Mechanisms of resistance to CDK4/6 inhibitors and new therapeutic approaches

Synopsis

The addition of CDK4/6 inhibitors to standard antiestrogen therapy has markedly improved the depth and duration of response of ER+ metastatic tumors. However, both de novo and acquired resistance to these combinations is nonetheless observed. The ongoing genomic evolution of breast cancer appears to play a major role in the development of drug resistance. In this talk, we will review the biologic mechanisms that can mediate resistance to CDK4/6 inhibitor combinations drawing from both laboratory and clinical investigations. The ways in which these mechanisms nominate new therapeutic strategies to either prevent or treat resistant disease will be further be discussed.