Supplementary Table. Summary of Thyroid Imaging Reporting and Data System in Guidelines

	Sonographic Features	Suggested Risk of Malignancy (%)	Recommendation
ATA-TIRADS			
High suspicion	Solid hypoechoic nodule or solid hypoechoic component of a partially cystic nodule with one or more of the following features: irregular margins, microcalcifications, the TDW shape, rim calcifications with small extrusive soft tissue component, evidence of ETE;	> 70-90	≥ 1.0 cm
Intermediate suspicion	Hypoechoic solid nodule with smooth margins without microcalcifications, ETE, or TDW shape	10-20	≥ 1.0 cm
Low suspicion	Isoechoic or hyperechoic solid nodule, or partially cystic nodule with eccentric solid areas, without microcalcification, irregular margin or ETE, or TDW shape.	5-10	≥ 1.5 cm
Very low suspicion	Spongiform or partially cystic nodules without any of the sonographic features described in low, intermediate, or high suspicion patterns;	< 3	Consider FNAB when diameter ≥ 2.0 cm
Benign	Purely cystic nodules (no solid component).	< 1	Not indicated
K-TIRADS			
High suspicion	Solid hypoechoic nodule with any of three suspicious US features (microcalcification, nonparallel orientation, spiculated/microlobulated margin);	> 60	≥ 1.0 cm

Intermediate suspicion	1) Solid hypoechoic nodule without any of three suspicious US features or 2) Partially cystic or isohyperechoic nodule with any of three suspicious US features;	15-50	≥ 1.0 cm
Low suspicion	Partially cystic or isohyperechoic nodule without any of three suspicious US features;	3-15	≥ 1.5 cm
Benign	1) Spongiform, 2) Partially cystic nodule with comet tail artifact, 3) Pure cyst.	< 3	≥ 2.0 cm (selective)
No nodule	-	-	Not applicable

Note. ATA-TIRADS, American Thyroid Association-Thyroid Imaging Reporting and Data System; ETE = extrathyroidal extension; FNAB, fine-needle aspiration biopsy; K-TIRADS, Korean Society of Thyroid Radiology-Thyroid Imaging Reporting and Data System; TDW = taller than wide.

Supplementary Table. Diagnostic performance by radiologist and CAD system based on TIRADS and dichotomous outcome classification.

	Sensitivity	Specificity	PPV	NPV	Accuracy	False positive	False negative
CAD based on K-TIRADS (category 3,4, and 5)	97.6 (163/167)	21.6 (62/287)	42.0 (163/388)	93.9 (62/66)	49.6 (225/454)	78.4 (225/287)	2.4 (4/167)
CAD based on K-TIRADS (category 4 and 5)	89.2 (149/167)	50.2 (144/287)	51.0 (149/292)	88.9 (144/162)	64.5 (293/454)	49.8 (143/287)	10.8 (18/167)
CAD based on ATA-TIRADS (category 3,4, and 5)	94.6 (158/167)	29.6 (85/287)	43.9 (158/360)	90.4 (85/94)	53.5 (243/454)	70.4 (202/287)	5.4 (9/167)
CAD based on ATA-TIRADS (category 4 and 5)	87.4 (146/167)	63.4 (182/287)	58.2 (146/251)	89.7 (182/203)	72.2 (328/454)	36.6 (105/287)	12.6 (21/167)
CAD based on possible diagnosis	81.4 (136/167)	81.9 (235/287)	72.3 (136/188)	88.3 (235/266)	81.7 (371/454)	18.1 (52/287)	18.6 (31/167)
Radiologist K-TIRADS (category 3,4, and 5)	97.6 (163/167)	36.2 (104/287)	47.1 (163/346)	96.3 (104/108)	58.8 (267/454)	63.8 (183/287)	2.4 (4/167)
Radiologist K-TIRADS (category 4 and 5)	91.6 (153/167)	76.7 (220/287)	69.5 (153/220)	94.0 (220/234)	82.2 (373/454)	23.3 (67/287)	8.4 (14/167)
Radiologist ATA-TIRADS (category 3,4, and 5)	89.8 (150/167)	44.3 (127/287)	48.4 (150/310)	88.2 (127/144)	61.0 (277/454)	55.7 (160/287)	10.2 (17/167)
Radiologist ATA-TIRADS (category 4 and 5)	83.8 (140/167)	80.8 (232/287)	71.8 (140/195)	89.6 (232/259)	81.9 (372/454)	19.2 (55/287)	16.7 (27/167)
Radiologist based on possible diagnosis	82.0 (137/167)	95.8 (275/287)	91.9 (137/149)	90.2 (275/305)	90.7 (412/454)	4.2 (12/287)	18.0 (30/167)

Note: The numbers are percentages. Category 5, 4, and 3 refer to high, intermediate, and low suspicion nodules in each guideline. ATA-TIRADS, American Thyroid Association- Thyroid Imaging Reporting and Data System; CAD, computer-aided diagnosis; K-TIRADS, Korean Society of Thyroid Radiology-Thyroid Imaging Reporting and Data System; PPV, positive predictive value; NPV, negative predictive value