

NATIONAL CANCER GRID COLLABORATION FOR CANCER CARE

NCG GUIDELINES- 2019 Head & Neck Cancer Management Guidelines



Categories of the guidelines

- a) Essential
- b) Optimal
- c) Optional

*Herewith essential will be referred as (a), optimal as (b) and optional as (c)



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^Optimal Imaging modality for tongue lesion is an MRI(b) and for other sites a Contrast enhanced CT scan(b). Loco regional imaging is for assessment of the primary and the neck. Early-stage oral cavity that is amenable to adequate clinical evaluation may not warrant imaging

studies of the primary and Ultrasound examination(c) of the neck is an optional alternative to CECT/MRI in this situation.

Chest X-ray(a) is an essential investigation for ruling out lung metastasis and possible aspiration. Either a PET CT(b) or CECT Thorax (c) should be optimal in patients being considered for curative therapy but with a high risk for distant metastasis (N3 node (size > 6 cm), multiple bilateral neck nodes, Lower cervical neck nodes, large primary (T4b) and in patients who have symptoms suggestive of distant metastasis.





%- Surgery - Primary tumor- Wide local excision (at least 1 cm gross margin so as to achieve > 5 mm histological tumor free margin) with appropriate Neck Dissection and appropriate reconstruction. For N0 Neck- Selective neck dissection addressing Level I-III (a)+/- Level IV. For N+ Neck – Modified neck dissection (Level I-V) with sparing of the XI nerve, IJV, SCM Muscle whenever oncologically feasible (a). The minimum optimal number of lymph nodes included in a SND should be >10 and in a MND >14.

***-The option of Radiation therapy for early oral cancers is optimal only for lip tumors and selected other sub sites. Tumors abutting the mandible risk osteoradionecrosis. The treatment should preferably include brachytherapy as a part of treatment. Either complete dose or partial dose should be delivered by brachytherapy.







****The option of Radiation Rx/ Chemo radiation Rx for advanced tumors is applicable only for patients who are unfit and unwilling for surgery, and target volumes that can be safely encompassed by a tumoricidal dose of 70 Gy. Patients with gross mandibular erosion risk osteoradionecrosis and are not suitable for this modality. Tumors abutting the mandible and tumors with gross skin ulceration are also at greater risk of complications.

\$- Indications for adjuvant post-op radiotherapy are T3-T4 primary, Node positivity, perineural invasion, lympho-vascular invasion, and poorly differentiated disease. IMRT may be considered (c) if affordable (employer insurance scheme, personal insurance schemes) and available. Adjuvant post-op concurrent chemo-radiation is indicated for positive margin and presence of extra nodal extension/extracapsular spread. and presence of nodal positivity of 2 or more lymph nodes. The options for adjuvant concurrent chemotherapy are- Cisplatin 100 mg/m2 (optimal option) or weekly cisplatin 30-40 mg/m2. Audiometry is preferred prior to administration of cisplatin.

@- Borderline Resectable - This is broadly a situation wherein the primary tumor is grossly resectable, but significant concern exists regarding the probability of a positive resection margin or excessive surgical morbidity. The decision regarding borderline resectablity should be taken by a surgeon (preferably in a multidisciplinary tumor board). Situations which may be deemed as borderline resectable are-

- 1. Soft tissue swelling up to the zygoma in case of a BM-GBS primary.
- 2. Disease close to hyoid or valleculae in case of a Tongue primary.
- Some situations with Extensive skin infiltration and Involvement of (Supra-notch) infratemporal fossa.

Radiological involvement of the infratemporal fossa which is inferior to the level of the mandibular notch is deemed as resectable by current surgical techniques.

If the treating team (surgeon) considers the lesion to be resectable then surgery should be offered as per the algorithm for operable oral cancers.



#NACT options

- DCF- Docetaxel 75 mg/m2 D1-D5, Cisplatin 75 mg/m2 D1 or Carboplatin AUC 5-6 on D1, 5FU 750 mg/m2 Continuous infusion of 24 hours D1-D5- 3 weekly
- DC- Docetaxel 75 mg/m2 D1-D5, Cisplatin 75 mg/m2 D1 or Carboplatin AUC 5-6 on D1- 3 weekly
- TPE- Docetaxel 75 mg/m2 D1-D5, Cisplatin 75 mg/m2 D1 or Carboplatin AUC 5-6 on D1- 3 weekly and Cetuximab (400 mg/m2 first cycle and then 250 mg/m2 subsequent weekly)
- 4. CF- Cisplatin 100 mg/m2 D1 or Carboplatin AUC 5-6 on D1, 5FU 10000 mg/m2 Continuous infusion of 24 hours D1-D4- 3 weekly
- PC- Paclitaxel 175 mg/m2 D1-D5, Cisplatin 75 mg/m2 D1 or Carboplatin AUC 5-6 on D1- 3 weekly
- 6. PC weekly—Paclitaxel v60-80 mg/m2 D1-D5, Carboplatin AUC 1.5-2 on D1- weekly
- Metronomic chemotherapy- Methotrexate 9 -15 mg/m2 weekly, Celecoxib 200 mg twice daily with or without Erlotinib 150 mg daily
- ** In select patients who refuse surgery and are fit for chemoradiotherapy.
- *1) Options for first line palliative chemotherapy include and need to be given till progression or development of intolerable side effects-
- Cytotoxic chemotherapy (single agent or combination)- metronomic chemotherapy consisting of weekly methotrexate-celecoxib with or without erlotinib (Methotrexate 9 -15 mg/m2 weekly, Celecoxib 200 mg twice daily with or without Erlotinib 150 mg daily); or combination Chemotherapy (Platinum, 5-FU, Taxane)
- > 5FU– Platinum Cetuximab or Paclitaxel Platinum Cetuximab (c);
- Pembrolizumab (if deemed appropriate with genetic testing for PDL1 and mutation load) (c)

2) Options for second line or beyond chemotherapy include- Triple metronomic chemotherapy (b) or single agent chemotherapy (b), or nivolumab or its altered schedules (c) or Pembrolizumab or its altered schedules (c)



Doses of palliative regimens- These are suggested doses and may need to be varied according to patient's condition.

