

# Koios DS<sup>™</sup> Thyroid

The first and only patented, proprietary, clinical decision support (DS) software using Al and machine learning to help physicians accurately analyze ultrasound images. Clinically proven to improve patient outcomes and streamline workflow.

- √ Automates nodule descriptors
- ✓ Increases diagnostic accuracy
- Cuts reading and reporting time
- √ FDA cleared, CE mark, CPT codes



### Smart Ultrasound®

- Greater accuracy and confidence
  System-generated categorical output aligning to either TI-RADS or ATA guidelines
- Automated diagnostic descriptors

  Machine vision auto-populates nodule descriptors to save, export and/or modify
- Koios Al Adapter

  Al assesses risk independently of descriptors and offers a diagnostic score adjustment



### Improved patient experience

Earlier detection, faster treatment and shown to reduce benign FNA biopsies by 23%



### Secure and rapid IT deployment

Premise-based web application sits behind your firewall – no PHI leaves your network



### Makes nice with your technology

Connects with all major PACS and exports to PowerScribe (other reporting systems soon)

## **Koios Engine**

>350,000

training images sourced from over 20 institutions around the world

>17,900

unique features analyzed per physician-selected nodule

5

descriptors automatically selected in seconds

## Research-proven.

## Study with 15 readers and 650 retrospective cases

Clinically proven to offer statistically significant improvement in physician accuracy – as measured by AUC (area under the receiver operating characteristic curve) – while also reducing both inter- and intra-operator variability.

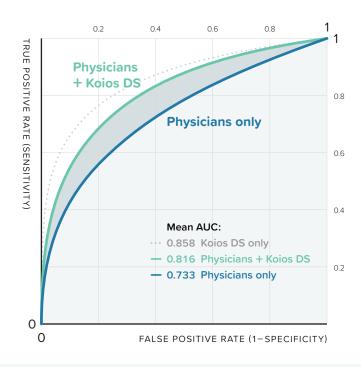
### Methodology

- 15 physicians (11 radiologists + 4 endocrinologists)
- 9 physicians had >20 years of experience; 6 had <15 years
- 650 cases, randomized and interpreted twice by each reader
- · First read without, second read with Koios DS software
- · 4-week "washout" period between rounds
- · All cases pathology-proven

#### Physicians using Koios DS Thyroid . . .

- Significantly improved diagnostic performance: sensitivity up 14% and specificity up 37%
- Decreased interpretation time by 24%
- Reduced reader variability by 41%

Koios DS FDA 510(k) Clearance: K212616, available at: https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm?ID=K212616



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### An Al Thumb on the Scale

Koios DS Thyroid assesses the risk of nodule malignancy and then suggests the Koios Al Adapter — an adjustment of the descriptor-based score between –2 and +2 points. This may result in a different TI-RADS or ATA classification.









KOIOS DS Breast KOIOS DS Thyroid