

## Medication storage and dating of select eye, ear and injectable medications in Long Term Care

The table below provides information on the stability, storage, and expiration of select eye drops, ear drops, and injectables that are used in the Calgary Zone Long Term Care Facilities (formulary and select non-formulary products included). Eye and ear drops, and injectables should be labeled with the 'date of opening' and/or 'date to discard' according to manufacturer's instructions. If the manufacturer does not provide a time frame for discarding the product after opening (or change in storage conditions), then the 28-day standard of practice is recommended<sup>1</sup>. The table below reflects select products with EXCEPTIONS to the 28-day practice.

Storing medications at the appropriate temperature, humidity, and light conditions is crucial since these factors directly affect the stability of products. It is recommended that all patients and healthcare professionals are aware of the suggested storage conditions and discard information of medications before using. When unsure, check the manufacturer's information directly for the most up-to-date information.

- follow proper hand hygiene practices for product administration<sup>2</sup>
- Inspect product before administration; when there are visible signs or suspicion of contamination, products should be discarded immediately.
- Keep all drugs in a safe place and out of the reach of other clients, visitors, children and pets.
- Keep product tightly closed when not in use.
- Store in carton or cardboard packaging if available to protect from light.
- Store eye/ear drops upright
- Expiration date is the last date a manufacturer can guarantee the potency, purity and physical characteristics of a medication, and beyond which they recommend the product not be used<sup>3</sup>. It is determined by stability testing from the manufacturer following good manufacturing practices<sup>4</sup>. Unless otherwise noted in the package label, insert or product monograph, medication should stay safe and effective until the expiration date if stored correctly.

If you have further questions or concerns, please reach out to a pharmacist or pharmacy provider for more information.

### The table below reflects select products with EXCEPTIONS to the 28-day practice.

Generic Name	Brand Name	Strength • Dosage Form (route)	Exception to 28 days discard timeframe	Specific Instructions	CalZone LTC Formulary Status
bimatoprost	Vistitan®	0.03% solution (ophthalmic)	30 days	Vistitan: store in the original container at 2°C to 25°C. Discard unused solution at the end of treatment. Discard the unused portion 30 days after opening. (1A)	NF-ASL
brinzolamide / brimonidine	Simbrinza®	1% * 0.2% suspension (ophthalmic)	125 days	store at 2°C to 25°C. Discard 125 days after opening the 10 mL bottle. (1A)	NF-ASL
brinzolamide / timolol	Azarga®	1% * 0.5% suspension (ophthalmic)	60 days	Store at 2°C to 30°C. Discard 60 days after opening. (1A)	NF-ASL
carboxymethylcellulose sodium	Refresh® Tears®	0.5% solution (ophthalmic)	90 days	Store at 15°C to 25°C. (1B)	F
carboxymethylcellulose sodium, preservative -free (PF)	Refresh® Celluvisc®	1% (supplied as minims) solution (ophthalmic)	Immediately after use	Store at 15°C to 25°C. (1B)	RS

Generic Name	Brand Name	Strength •Dosage Form (route)	Exception to 28 days discard timeframe	Specific Instructions	CalZone LTC Formulary Status
dorzolamide	Jamp-Dorzolamide	2% solution (ophthalmic)	40 days	Jamp-Dorzolamide: store at 15°C to 30°C. Protect from light. Once opened, the bottle may be stored at 15°C to 30°C for up to 40 days. Discard unused portion 40 days after opening. (1A)	F
insulin detemir	Levemir® (Penfill cartridge)	100 unit/mL	42 days	Not in-use (unopened): store between 2°C to 8°C (in a refrigerator) not near a freezing compartment. Do not freeze. In order to protect from light, Levemir Penfill cartridges should be kept in the outer carton.  In-use (opened): store below 30°C. Do not refrigerate. Do not freeze. Discard after 42 days. (1A)	NF
insulin detemir	Levemir® (FlexTouch prefilled pen)	100 unit/mL	42 days	Unopened (not in-use): store between 2°C to 8°C (in a refrigerator) not near a freezing compartment. Do not freeze. In order to protect from light, keep the cap on when Levemir FlexTouch is not in use.  Opened (In-Use): store below 30°C. Can be stored in a refrigerator (2°C to 8°C). Discard after 42 days. (1A)	NF
latanoprost	Xalatan® Apo-Latanoprost Jamp-Latanoprost Sandoz-Latanoprost Teva-Latanoprost Med-Latanoprost	50 mcg/mL (0.005%) solution (ophthalmic)	42 days	Store unopened bottle under refrigeration (2°C to 8°C) . Protect from light. Once opened, bottle may be stored at room temperature up to 25°C, for up to 6 weeks. (1A)	F
latanoprost / timolol	Xalacom® Med-Latanoprost- Timolol ACT-Latanoprost- Timolol Jamp-Latanoprost- Timolol	50mcg/mL(0.005%) * 5mg/mL(0.5%) solution (ophthalmic)	70 days	Store unopened bottle under refrigeration (2°C to 8°C). Protect from light. Once opened, the 5 ml container may be stored at room temperature up to 25°C for 10 weeks. Protect from light. (1A)	F

Generic Name	Brand Name	Strength • Dosage Form (route)	Exception to 28 days discard timeframe	Specific Instructions	CalZone LTC Formulary Status
semaglutide	Ozempic®	1.34 mg/mL and 2.68 mg/mL pens	56 days	Unopened (not in-use): store refrigerated (2°C to 8°C). Protect from excessive heat and light. Do not freeze and do not use if it has been frozen.  In use (opened): store at room temperature below 30°C or refrigerate at 2°C to 8°C. Discard after 8 weeks. Protect from excessive heat and light. Do not freeze and do not use if it has been frozen. (1A)	NF
sodium hyaluronate	Soothe® Preservative Free Dry Eye Therapy Preservative Free Multi-Dose <b>OR</b> BioTrue Dry Eye Relief Preservative Multi-Dose	0.24% solution (ophthalmic)	6 months	Store at 1°C to 25°C (1B)	F
timolol	Jamp-Timolol	0.5% solution (ophthalmic)	30 days	Store at room temperature (15°C to 25°C). Protect from light. Once opened, store at room temperature up to 25°C, out of direct light. In-use period of 1 month. (1A)	F
timolol	Sandoz-Timolol	0.25% and 0.5% solution (ophthalmic)	30 days	Store at room temperature (15°C to 25°C). Protect from light. It should not be used for more than one month after opening. (1A)	F
timolol	Timoptic XE® (also see generics)	0.5% gel solution (ophthalmic)	30 days	Store at room temperature (15°C to 25°C). Protect from light and freezing. Should not be used for more than one month after opening. (1A)	F
timolol	Timolol Maleate-EX (Sandoz)	0.25% and 0.5% gel solution (ophthalmic)	30 days	Store at 4°C to 30°C. It should not be used for more than one month after opening. (1A)	F

Generic Name	Brand Name	Strength • Dosage Form (route)	Exception to 28 days discard timeframe	Specific Instructions	CalZone LTC Formulary Status
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#### References

1. Guidelines for medication and vaccine injection safety (Alberta College of Pharmacy) 2018
2. Guidelines for hand hygiene (Alberta College of Pharmacy) 2016
3. Food and Drug Regulations (justice.gc.ca) C.R.C., c.870 (accessed Feb 7, 2023)
4. Good manufacturing practices guide for drug products (GUI-0001) - Canada.ca (accessed Feb 7, 2023)
- 1A. Product Monograph (accessed through RxTx or Health Canada)
- 1B. Product Information per manufacturer's website

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