# Appendix G Reporting proforma for neuroendocrine pituitary tumours

Surname……………………..… Forenames……………………… Date of birth………….… Sex.….

Hospital………….…………..… Hospital no……………….…...... NHS/CHI no…………....

Date of surgery….…………..… Date of report authorisation….… Report number…………....

Date of receipt…………………. Pathologist……………................ Surgeon…………………

**Summary of clinical and neuroimaging features**

**Macroscopic description**

Specimen dimensions (mm x mm x mm) …………………………

**Microscopic description**

Tumour architecture ……………………………………

Cytological features (select all that apply):

Nuclear atypia (particular when severe)

Presence fibrous bodies

Crooke’s hyaline changes

Cytoplasmic vacuoles

Ganglion cells or neurones: Present Absent

Necrosis: Present Absent

Macrophages and/or lymphocytic infiltrates: Present Absent

Rathke’s rests: Present Absent

Cavernous sinus, respiratory mucosa and/or bone: Present Absent

Normal anterior and/or posterior pituitary: Present Absent

Mitoses should be counted and reported as number per mm2 or per high power field (x40)

| **Test type** | **Explanation** | **Stain**  | **Test performed**  | **Marker expressed** |
| --- | --- | --- | --- | --- |
| Immunohistochemistry hormone expression type | Hormone expression by immunohistochemistry (multiple values may be recorded)  | ACTH |  |  |
| LH |  |  |
| FSH |  |  |
| Alpha-subunit |  |  |
| TSH |  |  |
| Prolactin |  |  |
| Growth hormone |  |  |
| Ki67  |  | Labelling index |
| Proliferation | Proliferation index | Pit-1 |  |  |
| Transcription factors | To refine the diagnosis when immunostaining for pituitary hormones are equivocal or negative. Transcription factors can also help distinguish different cell populations in the diagnosis of plurihormonal adenoma and double adenomas | T-Pit |  |  |
| SF1 |  |  |
| Cytokeratins | Relevant to subtype somatotroph adenoma and help diagnose corticotroph adenoma, particularly silent corticotroph adenoma | Cytokeratin 7 or cytokeratin 8 (CAM5.2) |  |  |
| Neuronal markers | When immunostains for pituitary hormones and transcription factors are negative to confirm the neuroendocrine lineage of the tumour. After excluding sellar paraganglioma, sellar neurocytoma, low-grade neuroblastoma or metastasis from a neuroendocrine tumour to the pituitary gland, tumours that lack expression of pituitary hormones and transcription factors are defined as ‘null cell’ | Chromogranin A and/or synaptophysin |  |  |
| Others | Can be added to the panel in cases of aggressive-looking tumours | p53 |  |  |