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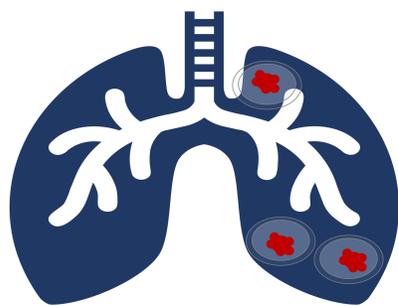
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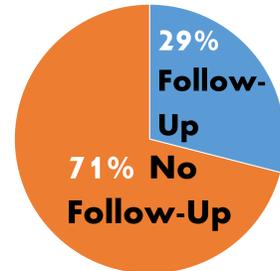
INTRODUCTION

Lung cancer is the leading cause of cancer-related mortality in the United States [1]. It is estimated that each year, 1.5 million adults in the United States will have pulmonary nodules identified. Although a majority of pulmonary nodules are benign, only 29% of patients were appropriately followed up [2]. In addition, with many patients diagnosed at the later stages of lung cancer (Stage III/IV), where the likelihood of survival is low, it is crucial to identify inconsistencies in diagnostic timelines and treatment. This study aimed to analyze the treatment timelines for patients with growing or suspicious nodules ($\geq 6\text{mm}$ in diameter) and/or diagnosed with lung cancer.

#1 LUNG CANCER IS THE LEADING CAUSE OF CANCER-RELATED DEATHS IN UNITED STATES



PULMONARY NODULE FOLLOW-UP

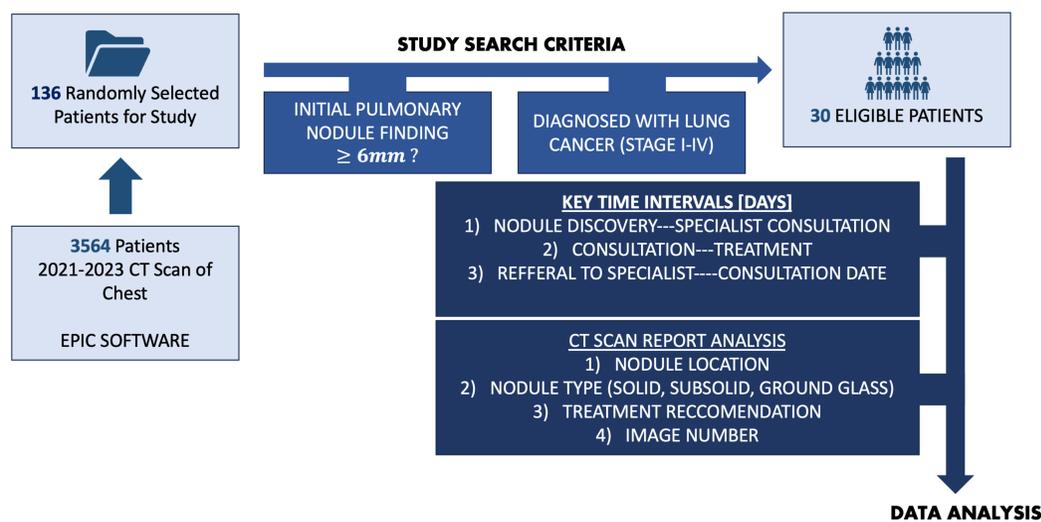


Estimated as many as 1.5 million adults will have pulmonary nodules identified each year

