the median progression free survival was 45 months (range 4–163). At least one homozygous deletion affecting RB1 (50%), PTEN (30%), TP53 (30%), and/or BRCA2 (20%), as well as clonal mutations affecting TP53 (30%) and ATRX (10%), were early events and present across all samples of a given patient. Non-oncogene missense mutations were frequently shared across samples from a given case. As a group, chromosomal instability was found to be significantly higher across recurrences compared to primary tumors (mean fraction of genome altered 50% v 37.5%, p=0.035).

Conclusion/Implications Primary uLMS and subsequent recurrences display genomic intra-individual concordance, with sustained driver mutations over time. Chromosomal instability was higher in recurrent tumors. The high BRCA2 homozygous deletion rate warrants exploration as a potential prognostic factor in uLMS.

PR081/#468 EARLY STAGE OVARIAN IMMATURE TERATOMA: SURVEILLANCE OR CHEMOTHERAPY AFTER SURGERY? EXPERIENCE FROM CHINESE NATIONAL CENTER OF RARE DISEASE

Xinyue Zhang*, Jie Yang, Ying Zhang, Jinhui Wang, Jiaxin Yang. *Peking Union Medical College Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College, Obstetrics and Gynecology, Beijing, China*

10.1136/ijgc-2023-IGCS.119

Introduction To compare the survival outcomes between surveillance and adjuvant chemotherapy in patients with stage I ovarian immature teratomas (IMTs) who underwent fertility-sparing surgery.

Methods In this retrospective cohort analysis, patients with stage IA Grade 2–3, stage IB and stage IC ovarian IMTs between 2011 to 2023 from PUMCH Rare Cancer Registry were identified. A shared decision about surveillance or chemotherapy was made by physician and patients or their guardians.

Results A total of 103 patients were included. As the largest tertiary referral center of gynecologic germ cell tumor in China, 75 patients (72.8%) underwent surgery in local hospitals from 21 different provinces referred to us for further treatment. Forty patients chose surveillance after surgery. The median age at diagnosis was 19 years old (range 3–37). After a mean follow-up period of 29.9 months, only one patient with stage IA grade 2 IMT who underwent cystectomy had recurrence in the same ovary. The menstruation was not affected in all patients of reproductive age. Successful pregnancy was achieved in four patients without adverse events. In chemotherapy group, 63 patients received cisplatin-based adjuvant chemotherapy. Patient age, tumor stage and grade were similar in two groups. There was no statistical difference of 3-year disease free survival (DFS) and overall survival (OS) between two groups (Log Rank p=0.325 and 0.304).

Conclusion/Implications We did not observe survival differences in recurrence between patients with stage I ovarian IMTs who underwent adjuvant chemotherapy or not. Surveillance