Patient Information Sheet by Pure Integrative Pharmacy:
Benzocaine, Lidocaine & Tetracaine or Lidocaine & Tetracaine compounded numbing creams
For relief of pain related to hair removal in preparation for gender-affirming surgery

General Information:
Benzocaine/Lidocaine/Tetracaine (BLT) and Lidocaine/Tetracaine (LT) creams are a combination of local anesthetics (numbing agents) designed to be used on the skin to reduce pain from certain procedures, for example, electrolysis or laser hair removal. “Compounded” means that the pharmacy makes the product using raw ingredients.

When it is considered:
While compounded products do not have an official indication (or reason for use) by Health Canada or the US FDA, they are considered when commercially available products are ineffective, not tolerated well, or not available. With its higher concentration of numbing agents, BLT & LT creams are an effective alternative to commercial products and may be less costly. BLT and LT are for short-term use to small sections of healthy skin.

How it works:
The ingredients in BLT and LT cause the nerve endings in the treated area to be less responsive to pain signals while the product is working. It does this by affecting the sodium channels in the nerves, causing the nerve to respond less to pain signals. This is what causes the temporary numbing sensation after the cream is applied. When used correctly, only minimal absorption into the bloodstream and rest of the body is expected.

Which one should I choose?
People have varying responses to anesthetics, so it is hard to know which option (BLT or LT) will work best for you.
The concentrations of numbing agents provided by Trans Care BC for pain relief related to medically-necessary hair removal prior to gender-affirming genital surgery are:

- BLT: 20% Benzocaine, 6% Lidocaine, 4% Tetracaine
- LT: 23% Lidocaine, 7% Tetracaine

Do I need a prescription for BLT products?
BLT and LT topical formulas are available behind-the-counter and do not require a prescription in British Columbia, except in a few cases.
If you experience any complications or concerns, you can speak with your compounding pharmacist about what adjustments can be made to meet your needs. It is helpful to have the following information available: 1) percentages of the numbing agents, 2) the base they were compounded in, 3) the reaction/concern you experienced and 4) when you experienced the reaction relative to when you applied the cream.

How do I use it?
- Apply a thin layer of the cream 30 to 60 minutes before your treatment. You should feel numbing 30 to 60 minutes after application and it should last around 4 hours.
- Wash your hands after application or wear gloves when applying to avoid unwanted anesthetic effects.
- If the numbing effect begins to wear off before your treatment is completed, you can apply another layer of BLT cream to healthy, intact skin once.
- Do not apply additional creams on top of BLT or LT cream after treatment.
Warnings & Precautions:

- These products can cause contact dermatitis or skin irritation and should not be used long-term.
- Do not apply to large areas of inflamed or irritated skin because this can cause the medication to be absorbed into the bloodstream. For example, do not apply to irritated hair follicles, or to burns, wounds, or areas of thin skin (for example, eyelids). The cream can be applied to genital tissue (ie: scrotum) in the context of short-term use for pain relief related to hair removal.
- Avoid ingestion or contact with eyes.
- Avoid covering the application site with bandages or dressings, as this can result in excessive absorption into the bloodstream.
- With any product or procedure, there are potential risks of toxicity or side effects. Improper use can lead to life threatening responses, including methemoglobinemia, a condition resulting from excess anesthetic in the bloodstream. Signs include increased breathing rate, shortness of breath, and a bluish-grey tinge to the skin or lips. This may occur within minutes to 1-2 hours after application and can occur with the first or subsequent applications. Severe cases can result in death. Methemoglobinemia is more common in children younger than 2 and in elderly patients; these patients should be monitored for the signs listed above and should only use the smallest dose possible. Children and adolescents should also be cautious when using BLT or LT products, as an appropriate dose has not been established.
- This medication should only be used by the person it was made for. Do not share it with others.

Contraindications: Who should **not** use BLT or LT products?

- BLT or LT products are contraindicated in patients with cholinesterase deficiencies.
- Do not use BLT products for at least 72 hours prior to pancreatic function tests, as benzocaine can interfere with the results.
- Do not use BLT or LT products if you are allergic to any of the ingredients.

How is it stored and when does it expire?

- This medication can be stored in the original container at room temperature (20°C to 25°C).
- Keep away from heat, moisture, and light. Avoid storing it in areas such as the kitchen or washroom.
- Keep out of reach from children.
- Generally, most BLT and LT formulas are good for 180 days from the date of compounding. Dispose of any left-over medication after the ‘beyond use date’ (BUD).
  - A BUD is not an expiry date, but instead indicates that we do not have enough data to be sure of how the medication performs beyond that date.
  - At Pure Pharmacy, we determine the BUD using conservative estimations, compounding references, and clinical guidelines. Without analytical information, we may use shorter dates depending on clinical guidelines.
Notable drug interactions

- Benzoyl peroxide (topical): reduces the efficacy of topical anesthetics. If you use benzoyl peroxide-containing products on the same area of skin that you are applying BLT or LT, ensure that the skin is washed prior to BLT or LT application.
- Dibucaine (topical): may have additive effects when used with BLT or LT products; this can lead to methemoglobinemia in serious cases.
- Pramoxine (topical): may have additive effects when used with BLT or LT products; this can lead to methemoglobinemia or skin damage in serious cases.
- Ethyl Chloride (topical): caution in combining local anesthetics because toxic effects can be additive. Monitor for development of methemoglobinemia (headaches, shortness of breath, rapid heart rate, fatigue, confusion).

Is BLT or LT safe for pregnancy?

- It is not known if using BLT or LT while pregnant could have adverse effects on the fetus.
- Manufacturers state that these products should not be used in early pregnancy, unless otherwise directed by your healthcare provider.

Is BLT or LT safe while breastfeeding/chestfeeding?

- It is not known if the components of BLT or LT are excreted in human milk. However, when used appropriately, a single dose of BLT or LT applied to intact skin will not be systemically absorbed enough to cause issues for a nursing infant.
  - BLT or LT should never be used near the breast/chest or nipple of an adult who is breast- or chest-feeding. Benzocaine has been associated with life-threatening cases of methemoglobinemia in infants or children aged 2 years and younger.
- If an infant or child experiences an adverse effect related to BLT or LT applied on the nursing adult’s body, report this to your healthcare provider.