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# Why Chemo? Chinese herbal medicines can do the magic!

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**Why Chemo? Chinese herbal medicines can do the magic!**

An Australian research has revealed that a combination of Chinese herbs Kushen and Baitulin can kill cancer cells. Compound kushen injection (CKI) has been used for about 10 years in Chinese clinics as an adjunct to western chemotherapy.

Laboratory experiments by South Australian Researchers at the University of Adelaide revelead the mechanism, illustrating how the herbal mixture acts on the same biological pathways as western chemotherapy, just through different genes.

The team used high-throughput next generation sequencing technologies to identify genes and biological pathways targeted by CKI when applied to breast cancer cells grown in the laboratory.

University of Adelaide Professor David Adelson, Director of the Zhendong Australia - China Centre for the Molecular Basis of Traditional Chinese Medicine, said the technique could be further used to analyze the molecular mechanisms of other Traditional Chinese Medicines, potentially opening the way for their use in western medicine.

"It seems that compound kushen injection alters the way the cell cycle is regulated to push cancer cells down the cell death pathway, therefore killing the cells," he explained. "Most Traditional Chinese Medicines are based on hundreds or thousands of years of experience with their use in China," Professor Adelson said. "There is often plenty of evidence that these medicines have a therapeutic benefit, but there isn't the understanding of how or why."

The Zhendong Australia China Centre for Molecular Traditional Chinese Medicine was established at the University of Adelaide in 2012 in collaboration with the China-based Shanxi College of Traditional Chinese Medicine and Zhendong Pharmaceutical Company.

He further elaborated that traditional Chinese Medicine is a combination of many ingredients and these multiple compounds in there have some level of activity that have significant effects. When one looks at the entire cocktail of all of the compounds,

the effects in cancer cells that support that can be seen.