- 1. DC- Docetaxel 75 mg/m2 D1-D5, Cisplatin 75 mg/m2 D1 or Carboplatin AUC 5-6 on D1- 3 weekly
- TPE-Docetaxel 75 mg/m2 D1-D5, Cisplatin 75 mg/m2 D1 or Carboplatin AUC 5-6 on D1-3 weekly and Cetuximab (400 mg/m2 first cycle and then 250 mg/m2 subsequent weekly)
- 3. CF- Cisplatin 100 mg/m2 D1 or Carboplatin AUC 5-6 on D1, 5FU 10000 mg/m2 Continuous infusion of 24 hours D1-D4- 3 weekly
- EXTREME- Cisplatin 100 mg/m2 D1 or Carboplatin AUC 5-6 on D1, 5FU 10000 mg/m2 Continuous infusion of 24 hours D1-D4- 3 weekly and Cetuximab (400 mg/m2 first cycle and than 250 mg/m2 subsequent weekly)
- PC- Paclitaxel 175 mg/m2 D1-D5, Cisplatin 75 mg/m2 D1 or Carboplatin AUC 5-6 on D1-3 weekly
- PCE- Paclitaxel 175 mg/m2 D1-D5, Cisplatin 75 mg/m2 D1 or Carboplatin AUC 5-6 on D1-3 weekly and Cetuximab (400 mg/m2 first cycle and then 250 mg/m2 subsequent weekly)
- 7. PC weekly—Paclitaxel 60-80 mg/m2 D1-D5, Carboplatin AUC 1.5-2 on D1- weekly
- 8. PCE weekly-—Paclitaxel 60-80 mg/m2 D1-D5, Carboplatin AUC 1.5-2 on D1- weekly and Cetuximab (400 mg/m2 first cycle and then 250 mg/m2 subsequent weekly)
- 9. Pembrolizumab- 200 mg 3 weekly or 400 mg 6 weekly or 2 mg/kg 3 weekly either alone or along with CF or PC
- 10. Nivolumab- 240 mg 3 weekly or 480 mg 6 weekly or 3 mg/kg 2 weekly alone. A lower dose of 20-40 mg may be used if clinical condition permits.
- 11. Metronomic chemotherapy- Methotrexate 9 -15 mg/m2 weekly, Celecoxib 200 mg twice daily with or without Erlotinib 150 mg daily
- 12. Cisplatin-75 mg/m2 3 weekly
- 13. Carboplatin AUC 5-6 3 weekly
- 14. Docetaxel 75 mg/m2 D1 3 weekly
- 15. Paclitaxel 175 mg/m2 D1 3 weekly
- 16. Paclitaxel 60-80 mg/m2 D1 weekly







^- Optimal Imaging modality for the primary and the neck may be by a CECT(b) or MRI(b). A MRI may be optimal for the Oropharynx and a CECT for the larynx and hypopharynx. Chest X-ray(a) is an essential investigation for ruling out lung metastasis and possible aspiration. Either a PET CT(c) or CECT Thorax (b) should be optimal in patients being considered for curative therapy but with a high risk for distant metastasis (N3 node (size > 6 cm), multiple bilateral neck nodes, Lower cervical neck nodes, large primary (T4b), advanced hypopharyn-geal cancer, and in patients who have symptoms suggestive of distant metastasis.

%- HPV testing(b) is Optimal for all Oropharyngeal Cancers. This may be by p16 (b). If expertise and facilities are available, then HPV mRNA testing is more specific (c). HPV+Ve Oropharyngeal Cancer is however currently noted in < 20% as per Indian studies and testing is not yet routine.

**- Assessment for speech(b) and swallowing to evaluate for aspiration(b) is considered Optimal. At least a 100 ml Bedside water swallowing test should be considered (b). If facility available, Fiber optic endoscopic evaluation of swallowing or Videofluoroscopy evaluation of swallowing to be undertaken (c)







~- Selected T1-2N0 lesions of tonsil – Base Tongue can be considered for minimally invasive Trans Oral Surgery (Laser/ Robotic) surgery (c) to achieve a margin negative resection of the primary (tumor free margin of 3-5 mm). This needs to be accompanied with selective neck dissection and appropriate adjuvant RT/ CTRT as indicated by surgical histology.

^ Options for chemoradiotherapy are as follows:

- 1. Radiation (70 Gy/35#) + Cisplatin 40mg/m2 (weekly)(a),
- 2. Radiation (70Gy/35#) + Cisplatin 100 mg/m2 once three weekly(b),
- 3. Radiation (70 Gy/35#) + Cisplatin 30-40 mg/m2 + Nimotuzumab 200 mg weekly(b),
- 4. Other regimens such as carboplatin -5FU or 5FU-Hydroxyurea or paclitaxel-cisplatin(c) (These options were tested in platinum fit patients. Expertise in delivering chemotherapy is required for these regimens) and
- 5. NACT followed by Radiation or chemoradiation(c) Indications for neoadjuvant chemotherapy are N3 lymph nodes (> 6 cm) and extensive soft tissue extension, which is difficult to encompass safely in radiation portals. Post induction chemotherapy patients may be routed to Curative therapy or Palliative therapy as per clinical response and reassessment of General Condition.

@- The options in non-cisplatin fit are carboplatin -5FU or 5FU-Hydroxyurea. These options were tested in platinum fit patients and hence while administering them in cisplatin unfit patients caution is mandated. Expertise in delivering chemotherapy is required for these regimens.

#- Either Cetuximab or Nimotuzumab can be used in this setting, Optimal if affordable (employer insurance scheme, personal insurance schemes) and available. However, these options were tested in platinum fit patients and hence while administering them in cisplatin unfit patients caution is mandated. Expertise in delivering chemotherapy is required for these regimens.

**- Large T4b lesions or large multiple N3 nodes (> 6 cm) could be considered for palliative therapy. In case of elderly patients or those with poor social support with very advanced disease this option can be considered.

+- Standard criteria for cisplatin fitness to be followed

\$Options for palliative chemotherapy -As listed in section for Oral Cancer





*At least a 16 slice CT scan with 3 mm cut should be preferred to evaluate involvement of cartilage.

**Tumor free margin of at least 1-2 mm should be achieved.

***The risk of occult metastasis to the neck needs to be addressed in all treatments for Supraglottic Cancer.

\$ Primary 70Gy+ Prophylactic Neck Radiation. (b)





*Conservative laryngeal surgeries (Open partial laryngectomy) for Glottic growth / Supraglottic Laryngectomy for Supraglottic growth. Case selection should include considerations of anatomical spread to warrant a reasonable expectation of a R0 resection, and also physiological considerations with regard to pulmonary and swallowing function to minimize post-surgical swallowing dysfunction and aspiration.

** Indications for adjuvant post-op radiotherapy are T3-T4 primary, Node positivity, perineural invasion, lymphovascular invasion, and poorly differentiated disease. Adjuvant post-op concurrent chemoradiation is indicated for positive margin, and presence of extra nodal extension/extracapsular spread. The options for adjuvant concurrent



chemotherapy are- Cisplatin 100 mg/m2 on day 1,22, 43 or weekly cisplatin 30-40 mg/m2. Audiometry is preferred prior to administration of cisplatin.

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^^- Post induction chemotherapy the options for concurrent treatment are weekly cisplatin (30 mg/m2), weekly carboplatin or weekly Cetuximab or weekly Nimotuzumab.

