Global task force offers a solution to the problem of untreatable cancers and disease relapse: non-toxic chemicals in plants and foods may be key

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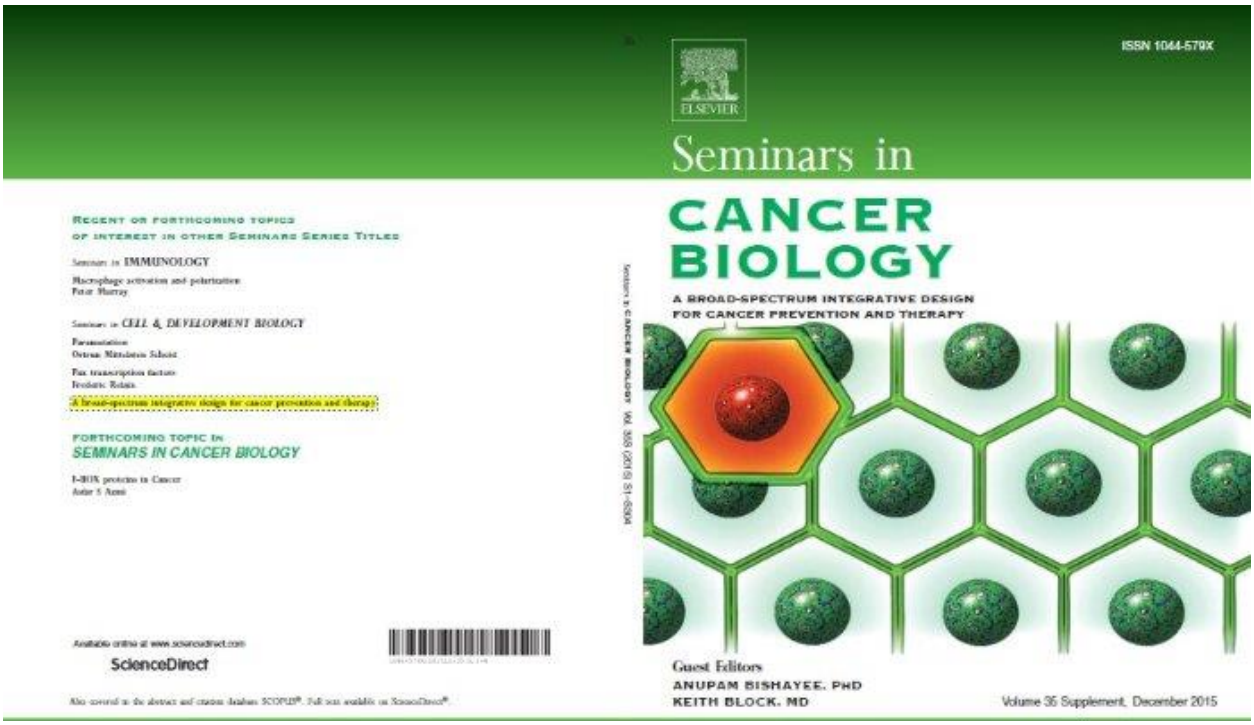
Halifax, Nova Scotia, Canada, Nov 18, 2015 – Combinations of a significant number of non-toxic substances, many of which can be found in plants and foods, may give us a chance to stop untreatable cancers and prevent disease

Many cancer therapies are highly toxic, and even when they appear to work, a significant percentage of patients will experience a relapse after only a few months. Typically these relapses result from small subpopulations of mutated cells which are resistant to therapy, and doctors who try to address this problem with combinations of therapies find that therapeutic toxicity typically limits their ability to stop most cancers.

To tackle this problem, a task force of 180 scientists from prominent institutions in 22 countries was assembled by a Canadian NGO called "Getting to Know Cancer". Interdisciplinary teams nominated a series of high-priority molecular targets (74 in total) that could be reached to improve patient outcomes in most cancers. Corresponding low-toxicity approaches were then recommended as potential candidates for mixtures of chemical substances that could reach a broad-spectrum of priority targets in most cancer types. Many of the substances that were selected were from plants and foods.

"We are extremely encouraged by the degree of consensus that we found within this large group of researchers" said Keith I. Block, M.D., the Medical and Scientific Director of the Block Center for Integrative Cancer Treatment in Skokie, Illinois. "We believe that carefully designed combinations of non-toxic chemicals can be developed in a manner that will maximize our chance of arresting most cancers. Currently, clinicians have a limited number of tools to help them treat the disease once it becomes resistant to mainstream therapy, but an approach that can reach a broad-spectrum of targets without toxicity offers considerable promise". Block is the lead author of this synthesis which has just been published (along with the supporting work from each of the teams) in a special issue of Elsevier's peer-reviewed journal, *Seminars in Cancer Biology (2014 Impact Factor: 9.330)*.



This was the first time that this large-scale problem has ever been considered by teams that could interpret the full spectrum of cancer biology and incorporate what is now known about non-toxic chemicals with anti-cancer effects. In light of this evidence, the task force is calling for an immediate increase in support for research on mixtures of chemicals that can reach a broad-spectrum of therapeutic targets.

“This is an area that merits considerable attention and where interdisciplinary and international collaboration is needed” said Dean Felsher, MD, PhD a project contributor from the Department of Medicine at Stanford University. “Our approaches to therapy are improving, but we need a breakthrough that can helps us address the problem of relapse”, he added.

The taskforce wanted to produce an approach to therapy that would also have the potential to be very low cost, so this approach may hold considerable promise for low-middle income countries where many of the latest cancer therapies are deemed unaffordable.

For more information on this project, please visit Getting to Know Cancer’s website at www.gettingtoknowcancer.org or contact Leroy Lowe, President and Cofounder of Getting to Know Cancer at leroy.lowe@gettingtoknowcancer.org