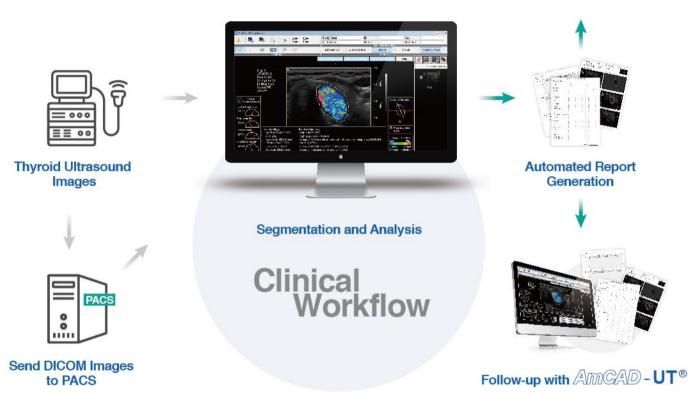
AMGAD - UT®

Detection













AMGAD-UT®

Detection



World's First Ultrasound CAD for Thyroid Cancer Detection

Automated Nodule Recognition

Patented Technologies to Quantify and Visualize Sonographic Features
Image Calibration Compatible with All Ultrasound Systems
Effective Management for Continuous Follow-Up
Automated Report Generation









Current Issues on Thyroid Cancer Examination

70% inconsistent results among ultrasound readers

15% inadequate sampling

30% indeterminate results from biopsy

50% removed thyroid tissues diagnosed as benign

Life-long medication after surgery







Automated Nodule Recognition

Visualization

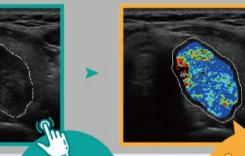
Quantification

Thyroid Guidelines

Follow-up or **FNA Recommendation**

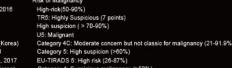
Automated Report















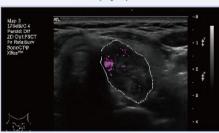


AMCAD-UT® **AI Solution**

One-click Nodule Recognition

AmCAD Algorithms

Anechoic Area (Cyst)



Prior to subsequent feature analysis, cyst area in magenta will be excluded by AmCAD-UT.

Echogenicity (Hypoechogenicity)



Darker color within a nodule indicates higher malignancy.

Echogenic Foci (Calcification)



More Red/Orange indicates higher malignancy.

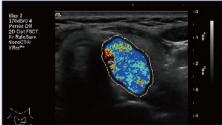
Features Visualization





and Quantification

Texture (Heterogeneity)



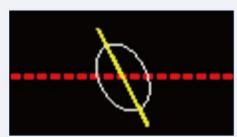
Higher color divergence indicates higher malignancy

Margin (III-Defined Margin)



More Red/Orange indicates more indistinct margin (possibly higher malignancy).

Taller than Wide



Taller than wide indicates higher malignancy.



Standalone **Performance**

Index	Echogenicity (Hypoechogenicity)	Echogenic Foci (Calcification)	Texture (Heterogeneity)	Margin (III-Defined Margin)
AUROC *	84.7%	91.5%	77.0%	68.6%
p-value **	<0.0001	<0.0001	0.0045	0.0014



^{*} Test the quantified values of cases against the Ground Truth determined by a panel of experienced specialists.

^{**} Difference between cases without and with presence of the sonography characteristic (statistically significant: p<0.05)