中國醫藥大學附設醫院
China Medical University Hospital

Management of Lung Nodules

中國醫藥大學附設醫院
胸腔外科 林昱森

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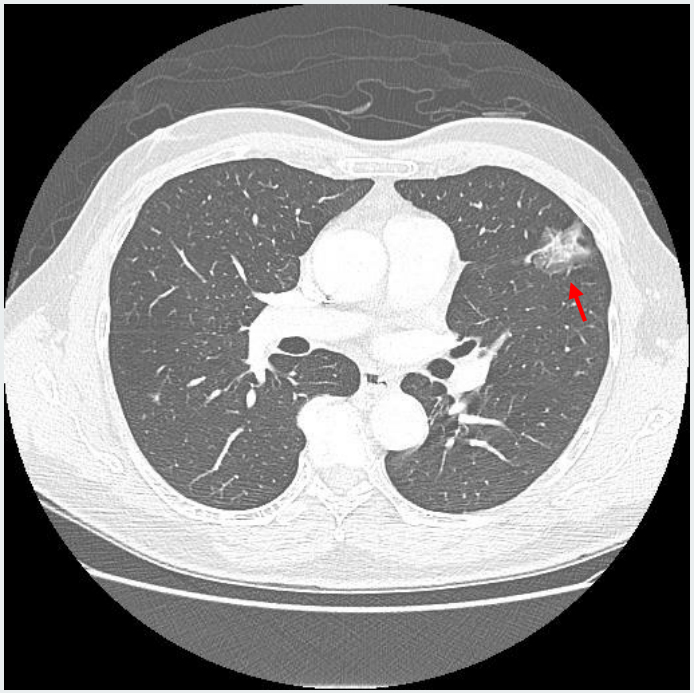
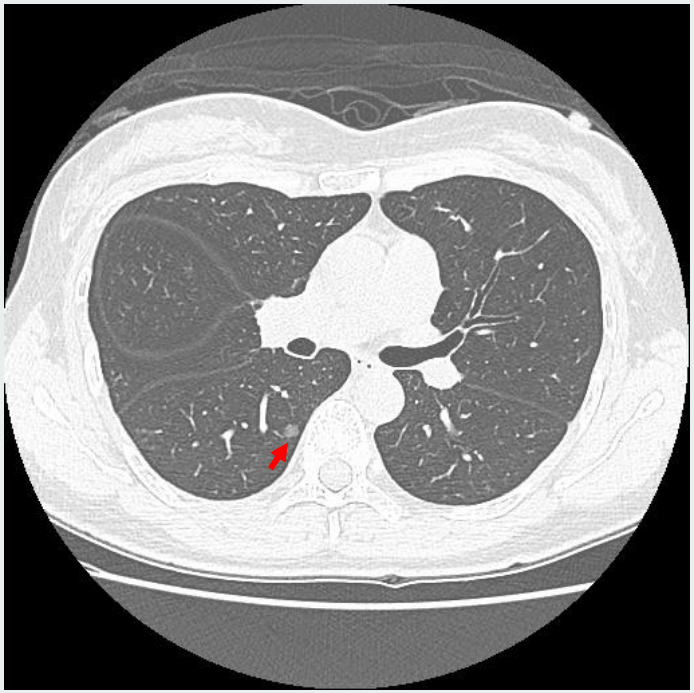
Reduced Lung-Cancer Mortality with Low-Dose Computed Tomographic Screening

