

Changing survival expectations

“When I first learned I had metastatic lung cancer, I was devastated. Like most people diagnosed with this disease, it was at a late stage and the prognosis was poor,” said Larry Frydman, a Toronto lung cancer survivor. “I quickly learned that science was in overdrive. Today’s news of new innovative treatment options brings much needed hope to Canadians living with lung cancer.”

“Health Canada’s decision means that Canadians living with lung cancer will have a new tool to fight this disease,” said Shem Singh, Executive Director of Lung Cancer Canada. “This is important as innovative treatment options provide metastatic lung cancer patients with the possibility of improved outcomes and the hope for more time with family and loved ones.”

About Lung Cancer

Lung cancer, which forms in the tissues of the lungs^v, usually within cells lining the air passages, is the leading cause of cancer death worldwide.^{vi} Each year, more people die of lung cancer than die of colon and breast cancers combined.^{vii} The two main types of lung cancer are non-small-cell (NSCLC) and small-cell. NSCLC is the most common type of lung cancer, accounting for 80 to 85 percent of all cases.^{viii} The five-year relative survival rate for patients suffering from highly advanced, metastatic (Stage IV) lung cancers is estimated to be between 2 and 13 per cent.^{ix}

Lung cancer is the most commonly diagnosed cancer in Canada (excluding non-melanoma skin cancers).^x It is the leading cause of death from cancer for both men and women in Canada. In 2017, an estimated 28,600 Canadians were diagnosed with lung cancer; representing 14 per cent of all new cancer cases, and 21,100 Canadians died from lung cancer, representing 26 per cent of all cancer deaths.^{xi}

About KEYTRUDA®

KEYTRUDA® is an anti-PD-1 therapy that works by increasing the ability of the body’s immune system to help detect and fight tumour cells. KEYTRUDA® is a humanized monoclonal antibody that blocks the interaction between PD-1 and its ligands, PD-L1 and PD-L2, thereby activating T lymphocytes which may affect both tumour cells and healthy cells.

KEYTRUDA® was first approved in Canada in 2015 and currently has eight indications in a number of disease areas, including NSCLC, classical Hodgkin lymphoma, melanoma and bladder cancer.

Merck has the industry's largest immuno-oncology clinical research program. There are currently more than 750 trials studying pembrolizumab across a wide variety of cancers and treatment settings. This clinical program seeks to understand the role of pembrolizumab across cancers and the factors that may predict a patient's likelihood of benefitting from treatment with this medication, including exploring several different biomarkers.

Our Focus on Cancer

Our goal is to translate breakthrough science into innovative oncology medicines to help people with cancer worldwide. At Merck Oncology, helping people fight cancer is our passion and supporting accessibility to our cancer medicines is our commitment. Our focus is on pursuing research in immuno-oncology and we are accelerating every step in the journey – from lab to clinic – to potentially bring new hope to people with cancer.

About Merck Canada

For over a century, Merck, a leading global biopharmaceutical company known as MSD outside of the United States and Canada, has been inventing for life, bringing forward medicines and vaccines for many of the world's most challenging diseases. Through our prescription medicines, vaccines, biologic therapies and animal health products, we work with customers and operate in more than 140 countries to deliver innovative health solutions. We also demonstrate our commitment to increasing access to health care through far-reaching policies, programs and partnerships.

Today, Merck continues to be at the forefront of research to advance the prevention and treatment of diseases that threaten people and communities around the world – including cancer, cardio-metabolic diseases, emerging animal diseases, Alzheimer's disease and infectious diseases including HIV and Ebola. For more information about our operations in Canada, visit www.merck.ca and connect with us on [YouTube](#) and [Twitter](#) @MerckCanada.

Forward-Looking Statement of Merck & Co. Inc., Kenilworth, NJ, USA

This news release of Merck & Co., Inc., Kenilworth, N.J., USA (the "company") includes "forward-looking statements" within the meaning of the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. These statements are based upon the current beliefs and expectations of the company's management and are subject to significant risks and uncertainties. If underlying assumptions prove inaccurate or risks or uncertainties materialize, actual results may differ materially from those set forth in the forward-looking statements.

Risks and uncertainties include but are not limited to, general industry conditions and competition; general economic factors, including interest rate and currency exchange rate fluctuations; the impact of pharmaceutical industry regulation and health care legislation in the United States and internationally; global trends toward health care cost containment; technological advances, new products and patents attained by competitors; challenges inherent in new product development, including obtaining regulatory approval; the company's ability to accurately predict future market conditions; manufacturing difficulties or delays; financial instability of international economies and sovereign risk; dependence on the effectiveness of the company's patents and other protections for innovative products; and the exposure to litigation, including patent litigation, and/or regulatory actions.

The company undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise. Additional factors that could cause results to differ materially from those described in the forward-looking statements can be found in the company's 2017 Annual Report on Form 10-K and the company's other filings with the Securities and Exchange Commission (SEC) available at the SEC's Internet site (www.sec.gov).

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Please see the product monograph for KEYTRUDA® (pembrolizumab) at:

https://www.merck.ca/static/pdf/KEYTRUDA-PM_E.pdf

References

ⁱ Canadian Cancer Society. Lung cancer statistics. Available at <http://www.cancer.ca/en/cancer-information/cancer-type/lung/statistics/?region=pe>

ⁱⁱ Canadian Cancer Society. Cancerous tumours of the lung. Available at <http://www.cancer.ca/en/cancer-information/cancer-type/lung/lung-cancer/cancerous-tumours/?region=on>

ⁱⁱⁱ Canadian Cancer Society. Survival statistics for non-small cell lung cancer. Available at <http://www.cancer.ca/en/cancer-information/cancer-type/lung/prognosis-and-survival/non-small-cell-lung-cancer-survival-statistics/?region=ab>

^{iv} New England Journal of Medicine. Pembrolizumab plus Chemotherapy in Metastatic Non-Small-Cell Lung Cancer. Available at <https://www.nejm.org/doi/full/10.1056/NEJMoa1801005>

^v Canadian Cancer Society. What is lung cancer? Available at <http://www.cancer.ca/en/cancer-information/cancer-type/lung/lung-cancer/?region=on>

^{vi} World Health Organization. Cancer fact sheet. Available at <https://www.who.int/en/news-room/fact-sheets/detail/cancer>

^{vii} World Health Organization. Cancer fact sheet. Available at <https://www.who.int/en/news-room/fact-sheets/detail/cancer>

^{viii} Canadian Cancer Society. Cancerous tumours of the lung. Available at <http://www.cancer.ca/en/cancer-information/cancer-type/lung/lung-cancer/cancerous-tumours/?region=on>

^{ix} Canadian Cancer Society. Survival statistics for non-small cell lung cancer. Available at <http://www.cancer.ca/en/cancer-information/cancer-type/lung/prognosis-and-survival/non-small-cell-lung-cancer-survival-statistics/?region=ab>

^x Canadian Cancer Society. Lung cancer statistics. Available at <http://www.cancer.ca/en/cancer-information/cancer-type/lung/statistics/?region=pe>

^{xi} Canadian Cancer Society. Lung cancer statistics. Available at <http://www.cancer.ca/en/cancer-information/cancer-type/lung/statistics/?region=pe>