

ABSTRACT

Aneuploidy, characterized by an abnormal number of chromosomes, is a well-established characteristic linked to cancer development. Unlike normal cells, which usually maintain a stable and predictable number of chromosomes (euploid), cancer cells frequently exhibit an erratic count (aneuploid). In our research focused on breast cancer, we explore the deficiency of phosphoinositide kinases. When these kinases are dysfunctional, they disrupt the normal arrangement and segregation of chromosomes during cell division, resulting in genomic instability. The objective of our research is to comprehend the significance of aneuploidy in cancer and to determine whether it presents vulnerabilities that can be targeted for treatment.