^ Options for chemoradiotherapy are as follows:

- 1. Radiation (70 Gy/35#) + Cisplatin 40mg/m2 (weekly)(a),
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- 3. Radiation (70 Gy/35#) + Cisplatin 30-40 mg/m2 + Nimotuzumab 200 mg weekly(b),
- 4. Other regimens such as carboplatin -5FU or 5FU-Hydroxyurea or paclitaxel-cisplatin(c) (These options were tested in platinum fit patients. Expertise in delivering chemotherapy is required for these regimens) and
- 5. NACT followed by Radiation or chemoradiation(c) Indications for neoadjuvant chemotherapy are N3 lymph nodes (> 6 cm) and extensive soft tissue extension, which is difficult to encompass safely in radiation portals. Post induction chemotherapy patients may be routed to Curative therapy or Palliative therapy as per clinical response and reassessment of General Condition.





*Conservative laryngeal surgery (Supracricoid Laryngectomy) for Glottic growth / Supraglottic Laryngectomy for Supraglottic growth is occasionally appropriate in the situation of mobile cords but T3 staging in view of paraglottic space/ pre-epiglottic space involvement.

[#] A Tracheo-Esophageal Prosthesis (TEP) for speech rehabilitation is appropriate and optimal for most patients undergoing a Total Laryngectomy



**- Indications for adjuvant post-op radiotherapy are T3-T4 primary, Node positivity, perineural invasion, lymphovascular invasion, and poorly differentiated disease. Adjuvant post-op concurrent chemoradiation is indicated for positive margin, and presence of extra nodal extension/extracapsular spread. The options for adjuvant concurrent chemotherapy are- Cisplatin 100 mg/m2 on day 1,22, 43 or weekly cisplatin 30-40 mg/m2. Audiometry is preferred prior to administration of cisplatin.

+- The criteria for fitness to be followed for patients in whom cisplatin is considered.

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*- Surgery remains the optimal option. Non-surgical options are likely to compromise cure rates especially in the setting of cartilage erosion. Patients may however choose for a laryngeal preserving non-surgical option despite the risks towards cure.

Some situations with anterior commissure related Thyroid cartilage erosion with mobile cords may be appropriate for surgical organ preservation with partial laryngectomy rather than Total/Near-total laryngectomy.



[#] For patients undergoing Total Laryngectomy, a Tracheo-Esophageal Prosthesis (TEP) for speech rehabilitation is appropriate and optimal

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*Surgical Organ preservation should be considered in select cases as expertise for the same is not widely available.

Case selection should include considerations of anatomical spread to warrant a reasonable expectation of a RO resection, and also physiological considerations with regard to pulmonary and swallowing function to minimize post-surgical swallowing dysfunction and aspiration.



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+- The criteria for fitness to be followed for patients in whom cisplatin is considered. ^^- Post induction chemotherapy the options for concurrent treatment are weekly cisplatin (30 mg/m2), weekly carboplatin or weekly Cetuximab or weekly Nimotuzumab.

@- The options in non-cisplatin fit are carboplatin -5FU or 5FU-Hydroxyurea. These options were tested in platinum fit patients and hence while administering them in cisplatin unfit patients caution is mandated. Expertise in delivering chemotherapy is required for these regimens.

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#For patients undergoing Total Laryngectomy, a Tracheo-Esophageal Prosthesis (TEP) for speech rehabilitation is appropriate and optimal

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 + cisplatin fitness as per standard practice/guidelines

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NASAL CAVITY & PNS





*Radiation in the PNS is optimally delivered with IMRT due to the vicinity of cranial nerves, intracranial contents and orbit. (**IMRT (b)**). For advanced tumors and posteriorly positioned tumors radiation therapy should include coverage for the retropharyngeal node.

**- Surgery should achieve a R0 Resection. The appropriate surgical technique may be accordingly selected (endoscopic, partial, total or extended maxillectomy, orbital exenteration, craniofacial resection). Neck Dissection is undertaken for a N+ neck. Prognosis is however very guarded for N+ disease except in the situation of Level I nodes related to anterior PNS Tumour/ Skin involvement.

#NACT indication- should be considered optimal for advanced tumors with nonsquamous high-grade histology {ENB (Gr3,4)/SNUC/SNEC/NUT/Small cell/Others}. (b)

NACT can be considered for SCC (c) in situations wherein surgical resection may not yield a R0 Resection or lead to unacceptable morbidity (Intracranial extension; High ITF involvement; orbital preservation in intraocular extension)







NASOPHARYNX			
	NASOPHARYNX		
Staging workup	Other Workups		
Endoscopic Examination(a)	• EBV(b)		
 CT/MRI face, neck including PNS(b) 	Dental prophylaxis(a)		
Chest X ray HRCT Chest(a)	 Audiometry & Visual field testing(a) 		
• PET-CT(b)	 Nutritional Counselling(a) 		
	 Endocrine work Up including thyroid(b) 		



- FOLLOW-UP
- PET-CT/MRI for response evaluation(b)
- Examination of nasopharynx, neck and cranial nerves(a)
- For T3and T4 tumors, PETCT/MRI might be done annually for 5 years(b)
- Audiometry(a)
- EBV(b)
- IMRT or 3DCRT are the optimal modalities of Radiotherapy for Nasopharyngeal Cancer(b)
- All treatments have titrated as per patient's general condition and tolerability









*Optimal

\$ PET-CT where not available (a) → CECT of the Face & Neck CECT thorax USG (Abdomen)

%Depending on nodal stage and institutional policy



MANAGEMENT ALGORITHM FOR RECURRENT / METASTATIC SCCHN



*Consider early palliative care.

**Options for first line palliative chemotherapy include-

- Cytotoxic chemotherapy (single agent or combination)- metronomic chemotherapy consisting of weekly methotrexate-celecoxib with or without erlotinib; or combination Chemotherapy (Platinum, 5-FU, Taxane)
- 5FU– Platinum Cetuximab or Paclitaxel Platinum-Cetuximab (c);
- Pembrolizumab (if deemed appropriate with genetic testing for PDL1 and mutation load) (c)

**Options for second line or beyond chemotherapy include- Triple metronomic chemotherapy (b) or single agent chemotherapy (b), or nivolumab or its altered schedules (c) or pembrolizumab or its altered schedules (c)



ANNEXURE -1. RADIOLOGY SYNOPTIC REPORTING FORMATS

ORAL CAVITY:

CT/ MR legend: CT scan/ MR scan of the neck dated:

Oral cavity (Buccal, Lip, alveolus, palate and RMT)

T stage:

Laterality:

