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Sommario/riassunto	This eBook provides a compendium of the current state-of-the-art in research tools for, and understanding of, the critical research areas in epithelial ovarian cancer (EOC) with a strong emphasis on (HG-SOC). Research areas covered include therapy response and development, microenvironmental influences and the etiology and progression of EOC. Ten articles detail established and novel in vivo and in vitro model systems. These include primary and immortalized cell culture in 2D and 3D as well as genetically engineered, transgenic, spontaneous, syngeneic, classical xenograft and patient derived xenograft mouse models. The generation of genetically engineered mouse models of HG-SOC has been a major dilemma as models with the oncogenic aberrations common in the human malignancy do not accurately recapitulate HG-SOC. Conversely, commonly used HG-SOC cell lines have been found to not harbor the expected genetic changes. These issues as well as the rapid acceptance of patient derived xenograft

models are reviewed. Five articles discuss different aspects of the tumor microenvironment including its role in therapy resistance, disease progression and metastasis. Mutation of BRCA1/2 continues to be the best defined risk factor for HG-SOC. Three articles discuss BRCA-loss in the context of disease development, targeted therapies and changes in preventative measures proposed for mutation carriers in light of the recent advances in knowledge regarding the origins of this malignancy. An image of HG-SOC with reduced BRCA1 expression is featured on the cover (image by VM Howell). A major clinical issue for patients with HG-SOC is the development of therapy resistance. Five articles focus on therapy resistance and different ways to overcome resistance. Overall, this eBook is an outstanding resource to aid researchers design their programs of research and determine the most appropriate and up-to-date EOC model systems to address their research questions.

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