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Supplemental material

Determinants of immediate and long-term remission after initial transsphenoidal surgery for acromegaly and outcome patterns during follow-up: a longitudinal study on 659 patients
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Supplementary Table 1. Endocrine remission and non-remission after surgery only for acromegaly and clinical correlations.

	Endocrine remission (n=362)	Endocrine non-remission (n=297)	P values
Age at diagnosis, years	43.7 ± 12.2	39.3 ± 11.7	<0.001 [#]
Males, n (%)	186 (51.4)	107 (36.0)	<0.001 [#]
Body mass index, kg/m^2	26.4 ± 3.7	26.4 ± 3.8	0.883
Disease duration, months	60 (36, 120)	60 (24, 108)	0.772
Preoperative hormone status			
GH level, ng/ml	10.8 (5.5, 19.7)	22.4 (9.8, 58.5)	<0.001 [#]
GH nadir level after OGTT, ng/ml	7.7 (3.6, 15.1)	15.3 (6.7, 30.6)	<0.001 [#]
IGF-1/ULN	3.1 ± 1.0	3.1 ± 0.9	0.599
Hyperprolactinemia, n (%)	57 (15.7)	70 (23.6)	0.011
Central hypogonadism, n (%)	84 (23.2)	80 (26.9)	0.270
Central hypothyroidism, n (%)	10 (2.8)	30 (10.1)	<0.001 [#]
Central hypoadrenalism, n (%)	14 (3.9)	19 (6.5)	0.138
Tumor imaging			
Maximum diameter, mm	15.1 ± 7.7	19.4 ± 9.1	<0.001 [#]
Macroadenoma, n (%)	287 (76.8)	272 (91.6)	<0.001 [#]
Cavernous sinus invasion, n (%)	72 (19.9)	159 (53.5)	<0.001 [#]
Surgery approach			
Transsphenoidal, microscopic, n (%)	261 (72.1)	253 (85.2)	<0.001 [#]
Transsphenoidal, endoscopic, n (%)	101 (27.9)	44 (14.8)	<0.001 [#]
Tumor pathology			
Ki-67 index, %	2.1 ± 1.7	2.4 ± 1.7	0.055
PRL-positive, n (%)	154 (42.5)	105 (35.4)	0.060
FSH/LH-positive, n (%)	282 (77.9)	188 (63.3)	<0.001 [#]

Quantitative data were presented as means ± SDs or medians (quartiles) according to the distribution of data.

Abbreviations: FSH, follicle-stimulating hormone; GH, growth hormone; IGF-1, insulin-like growth factor 1; LH, luteinizing hormone; OGTT, oral glucose tolerance test; PRL, prolactin; ULN, upper limit of normal.
[#] Indicates statistically significant differences after being justified by the false discovery rate algorithm.

Supplementary Table 2. Immediate remission and delayed remission after initial surgery for acromegaly and clinical correlations.

	Immediate remission (n=223)	Delayed remission (n=139)	P values
Age at diagnosis, years	45.0 ± 12.7	41.6 ± 11.0	0.009
Males, n (%)	120 (53.8)	66 (47.5)	0.241
Body mass index, kg/m^2	26.8 ± 3.8	25.7 ± 3.6	0.005
Disease duration, months	60 (36, 108)	60 (24, 120)	0.778
Preoperative hormone status			
GH level, ng/ml	8.9 (4.4, 18.3)	12.4 (7.5, 20.5)	0.449
GH nadir level after OGTT, ng/ml	6.3 (3.2, 14.4)	9.3 (4.7, 16.6)	0.751
IGF-1/ULN	3.1 ± 1.0	3.1 ± 1.0	0.826
Hyperprolactinemia, n (%)	32 (14.3)	25 (18.0)	0.356
Central hypogonadism, n (%)	50 (22.4)	34 (24.5)	0.655
Central hypothyroidism, n (%)	6 (2.7)	4 (2.9)	0.916
Central hypoadrenalism, n (%)	8 (3.6)	6 (4.3)	0.726
Tumor imaging			
Maximum diameter, mm	14.4 ± 8.0	16.2 ± 7.0	0.076
Macroadenoma, n (%)	173 (77.6)	114 (82.0)	0.311
Cavernous sinus invasion, n (%)	28 (12.6)	44 (31.7)	<0.001 [#]
Surgery approach			
Transsphenoidal, microscopic, n (%)	164 (73.5)	97 (69.8)	0.438
Transsphenoidal, endoscopic, n (%)	59 (26.5)	42 (30.2)	0.438
Tumor pathology			
Ki-67 index, %	2 (1, 3)	1 (1, 3)	0.584
PRL-positive, n (%)	95 (42.6)	59 (42.4)	0.977
FSH/LH-positive, n (%)	181 (81.2)	101 (72.7)	0.058

Quantitative data were presented as means ± SDs or medians (quartiles) according to the distribution of data.

Abbreviations: FSH, follicle-stimulating hormone; GH, growth hormone; IGF-1, insulin-like growth factor 1; LH, luteinizing hormone; OGTT, oral glucose tolerance test; PRL, prolactin; ULN, upper limit of normal.
[#] Indicates statistically significant differences after being justified by the false discovery rate algorithm.