

Insulin specific properties - Prandial (bolus) insulin

Agent (100 units/mL unless otherwise specified)	Onset ¹	Peak ¹	Dura- tion ¹	Comments	Coverage (ODB ²⁸ , NIHB ²⁹)	Dosage forms ²⁸	Drug cost for dosage forms ³⁰	Drug cost for usual dose* (25 units/day for 100 days supply)
Rapid-acting								
Aspart (Novorapid®)	9-20 min	1-3h	3-5h	<ul style="list-style-type: none"> Inject immediately (not more than 5-10 minutes) before or immediately after a meal Max units/dose:** 80 for prefilled pen, 60 for reusable pen¹¹ 	ODB ✓ LU 388, 389, 390 ³⁵ NIHB ✓	5x3mL prefilled pens 5x3mL cartridges 10mL vial	\$78 \$75 \$42	\$147 \$142 \$107
†(Fiasp®)	4 min	0.5-1.5h	3-5h	<ul style="list-style-type: none"> Faster-acting insulin Suggested initial dose for type 2 diabetes in adults is 4 units at one or more meals Inject at the start of the meal (up to 2 minutes before meal) or within 20 minutes after starting the meal Max units/dose:** 80 for prefilled pen, 60 for reusable pen¹¹ 	ODB x NIHB x	5x3mL prefilled pens 5x3mL cartridges 10mL vial	\$84 \$81 \$45	\$157 \$152 \$115
Glulisine (Apidra®)	10-15 min	1-1.5h	3.5-5h	<ul style="list-style-type: none"> Inject within 15 minutes before or within 20 minutes after starting a meal Max units/dose:** 80 for prefilled and reusable pens¹¹ 	ODB ✓ NIHB ✓	5x3mL prefilled pens 5x3mL cartridges 10mL vial	\$67 \$66 \$38	\$124 \$123 \$95
Lispro (Humalog®)	10-15 min	0.75-2.5h	3.5-4.75h	<ul style="list-style-type: none"> Inject within 15 minutes before a meal or within 20 minutes after starting the meal Admelog® is biosimilar to Humalog® (Health Canada: no clinically meaningful differences in pharmacokinetics, pharmacodynamics, clinical efficacy, safety or immunogenicity)³³ Max units/dose:** 60 for Humalog® prefilled and reusable pens, 80 for Admelog® prefilled and reusable pens¹¹ 	ODB ✓ LU 599 ³⁶ NIHB ✓	5x3mL prefilled pens 5x3mL cartridges 10mL vial	\$74 \$74 \$42	\$138 \$139 \$107
(Admelog®)					ODB ✓ NIHB x	5x3mL prefilled pens 5x3mL cartridges 10mL vial	\$63 \$63 \$37	\$112 \$112 \$87
Lispro 200 units/mL (Humalog®)					ODB ✓ NIHB ✓	5x3mL prefilled pens	\$129	\$129
Short-acting								
Regular insulin (Humulin® R)	30-60 min	2-4h	5-8h	<ul style="list-style-type: none"> Inject 15-30 minutes before meals Entuzity® should be reserved for patients who require > 200 units/day and delivers insulin in 5-unit increments Entuzity® has a unique pharmacokinetic profile with an onset similar to regular insulin and a duration similar to some basal/premixed insulins Max units/dose:** 60 for Humulin-R® reusable pen, 60 for Novolin ge Toronto® reusable pen, 300 for Entuzity® prefilled pen¹¹ 	ODB ✓ NIHB ✓	5x3mL cartridges 10mL vial	\$62 \$36	\$115 \$89
(Novolin®ge Toronto)						5x3mL cartridges 10mL vial	\$61 \$36	\$112 \$88
‡Regular insulin 500 units/mL (Entuzity®)						2x3mL prefilled pens	\$120	\$120

* Prices reflect the cost to the consumer and include a markup and dispensing fee (the cost per dosage form and the 100-day cost both include one dispensing fee and reflect the usual pharmacy practice of dispensing a full box or vial; e.g., 5x3mL pens). The cost for a usual dose assumes a 100 kg patient. The price for vials does not include the cost of syringes.

** This reflects the maximum amount given for 1 injection, not the maximum amount of insulin that is required. Multiple injections may be required to achieve blood glucose targets.

† = not on Ontario drug formulary, ✓ = general benefit, x = not a benefit, **bid** = twice daily, **h** = hour, **kg** = kilogram, **LU** = limited use, **max** = maximum, **µg** = microgram, **mg** = milligram, **mL** = milliliter, **NIHB** = non-insured health benefits for First Nations and Inuit, **NPH** = neutral protamine Hagedorn, **ODB** = Ontario Drug Benefit, **SC** = subcutaneous