

The Galaxy Experience: **First 75 Cases**

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Dr. Mahajan is one of the earliest Galaxy System™ users in the United States. He oversees Inova's incidental lung nodule program and lung cancer screening program. As a leader in interventional pulmonology, he is critical of data when considering robotics, and whether they can increase his technique and diagnostic yield. He has been involved in numerous studies, including BENEFIT, NAVIGATE and MATCH.



My ultimate goal is to be able to perform bronchoscopic biopsies of lung nodules in the periphery with laser accuracy. The challenges created by CT-to-body divergence have plagued interventional pulmonology for decades. The ability to see lesions clearly with advanced imaging is important not just to obtain diagnoses, but also to confirm true negatives.

Over 300 Lung Biopsies Annually

Prior to the Galaxy System™, I've used the ILLUMISITE™ Fluoroscopic Navigation Platform and Olympus bronchoscopes. Some of the challenges I've encountered with these technologies include:

- Poor image quality
- Lack of bronchoscope stability
- CT-to-body divergence

I've started using the Galaxy System as I believe its integrated imaging capability could help correct for CT-to-body divergence, while its robotic arm can provide stability with access to peripherally located lesions, thus helping improve diagnostic yields.



Insights from **the First 75** **Galaxy System™** Procedures

LESION CHARACTERISTICS

14mm average size

88% were less than/equal to 20mm

37% were less than/equal to 10mm

9% were GGOs

89% had no bronchus sign

PROCEDURE RESULTS

44 mins Average procedure time
(Scope in – Scope out)

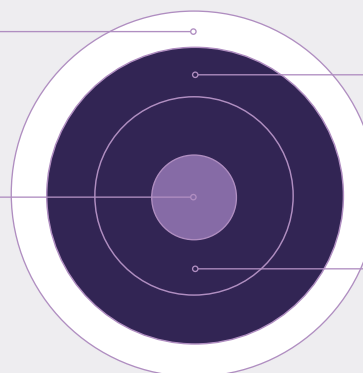
100%* CT-to-body divergence
observed

92%* Tool-in-Lesion Confirmed

LESION LOCATION	Right	Left
Upper	38%	25%
Middle	4%	—
Lower	16%	17%

29%
Pleural

3%
Inner 1/3



46%
Outer 1/3

22%
Middle 1/3

Challenging lesions in challenging locations
Most lesions were in upper lobes, and outer 1/3

96%

Diagnostic Yield

* Results assessed from observations recorded in 62 procedures; Observations for 13 procedures were not recorded

Disclaimer: This data has been adjudicated by the physician to be accurate. This data is not meant to be misconstrued as peer-reviewed

Case Example

Presentation:

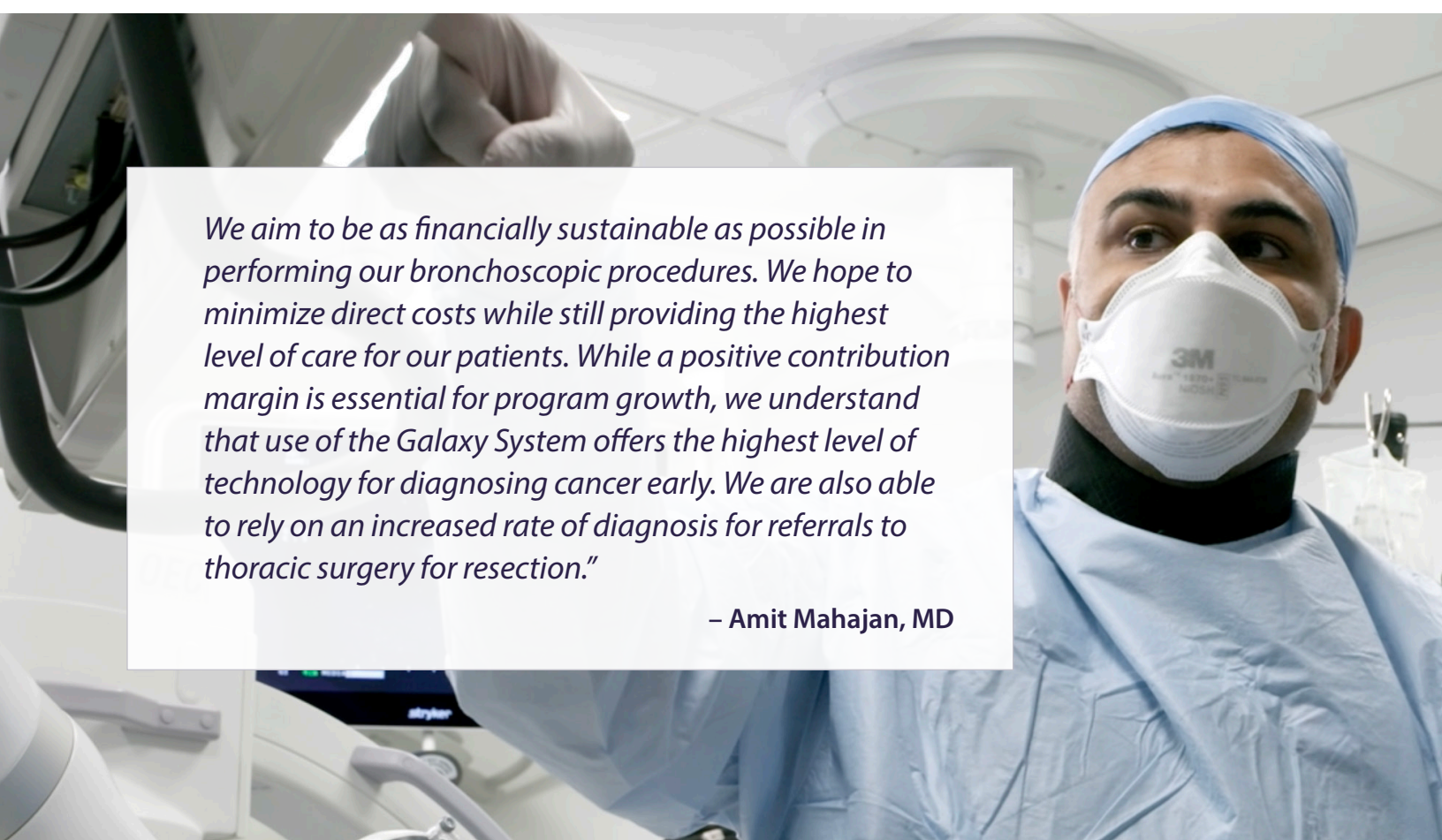
- Female patient with 8mm nodule in the left upper lobe, located peripherally close to the pleura, came in for a second opinion. Her initial consult informed her that the only way to biopsy the peripherally located small nodule would be through surgery.
- Patient was reluctant to undergo surgery without knowing that the lesion was malignant.

Approach:

- Reviewed the CT scan and discussed biopsy procedure via telemedicine visit.
Used the Galaxy system to perform the biopsy procedure – an excellent tomosynthesis image was obtained and biopsy was performed without any difficulty.

Outcome:

- Patient was diagnosed with adenocarcinoma in the left upper lobe. No procedure complications. A fiducial was placed as the patient was a candidate for SBRT of this early-stage cancer.



We aim to be as financially sustainable as possible in performing our bronchoscopic procedures. We hope to minimize direct costs while still providing the highest level of care for our patients. While a positive contribution margin is essential for program growth, we understand that use of the Galaxy System offers the highest level of technology for diagnosing cancer early. We are also able to rely on an increased rate of diagnosis for referrals to thoracic surgery for resection."

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