

French Grape Seed Extract VX1 Found Effective in Suppression of Cancer Pathway

Source: Center for Epigenetics and Cancer Prevention

Results hold great promise for future therapies

In the first study of its kind, researchers at the Baylor Scott & White Research Institute, Baylor University Medical Center have demonstrated novel and previously unknown mechanisms of action by which low molecular weight oligomeric proanthocyanins (OPC) from French Grape Seed Extract VX1 help eradicate colorectal cancer cells. [Toden S, Goel, A. Oligomeric proanthocyanidins inhibit Hippo-YAP pathway and prevent colorectal cancer stem cell formation. Poster presentation at the annual American Association for Cancer research (AACR) meeting. New Orleans, LA. April 16-20, 2016]

"We know that chemotherapy kills cancer cells but leaves behind cancer stem cells that are key to cancer's recurrence and metastasis (spread)," says Ajay Goel, Ph.D., senior author of the study. "In this study, we were able to for the first time demonstrate that OPCs can eliminate cancer stem cells, and the mechanism by which they are effective. We found that OPCs target a unique pathway called HIPPO-YAP that is necessary for stem cell survival. We show that OPCs can suppress this pathway, and this is something that has never been shown before." Dr. Goel is Professor, and Director of the Center for Epigenetics and Cancer Prevention, Baylor Scott & White Research Institute, Baylor University Medical Center, Dallas, TX.

"Also, we showed that OPCs cause cell cycle arrest and lock up tumor cells in their growth phase, which eventually leads to cancer cell death," he explains. "We found that OPCs target specific microRNAs that lead to cancer suppression. There is a growing interest in miRNA-based pharmaceutical drug development for cancer, though there has not been success. So we are quite gratified and enthused that low molecular weight OPCs can effectively, safely, and inexpensively achieve this goal, which no drug has yet accomplished--and all without the potential side effects and toxicity associated with such treatments," says Dr. Goel.

"While these are pre-clinical findings in cultured cells and animal models, the results may hold great promise for people with colorectal cancer. More human research is needed. However, I think using a tannin-free, low molecular weight OPC grape seed extract may provide excellent benefits," Dr. Goel concluded.

It is important to note that the form of grape seed extract used in the study, VX1, has unique specifications for standardization to low molecular weight for proper absorption. It is a tannin-free extract. Therefore, results may not apply to other forms of grape seed without these standardizations.