

HEALTH UPDATE

A Common Microbe May Help Cure Cancer

(NAPSA)—A new discovery using a common microorganism found in dairy products is now helping scientists grow closer to developing vaccines for certain types of cancers.

Yvonne Paterson, Ph.D., a professor of microbiology at the University of Pennsylvania, and a breast cancer survivor, discovered that a microbe called *Listeria monocytogenes* is capable of bringing out an exceptionally profound immune response—a response that is different from, and more effective than, the human immune system's typical response to cancer.

Using Dr. Paterson's principal findings, which are backed by over 10 years of research and multiple published studies, scientists at Advaxis, a publicly traded biotechnology company founded to develop these vaccines, are now using this breakthrough to develop a series of *Listeria*-based vaccines called Lovaxin that specifically target cervical, breast, head and neck cancer, melanoma, lung, prostate and ovarian cancers.

"Essentially, *Listeria* vaccines such as Lovaxin harness the power of the immune system against infectious agents, to then direct the immune system to attack and eliminate cancerous cells," says Dr. John Rothman, Advaxis' Vice President of Clinical Development. "The vaccines teach the immune system to mount a specialized, targeted response that is lethal to cancer."

Cervical cancer affects many thousands of women every year. Newly developed vaccine treatments associated with the disease address women who have not been exposed to HPV, the viral cause of cervical cancer.

According to Dr. Rothman, Lovaxin C, which will be entering Phase I/II clinical trials, is being



developed to treat and hopefully cure women who have been exposed to HPV and/or have cervical cancer.

"If Lovaxin C is successful in clinical trials, it has the potential of not only preventing cervical cancer in women who have been exposed to HPV but also to serve as a viable therapy for women battling cervical cancer."

New Progress for Breast Cancer

Besides harnessing the immune system, the Lovaxin vaccines also appear to help the immune system create memory cells that may help cancer from reoccurring.

In a published study in the *Journal of Immunology*, a live *Listeria* cancer vaccine demonstrated that it is capable of eradicating existing, rapidly growing breast tissue tumors in mice. The vaccine was able to stop tumor progression and also achieve regression in many cases.

"The tumors stopped growing or went completely away," said Dr. Paterson. "*Listeria* vaccines have shown great promise as one of the most effective methods of generating a significant immune response," she added.

For more information, log on to www.advaxis.com.