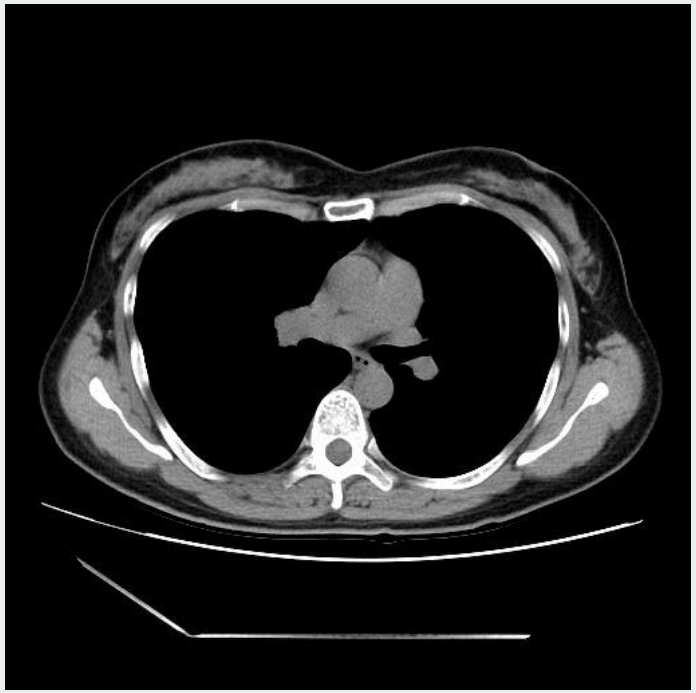
The National Lung Screening Trial Research Team*

Observation ???



Operation ???





Management of ground-glass opacities: should all pulmonary lesions with ground-glass opacity be surgically resected?

