

Seaweed extract may hold promise for non-Hodgkin's lymphoma treatment

March 11 2010

Seaweed extract may eventually emerge as a lymphoma treatment, according to laboratory research presented at the second AACR Dead Sea International Conference on Advances in Cancer Research: From the Laboratory to the Clinic, held here March 7-10, 2010.

Lymphoma is a cancer of the immune system and is classified into Hodgkin's and non-Hodgkin's types, which are then further classified into B-cell and T-cell groups.

"Some forms of B-cell lymphoma are especially resistant to standard treatment and thus new therapies are needed," said Mohammad Irhimeh, Ph.D., assistant professor of hematoncology and <u>stem cells</u> at the Hashemite University in Jordan. "In this study, we looked at a new treatment strategy using novel active compounds derived from a natural source ¬¬— seaweed."

Seaweeds containing fucoidan, a sulfated polysaccharide similar to <u>heparin</u> in chemical structure, have been reported to have anti-tumor activity in mice and some cell lines.

For the current study, Irhimeh and colleagues at the University of California, Berkeley, and Royal Hobart Hospital in Australia treated lymphoma cell lines with a commercially available seaweed extract.

They found that the extract had an <u>inhibitory effect</u> on the growth of lymphoma cell lines, while leaving the control healthy cells intact. The



researchers also noted a significant pattern of activity in the genes known to be linked with <u>apoptosis</u>, or cell death, in <u>lymphoma</u>.

Irhimeh said they would continue to study the mechanism of action for these biological effects and had a goal of conducting phase II or III clinical trials.

Provided by American Association for Cancer Research

Citation: Seaweed extract may hold promise for non-Hodgkin's lymphoma treatment (2010, March 11) retrieved 2 May 2024 from <u>https://medicalxpress.com/news/2010-03-seaweed-non-hodgkin-lymphoma-treatment.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.