

Health PEI

SAFER PRACTICE NOTICE

Originator and Biosimilar Insulins January 2024

Issue

Insulins are **high alert medications** and among the top medications cited in harmful incidents in all Health PEI health care facilities.

Through the [PEI Biosimilar Initiative](#), many patients are being switched to a biosimilar version of their insulin(s) by their community pharmacist, physician, or nurse practitioner. Because of the number of originator and biosimilar products available, there is the potential for confusion for patients and health care providers.

Key Messages

When transitioning from an originator insulin to a corresponding biosimilar insulin:

- Use the same dose unit to unit.
- There are no clinical differences in onset, peak, or duration of action between an originator insulin and the corresponding biosimilar(s).
- There are no expected differences in adverse effects between an originator insulin and the corresponding biosimilar(s).

Other Recommendations:

- Patients should not be receiving two versions of the same insulin (e.g. patients should not have orders for both NovoRapid® and Trurapi®).
- Some biosimilar insulins have not been approved for use with insulin pumps. **Patients on an insulin pump should only be changed to a biosimilar version of their insulin if it has been shown to be compatible with their pump.**
- Ensure patients and their caregivers are clear on which insulin patients should be using on discharge.
- Consult the reference chart on page 2 or contact your pharmacy department with any questions about biosimilar insulin products.
- Practice the 10 rights of medication administration (10 Rs). Refer to the [Health PEI Medication Administration Policy](#) for details.

About biologic drugs and biosimilars:

- Biologic drug—a drug made from living organisms
- Reference biologic or originator drug—the first version of a biologic drug to be made
- Biosimilar drug—the next version of a biologic drug to be made after the reference biologic's patent expires
- Biosimilars work in the same way as the reference biologic. They are highly similar, and patients can expect the same results from biosimilars
- Additional information about biosimilar insulins can be found on the [Biosimilars](#) page on the Health PEI Staff Resource Centre.
 - [Biosimilar Patient Information - Trurapi and Kirsty](#)
 - [Biosimilar Patient Information - Admelog](#)
 - [Biosimilar Patient Information - Basaglar and Semglee](#)

Insulins (Originator and Biosimilar)

Drug Class	Insulin Type	Originator	Biosimilar
Rapid-acting	Insulin Aspart	NovoRapid® (100 units/mL) <ul style="list-style-type: none"> • FlexTouch® prefilled pen • Cartridge • Vial 	Trurapi® (100 units/mL) <ul style="list-style-type: none"> • Solostar® prefilled pen • Cartridge • Vial **
			Kirsty™ (100 units/mL) <ul style="list-style-type: none"> • Prefilled pen
	Insulin Lispro	Humalog® (100 units/mL) <ul style="list-style-type: none"> • Kwikpen® prefilled pen • Cartridge • Vial 	Admelog® (100 units/mL) <ul style="list-style-type: none"> • Solostar® prefilled pen • Cartridge • Vial
Long-acting	Insulin Glargine	Lantus® (100 units/mL) <ul style="list-style-type: none"> • Solostar® prefilled pen • Cartridge • Vial 	Basaglar® (100 units/mL) <ul style="list-style-type: none"> • Kwikpen® prefilled pen • Cartridge
			Semglee® (100 units/mL) <ul style="list-style-type: none"> • Prefilled pen

Disclaimer: This chart is current as of January 4, 2024. New dosage formats or future biosimilars may be added as they become available. ** Trurapi 10 mL vial is available, but not yet listed on PEI Pharmacare formulary.

For more information on this Safer Practice Notice, please contact:

Amanda Burke
 Pharmacy Manager, Formulary and Quality Improvement
 Provincial Pharmacy Services
adburke@ihis.org

Brianne Timpson
 Quality and Risk Consultant
 Quality and Patient Safety Division
btimpson@ihis.org

Safer Practice Notices are issued by the Health PEI Quality and Patient Safety Division to communicate recommended changes as a result of events that have been reported and investigated through the Provincial Safety Management System (PSMS).

Safer Practice Notices can be found at: <https://src.healthpei.ca/safer-practice-notice>