

Table S1. Baseline characteristics of patients with acromegaly according to treatment methods.

Variables	SSA therapy <i>n</i> = 20	Surgery <i>n</i> = 38	<i>p</i> -Value
Age [years]	60 (54–67)	53 (41 – 60)	0.026 * ¹
Female, <i>n</i> (%)	16 (80)	23 (60.5)	0.154 ²
Male, <i>n</i> (%)	4 (20)	15 (39.5)	
BMI [kg/m ²]	33.3 (27.2 – 35.5)	29.0 (26.5 – 33.5)	0.127 ¹
Random GH at diagnosis [ng/mL]	4.61 (2.31 – 9.41)	11.65 (3.80 – 25.10)	0.032 * ¹
IGF-1 at diagnosis [ng/mL]	534.50 (380.95 – 759.50)	675.0 (565.0 – 900.0)	0.087 ¹
IGF-1, x ULN at diagnosis	3.49 (1.93 – 4.12)	3.41 (2.48 – 4.60)	0.213 ¹
Lanreotide Autogel, <i>n</i> (%)	9 (45)	-	-
Octreotide LAR, <i>n</i> (%)	9 (45)	-	-
Switching SSA therapy	2 (10)	-	-
Median follow-up [months]	10.0 (2.3 – 17.8)	8.8 (7.3 – 10.8) 2.8 (2.0 – 4.8) ***	0.852 ¹
Pituitary adenoma mass effects			
Visual field defects, <i>n</i> (%)	5 (25)	3 (7.9)	0.077 ¹
Headache, <i>n</i> (%)	10 (50)	21 (55.2)	0.712 ¹
Radiological features of pituitary adenomas			
Primary tumour MD [mm]	12.5 (8.1 – 17.5)	14.5 (10.0 – 25.0)	0.242 ¹
Microadenoma, <i>n</i> (%)	6 (30)	8 (21.1)	0.383 ¹
Macroadenoma, <i>n</i> (%)	14 (70)	29 (76.3)	0.307 ¹
Giant tumour, <i>n</i> (%)	0 (0)	1 (2.6)	**
At least 1 feature of pituitary adenoma invasiveness, <i>n</i> (%)	8 (40)	25 (65.8)	0.063 ¹
No features of pituitary adenoma invasiveness, <i>n</i> (%)	12 (60)	13 (34.2)	
Sphenoid sinus invasion, <i>n</i> (%)	6 (30)	22 (57.9)	0.046 * ¹
Cavernous sinus invasion, <i>n</i> (%)	3 (15)	15 (39.5)	0.059 ¹
Compression of the optic chiasm, <i>n</i> (%)	6 (30)	11 (29.0)	0.942 ¹
Hormonal status of pituitary gland			
Secondary hypothyroidism, <i>n</i> (%)	1 (5)	0 (0.0)	-
Secondary adrenal insufficiency, <i>n</i> (%)	1 (5)	1 (2.6)	0.660 ¹
Hypogonadism hypogonadotropic/estrogen depletion, <i>n</i> (%)	3 (15)	5 (13.2)	0.859 ¹
Hyperprolactinemia due to pituitary stalk deviation, <i>n</i> (%)	3 (15)	9 (23.7)	0.449 ¹
At least 1 pituitary deficiency, <i>n</i> (%)	3 (15)	13 (34.2)	0.126 ¹
No pituitary deficiency, <i>n</i> (%)	17 (85)	25 (65.8)	
Glucose homeostasis disorders			
Normoglycemia, <i>n</i> (%)	6 (30)	11 (29.0)	0.942 ¹
Pre-DM, <i>n</i> (%)	10 (50)	19 (50.0)	0.992 ¹
IFG, <i>n</i> (%)	7 (35)	17 (44.7)	0.484 ¹
IGT, <i>n</i> (%)	6 (30)	6 (15.8)	0.212 ¹
IFG+IGT, <i>n</i> (%)	3 (15)	4 (10.5)	0.632 ¹
T2DM/secondary form of DM, <i>n</i> (%)	4 (20)	8 (21.1)	0.935 ¹
FPG [mg/dL]	108.0 (95.5 – 118)	104.0 (93.0 – 114.0)	0.529 ¹
Cardiovascular complications			
Hypertension, <i>n</i> (%)	15 (75)	24 (63.2)	0.371 ¹
Coronary artery disease, <i>n</i> (%)	3 (15)	5 (13.2)	0.859 ¹
Cardiac arrhythmias, <i>n</i> (%)	6 (30)	2 (5.3)	0.010 * ¹
Disturbances in TTE, <i>n</i> (%)	9 (45)	21 (55.3)	0.467 ¹
Other comorbidities			
Obstructive sleep apnea syndrome, <i>n</i> (%)	3 (15)	10 (26.3)	0.336 ¹
Benign neoplasms, <i>n</i> (%) ^a	10 (50)	16 (42.1)	0.575 ¹
Degenerative changes in joints and bones, <i>n</i> (%)	11 (55)	13 (34.2)	0.132 ¹

