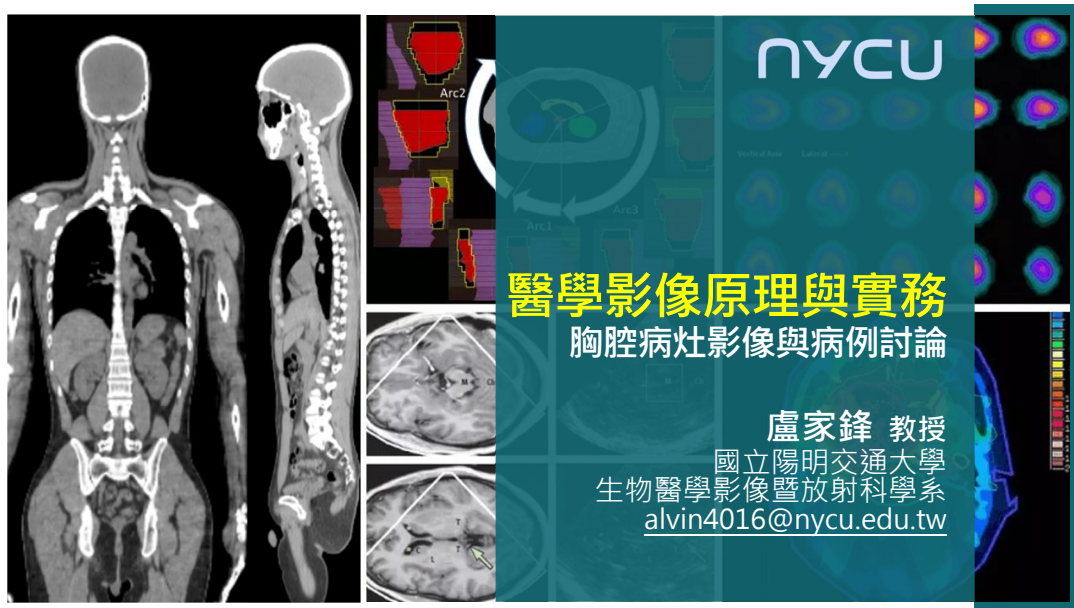




NYCU

醫學影像原理與實務
胸腔病灶影像與病例討論

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生物醫學影像暨放射科學系
alvin4016@nycu.edu.tw

本週學習目標

1. 認識不同胸腔疾病之影像表現
找出異常處、描述影像特徵、位置
2. 計算冠狀動脈鈣化分數
找出鈣化血管區域並計算Agatston score

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Case Discussion

- Describe what you observe on the provided images.
- Post your findings on the Padlet board.
 - Identify the image/series you are observing.
 - Describe the lesion image traits (intensity, shape, size, etc.).
 - Recognize the lesion location.