Location/ epicenter: Buccal mucosa/ Retromolar trigone/ Alveolus/ Lip If buccal mucosa: gingivobuccal sulcus (GBS) involvement: upper/ lower/ both If Retromolar trigone: upper/ lower/ both If lip: upper/ lower/ angle Alveolus: upper/ lower

Whether Measurable/ Nonmeasurable.If measurableSize:X X ... cm. (<2 cm, 2-4 cm, > 4 cm)Depth of invasion:(Previous Depth of invasion:)

Primary Disease extent:

Retromolar trigone: Not involved/ Involved Floor of mouth: Not involved/ Involved Gingivolingual sulcus: Not involved/ Involved Tongue: Not involved/ Involved

Masseter muscle involvement: Not involved/ Involved Masticator space involvement: Not involved/ Involved

Infratemporal fossa: Not involved/ Involved If yes Extension to High Infratemporal fossa: Present/ Absent

Retroantral space extension: Not involved/ Involved Medial pterygoid muscles involvement: Not involved/ Involved Lateral pterygoid muscles involvement: Not involved/ Involved



Pterygoid plates: Not involved/ Involved Pterygopalatine fossa: Not involved/ Involved Pterygomaxillary fissure: Not involved/ Involved Temporalis Muscle: Not involved/ Involved Condylar fossa: Not involved/ Involved

Maxillary sinus involvement: Not involved/ Involved Hard palate involvement: Not involved/ Involved

Skin involvement: Not involved/ Involved Specific comments, if any:

Perineural spread: Absent/ Present/ cannot be commented* If present: Nerve involved (V1, V2, V3 etc):

Cranial extent of perineural: Extension up to skull base: Absent/ Present/ Suspicious or cannot be commented* If yes: foramen ovale, foramen rotundum, vidian canal, greater palatine foramen

Intracranial extension: Present/ Absent/ Suspicious or cannot be commented* If yes: cavernous sinus involvement: Present/ Absent

Vascular involvement: Absent/ Present (with CCA and ICA) If present angle of contact: <90, 90 – 179, 180 – 269; >270 IJV status:

Bone status

Dentition: Absent/ Present Bony Erosion: Absent/ Present: if present: maxillary/ mandibular

If absent: Height of the mandible free from Para mandibular soft tissue: mm

If present:

Bone invasion absent or limited to cortical bone: Absent/ Present Medullary/ marrow invasion: Absent/ Present Mandibular canal (MC) involvement: Absent/ Present Mandibular foramen (MF) involvement: Absent/ Present If yes, Superior extent: foramen ovale/ cavernous sinus



The height of the intact mandible at the site of erosion:

N stage

Presence of nodal disease: Metastatic/ Benign (reactive) / Indeterminate If indeterminate/ suspicious: need for additional imaging

Laterality- Ipsilateral / contralateral / Bilateral Right levels: Levels IA & IB/II, III, IV, V, VI & retropharyngeal Left levels: Levels IA & IB/II, III, IV, V, VI & retropharyngeal

Necrosis: Absent/ Present Perinodal extension/extracapsular spread: Absent/ Present

Vascular involvement: IJV: involved/ compressed/ cannot be commented upon CCA abutment: Absent/ Present ICA abutment: Absent/ Present ECA abutment: Absent/ Present If present angle of contact for CCA and ICA: <90, 90 – 179, 180 – 269; >270 Strap muscles involvement: Absent/ Present Prevertebral fascia invasion: Absent/ Present

Size of the largest node: Right side: mm and level Left side: mm and level

M Stage

Lung nodules: Absent / Present If present: solitary/ multiple location: Size: suspicious/ TSTC@/ Benign Any other metastatic lesion (hepatic, adrenal, skeletal): Absent / Present If yes, specify location and size: Impression: T stage N stage M stage



Specific comments, if any:* Needs additional imaging.# Needs additional imaging/ FNAC correlation.@ Follow-up/ image guided FNAC correlation.

LARYNX AND HYPOPHARYNX

CT/ MR legend: CT scan/ MR scan of the neck dated:

Primary:

Laterality: Larynx/ Hypopharynx: If Larynx: epicentre of disease: Glottic/ Supraglottic/ Sub glottic If hypopharynx: epicentre of disease: Pyriform sinus/ post-cricoid Whether Measurable/ Nonmeasurable. If measurable Tumor Volume/Transverse dimensions: (AP x transverse x CC)Volume:......cc

T stage:

Epiglottis:Not involved/ Involved: If Involved: Free edge (ipsilateral / both sides)/ BasePre-epiglottic space:Not involved/ Involved: If Involved: Less than 25 % / Less than 50%/ More than50%Valleculae:Not involved/ Involved: If Involved: ipsilateral/ both sidesHyoid bone:Not Involved/ Involved: If Involved: (erosion/ sclerosis)/ cannot be commented

Medial wall of pyriform & AE fold:Not Involved/ Involved: If Involved: (Ipsilateral/Contralateral)Lateral wall of pyriform sinus:Not Involved/ InvolvedApex of pyriform sinus:Not Involved/ Involved

Para Glottic Space: Not Involved/ Involved (a) at false cord level b) true cord level) both False vocal cord: Not Involved/ Involved True vocal cord: Not Involved/ Involved Anterior commissure: Not Involved/ Involved Posterior commissure: Not Involved/ Involved

Sub-Glottis: Not Involved/ Involved (if involved inferior extent in mm) Post cricoid: Not Involved/ Involved Trachea: Not Involved/ Involved



Thyroid gland: Not Involved/ Involved

Pre-vertebral fascia: Not Involved/ Involved/ Indeterminate

Cartilage erosion:

Thyroid cartilage: Not Involved/ Involved: If Involved: (sclerosis/ erosion-lysis/ encased & displaced) If Eroded: Unilateral/Bilateral laminae, Outer/ Inner cortex/both Arytenoid cartilage: Not Involved/ Involved: If Involved: (sclerosis/ erosion-lysis/ encased & displaced).

Cricoid cartilage: Not Involved/ Involved: If Involved: (sclerosis/ erosion/ lysis/ marrow invasion) Crico-arytenoid joint: Not Involved/ Involved Exolaryngeal Spread: absent/ Present, If present mode of spread-through eroded thyroid cartilage/ through thyrohyoid membrane/ along the

posterior aspect of the thyroid cartilage.

