X-INACTIVATION

Roman et al. 2023 (D. Page group) analyzed the expression of X-linked genes in lymphoblastoid cell lines and in primary fibroblasts from patients with various X and Y aneuploidies. The analysis revealed an unprecedented and complex situation in which many genes on the active X are modulated in different ways by the inactive X, while the Y chromosome, even with four copies, has little influence. These results may explain, in some cases, the different expression of an X-linked disease in females compared to males.

1. https://www.sciencedirect.com/science/article/pii/S2666979X2300 0150?via%3Dihub