

## Prognostic Models Based on Machine Learning for Gynecological Cancers

Guest Editor(s)



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Dear Colleagues,

Cancer of the female genital organs is specifically known as gynecological cancers, including primary peritoneal cancer, tubo-ovarian cancer, uterine and cervical cancer, vaginal cancer, and vulvar cancer. Although surgery is the main treatment for gynecological cancers patients, except in cases of late-stage cervix, vulvar, and vagina cancers. In addition, for those patients with far-advanced or recurrent diseases, the outcome after treatment is often disappointing. Significant unmet needs exist in the diagnosis and treatment of these cancers. Recently, with advances in modern technology, the use of next-generation whole genomic sequences has become much plausible in the diagnosis and treatment of these patients.

Prognostic models combine multiple prognostic factors to estimate the risk of future outcomes in individuals with a particular disease or health condition. Such models can assist in the decision-making process aimed at achieving specific clinical outcomes, as well as guide the allocation of healthcare resources. Prognostic models are based on prognostic information that generally addresses the patient rather than the disease or treatment. Examples include statements that predict chance or duration of survival, progression of disease, and prediction of certain clinical events related to therapy or treatment response. Through machine learning, genomic profiles have significantly improved our ability to prognosticate in gynecological cancers patients. Many studies have examined the prognostic significance of genomic biomarkers and clinical-pathological variables and have often shown that both provide independent information. Some of these have been developed to track activated molecular signaling pathways and particular biological processes such as cell proliferation, hypoxia, cell differentiation, immune cell processes and wound responses; other signatures have been specifically designed to predict sensitivity to drug sensitivity or biologic therapies.

This special issue will focus on prognostic models based on machine learning for gynecological cancers. We welcome original research as well as review articles.

**Key Words:** Bioinformatics; Machine Learning; Signature; Prognostic Models; Gynecological Cancers

**Submission Deadline:** 31 January 2023

**Online Submission System:** <https://js.ejgo.net/ch/author/login.aspx>

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