N stage:

Presence of nodal disease: Metastatic/ Benign (reactive) / Indeterminate If indeterminate/ suspicious: need for additional imaging

Laterality- Ipsilateral / contralateral / Bilateral Right levels: Levels IA & IB/II, III, IV, V, VI & retropharyngeal Left levels: Levels IA & IB/II, III, IV, V, VI & retropharyngeal

Necrosis: Absent / Present Perinodal extension/extracapsular spread: Absent / Present

Vascular involvement: IJV: involved/ compressed/ cannot be commented upon CCA abutment: Absent / Present ICA abutment: Absent / Present ECA abutment: Absent / Present If present angle of contact for CCA and ICA: <90, 90 – 179, 180 – 269; >270 Strap muscles involvement: Absent / Present Prevertebral fascia invasion: Absent / Present

Size of the largest node: Right side: mm and level Left side: mm and level



M Stage

Lung nodules: Absent / Present If present: solitary/ multiple location: Size: suspicious/ TSTC@/ Benign

Any other metastatic lesion (hepatic, adrenal, skeletal): Absent / Present If yes, specify location and size:

Impression: T stage N stage M stage

Specific comments, if any:

Needs additional imaging/ FNAC correlation@ Follow-up/ image guided FNAC correlation

CARCINOMA TONGUE

Laterality: Tumour size (AP x transverse x CC) MM: Depth of invasion MM:

T stage:

Crosses the midline: No/ abuts lingual raphe/ yes. Extrinsic muscles: Not involved/ Involved Genioglossus: Not involved/ Involved (origin/ insertion) Hyoglossus: Not involved/ Involved (origin/ insertion) Geniohyoid: Not involved/ Involved (origin/ insertion)

Lingual neurovascular bundle: Not involved/ Involved (grade:0/I/II/III) If involved: Unilateral/bilateral Sublingual space: Not involved/ Involved Submandibular space: Not involved/ Involved



Mylohyoid: Not involved/ Involved (origin/ insertion) Floor of mouth: Not involved/ Involved

Masticator space: Not involved/ Involved ITF: Not involved/ Involved. If yes Extension to High Infratemporal fossa: Present/ Absent

Posterior one-third of the tongue (BOT):Not involved/ Involved RMT: Not involved/ Involved Tonsillo-lingual sulcus: Not involved/ Involved Tonsil: Not involved/ Involved

Inferior extent: up to vallecular/ epiglottis / PFS Hyoid: Not involved/ Involved (Distance from hyoid bone) Valleculae- Not involved/ Involved Epiglottis: Not involved/ Involved PFS: Not involved/ Involved **Mandibular involvement:** Cortical breach: Present/ absent Marrow signal abnormality: Present/ absent Need for additional imaging: yes (CT bone window)

N stage

Presence of nodal disease: Metastatic/ Benign (reactive) / Indeterminate If indeterminate/ suspicious: need for additional imaging.

Laterality- Ipsilateral / contralateral / Bilateral. Right levels: Levels IA & IB/II, III, IV, V, VI & retropharyngeal. Left levels: Levels IA & IB/II, III, IV, V, VI & retropharyngeal.

Necrosis: Present/ Absent. Perinodal extension/extracapsular spread: Present/ Absent.

Vascular involvement: IJV: involved/ compressed/ cannot be commented upon. CCA: Present/ Absent ICA: Present/ Absent ECA: Present/ Absent If present angle of contact for CCA and ICA: <90, 90 – 179, 180 – 269; >270



Strap muscles involvement: Present/ Absent Prevertebral fascia invasion: Present/ Absent

Size of the largest node: Right side: mm and level. Left side: mm and level.

Impression:

T stage N stage Specific comments, if any: # Needs additional imaging/ FNAC correlation @ Follow-up/ image guided FNAC correlation

CARCINOMA NASOPHARYNX

CT/ MR legend: CT scan/ MR scan of the neck dated:

Laterality: Right/ Left/ Both Crossing midline: No/ Yes Tumour size (AP x transverse x CC)

Primary tumor extent:

Fossa of Rosenmuller: Not involved/ Involved Eustachian tube opening: Not involved/ Involved Pharyngobasillar fascia: Not involved/ Involved Levator VeliPalatini: Not involved/ Involved Tensor Velipalatini: Not involved/ Involved Parapharyngeal space: Not involved/ Involved Carotid space: Not involved/ Involved Pterygoid muscles: Not involved/ Involved If present: medial/ lateral/ both Infratemporal fossa: Not involved/ Involved Pterygoid plates: Not involved/ Involved Pterygopalatine fossa: Not involved/ Involved Pterygomaxillary fissure: Not involved/ Involved Masseter muscle: Not involved/ Involved Masticator space: Not involved/ Involved



Intra-nasal extension: Not involved/ Involved Pre-vertebral muscles: Not involved/ Involved Clivus (altered marrow signal): Not involved/ Involved Intra-cranial extension: absent/ Present If present: extent Dural enhancement: Not involved/ Involved Parenchymal involvement: Not involved/ Involved Oropharynx: Not involved/ Involved

Perineural spread:

Absent/ Present/ cannot be commented* If present: Nerve involved (V1, V2, V3 etc): Cranial extent of perineural: Extension up to skull base: Present/ Absent/ Suspicious or cannot be commented* If yes: foramen ovale, foramen rotundum, vidian canal, greater palatine foramen Intracranial extension: Present/ Absent/ Suspicious or cannot be commented* If yes: cavernous sinus involvement: Present/ Absent

N stage:

Presence of nodal disease: Metastatic/ Benign (reactive) / Indeterminate If indeterminate/ suspicious: need for additional imaging

Laterality- Ipsilateral / contralateral / Bilateral Right levels: Levels IA & IB/II, III, IV, V, VI & retropharyngeal Left levels: Levels IA & IB/II, III, IV, V, VI & retropharyngeal Necrosis: Absent / Present Perinodal extension/extracapsular spread: Absent / Present

Vascular involvement: IJV: involved/ compressed/ cannot be commented upon CCA abutment: Absent / Present ICA abutment: Absent / Present ECA abutment: Absent / Present If present angle of contact for CCA and ICA: <90, 90 – 179, 180 – 269; >270 Strap muscles involvement: Absent / Present Prevertebral fascia invasion: Absent / Present

Suspicious nodes: above cricoid only / above and below cricoid Size of the largest node:



Right side: mm and level Left side: mm and level

Impression: T stage N stage Specific comments, if any: * Needs additional imaging. # Needs additional imaging/ FNAC correlation. @ Follow-up/ image guided FNAC correlation.

Neck Imaging Reporting & Data System (NI-RADS)

NIRADS SURVEILLANCE REPORT TEMPLATE

INDICATION: [] Subsite & HPV status: [] Surgery & Chemoradiation: []

TECHNIQUE:

COMPARISON: [<None.>]

FINDINGS: [<No evidence of recurrent disease is demonstrated at the primary site. >]

[<No pathologically enlarged, necrotic, or otherwise abnormal lymph nodes. >]

Expected post-treatment changes are noted including [<supraglottic mucosal edema and thickening of the skin and subcutaneous soft tissues.>]

There are no findings to suggest a second primary in the imaged aerodigestive tract.

Evaluation of the visualized portions of brain, orbits, spine and lungs show no aggressive lesions suspicious for metastatic involvement.



