

BIOSIMILAR THERAPIES

FOR LYMPHOMA & CLL



LYMPHOMA
CANADA

Your treatment for lymphoma or CLL may include a **biologic drug** (e.g., rituximab) on its own or in combination with other treatments. You may be treated with the original name brand biologic drug (reference biologic) or a **biosimilar** - a drug that is demonstrated to be highly similar to the reference biologic.

WHAT IS A BIOLOGIC DRUG?

Biologic drugs are a diverse category of drugs that are made from living cells. These drugs are usually larger and more complex than non-biologic or chemically produced drugs. Biologic drugs are used to treat many diseases and medical conditions such as rheumatoid arthritis, anemia, psoriasis, inflammatory bowel disease, hormone deficiency and some forms of cancer, including lymphoma.

WHAT IS A BIOSIMILAR DRUG?

A biosimilar drug is a highly similar copy of a reference biologic drug. Canada and other countries have used biosimilars to for many years to treat diseases including arthritis, diabetes Crohn's disease and side effects of cancer.

IS THERE A DIFFERENCE BETWEEN BIOSIMILAR AND GENERIC DRUGS?

Yes. Generic drugs contain identical medicinal ingredients to existing non-biologic, name brand drugs. Unlike non-biologic drugs, biosimilars are derived from living cells, making them more difficult to copy in comparison to chemically synthesized drugs. This causes biosimilars to vary slightly from their reference biologic and they are therefore not identical.

ARE BIOSIMILARS SAFE AND EFFECTIVE?

Biosimilars are approved and monitored by Health Canada to the same standards as the reference biologic. Health Canada assesses and approves biosimilars based on a thorough comparison with their reference biologic. In order to meet the standards of biosimilarity, biosimilars must have no clinically meaningful difference in safety or efficacy to the reference biologic.

WHAT IS THE BENEFIT OF USING A BIOSIMILAR DRUG?

Biosimilars work in the exact same way as their reference biologic; however, biosimilars cost less because they are less expensive to produce. The money saved by using biosimilars can be spent on other treatments to help improve patient outcomes.

WHAT BIOSIMILARS ARE USED TO TREAT LYMPHOMA AND CLL?

Rituximab is a biologic drug widely used to treat people with non-Hodgkin lymphoma (NHL), and chronic lymphocytic leukaemia (CLL). Rituximab is a monoclonal antibody that works by targeting a protein called CD20, present on the surface of B cells. This drug effectively treats diseases characterized by excessive number of B cells or dysfunctional B-cells, such as NHL and CLL. Rituximab biosimilars are starting to become available in Canada and have been used in Europe for a few years to treat lymphoma.

Filgrastim is a biologic drug used to stimulate the production of neutrophils – a type of white blood cell that is important for fighting infections. A reduction in the number of white blood cells (neutropenia) can occur for several reasons and makes your body less able to fight infection. Filgrastim stimulates the bone marrow to produce new white blood cells quickly. Filgrastim biosimilars have been available in Canada for a few years and are being used in many hospitals and cancer centres.

IF I AM ALREADY BEING TREATED WITH A BIOLOGIC DRUG, CAN I BE SWITCHED TO ITS BIOSIMILAR?

Your hospital might switch from a reference biologic to a biosimilar as biosimilars become available. Any decision to switch to a biosimilar should be taken by your doctor in consultation with you. Biosimilars are equally safe and effective; however, if you experience any problems while taking a biosimilar you should report them to your doctor.

WHERE CAN I FIND MORE INFORMATION?

Health Canada - Biosimilar biologic drugs in Canada: Fact Sheet

https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/dhp-mpps/alt_formats/pdf/brgtherap/applic-demanded/guides/Fact-Sheet-EN-2019-08-23.pdf

Biosimilars – What You Need to Know (for patients)

<https://www.cancercareontario.ca/en/cancer-treatments/chemotherapy/about/biosimilars>

Biosimilars – What You Need to Know (for providers)

<https://www.cancercareontario.ca/en/guidelines-advice/modality/biological-therapy/biosimilars-need-to-know-providers>