

## **Genetic Science Spotlight**

30% of breast cancer patients are known to be Tamoxifen resistant: Who should have tamoxifen plus therapy instead of mono therapy?





A study at the University of Illinois recently uncast shadow on the endocrine resistant breast cancer patient which often progresses into an incurable metastatic cancer with the discovery of a biomarker XPO1 gene, among the 13 nuclear transport genes discovered. The study showed that patient with higher expression on XPO1 gene has lesser survival time, earlier metastases and endocrine-resistant tumor cells proliferated more rapidly when treated with tamoxifen. This allows scientists to conclude that biomarker XPO1 is likely to predict if a patient would be resistant to Tamoxifen and may have a better outcome with the combination of Tamoxifen and Selinexor, which inhibits the activity of XPO1. In the laboratory, the combination of drugs successfully blocked tumor progression with no recurrence weeks after treatment. It delays the development of endocrine resistance and at the same time reducing dosage of tamoxifen required. Madak-Erdogan, the scientist who led the study also mentioned that Selinexor, which is already in clinical trials for treating leukemia and therapy-resistant prostate cancer, is tolerated well, and patients experience very mild side effects that wear off as therapy continues.

https://www.ncbi.nlm.nih.gov/pubmed/27533791

You are welcome to contact us for more information!









Copyright 2012-2016 Le GENE Limited | All Rights Reserved