IMPRESSION:

Primary: [1]. [<Expected post-treatment changes in the neck without evidence of recurrent disease in the primary site >]

Neck: [1], [<No evidence of abnormal lymph nodes.>]

CECT or MRI Surveillance Legend:

Primary

- 1: No evidence of recurrence: routine surveillance
- 2: Low suspicion
- a) Superficial abnormality (skin, mucosal surface): direct visual inspection
- b) Ill-defined deep abnormality: short interval follow-up*or PET
- 3: High suspicion (new or enlarging discrete nodule/ mass): biopsy
- 4: Definitive recurrence (path proven, clinical or definitive imaging progression): no biopsy needed

Nodes

- 1: No evidence of recurrence: routine surveillance
- 2: Low suspicion: (enlarging lymph node without morphologically abnormal features): short interval follow-up or PET

3: High suspicion (new or enlarging lymph node with morphologically abnormal features): biopsy if clinically needed

4: Definitive recurrence (path proven, clinical or definitive imaging progression): no biopsy needed

*short interval follow- up: 3 months at our institution

CACRNIOMA THYROID CT IMAGING

CT legend: CT scan of the neck dated:

Primary Thyroid nodule:

Location: Right lobe/Left lobe/Isthmus Size: Enhancement: Homogeneous/Heterogeneous Calcifications: Absent/Present If present: microcalcification/ macrocalcification/ eggshell



Cystic / Necrotic change: Absent/Present Extra-thyroid extension: Absent/Present If present CT Grade of ETE*: Mediastinal extension: Absent/Present Right aberrant subclavian artery: Absent/Present

T STAGE

Strap muscle involvement: yes/No T-E groove: Not involved/Involved (Status of vocal cords' indirect sign of RLN involvement) Relationship with trachea(SHIN grade #): Fat planes with oesophagus: Lost/ maintained. If lost; angle of contact: Planes with prevertebral fascia: Lost/ maintained Cricophraynx: Not involved/Involved Cricoid cartilage: Not involved/Involved Angle of contact with CCA (<180 / 180-270/>270): Angle of contact with innominate vessels (<180 / 180-270/>270):

N STAGE:

Laterality- Ipsilateral / contralateral / Bilateral Compartment: central/ lateral Node stations:

Right cervical nodes		
LEVELS:	Level I Level II Level III	Level IV Level V Level VI
Size		
Heterogeneity		
Calcification		
Cystic or necrotic change		
Suspicious/ indeterminate/ benign @	<u>a</u>	

Left cervical nodes		
LEVELS:	Level I Level II Level III	Level IV Level V Level VI
Size		
Heterogeneity		
Calcification		
Cystic or necrotic change		
Suspicious/ indeterminate/ benign @	ā	

Vascular involvement:



CCA abutment: Absent/Present ICA abutment: Absent/Present ECA abutment: Absent/Present If present angle of contact for CCA and ICA: <90, 90 – 179, 180 – 269; >270 Strap muscles involvement: Absent/Present Prevertebral fascia invasion: Absent/Present

M Stage

Lung nodules: Absent / Present If present: solitary/ multiple location: Size: suspicious/ TSTC@/ Benign

Any other metastatic lesion (hepatic, skeletal): Absent / Present If yes, specify location and size:

In	npression:
Т	stage

N stage M stage

Specific comments, if any: @ Follow-up/ image guided FNAC correlation.

*CT ETE grading:

- I, a tumor which was completely enveloped by thyroid parenchyma;
- II, a tumor in which the percentage of the tumor perimeter in contact with the thyroid capsule was 1–25%;
- III, a tumor in which the contact with the capsule was 25–50%;
- IV, a tumor in which the contact with the capsule was >50%

CT Shin grading:

- 0: > 5mm distance between tumor and trachea.
- I: disease abuts external perichondrium.
- II: disease invades into the cartilage +/- destruction.
- III: disease extends into the tracheal mucosa with no elevation/penetration of mucosa.
- IV: disease is full-thickness invasion with expansion of the tracheal mucosa with a bulge



USG THYROID DATED

High frequency USG of the thyroid with Doppler and elastography is performed.

Right thyroid lobe

measures cm.
A well/ill defined solid/cystic/mixed hypoechoic/hyperechoic/isoechoic nodule is seen in the right lobe of thyroid.
It measures 8 x 9 mm in size.
The nodule is wider than taller.
It shows no/complete/irregular halo.
No/microcalcifications/macrocalcifications are seen
The lesion shows no/central/peripheral/both central and peripheral vascularity.
It shows no spongiform pattern/ comet tail artifacts.
Extrathyroid extension is not seen.
On elastography it is hard/soft, Asteria ES III.

Left thyroid lobe

measures cm.

A well/ill defined solid/cystic/mixed hypoechoic/hyperechoic/isoechoic nodule is seen in the left lobe of thyroid.

It measures 8 x 9 mm in size.

The nodule is wider than taller.

It shows no/complete/irregular halo.

No/microcalcifications/macrocalcifications are seen

The lesion shows no/central/peripheral/both central and peripheral vascularity.

It shows no spongiform pattern/ comet tail artifacts.

Extrathyroid extension is not seen.

On elastography it is hard/soft, Asteria ES III.

Isthmus measures 3 mm.

Few subcm sized reactive appearing nodes are seen in level IB and II region. There is no suspicious cervical lymphadenopathy.

Bilateral neck vessels are patent.

Impression :-

USG reveals:



Right thyroid nodule appears benign/indeterminate/suspicious on USG with TIRADS score and TMC RSS Score : low/Intermediate/high risk. FNAC correlation is suggested Left thyroid nodule appears benign/indeterminate/suspicious on USG with TIRADS score and TMC RSS Score : low/Intermediate/high risk. FNAC correlation is suggested.

USG NECK FOR NODAL MAPPING DATED:

High frequency USG of the neck nodes with Doppler is performed. Neck nodes:

Right cervical nodes		
LEVELS:	Level I Level II Level III	Level IV Level V Level VI
Short-axis diameter		
Long-axis diameter		
Loss of hilum		
Echogenicity		
Microcalcifications		
Vascularity at power Doppler US		
Suspicious/ indeterminate/ benign		

Left cervical nodes		
LEVELS:	Level I Level II Level III	Level IV Level V Level VI
Short-axis diameter		
Long-axis diameter		
Loss of hilum		
Echogenicity		
Microcalcifications		
Vascularity at power Doppler US		
Suspicious/ indeterminate/ benign		

Bilateral neck vessels are patent.

IMPRESSION:

USG reveals:

Reactive/ indeterminate/ suspicious right / left side adenopathy is seen. Comments: Suggested FNAC correlation.



