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Targeting Abnormal Cell Cycle in Cancer

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Message from the Guest Editors

Dear Colleagues,

A variety of oncogenic signals merge on the upregulation of D-type cyclins and, thus, many of the molecular targeting drugs attenuate abnormal cell proliferation by suppressing kinases whose function is dependent on cyclins. Synthetic CDK4/6 inhibitors exert antitumor effects by maintaining RB1 in an unphosphorylated state, causing cell cycle arrest in G1 phase, cellular senescence, apoptosis and increased immunogenicity. The successful result of breast cancer treatment by CDK4/6 inhibitors in combination with endocrine therapy has demonstrated that targeting the key machinery of cell cycle control bears significant clinical benefits. This Special Issue will highlight basic and clinical studies that aim to develop novel or improved therapeutic strategies targeting abnormal cell cycle in cancer.

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