SSO supports the need for treatment decisions to be made on a case-by-case basis. The surgeon’s knowledge and understanding of the biology of each cancer, alternative treatment options, and the institution’s policies at the time the patient will be scheduled for surgery all need to be taken into consideration.

The information below is based on the opinions of individuals who are experts within the field of endocrine cancer and head and neck oncologic surgery, the majority of whom are members of the Society’s Endocrine/Head and Neck Disease Site Work Group.

The opinions generally align or incorporate those from other societies such as the American Association of Endocrine Surgeons (AAES), American Academy of Otolaryngology – Head and Neck Surgery (AAO-HNS), and the American Head and Neck Society (AHNS).

I. Surgical Procedures:
   A. Endocrine Surgery:
      • Most uncomplicated endocrine operations can be delayed. Diseases and presentations that might qualify for more urgent surgery (i.e., within approximately 4-8 weeks during the current pandemic), include:
         Thyroid:
         • Thyroid cancer that is a current or impending threat to life, those that are threatening morbidity with local invasion (e.g., trachea, recurrent laryngeal nerve), aggressive biology (rapidly growing tumor or recurrence, rapidly progressive local-regional disease including lymph nodes)
         • Severely symptomatic Graves’ disease that has failed medical therapy
         • Goiter that is highly symptomatic or is at risk for impending airway obstruction
         • Open biopsy with diagnostic intent for suspected anaplastic thyroid cancer or lymphoma
         Parathyroid:
         • Hyperparathyroidism with life-threatening hypercalcemia that cannot be controlled medically
         Adrenal:
         • Adrenocortical cancer or highly suspected adrenocortical cancer
         • Pheochromocytoma or paraganglioma that is unable to be controlled with medical management
         • Cushing’s syndrome with significant symptoms that is unable to be controlled with medical management
         • Generally, functional adrenal tumors that are medically controlled and asymptomatic non-functional adrenal adenomas can be delayed
         Neuroendocrine Tumors:
• Symptomatic small bowel NETs (e.g., obstruction, bleeding/hemorrhage, significant pain, concern for ischemia)
• Symptomatic and/or functional pancreatic NETs that cannot be controlled medically
• Non-functional pancreatic NETs causing symptoms (jaundice, bleeding, obstruction) after failure of somatostatin analogues and medical therapy
• Lesions with significant growth or short doubling times
• Most other NETs can be delayed and/or can be considered for somatostatin analogues or medical therapy
• Cytoreductive operations and metastasectomy should generally be delayed but should be considered on an individual basis, especially if progressing after multiple therapies (SSAs, chemo or biologic therapy, PRRT)

Other:
• If an endocrine disorder threatens a pregnant mother or her fetus

B. Non-Endocrine Head and Neck Oncologic Surgery:
Head and Neck Oncologic Surgery for malignancies of the Upper Aerodigestive tract represent a unique challenge during the COVID-19 pandemic. COVID-19 replicates in the nasal cavity, nasopharynx, and oropharynx which are routine sites of surgery. Aerosol generating events during these procedures such as tracheostomies are common, and these procedures can be lengthy, potentially increasing the chances of exposure to healthcare workers.

• All procedures involving the upper aerodigestive tract should be considered high risk. Other procedures not involving entering the airway but involving the head and neck are deemed medium risk due to proximity to the airway.
• Emergency procedures such as for stridor, bleeding and obstruction need to be treated appropriately.
• For high risk procedures, increased personal protective equipment (PPE) is appropriate. This includes standard PPE and the use of N95 masks for all personnel in the operating room.
• Urgent procedures (tracheostomy, endoscopic nasogastric tube insertion, esophageal stenting) should be carefully considered for delay on a case-by-case basis.
• Cosmetic procedures, including reconstruction, should be delayed.
• Diagnoses which have equivalent results with radiation therapy and surgery should be considered for radiation therapy.
• Consideration should be given to maintain patients on systemic therapy (e.g., neoadjuvant therapy) to allow surgery to be rescheduled at a later date.
• N95 masks should be considered for medium risk procedures.
• The operation should be completed expeditiously, with possible modifications to, or deferral of, the reconstructive plan to reduce operative times.
• Measures to reduce the number of people in the room during these procedures should be undertaken.
• If possible, patients should self-quarantine for two weeks prior to the case and if local testing capabilities allow, be COVID-19 tested as close to the time of surgery as local testing capabilities allow.
II. **Surveillance:**

A. **Surveillance for Delayed Surgical Procedures:**
   - **Adrenal:**
     - CT or MRI every 3-6 months
     - Functional tumors:
       - Appropriate laboratory studies every 3-6 months
       - Medical management of functional tumors should be ongoing
   - **Parathyroid:**
     - Medical management when necessary
   - **Thyroid:**
     - Ultrasound surveillance (including nodal basins) and physical exam every 3-6 months
   - **Neuroendocrine Tumors:**
     - CT or MRI imaging every 3-6 months
     - Functional tumors:
       - Appropriate laboratory studies every 3-6 months
       - Medical management of functional tumors should be ongoing

B. **Endoscopic Surveillance for gastric, duodenal, or rectal NET:**
   - Consider deferring as the emerging evidence on the risk of transmission of SARS-CoV-2 with procedures involving the GI tract should be considered for the safety of both the surgical team and the patient.

III. **Safety Considerations for Surgeons Performing Head and Neck Procedures:**
   - The evidence suggesting that surgeons performing procedures on the head and neck are at higher risk for COVID-19 should be reviewed and considered.
   - Appropriate PPE for any surgical procedure should always be utilized and should conform to the recommendations of the CDC and your local institution.
   - Avoid or minimize exposure to any Aerosol-Generating procedures such as intubation/extubation, as these are high risk situations for SARS-CoV-2 transmission.
   - Fit testing for N95 masks prior to use is essential.