ANNEXURE -2. PATHOLOGY SYNOPTIC REPORTING FORMATS

(All parameters in regular font are Optimal (b)/core parameters Parameters in Italic red font with * that are Optional (c)/non-core parameters)

Mucosal Malignancies of Lip and Oral Cavity

Name	Age Sex Hosp. Case No Pathology No
Date of request Date of	reporting Resident Pathologist
Clinical Data:	
Operative procedure:	Biopsy / Resection / Not specified
(*Spe	ccify the procedure, Document Primary surgery vs. Completion surgery)
Specimen submitted:	(List all the subsites included in the specimen)
Pre-procedural therapy:	(Specify - Chemotherapy / Radiotherapy / Targeted therapy)
Gross findings:	
Dimensions of Specimen:	XX
Primary Tumor:	Cannot be assessed / Not grossly visible / Tumor present
Tumor laterality:	
Number of tumor foci:	
Tumor location:	
Tumor extent:	(Extension to other subsites and adja-
cent organs)	
Size of tumor:	XX (Maximum dimension mandatory, specify
thickness of tumor)	
*Gross appearance of tumor	(e.g. Ulcerative/Exophytic/Verrucous)
*Associated lesions if any	
Underlying Bone (if included in the	e specimen): Involved / Not involved / Uncertain
Skin (If included in the specimen):	Involved / Not involved / Uncertain

Margins:List all the margins and document gross distance of each margin from tumor(Specify for all mucosal, bony, soft tissue margins and base separately, as applicable)



	Margin Distance of margin from tumor	
Microscopy:		
Primary tumor:	(Document separa	tely for each tumor focus in case of multifocal tumor)
Histologic type of tumor	:	(As per WHO 2017 classification)
Grade of tumor:		
Microscopic size of tum	or:	(Specify only if size different from gross tumor size)
Depth of invasion:		\leq 5 mm / >5 mm and \leq 10 mm / >10 mm / Cannot be
determined		
Pattern of invasion:	* <i>PPOI</i>	WPOI (Applicable for squamous cell carcinoma only)
Perineural invasion (PN	I): Abs	sent / Present / Cannot be determined
	*If PNI	present:
	o Size	e of the nerve (mm)
	o Loc	ation (Intratumoral / Extratumoral)
	o Ext	ent (Focal / Extensive)
Lymphovascular emboli	i:	Absent / Present / Cannot be determined
Underlying bone (if included): - Not involved /		
	- Involved (Cortical erosion vs. Medullary infiltration) /
	- Cannot be	determined
Skin (If included):		Not involved / Involved / Cannot be determined
Margins:		Specify for each margin, document distance
closest margin:		
	o Fre	e /
	o Clo	se (specify distance of closest margin) /
	o Inv	olved by invasive carcinoma /
	• Clo	se to or Involved by severe dysplasia or in situ carcinoma
	o Car	not be assessed
*Coexistent pathology: Including adja		luding adjacent mucosal pathology (specify)
*Ancillary studies if any		Specify
*Impression:		



Lymph Node Dissection

Name	Age Se	ex Hosp. Case No	Pathology No
Date of request	. Date of reporting	Resident	Pathologist

Clinical Data:

*Operative procedure: Type of node dissection

(Specify the procedure, Document Primary surgery vs. Completion surgery)

Gross findings:

Lymph nodes:

Laterality	Level / Site of lymph	Total No. of nodes	Size of larg-
KL. / LL. / Central / Not known	node	aissected	eschode

Non-lymphoid tissue: Gross description of: Salivary gland / Skeletal muscle / Nerve / Vein / Other

Microscopy:

*Primary tumor:

Histologic type of tumor (WHO 2017)

Lymph nodes:

Specify for each level

Laterality: Rt. / Lt. / Central / Not known	Level / Site of lymph node	No. of nodes ex- amined	No. of nodes posi- tive for me- tastases	Extanodal extension (ENE): - Absent - Present (*ENE mi / ≤2 mm) - Present (*ENE ma / >2 mm)



Maximum dimension o	of largest metastatic focus: mm				
Non-lymphoid tissue:	Specify				
*Impression:					
TNM Stage: pN					
<u>Larynx</u>					
Name	Age Sex Hosp. Case No Pathology No				
Date of request	Date of reporting Resident Pathologist				
<u>Clinical Data:</u>					
Operative procedure:	Biopsy / Resection / Not specified				
	(*Specify the procedure, Document Primary surgery vs. Completion surgery)				
Specimen submitted:	(List all the subsites included in the specimen)				
Pre-procedural therapy	y:				
Gross findings:					
Dimensions of Specime	en:XX				
Primary Tumor:	Cannot be assessed / Not grossly visible / Tumor present				
Tumor laterality:					
Number of tumor foci:					
Tumor location:					
Tumor extent:	(Extension to other subsites and adjacent organs)				
Size of tumor:	XX (Maximum dimension mandatory)				
*Gross appearance of t	umor				
*Associated lesions if a	ny				
Margins:	List all the margins and document gross distance of each margin from tumor				
	(Specify for all mucosal and soft tissue margins separately, as applicable)				



Margin	Distance of margin from tumor		

*Adjacent tissue:

Thyroid gland, Tracheostomy stoma (Specify)

Microscopy:

Primary tumor: (I	(Document separately for each tumor focus in case of multifocal tumor)				
Histologic type of tumo	or:	(As per WHO 2017 classification)			
Grade of tumor:					
Microsocopic size of tu	imor:	(Specify only if size different from gross tumor size)			
Extent of tumor invasion	on:	Specify involvement of other/adjacent structures/spaces:			
		Pre-epiglottic space,			
*Paraglottic space invo	olvement				
Thyroid and/or Cricoid	cartilage involve	ement (*Partial / Complete)			
*Pattern of invasion:		(Applicable for squamous cell carcinoma only)			
Perineural invasion (PNI):		Absent / Present / Cannot be determined			
	*If	^f PNI present:			
	0	Size of the nerve (mm)			
	0	Location (Intratumoral / Extratumoral)			
	0	Extent (Focal / Extensive)			
Lymphovascular embo	oli:	Absent / Present / Cannot be determined			
Margins:		Specify for each margin, document distance of closest margin:			
	0	Free /			
	0	Close (specify distance of closest margin) /			
	0	Involved by invasive carcinoma /			
	0	Close to or Involved by severe dysplasia or in situ carcinoma			
	0	Cannot be assessed			
*Coexistent pathology	/:	Including adjacent mucosal pathology (Dysplasia, hypserplasia - specify)			
*Ancillary studies if an	ıy:	Specify			

TNM Stage: pT



Nose and Paranasal Sinuses

Name	Age Sex	Hosp. Case No	Pathology No
Date of request	Date of reporting	. Resident	Pathologist

Clinical Data:

