

Supplemental Table S1. Previous Studies of Fixed-Dose Radioiodine Therapy for Graves' Disease [6-12]

Study/Country	Study design	No. of cases	I-131 activity, mCi	Follow-up period, mo	Success rate, %	Factors related to RAI failure	Post-RAI hypothyroid, %
This study (2024)/ Thailand	Retrospective quasi-experimental	658	10 (TV <15 g), 15 (TV 15.1–45.0 g), 20 (TV 45.1–75.0 g), 25 (TV 75.1–105.0 g), vs. modified fixed dose	6	67.2 vs. 63.6	NA	48.9 vs. 39.0
Santos et al. (2012) [7]/Brazil	Prospective experimental	128	10 vs. 15	12	73.7 vs. 80.8	Larger size of thyroid gland (>60 g)	56.5 vs. 71.1
El-Kareem et al. (2014) [8]/Egypt	Retrospective cohort	321	8 vs. 12	12	49.0 vs. 69.9	Larger size of thyroid gland (no mentioned how large size) Greater Tc-99m thyroid uptake (>20.9%)	32.9 vs. 47.6
Sfiligoj et al. (2015) [9]/Slovenia	Retrospective cohort	724	15 (TV <30 mL), 20 (TV 30–60 mL), 25 (TV 60–90 mL), 30 (TV >90 mL)	NA	90.5	Larger size of thyroid gland (median 25.6 mL) Older age (median 49 yr) Greater initial fT3 and fT4 (median fT3 27.6 pmol/L, median fT4 69.4 pmol/L)	NA
Sapienza et al. (2015) [10]/Brazil	Prospective experimental	91	15 vs. 30	12	77.4 vs. 94.8	Larger size of thyroid gland (mean 43.5 g) Older age (mean 47.4 yr)	70.0 vs. 70.0
Zaman et al. (2015) [11]/Pakistan	Retrospective cohort	370	15	6	77	Older age (≤ 42 yr) Absence of pyramidal lobe Greater thyroid uptake (>15%)	62
Fanning et al. (2018) [12]/Australia	Retrospective cohort	101	12.2–13.5	12	79.3	Higher TSH receptor antibody titers	69
Kiatkittikul et al. (2021) [13]/ Thailand	Retrospective cohort	179	10 (TV ≤ 50 g), 15 (TV 51–100 g), 20 (TV 101–150 g), 25 (TV 151–200 g), 30 (TV >200 g)	6–9	50	Larger size of thyroid gland (>50 g)	33.1

RAI, radioiodine; TV, thyroid volume; NA, not available; fT3, free triiodothyronine; fT4, free thyroxine; TSH, thyroid-stimulating hormone.