OBJECTIVE

Early Diagnosis of Lung Cancer → Better Health Outcomes

METHODS



RESULTS

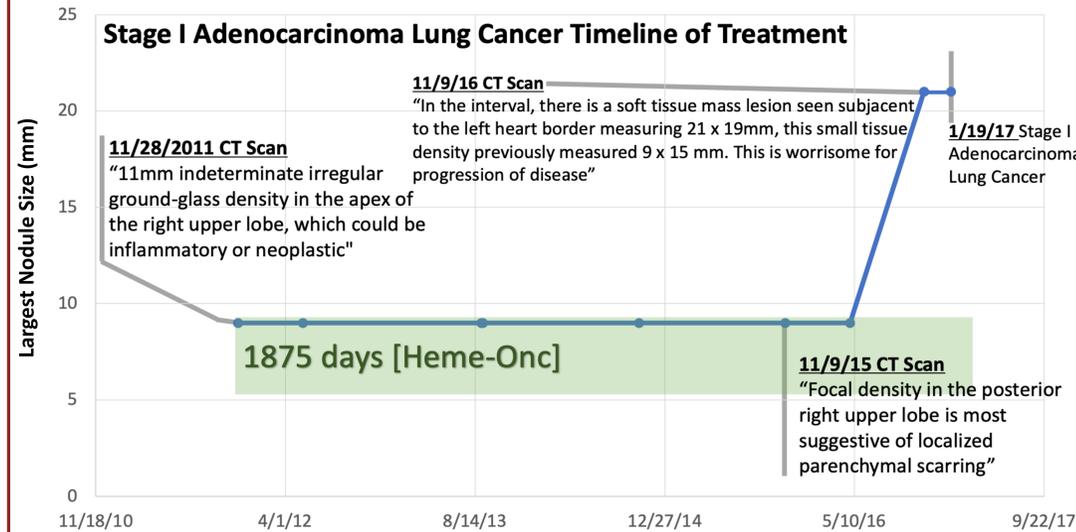


Figure 1: Example of Stage I Adenocarcinoma Lung Cancer Timeline of Treatment. Y-axis measures the largest lung nodule size (mm) for each indicated date (X-axis). Patient was already being followed-up by Hematology/Oncology for colon cancer. Patient had 1875 days of observation with Hematology/Oncology (Heme-Onc) before being diagnosed with Stage I Adenocarcinoma Lung Cancer. Pt received CT Chest w/o IV Contrast.

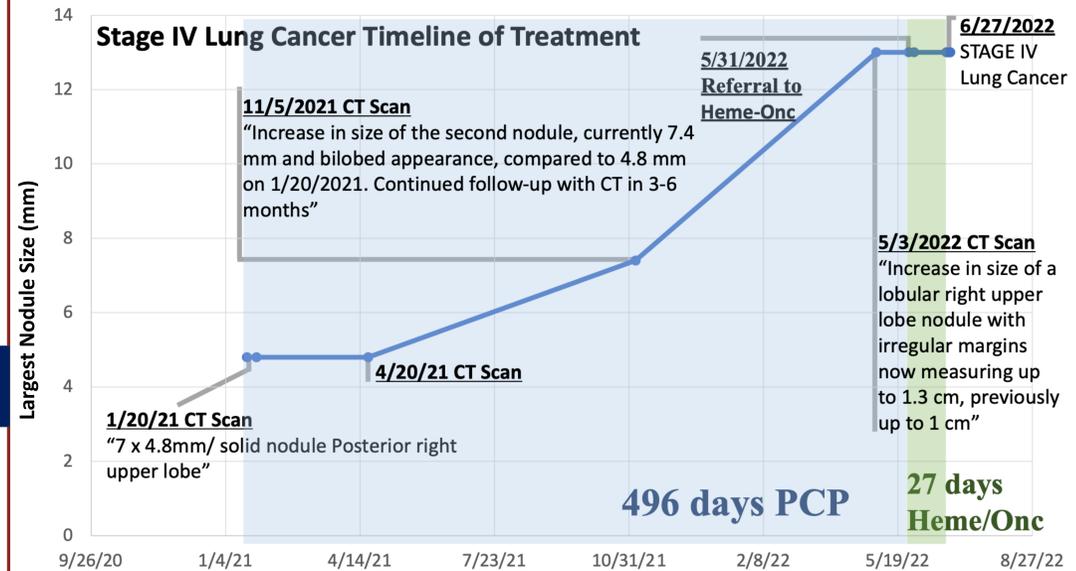


Figure 2: Example of Stage IV Lung Cancer Diagnosis Timeline of Treatment. Y-axis measures the largest lung nodule size (mm) for each indicated date (X-axis). Patient received a CT Chest w/o IV Contrast, which revealed 7x4.8mm solid nodule at the posterior right upper lobe. Patient received a total of 496 days of observation with primary care (PCP) before being referred to Hematology/Oncology. (Heme-Onc) Patient received 27 days of observation between the date of referral to initial consult date with Hematology/Onc.

