

A compound in avocados could lead to improvements in leukemia treatment, according to a [study](#) by the University of Guelph.

The compound, avocatin B, targets an enzyme known as VLCAD that scientists have identified for the first time as being critical to cancer cell growth, Dr. Paul Spagnuolo, Department of Food Science said.

The study focused specifically on acute myeloid leukemia (AML). This form largely affects adults over the age of 65, and fewer than 10 percent of patients survive five years after diagnosis.

Dr. Spagnuolo explained that leukemia cells have higher amounts of VLCAD involved in their metabolism.

"The cell relies on that pathway to survive," he said, "This is the first time VLCAD has been identified as a target in any cancer."

After screening various nutraceutical compounds in search of one that would inhibit the enzyme, the research team found that avocatin B provided the best results.

The compound had previously been researched for its potential in diabetes prevention and weight management. Now, Spagnuolo sees a potential usage in leukemia patients.

"VLCAD can be a good marker to identify patients suitable for this type of therapy. It can also be a marker to measure the activity of the drug," he said. "That sets the stage for the eventual use of this molecule in human clinical trials."

This could answer a call for less toxic drug options in the treatment of AML. Currently, around half of patients with AML over 65 will enter palliative care while others will go through chemotherapy.