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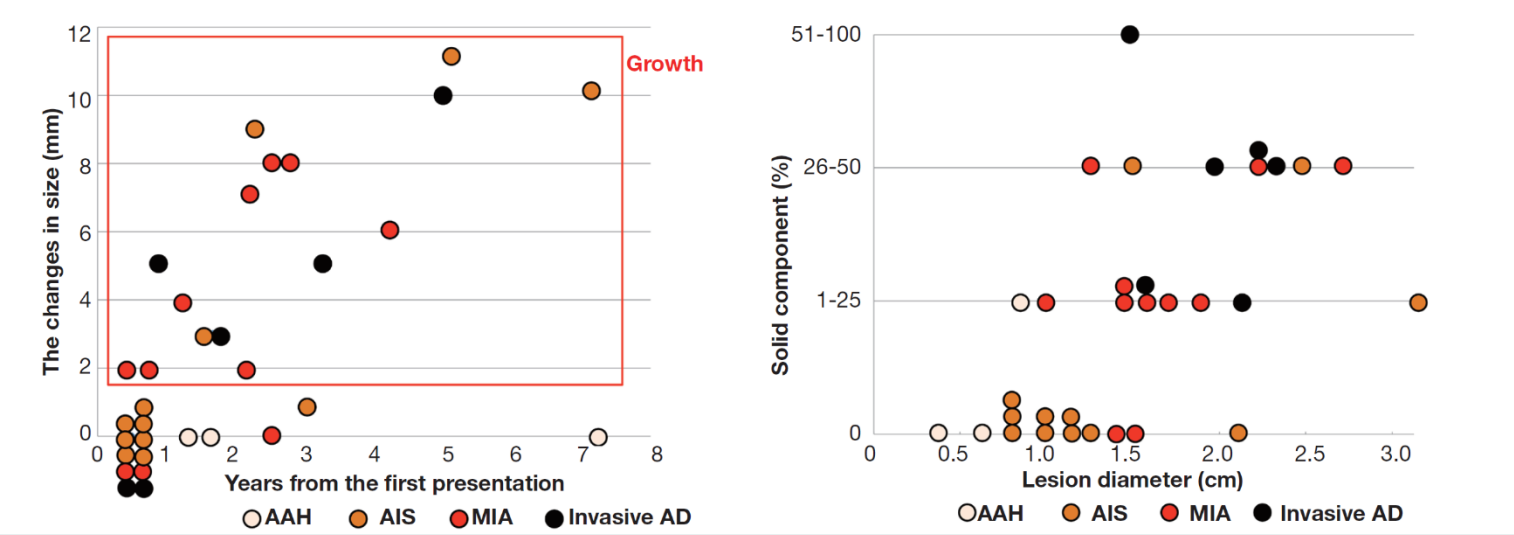
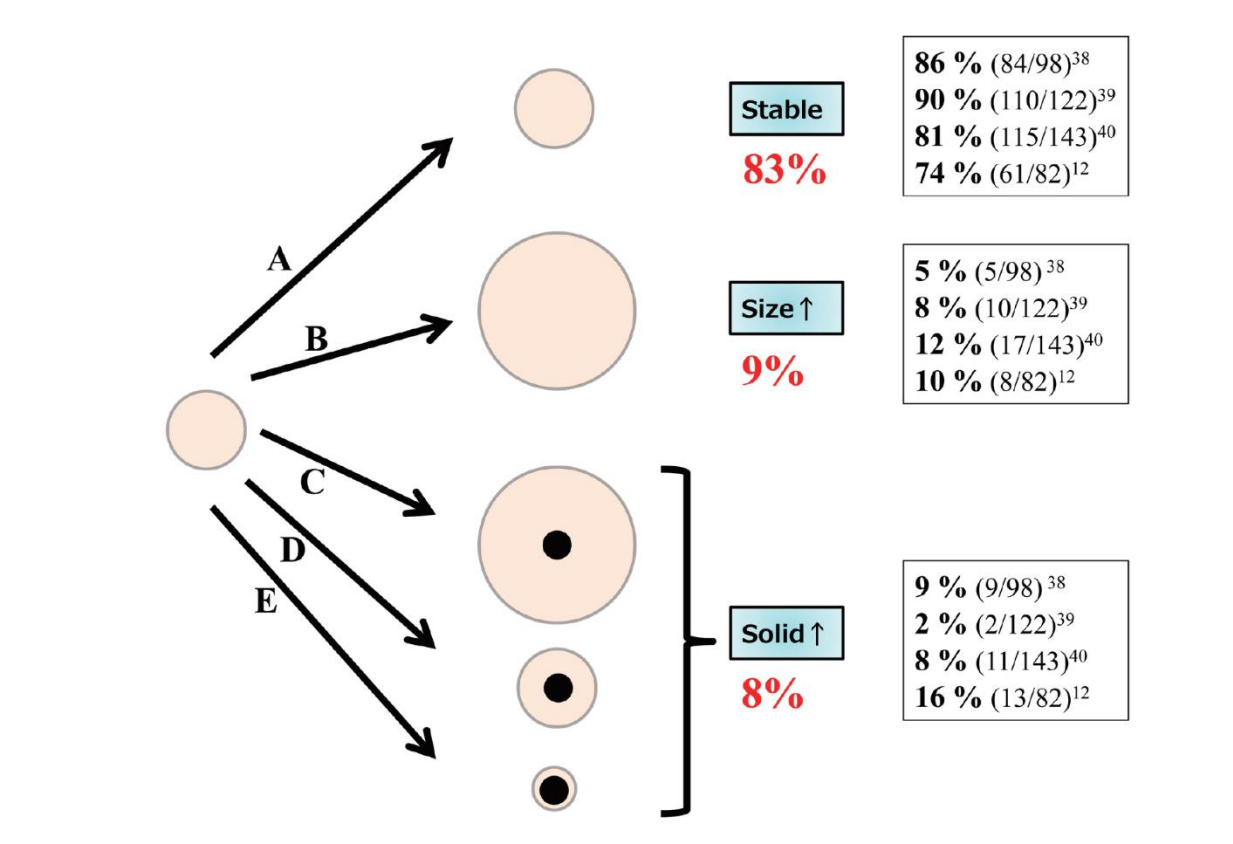