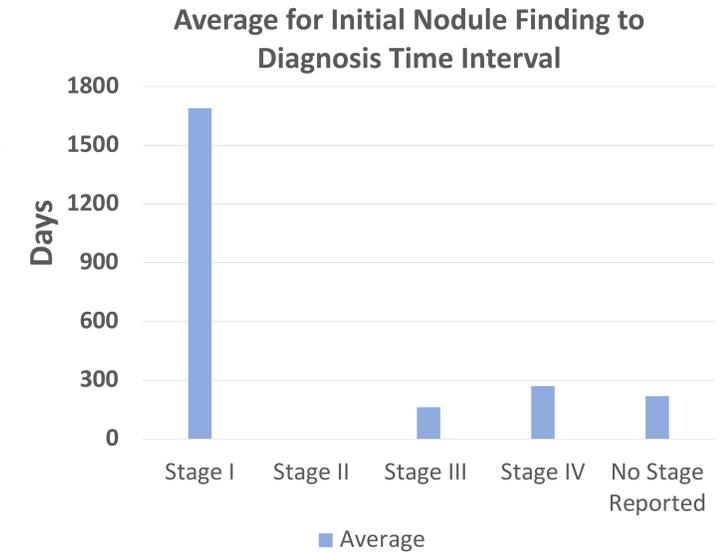


Figure 3: Comparative Analysis of Average Values Between Date of Nodule Finding to Date of Diagnosis by Lung Cancer Diagnosis (Stage I [N=3], Stage II [N=0], Stage III [N=1], Stage IV [N=6]) and No Stage Reported (N=6). Note: For No-Stage Reported, all patients received a lung cancer diagnosis, but no stage was indicated in their report.

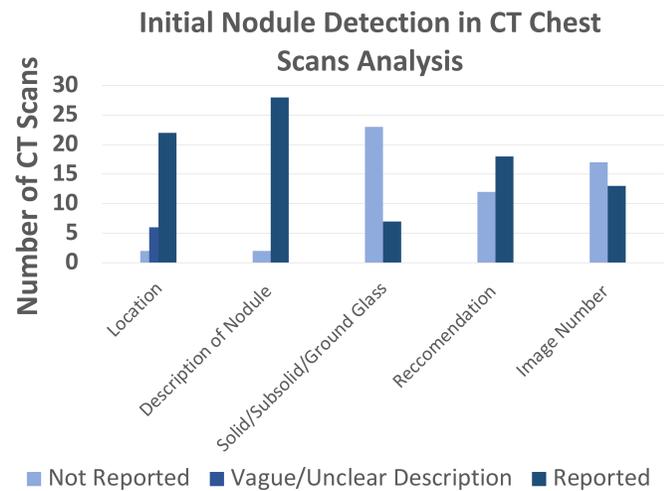


Figure 4: Initial Nodule Detection in CT chest scans: Analysis by Location, Nodule Type, Recommendation, and Image Number. [N=28]

CONCLUSIONS

- 1) Patients diagnosed with Stage I Lung Cancer received a longer average timeline of treatment, compared to Stage IV Lung Cancer Patients.
- 2) Majority of CT Chest Scans did not indicate Image Number and Type of Nodule (Solid/Subsolid/Ground Glass)

REFERENCES

- 1) An Update on Cancer Deaths in the United States | CDC. <https://www.cdc.gov/cancer/dpcp/research/update-on-cancer-deaths/index.htm>.
- 2) Blagev DP, Lloyd JF, Conner K, et al. Follow-up of incidental pulmonary nodules and the radiology report. *J Am Coll Radiol.* 2014;11(4):378-383. doi:10.1016/J.JACR.2013.08.003 .