



Killing Cancer Where It Lives

(NAPSA)—A fascinating medical discovery was made in 1998 by researchers studying how certain viruses grow and multiply: a virus named the Respiratory Enteric Orphan virus, or reovirus, has the ability to grow in and kill a broad range of cancer cells without growing in or damaging normal, non-cancerous cells.

After further investigation, researchers determined that the reovirus needed an “activated Ras Pathway” in order to be able to grow in and subsequently kill the cancer cell. The Ras Pathway is instrumental in transferring growth signals to the nucleus of a cell, telling the cell when and how to grow—much like an “on-off” switch. An activated Ras Pathway, which has lost its ability to “turn off,” leads to uncontrolled cell growth. An activated Ras Pathway is evident in approximately two-thirds of all human cancers.

In these Ras-activated cancer cells, reovirus is able to freely replicate and kill the host tumor cell. When the cancer cell dies, thousands of progeny viruses are freed, and proceed to infect and kill adjacent cancer cells. This process is believed to continue until all adjacent cancer cells have been infected with the reovirus. In cells without an activated Ras Pathway, the reovirus cannot grow, and normal cells remain healthy.

This discovery led to the formation of Oncolytics Biotech Inc., a company established to develop the reovirus, REOLYSIN™, as a potential treatment for cancer. Moving beyond early testing in cell cultures, through various tests in animals and into human clinical trials, Oncolytics is focused on answering these basic questions:

- Is it safe in humans?
- Can we make it in sufficient quantities and under approved conditions?
- Is it effective in treating various types of cancer?

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Oncolytics has successfully completed two human clinical studies in Canada, and is currently conducting two additional trials: a Phase I intravenous administration trial with REOLYSIN at the Royal Marsden Hospital in the United Kingdom, and a brain tumor trial in Canada. Plans are underway for other trials both in the U.K. and in the U.S.

Results to date indicate that REOLYSIN is well tolerated with no side effects of note. Evidence of cancer-killing activity has been noted even while it is early to draw final conclusions.

As the population ages, cancer is expected to surpass cardiovascular disease as the leading cause of death. In fact, half of all men and one-third of all women will develop some form of cancer during their lifetimes. The American Cancer Society estimates that there are currently 8.9 million people in the United States with a history of cancer. Approximately 1.3 million people are expected to be diagnosed with cancer this year, and more than half a million are expected to die from the disease.

Oncolytics Biotech Inc. trades on the NASDAQ (ONCY) and in Canada on the Toronto Stock Exchange (ONC).

To learn more, visit www.oncolyticsbiotech.com.