

# Lung Screening Artificial Intelligence: Issues With The Published Literature

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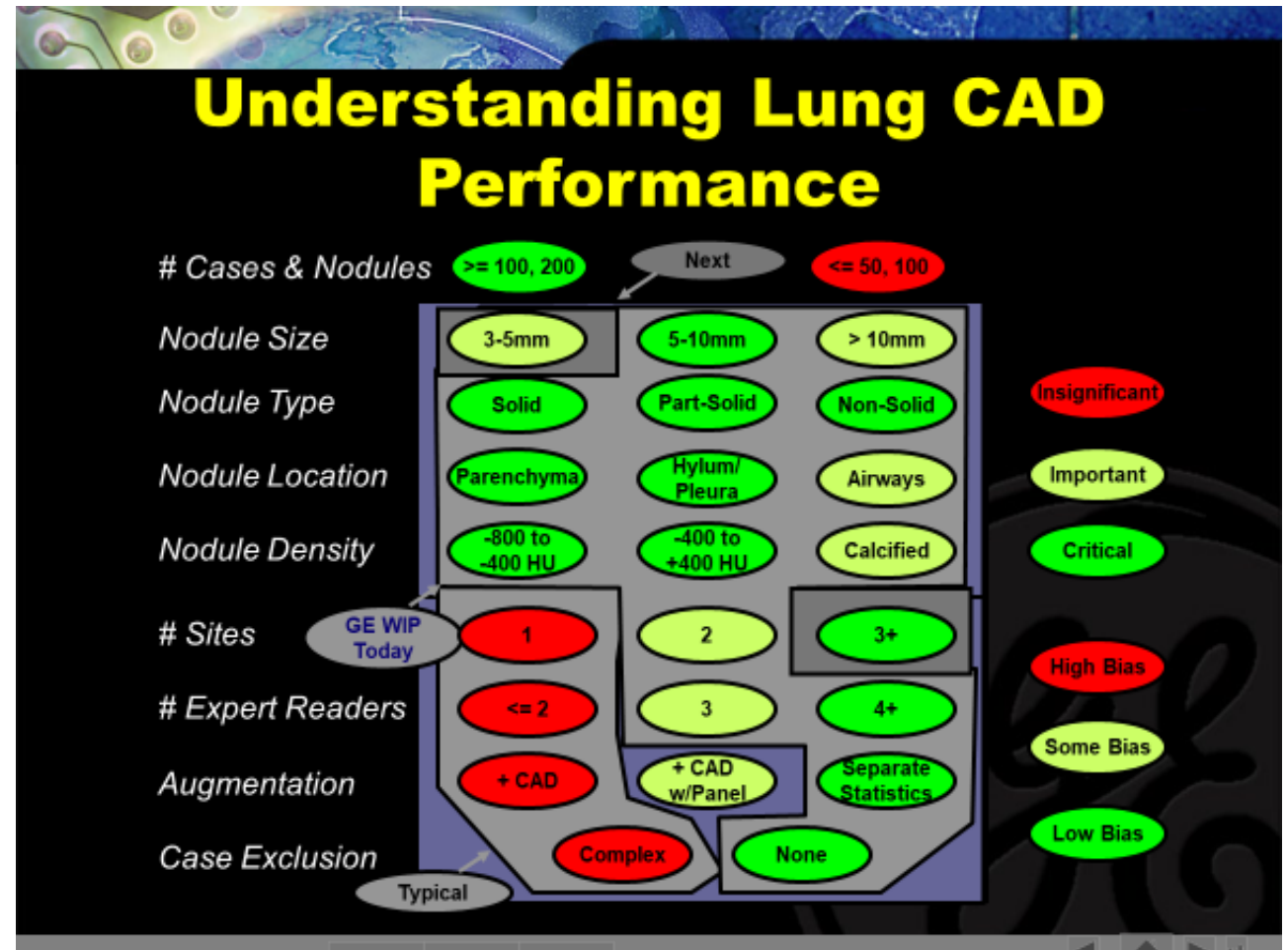
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# Lung Nodule Automated Detection : Are We Improving?

- **We Still Can't Tell (Ughh!)**
  - A Group Can Publish Any Sens./Spec.
  - Reporting Standards Are Needed
- 20 Year Old Issues
  - Over-Fitting
  - Small Datasets
  - Lack of Diversity (Scanner/Patient/Diseases)
  - Old Data (NLST, LIDC/IDRI)
  - Rapidly Changing Imaging Technology
  - Different Performance Measures
  - Miss One Obvious Nodule And Credibility Is Lost
  - Accounting For CT Image Quality (QIBA)
- **We Are Stuck With Insufficient Data Until We Create A Continuous, Automated, Quality Controlled, and Global Data Collection/Curation System**
  - Auto Collect From Major EHR/PACS Systems
  - Modify DICOM To Better Support Deidentification
  - QIW XVI Recommendation: Global Patient Opt-In

2003 GE Slide



# Confocal Microscopy Example



**Nothing Can Restore A Major Loss of Imaging Resolution**

**Thank You**