Poster 21: Survival outcomes in patients with recurrent mixed set cord-stromal tumors of the ovary.

Presenting Author: Elio Tahan, MD, MD Anderson

Topic

Ovarian

Objectives

Mixed sex-cord/stromal tumors (SCSTs) of the ovary contain combinations of granulosa cell tumor components—either adult (AGCT) or juvenile (JGCT) subtypes—and/or Sertoli-Leydig cell tumor (SLCT) elements. While survival outcomes are well-characterized for histologically uniform SCSTs, limited data exist regarding outcomes following recurrence in pts with mixed SCSTs.

Methods

This is a retrospective cohort study of pts with recurrent mixed SCSTs of the ovary identified through an institutional registry. Pts lost to follow-up after first visit were excluded. Comparative cohorts with recurrent, non-mixed AGCT, JGCT, and SLCT were drawn from the same registry. Demographic and clinical characteristics were compared using descriptive statistics. Progression free survival after first recurrence (PFS2) and overall survival from first recurrence (OS) outcomes were estimated using Kaplan-Meier methods and compared using log rank tests (significance threshold p-value < 0.05).

Results

Sixteen pts with recurrent mixed ovarian SCSTs were identified: 6 (37.5%) with AGCT+SLCT, 4 (25%) with JGCT+SLCT, and 6 (37.5%) with AGCT+JGCT. They were compared to outcomes of histologically uniform tumors, including 97 AGCTs, 14 JGCTs, and 11 SLCTs. The median age at time of first recurrence was 38 years (range 16-81), with a median follow-up time of 61.1 mo. Pts with mixed tumor were treated for first recurrence with surgery alone (25%), surgery and systemic therapy (68.7%), and systemic therapy alone (6.2%). Uniform AGCT, JGCT, or SLCT pts had similar treatments: surgery alone (18%), surgery plus systemic therapy (61.5%), and systemic therapy alone (13.1%). When comparing AGCT to AGCT+JGCT, significant differences in median PFS2 (21.2 vs 8.7 mo.; p=0.03) and OS (181.9 vs 83.8 mo.; p=0.001) were observed (Table 1). No significant differences in PFS2 or OS were noted between JGCT and AGCT+JGCT (p=0.7, 0.8). Among tumors tested molecularly, 25% (1/4) of AGCT+JGCT, 25% (1/4) of AGCT+SLCT, and 33% (1/ 3) of JGCT+SLCT were positive for the c.C402G FOXL2 mutation.

Conclusions

The presence of a JGCT component in AGCT+JGCT tumors appears to confer more aggressive clinical behavior compared to AGCT alone. These findings may inform prognostic discussions and therapeutic decision-making; however, further studies with larger cohorts are needed for validation.

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Abstract Table or Graph

Table 1: Median PFS2 and Median OS after first recurrence per tumor cohort.

Group	Median PFS2 in months [CI]	Median OS in months [CI]
AGCT+JGCT	8.7 [3.2, NR]	83.8 [11.3, NR]
AGCT+SLCT	19.1 [6.4, NR]	99.7 [83.4, NR]
JGCT+SLCT	12.5 [10.6, NR]	74.0 [14.6, NR]
AGCT	21.2 [16.6,33.8]	181.9 [137.7, NR]
JGCT	8.9 [3.8,43.1]	32.2 [20.3, NR]
SLCT	9.8 [4.2, NR]	63.3 [22.5, NR]