SCIENTISTS here have discovered a new protein that causes breast cancer. Their finding could eventually lead to new drugs to treat the disease.

Named WBP2, the protein exists in two forms: dormant and active. The dormant form is harmful only to people who already have breast cancer, because it encourages the rogue cells to multiply faster.

But the active form is dangerous even in healthy people: It changes normal cells to breast cancer cells and then speeds up their growth.

The scientists from the National University of Singapore's Yong Loo Lin School of Medicine said it is not clear how many of these proteins are found in people.

They are “switched on” by a process called phosphorylation, where a phosphate binds to the protein, but it is also not known why this happens.

About 1,500 women are diagnosed with breast cancer every year in Singapore. It is the most common form of the disease in women, accounting for more than a quarter of cases.

The scientists’ research was published in the Faseb Journal, a top biology publication, in September.

They said the identification of the protein could lead to more targeted drugs. Several drugs currently being used in clinical trials are especially effective against cancer caused by WBP2.

Principal investigator Lim Yoon Pin said the team will start a new study involving 1,000 breast cancer samples by next June to find out how the protein works, and how prevalent it is among breast cancer cases. The protein has also been linked to lung, prostate and colon cancer.

The team’s work has been funded by the Agency for Science, Technology and Research.

FENG ZENKUN