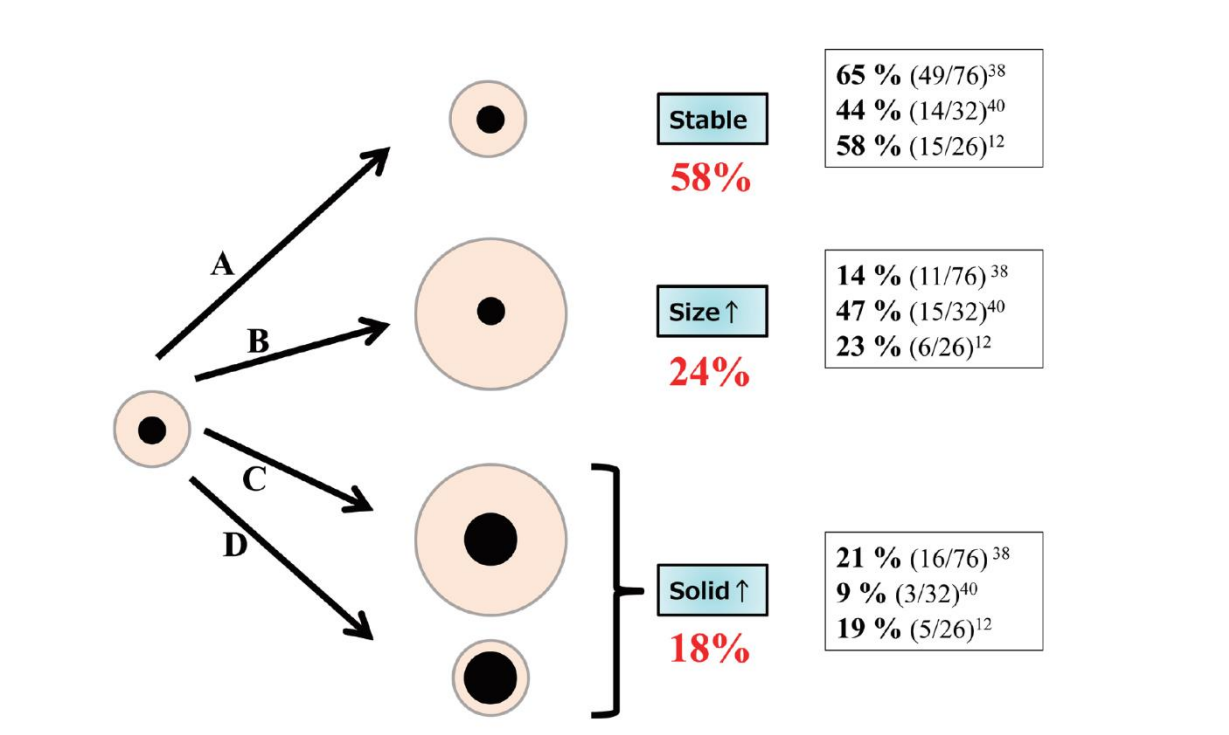
Trans Lung Cancer Res 2013; 2:354–363.

