

Differentiating LGSOC from HGSOC

Histopathological and molecular characteristics between LGSOC and HGSOC.

Managing LGSOC depends on distinguishing it from HGSOC.

LGSOC	HGSOC
HISTOPATHOLOGICAL CHARACTERISTICS	HISTOPATHOLOGICAL CHARACTERISTICS
<p>Mild to moderate nuclear atypia¹</p> <p>Low mitotic index (12 mitoses per 10 high-power fields)¹</p>	<p>Tumors are pleomorphic with marked nuclear pleomorphism ($\geq 3:1$ size variation)¹</p> <p>High mitotic index (≥ 12 mitoses per 10 high-power fields)¹</p>
MOLECULAR CHARACTERISTICS	MOLECULAR CHARACTERISTICS
<p>TP53 wild type²</p> <p>KRAS, BRAF, NRAS, and PIK3CA mutations^{3,4}</p>	<p>TP53 mutation and BRCA1/2 mutations³</p>

REFERENCES

1. Malpica A, Deavers MT, Lu K, et al. Grading ovarian serous carcinoma using a two-tier system. *Am J Surg Pathol*. 2004;28(4):496-504.
2. Sallum LF, Andrade L, Ramalho S, et al. WT1, p53 and p16 expression in the diagnosis of low- and high-grade serous ovarian carcinomas and their relation to prognosis. *Oncotarget*. 2018;9(22):15818-15827.
3. Manning-Geist B, Gordhandas S, Liu YL, et al. MAPK pathway genetic alterations are associated with prolonged overall survival in low-grade serous ovarian carcinoma. *Clin Cancer Res*. 2022;28(20):4456-4465.
4. Dey P, Nakayama K, Razia S, et al. Development of low-grade serous ovarian carcinoma from benign ovarian serous cystadenoma cells. *Cancers (Basel)*. 2022;14(6):1506.