

## ANEUPLOIDIES AND CANCER

Aneuploidies are commonly observed in cancer cells and are thought to influence tumor progression and genetic stability. Specific chromosome gains occur in a defined temporal order, suggesting that aneuploidies, such as 1q trisomy, that are consistently gained early during tumorigenesis, may enhance cancer fitness. [Girish et al.](#) (Science) wanted to validate this generally accepted opinion with a very clever experiment.

The authors developed a technique, ReDACT (Restoring Disomy in Aneuploid cells using CRISPR Targeting), which they used to get rid of the extra copy of 1q in a tumor cell line and to re-establish diploidy. The cell line lost malignancy. They conclude that trisomy 1q is required for malignant growth and that the trisomy acts on *MDM4* overexpression and suppression of p53 signaling.

1-<https://www.science.org/doi/10.1126/science.adg4521>