Aim: Procurement of high quality tissues frozen quickly and cleanly so that ischemia and contamination is kept to a minimum for use in extraction techniques.

Purpose: Procedures need to be established that will lead to efficient and effective specimen procurement routines.

**TAS Procedure for Snap Freezing Tissue in Liquid Nitrogen**

**Required Reagents/Equipment:**
- Liquid nitrogen
- Liquid nitrogen canister
- Cutting board/surface
- Long metal forceps
- Scalpel/razor blades
- Gloves
- 2 ml plastic cryovial
- Cryovial labeling pen
- Precision scale (to one hundredth of a gram)

**Procedure:**
1. Piece(s) of tissue obtained from pathology staff (PA).
2. Tumor and Nat or Normal tissue kept separate, tools wiped clean (with alcohol wipes) in between handling tumor and normal
3. If necessary, each piece of tissue obtained from pathology staff is cut into smaller aliquots to fit into plastic vials. Target weight approx. 0.1 – 0.2 grams.
4. Plastic vial is placed on precision scale and scale is tared (reads 0.0 with vial on it).
5. 1 aliquot of tissue is placed in vial, and weight recorded.
6. Cryovial is labeled with: TAS tracking number, tissue site (ex. Lung), tissue type (tumor, nat, etc), weight of tissue, and piece number. (cryomarkers are used)
7. Cryovial is held with long metal forceps and immersed approximately halfway down the height of the liquid nitrogen in the canister for at least 30 seconds.
8. Information included on cryovial label is recorded on TAS quick entry form, and ischemia time is noted and recorded on form.
9. Cryovials are either transferred to dry ice cooler or kept in liquid nitrogen until transfer to -80º freezer.
10. Standard precautions for blood and body fluids are observed throughout the process.