Supplementary

Table S1 Characteristics of patients in the training and validation cohorts

Variables	Total (n=180)	Validation (n=72)	Train (n=108)	Statistic	P
Area (cm^2), mean ± SD	0.71±0.71	0.71±0.67	0.70±0.73	t=0.09	0.93
TT3, mean ± SD	1.20±0.67	1.25±0.66	1.17±0.68	t=0.74	0.46
FT3, mean ± SD	4.95±3.63	4.89±1.71	4.99±4.48	t=-0.18	0.86
TT4, mean ± SD	8.78±3.02	8.89±3.20	8.70±2.91	t=0.41	0.68
FT4, mean ± SD	26.99±144.07	15.92±8.13	34.37±185.86	t=-0.84	0.40
TSH, mean ± SD	4.95±17.76	3.57±8.62	5.87±21.83	t=-0.85	0.40
Lesion size, mean ± SD	10.30±5.52	10.29±6.11	10.31±5.11	t=-0.02	0.99
Age, mean ± SD	41.88±11.05	42.61±10.55	41.39±11.39	t=0.73	0.47
TPO-Ab, n(%)				χ^2=0.09	0.76
≤34	80 (44.44)	31 (43.06)	49 (45.37)		
>34	100 (55.56)	41 (56.94)	59 (54.63)		
TG-Ab, n(%)				χ^2=0.04	0.85
≤60	66 (36.67)	27 (37.50)	39 (36.11)		
>60	114 (63.33)	45 (62.50)	69 (63.89)		
TR-Ab, n(%)				χ^2=3.38	0.07
≤1.75	100 (55.56)	34 (47.22)	66 (61.11)		
>1.75	80 (44.44)	38 (52.78)	42 (38.89)		
Sex, n(%)				χ^2=0.77	0.38
Male	25 (13.89)	12 (16.67)	13 (12.04)		
Female	155 (86.11)	60 (83.33)	95 (87.96)		
Echogenic foci, n(%)				χ^2=1.92	0.38
None, comet-tail artifacts or punctate echogenic foci of uncertain significance	47 (26.11)	21 (29.17)	26 (24.07)		
Microcalcification	114 (63.33)	46 (63.89)	68 (62.96)		
Macrocalcification	19 (10.56)	5 (6.94)	14 (12.96)		
Echogenicity, n(%)				-	0.72
Isoechoic	3 (1.67)	0 (0.00)	3 (2.78)		
Hypoechoic	167 (92.78)	68 (94.44)	99 (91.67)		
Hyperechoic	3 (1.67)	1 (1.39)	2 (1.85)		
Markedly hypoechoic	7 (3.89)	3 (4.17)	4 (3.70)		
Composition, n(%)				-	0.79
Cystic or almost completely cystic	4 (2.22)	1 (1.39)	3 (2.78)		
Solid or almost completely solid	176 (97.78)	71 (98.61)	104 (97.22)		
Margin, n(%)				χ^2=0.19	0.67
Smooth	42 (23.33)	18 (25.00)	24 (22.22)		
Ill-defined or irregular	138 (76.67)	54 (75.00)	84 (77.78)		
Shape, n(%)				χ^2=0.24	0.62
Wider-than-tall	76 (42.22)	32 (44.44)	44 (40.74)		
Taller-than-wide	104 (57.78)	40 (55.56)	64 (59.26)		
Location, n(%)				χ^2=0.71	0.70
Right	91 (50.56)	36 (50.00)	55 (50.93)		
Left	65 (36.11)	28 (38.89)	37 (34.26)		
Isthmus	24 (13.33)	8 (11.11)	16 (14.81)		
CDFI, n(%)				χ^2=3.39	0.18
0	56 (31.11)	28 (38.89)	28 (25.93)		
1	101 (56.11)	36 (50.00)	65 (60.19)		
2	23 (12.78)	8 (11.11)	15 (13.89)		
ETE, n (%)				χ^2=0.19	0.67
No	138 (76.67)	54 (75.00)	84 (77.78)		
Yes	42 (23.33)	18 (25.00)	24 (22.22)		
Enhancement type, n (%)				-	0.76
None or iso-enhancement	48 (26.67)	17 (23.61)	31 (28.70)		
Hypoenhancement	130 (72.22)	54 (75.00)	76 (70.37)		
Hyperenhancement	2 (1.11)	1 (1.39)	1 (0.93)		

Table S1 (*continued*)

https://dx.doi.org/10.21037/gs-2024-510

Table S1 (*continued*)

