

The Prognosis On Breast Cancer

Alberta, BC Now Using Risk Assessment Test

University of British Columbia



The year 2017 ushered in some milestones for breast cancer research in British Columbia, Alberta and the United States.

The attention centered on a test called Prosigna, which assesses the 10-year risk of recurrence of breast cancer in some postmenopausal women. The test evolved from years of research by the BC Cancer Agency, the University of British Columbia (UBC) and three U.S. university labs.

Prosigna, the first in vitro diagnostic product to assess the prognosis of early-stage breast cancer, has been approved by health officials in Europe and the United States for about five years. Health Canada licensed it soon after.

In 2017 Alberta and British Columbia became the first provinces to approve its active clinical use. Their decisions followed an economic health evaluation; Alberta, for instance, is looking to save on the \$1 million it spent annually on Prosigna's predecessor. Unlike Prosigna, that molecular testing had to be done out of the country, running up the cost.

Several major U.S. insurers, including Blue Cross Blue Shield, also came on board in 2017, with the result that 95 percent

of affected women in the United States now have insurance coverage for the test.

“ *Prosigna is a rare example of the complete bench-to-bedside development of a new medical diagnostic; it represents the successful transfer of a fundamental research finding from the lab to the clinic. The test is now in use in more than a dozen countries.*”

The assay analyzes genetic activity in some forms of early-stage breast cancer and uses that information, along with clinical variables, to assess a woman’s 10-year risk of distant breast cancer recurrence (metastasis). The test results can be useful when determining the potential benefit, or even the necessity, of hormonal therapy or chemotherapy.

Prosigna, marketed by Seattle-based NanoString Technologies, “is the result of a decade of research, in which Canadian researchers have had a major role as co-inventors and leaders in multinational research and development programs,” said Torsten Nielsen, a pathologist at BC Cancer and UBC who helped lead the effort.

As a result, people with breast cancer now have improved access to state-of-the-art molecular tests to help them make difficult decisions about their treatment

This story was originally published in 2018.

To see available technologies from research institutions, click [here](#) to visit the AUTM Innovation Marketplace.

Share your story at autm.net/betterworldproject

#betterworldproject