



Canadian
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Canadian Cancer Society COVID-19 clinical trial

The Canadian Cancer Society is funding an exciting clinical trial to test the effectiveness of a new approach to prevent severe COVID-19 infections in people with cancer, who may be at greater risk of more serious outcomes from COVID-19. The trial is being conducted by the CCS-funded Canadian Cancer Trials Group (CCTG).

A clinical trial published in 2016 found that an immune-boosting treatment called IMM-101 is safe and well tolerated in people with advanced pancreatic cancer. In two other studies, treatment with IMM-101 enhanced the effectiveness of other immunotherapy and chemotherapy drugs and led to dramatic responses in people with metastatic pancreatic cancer and advanced melanoma. Based on these promising results, IMM-101 is currently being developed as an anti-cancer therapy and now, as a strategy to prevent severe COVID-19 infections.

What is the goal of this trial?

To test whether a new immune-stimulating treatment, called IMM-101, can reduce the incidence and severity of COVID-19 symptoms in people who are actively undergoing cancer treatment.

What is IMM-101?

IMM-101 contains harmless, dead bacteria and works like a vaccine to turn on certain immune cells, boosting the immune system's ability to recognize and kill things like cancer cells and harmful viruses. This activates an immune response that, based on other studies, appears to be critical for getting rid of coronavirus infections.

What is the methodology of this trial?

The trial is taking place at 8 cancer centres across Canada with the goal of recruiting 1,500 people who are receiving active cancer treatment. Of the 1,500 participants, 500 will receive 3 doses of IMM-101 while the other 1,000 people will receive no treatment. The researchers will follow the participants to collect information on whether they become infected with COVID-19, their symptoms and the impact on their cancer treatment plan. Results are expected within 9 months.

The researchers selected 1,500 as their target sample size because this was the minimal number of participants needed to have enough statistical power (i.e., confidence) to detect any relevant effects of the vaccine across a range of expected COVID-19 infection rates. Given that this trial is being done in the midst of a pandemic, the researchers are trying to balance the need to get reliable results with the desire to complete the study as quickly as possible.

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How is the IMM-101 treatment different from a COVID-19 vaccine?

The COVID-19 vaccines that are currently in development are designed to protect people specifically from becoming infected with SARS-COV-2, the coronavirus that causes COVID-19. These vaccines use different strategies to help the body generate an immune response against SARS-COV-2, so that it is primed to attack the coronavirus should the person become exposed. In contrast, IMM-101 is an immune-stimulating treatment that enhances the body's immune response in a nonspecific way. In earlier studies, the immune response created by IMM-101 showed promising results against cancer cells. In this clinical trial, the researchers are testing if IMM-101's immune-boosting effects could also extend to COVID-19 infections and limit the severity of these infections in people with cancer.

What are the broader implications of this trial?

To our knowledge, this is the first clinical trial of its kind to test an immune-stimulating treatment to mitigate COVID-19 infection specifically in people with cancer. If successful, this treatment could help protect people with cancer from the severe outcomes associated with COVID-19, and potentially other respiratory infections like the seasonal flu. This approach could also offer benefits to people with other chronic illnesses or compromised immune systems who are similarly at a heightened risk of serious outcomes from COVID-19.

Please visit cancer.ca to donate to fund groundbreaking research and a national support system that makes a real difference for people affected by cancer. Together, we can create a world where no Canadian fears cancer.