Qure AIR_EC_Capabilities

2022/09/08

System Name: NA_DEV_Qure.ai_Qure.ai

AI Algorithm Description: Lung Nodule Detection

qCT-Lung reports pulmonary nodules by finding all slices in which nodules are present and Measures each of the nodules' diameter and volume.

DICOM IODs

- Comprehensive 3D SR IOD
- Secondary Capture IOD

Result Primitives encoded

- TID 1500 Measurement Report

Measurements

Volume measurement:

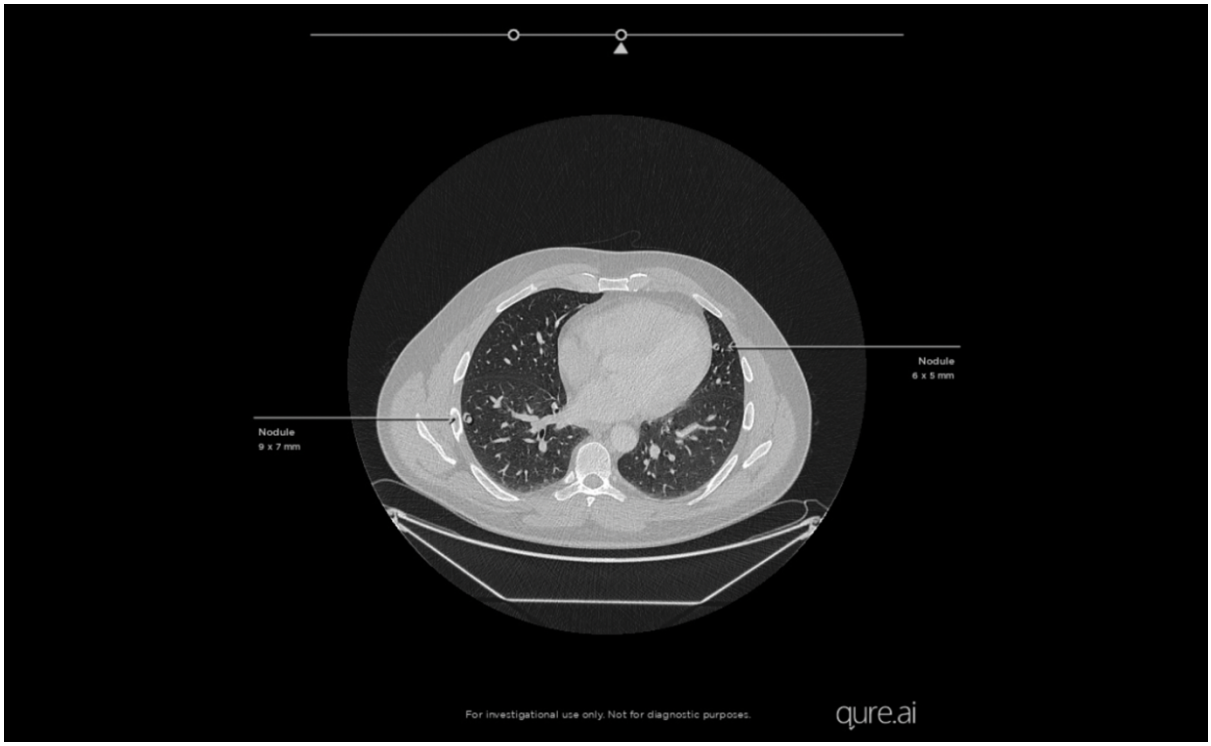
Voxel-volume is measured by (unit-voxel volume * Num of voxels inside a detected nodule). Unit-voxel volume is defined as (Spacing.x * Spacing.y * Spacing *z). This is reported in mm3

Diameter measurement:

Following Flischner-guidelines, maximal long-axis, and perpendicular maximal short-axis in the same plane is measured, along with the above average of these two axis is reported in mm.

Nodule, Slice 161 Axial view image

Nodule, Slice 247 Axial view image



AI Algorithm Description: Nodule Characteristics

qCT-Lung uses detected nodules location along with neighboring voxels to classify characteristics.

The following characteristics are classified.

- Texture - (Solid, Part-Solid, GGO)
- Calcification - (Absent, Present)
- Spiculation - (Spiculation-present, No-Spiculation)
- Margin - (Poorly-Defined, Sharp/Medium-Margin)

DICOM IODs

- Secondary Capture IOD

qCT Analysis Report