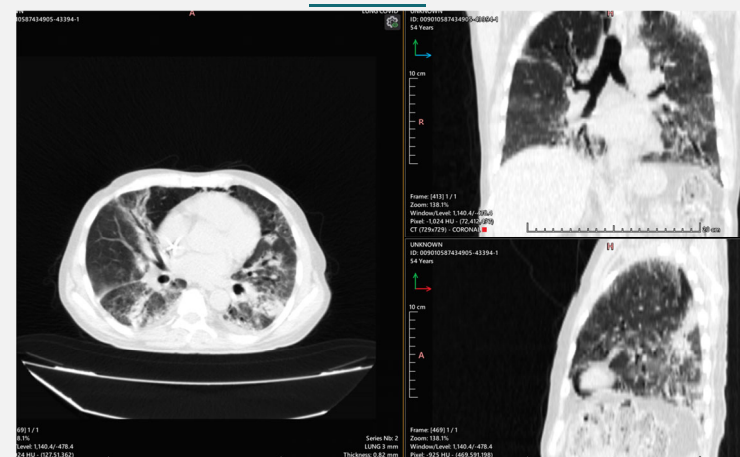


<https://padlet.com/nycu2/chest-image-case-discussion-kopotv2aqics3mop>

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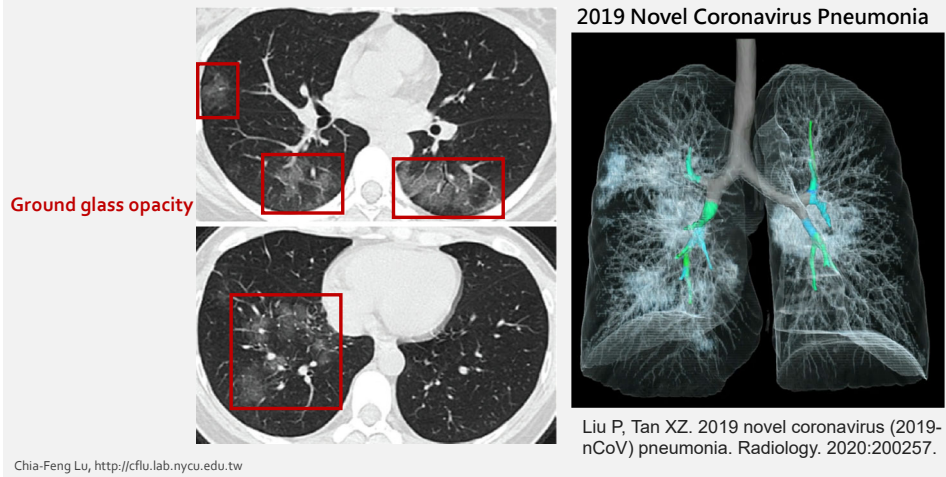
Case 1



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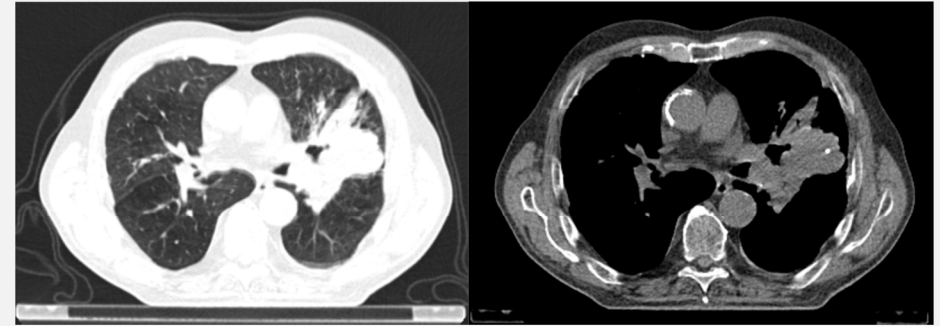
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COVID-19 - Computed Tomography



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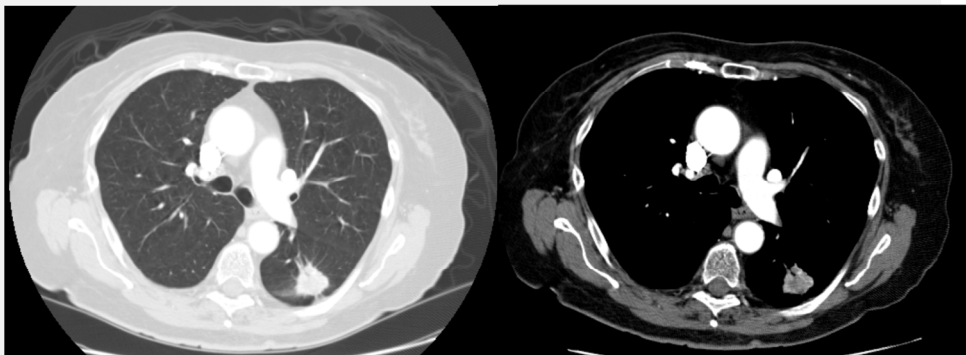
Case 2