Carpal tunnel syndrome, <i>n</i> (%)	6 (30)	7 (18.4)	0.325 ¹
Values are number (%) or median (interquartile range, IQR). * <i>p</i> -value < 0.05 was statistically significant. ** This variable was detected only in single case, thus the statistical analysis is impossible. *** Median time of assessment after surgery. ¹ U-Mann-Whitney test and ² Chi-Square test were applied. GH – growth hormone; IGF-1 – insulin-like growth factor 1; IGF-1 ULN – insulin-like growth factor 1 upper limit of normal range for age and sex; SSA – somatostatin analogue; MD – maximum diameter; FPG – fasting plasma glucose; IFG – impaired fasting glucose; IGT – impaired glucose tolerance; DM – diabetes mellitus; T2DM – diabetes mellitus type 2; TTE – trans-thoracic echocardiography. ^a Benign neoplasms were defined as the presence of colon polyps, polyp of the gallbladder, uterine fibroids, adrenal gland adenoma.			

Table S2. Results of the model from the nparLD R package, testing for the effects of method of treatment (surgery, pharmacotherapy) and time (before treatment, after treatment).

Factor	Statistic	df	<i>p</i> -Value
WBC			
Method of treatment	0.219	1	0.640
Time	5.272	1	0.022 *
Method of treatment x Time	1.159	1	0.282
NEU			
Method of treatment	0.053	1	0.817
Time	7.235	1	0.007 *
Method of treatment x Time	1.701	1	0.192
LYM			
Method of treatment	0.442	1	0.506
Time	0.459	1	0.498
Method of treatment x Time	0.090	1	0.765
NLR			
Method of treatment	0.139	1	0.709
Time	7.000	1	0.008 *
Method of treatment x Time	1.086	1	0.297
MONO			
Method of treatment	0.447	1	0.504
Time	2.023	1	0.155
Method of treatment x Time	0.918	1	0.338
LMR			
Method of treatment	1.088	1	0.297
Time	1.017	1	0.313
Method of treatment x Time	0.115	1	0.735
PLT			
Method of treatment	0.094	1	0.759
Time	0.371	1	0.542
Method of treatment x Time	2.419	1	0.120
PLR			
Method of treatment	0.579	1	0.447
Time	0.503	1	0.478
Method of treatment x Time	0.914	1	0.339
MPV			
Method of treatment	0.013	1	0.909
Time	1.636	1	0.201
Method of treatment x Time	0.015	1	0.902
MPV/PLT			
Method of treatment	0.103	1	0.749
Time	0.377	1	0.539
Method of treatment x Time	0.468	1	0.494
SII			
Method of treatment	0.198	1	0.657
Time	6.240	1	0.012 *
Method of treatment x Time	1.454	1	0.228
GH			
Method of treatment	0.924	1	0.034 *

Time	121.512	1	< 0.001 *
Method of treatment x Time	8.204	1	0.004 *
IGF-1			
Method of treatment	1.238	1	0.027 *
Time	94.054	1	< 0.001 *
Method of treatment x Time	2.397	1	0.012 *
Adenoma MD			
Method of treatment	4.048	1	0.042 *
Time	78.465	1	< 0.001 *
Method of treatment x Time	32.060	1	< 0.001 *

A total of 58 patients were enrolled in the analysis. * *p*-value < 0.05 was statistically significant. WBC – white blood cell; NEU – neutrophil; LYM – lymphocyte; NLR – neutrophil-to-lymphocyte ratio; MONO – monocyte; LMR – lymphocyte-to-monocyte ratio; PLT – platelet; PLR – platelet-to-lymphocyte ratio; MPV – mean platelet volume; MPV/PLT – mean platelet volume-to-platelet ratio; SII – systemic immune-inflammation index; GH – growth hormone; IGF-1 – insulin-like growth factor – 1; MD – maximum diameter.