The term “metastatic PitNET” is advocated to replace the previous terminology “pituitary carcinoma” in order to avoid confusion with neuroendocrine carcinoma (a poorly differentiated epithelial neuroendocrine neoplasm). Subtypes of PitNETs that are associated with a high risk of adverse biology are emphasized within their cell lineage and cell type as well as based on clinical variables. Posterior lobe tumors, the family of pituicyte tumors, include the traditional pituicytoma, the oncocytic form (spindle cell oncocytoma), the granular cell form (granular cell tumor), and the ependymal type (sellar ependymoma). Although these historical terms are entrenched in the literature, they are nonspecific and confusing, such that oncocytic pituicytoma, granular cell pituicytoma, and ependymal pituicytoma are now proposed as more accurate. Tumors with hypothalamic neuronal differentiation are classified as gangliocytomas or neurocytomas based on large and small cell sizes, respectively. This classification sets the standard for a high degree of sophistication to allow individualized patient management approaches [1)]

see Neuroendocrine tumor

1)

Asa SL, Mete O, Perry A, Osamura RY. Overview of the 2022 WHO Classification of Pituitary Tumors. Endocr Pathol. 2022 Mar;33(1):6-26. doi: 10.1007/s12022-022-09703-7. Epub 2022 Mar 15. PMID: 35291028.