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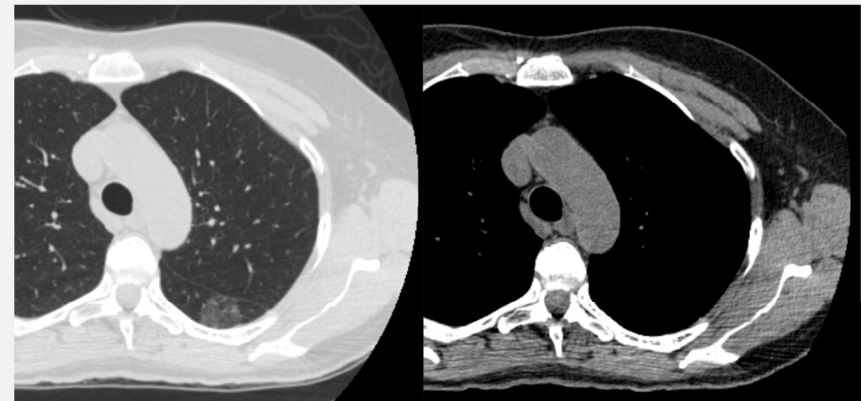
Case 3



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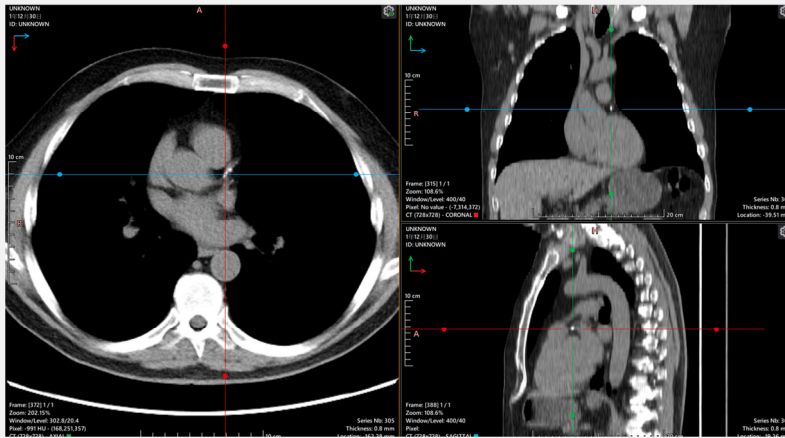
Case 4



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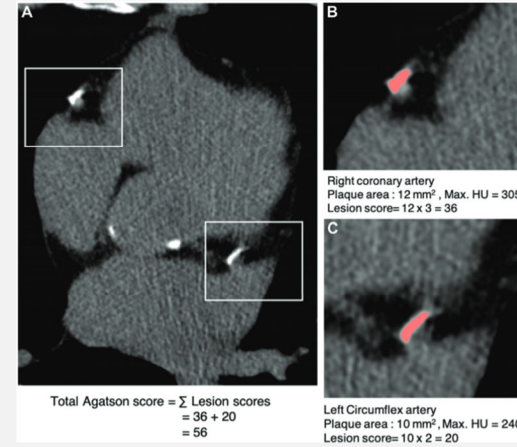
Case 5



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CT for Coronary Artery Calcium Scoring



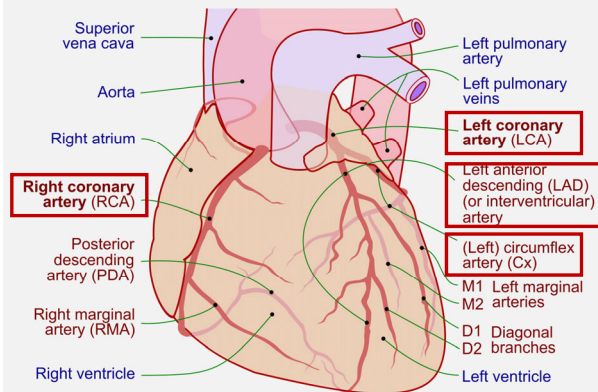
- **Agatston score**
= plaque area × attenuation-weighting factor
- The CAC Consortium suggests that the CAC score is useful in predicting the risk of cardiovascular events and disease-specific mortality.

RadioGraphics, 42:947–967, 2022.