Operative procedure:	Biopsy / Resection / Not specified			
	(*Specify the procedure, Document Primary surgery vs. Completion surgery)			
Specimen submitted:	(List all the subsites included in the specimen)			
Pre-procedural therapy:	(Specify - Chemotherapy / Radiotherapy / Targeted therapy)			
Gross findings:				
Dimensions of Specimen:	XX			
Primary Tumor:	Cannot be assessed / Not grossly visible / Tumor pre-			
sent				
Tumor laterality:				
Number of tumor foci:				
Tumor location:				
Tumor extent:	(Extension to other subsites and adjacent organs)			
Size of tumor:	XX (Maximum dimension mandatory)			
*Associated lesions if any	·······			

Bone/Cartilage (if included in the specimen): Involved / Not involved / Uncertain

Skin (If included in the specimen):

Involved / Not involved / Uncertain

Margins:List all the margins and document gross distance of each margin from tumor(Specify for all mucosal, bony, soft tissue margins and base separately, as applicable)

Margin	Distance of margin from tumor

*Adjacent tissue:

Specify if applicable



Microscopy:

Primary tumor:	cument separately for each tumor focus in case of multifocal tumor)		
Histologic type of tumor:	(As per WHO 2017 classificaiton)		
Grade of tumor:			
Microsocopic size of tumo	pr:		
Extent of tumor invasion:	Specify involvement of other/adjacent structures/spaces		
Perineural invasion (PNI)	Absent / Present / Cannot be determined		
	*If PNI present:		
	• Size of the nerve (mm)		
	 Location (Intratumoral / Extratumoral) 		
	• Extent (Focal / Extensive)		
Lymphovascular emboli:	Absent / Present / Cannot be determined		
Bone/Cartilage (if include	d): - Not involved /		
	- Involved (Cortical erosion vs. Medullary infiltration for bone) /		
	- Cannot be determined		
Skin (If included):	Not involved / Involved / Cannot be determined		
Margins:	Specify for each margin, document distance of		
closest margin:			
	o Free /		
	 Close (specify distance of closest margin) / 		
	 Involved by invasive carcinoma / 		
	 Close to or Involved by severe dysplasia or in situ carcinoma 		
	 Cannot be assessed 		
*Adjacent tissue:	Specify if applicable		
*Coexistent pathology:	Including adjacent mucosal pathology (specify)		
*Ancillary studies if any:	Specify		
*Impression:			

TNM Stage: pT



Salivary Glands

Name	Age Sex Hosp. Case No Pathology No				
Date of request Da	te of reporting Resident Pathologist				
<u>Clinical Data:</u>					
Operative procedure:	Biopsy / Resection / Not specified				
(*Specify the procedure, Document Primary surgery vs. Completion surgery)				
Specimen submitted:	(List all the subsites included in the specimen)				
Pre-procedural therapy:	(Specify - Chemotherapy / Radiotherapy / Targeted therapy)				
Gross findings:					
Dimensions of Specimen:	XX				
Primary Tumor:	Cannot be assessed / Not grossly visible / Tumor pre-				
sent					
Tumor laterality:					
Number of tumor foci:					
Tumor location:					
Tumor extent:	(Extrglandular extension to adjacent structures – specify)				
Size of tumor:	XX (Largest dimension mandatory)				
*Gross appearance of tumor					
*Associated lesions if any					

Margins: Document gross distance of all margin from tumor

Microscopy:

Primary tumor:	(Document separately for each tumor focus in case of multifocal tumor)
Histologic type of tumor:	(As per WHO 2017 classificaiton)
Grade of tumor:	
Microsocopic size of tum	or:



Extent of tumor invasion:	Specify involvement of other/adjacent structures/spaces				
Perineural invasion (PNI):	Absent / Present / Cannot be determined				
	*If PNI present:				
	• Size of the nerve (mm)				
	 Location (Intratumoral / Extratumoral) 				
	 Extent (Focal / Extensive) 				
Lymphovascular emboli:	Absent / Present / Cannot be determined				
Margins:	Specify for each margin, document distance of				
closest margin:					
	o Free /				
	 Close (specify distance of closest margin) / 				
	 Involved by invasive carcinoma / 				
	 Close to or Involved by severe dysplasia or in situ carcinoma 				
	 Cannot be assessed 				
*Coexistent pathology:	Including adjacent mucosal pathology (specify)				
*Ancillary studies if any:	Specify				
*Impression:					

TNM Stage: pT

<u>Ear</u>

Name	Age	Sex	Hosp. Case No	Pathology No
Date of request	Date of reporting		. Resident	Pathologist

Clinical Data:

Operative procedure:

Biopsy / Resection / Not specified

(*Specify the procedure, Document Primary surgery vs. Completion surgery)



Specimen submitted:		(List all the subsites included in the specimen)				
Pre-procedural therapy:		(Specify - Chemotherapy / Radiotherapy / Targeted therapy)				
Gross findings:						
Dimensions of Specimen:		X	X			
Primary Tumor:			Cannot be ass	essed / Not grossly visible / Tumor pre-		
sent						
Tumor laterality:						
Number of tumor foci:						
Tumor location:						
Tumor extent:			(Extensic	on to other subsites and adjacent organs)		
Size of tumor:			XX	(Maximum dimension mandatory)		
*Associated lesions if any						
Bone/Cartilage (if included in	the specimen):	Involve	ed / Not involve	d / Uncertain		
Skin (If included in the specin	nen):			Involved / Not involved / Uncertain		
Margins:	List all the mar	gins and	document gros	ss distance of each margin from tumor		

Margin	Distance of margin from tumor

Microscopy:

Primary tumor:	(Document se	parately for each tumor focus in case of multifocal tumor)
Histologic type of tumor:		(As per WHO 2017 classificaiton)
Grade of tumor:		
Microsocopic size of tum	or:	(Specify only if size different from gross tumor size)
Extent of tumor invasion	:	Specify involvement of other/adjacent structures/spaces
Perineural invasion (PNI)):	Absent / Present / Cannot be determined
		*If PNI present:
	0	Size of the nerve (mm)
	0	Location (Intratumoral / Extratumoral)

• Extent (Focal / Extensive)



Lymphovascular emboli:	Absent / Present / Cannot be determined
Bone/Cartilage (if included):	- Not involved /
	- Involved (Cortical erosion vs. Medullary infiltration for bone) /
	- Cannot be determined
Skin (If included):	Not involved / Involved / Cannot be determined
Margins:	Specify for each margin, document distance of
closest margin:	
	• Free /
	 Close (specify distance of closest margin) /
	 Involved by invasive carcinoma /
	 Close to or Involved by severe dysplasia or in situ carcinoma
	 Cannot be assessed
*Coexistent pathology:	Including adjacent mucosal pathology (specify)
*Ancillary studies if any:	Specify
<u>*Impression:</u>	

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