

Supplementary Tables

Supplementary Table 1. Clinical characteristics of posterior pituitary tumor, pituitary adenoma and Craniopharyngioma.

Clinical characteristics	Posterior pituitary tumor (n=42)	Pituitary adenoma (n=68)	Craniopharyngioma (n=64)	p
Age (year $\pm$ SD)	46.43 $\pm$ 11.34	46.50 $\pm$ 11.05	48.50 $\pm$ 12.01	0.58
Sex (n, ratio)				
Male	19 (0.45)	39 (0.57)	39 (0.61)	0.27
Female	23 (0.55)	29 (0.43)	25 (0.39)	
Pituitary hormone (n, ratio)				<0.01*
Normal	22 (0.52)	23 (0.34)	15 (0.23)	
Abnormal	20 (0.48)	45 (0.66)	49 (0.77)	

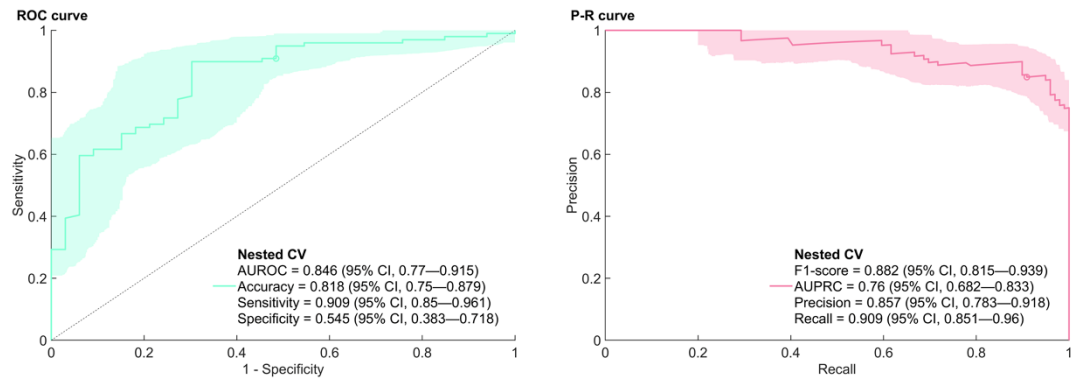
Supplementary Table 2. Clinical characteristics of pituicytoma, granulosa cell tumor spindle cell oncocytoma.

Clinical characteristics	Pituicytoma (n=29)	Granulosa cell tumor (n=9)	Spindle cell oncocytoma (n=4)
Age (year ± SD)	50.00 ± 10.27	46.00 ± 11.15	42.00 ± 19.40
Sex (n, ratio)			
Male	13 (0.45)	4 (0.44)	2 (0.50)
Female	16 (0.55)	5 (0.56)	2 (0.50)
Pituitary Hormone (n,ratio)			
Normal	17 (0.59)	3 (0.33)	2 (0.50)
Abnormal	12 (0.41)	6 (0.67)	2 (0.50)

Supplementary Table 3. The predicting performance of group of models in the nested cross-validation.

Features	Accuracy	Precision	Specificity	Sensitivity	AUC
T1-weighted	0.750	0.800	0.333	0.889	0.697
CE T1-weighted	0.811	0.849	0.515	0.909	0.846
T1-weighted & CE T1-weighted	0.832	0.848	0.528	0.941	0.843

CE, contrast-enhanced, AUC, area under curve.



Supplementary Figure 1. Receiver operating characteristic curve (ROC) and Precision-Recall (P-R) curve in the nested cross-validation.