# Can Clinic-Level Differences in Nodule Evaluation Be Incorporated to Improve Lung Cancer Prediction Accuracy?

STUDY DESIGN

Retrospective study of indeterminate pulmonary nodules using data from six sites of various clinical settings

Setting	N=	Cancer prevalence (%)
Pulmonary Nodule Clinic	374	42
Outpatient Thoracic Surgery Clinic	553	73
Inpatient Surgical Resection	474	90

RESULTS

Graph comparing internally validated model discriminative ability.
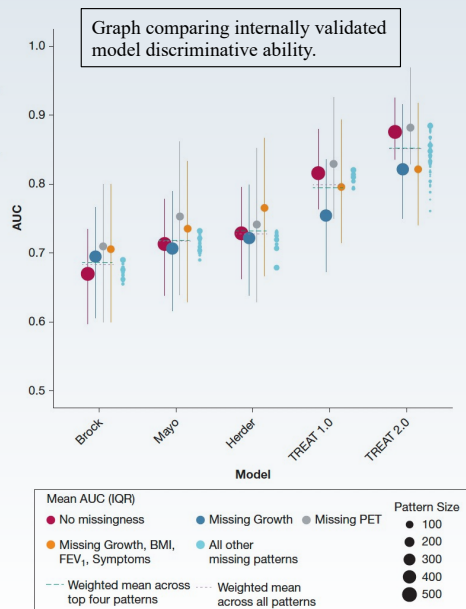
- The Thoracic Research Evaluation and Treatment (TREAT) 2.0 model was better able to distinguish between cancerous and benign nodules than the:
  - TREAT 1.0 model (AUC 0.80)
  - Mayo Clinic model (AUC 0.72)
  - Herder model (AUC 0.73)
  - Brock model (AUC 0.69)

The TREAT 2.0 model predicted the probability of lung cancer in a high cancer prevalence clinical setting with high accuracy and good calibration better than currently existing models, and it may improve time to diagnosis for lung cancer if implemented in pulmonology and thoracic surgery clinics.