

Seminar 1

Personalized oncogenomic

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Abstract

Cancer is a devastating disease that continues to claim the lives of millions of people every year. It is the second leading cause of death worldwide, with about ten million people succumbing to the disease annually. The impact of cancer on families and communities is immeasurable, and the need for better treatments is urgent. There are many ongoing efforts to develop new methods of cancer treatment, and personalized oncogenomic (POG) is one of these promising approaches. POG implements genomic knowledge to personalize clinical treatment decisions. This approach involves analyzing a patient's tumor DNA to identify specific genetic mutations or other alterations that are driving the cancer's growth. By understanding the molecular characteristics of the tumor, doctors can select treatments that are more likely to be effective and avoid treatments that are unlikely to work. In this seminar, the world-leading POG program research at the British Columbia Cancer Agency is described. Additionally, five cases of metastatic adenoid cystic carcinomas (ACC) who participated in the POG program, selected from the literature, and the POG procedure from finding mutations to selecting the proper drug are discussed.

Keywords: cancer, adenoid cystic carcinoma, personalize oncogenomic