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Coronary Artery Calcium Scoring



- Calculate Agatston score for LCA, LAD, LCX, and RAD separately

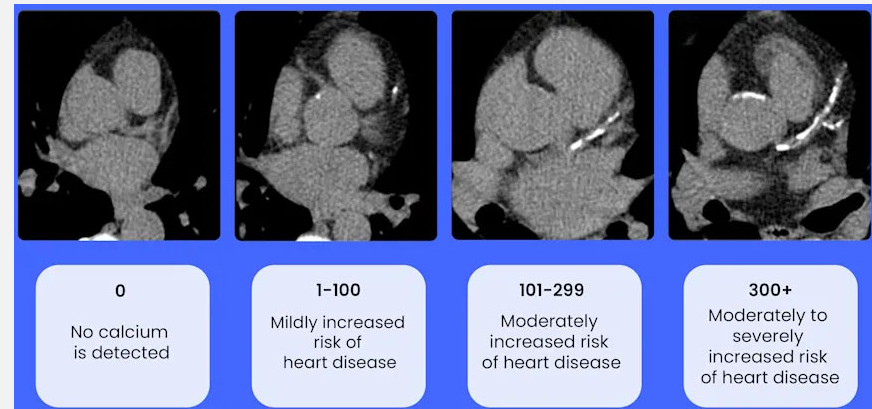
- **Agatston score**
= plaque area × attenuation-weighting factor

https://en.wikipedia.org/wiki/Coronary_arteries#/media/File:Coronary_arteries.svg

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CT for Coronary Artery Calcium Scoring



<https://www.healthcentral.com/condition/high-cholesterol/coronary-calcium-test>

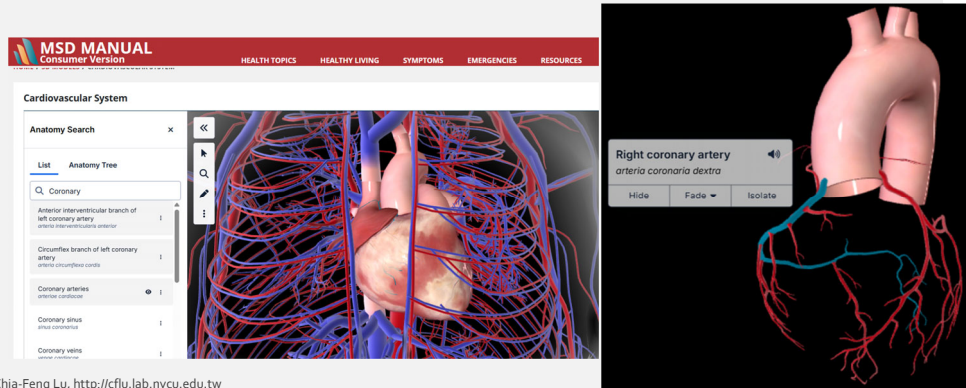
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Interactive Cardiovascular Atlas

- MSD MANUAL Cardiovascular System

<https://www.msmanual.com/home/multimedia/3dmodel/cardiovascular-system>



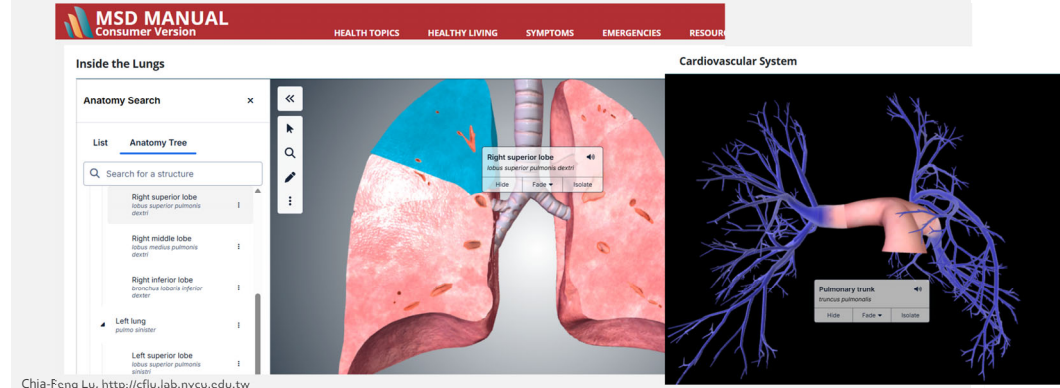
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Interactive Lung Atlas

- MSD MANUAL Inside the Lungs

<https://www.msmanual.com/home/multimedia/3dmodel/inside-the-lungs>



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