Variables	Total (n=180)	Validation (n=72)	Train (n=108)	Statistic	P
Enhancement homogeneity, n(%)				χ^2=0.67	0.41
Homogeneous	150 (83.33)	58 (80.56)	92 (85.19)		
Heterogeneous	30 (16.67)	14 (19.44)	16 (14.81)		
Filling defects, n(%)				χ^2=3.50	0.06
Absent	138 (76.67)	50 (69.44)	88 (81.48)		
Present	42 (23.33)	22 (30.56)	20 (18.52)		
Enhancement direction, n(%)				χ^2=0.08	0.78
Scattered	47 (26.11)	18 (25.00)	29 (26.85)		
Centripetal or centrifugal	133 (73.89)	54 (75.00)	79 (73.15)		
MeanLin (au), n(%)				χ^2=1.21	0.27
>66054.70	40 (22.22)	19 (26.39)	21 (19.44)		
≤66054.70	140 (77.78)	53 (73.61)	87 (80.56)		
PE (a u), n(%)				χ^2=2.67	0.10
≤38933.21	30 (16.67)	16 (22.22)	14 (12.96)		
>38933.21	150 (83.33)	56 (77.78)	94 (87.04)		
WiAUC (au), n(%)				χ^2=0.30	0.58
≤1260081.63	165 (91.67)	67 (93.06)	98 (90.74)		
>1260081.63	15 (8.33)	5 (6.94)	10 (9.26)		
RT (s), n(%)				χ^2=1.09	0.30
>3.10	122 (67.78)	52 (72.22)	70 (64.81)		
≤3.10	58 (32.22)	20 (27.78)	38 (35.19)		
Mttl (s), n(%)				χ^2=1.61	0.20
>25.45	53 (29.44)	25 (34.72)	28 (25.93)		
≤25.45	127 (70.56)	47 (65.28)	80 (74.07)		
TTP (s), n(%)				χ^2=0.32	0.57
>10.66	68 (37.78)	29 (40.28)	39 (36.11)		
≤10.66	112 (62.22)	43 (59.72)	69 (63.89)		
WiR (au), n(%)				χ^2=0.12	0.73
≤101887.21	135 (75.00)	55 (76.39)	80 (74.07)		
>101887.21	45 (25.00)	17 (23.61)	28 (25.93)		
WiPI (au), n(%)				χ^2=0.46	0.50
≤156760.13	143 (79.44)	59 (81.94)	84 (77.78)		
>156760.13	37 (20.56)	13 (18.06)	24 (22.22)		
WoAUC (au), n(%)				χ^2=0.01	0.90
≤1675665.75	167 (92.78)	67 (93.06)	100 (92.59)		
>1675665.75	13 (7.22)	5 (6.94)	8 (7.41)		
WiWoAUC (au), n(%)				χ^2=0.01	0.91
≤2935747.5	167 (92.78)	67 (93.06)	100 (92.59)		
>2935747.5	13 (7.22)	5 (6.94)	8 (7.41)		
FT (s), n(%)				χ^2=0.03	0.86
≤3.77	24 (13.33)	10 (13.89)	14 (12.96)		
>3.77	156 (86.67)	62 (86.11)	94 (87.04)		
WoR (au), n(%)				χ^2=0.02	0.89
≤41879.95	126 (70.00)	50 (69.44)	76 (70.37)		
>41879.95	54 (30.00)	22 (30.56)	32 (29.63)		
CLNM, n(%)				χ^2=0.02	0.89
No	126 (70.00)	50 (69.44)	76 (70.37)		
Yes	54 (30.00)	22 (30.56)	32 (29.63)		

t: *t*-test, χ^2: Chi-square test, -: Fisher exact. SD: standard deviation; CLNM, cervical lymph node metastasis; TPO-Ab, thyroid peroxidase antibody; TG-Ab, thyroglobulin antibody; TR-Ab, thyrotropin receptor antibody; CDFI, color Doppler flow imaging; ETE, extrathyroidal extension; PE, peak enhancement ; RT, rise time; TTP, time to peak ; mTTl, mean transit time local ; FT, fall time; WiAUC, wash-in area under the curve ; WiPI, wash-in perfusion index; WiR, wash-in rate ; WoAUC, wash-out area under the curve ; WiWoAUC, combined wash-in and wash-out area under the curve ; WoR, wash-out rate.

https://dx.doi.org/10.21037/gs-2024-510