Nature History of Pure GGOs



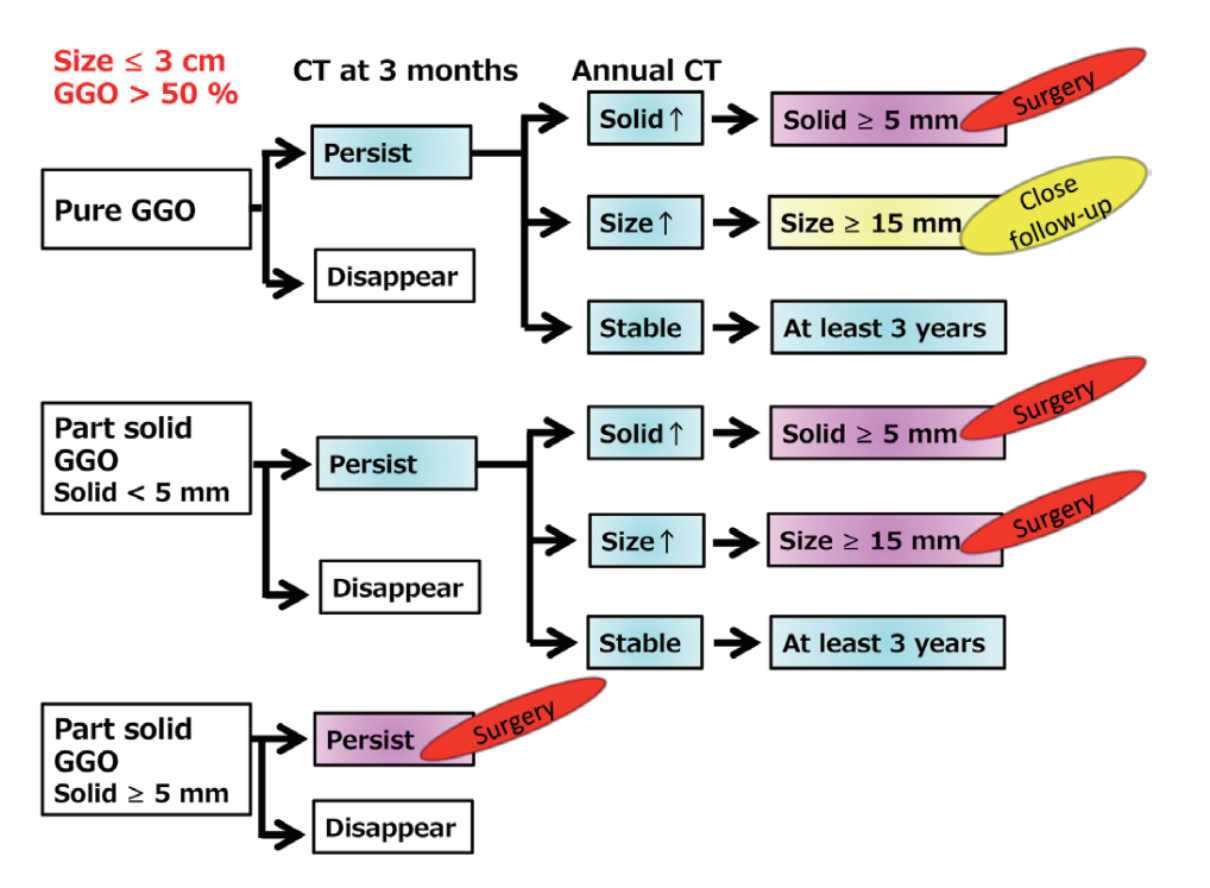
Trans Lung Cancer Res 2013; 2:354–363.

Nature History of Part-solid GGOs



Trans Lung Cancer Res 2013; 2:354–363.

Follow-up Algorithm



Trans Lung Cancer Res 2013; 2:354–363.

ORIGINAL ARTICLE

Natural History of Pulmonary Subsolid Nodules: A Prospective Multicenter Study

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Tetsuro Kondo, MD, PhD,[i] Haruhisa Matsuguma, MD, PhD,[j] Norihisa Nitta, MD, PhD,[k]
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Taiki Yamaji, MD, PhD,[p,q] Ken Kodama, MD, PhD,[m,r] Kiyoshi Mori, MD, PhD,[s,t]
Kouzo Yamada, MD, PhD,[i] Yoshihiro Matsuno, MD, PhD,[u]
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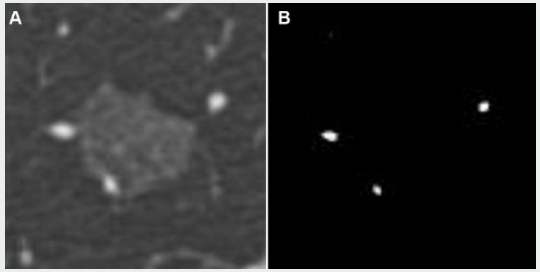
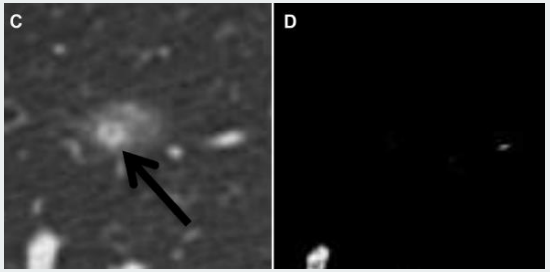
J Thorac Oncol 2016;11:1012–1028.

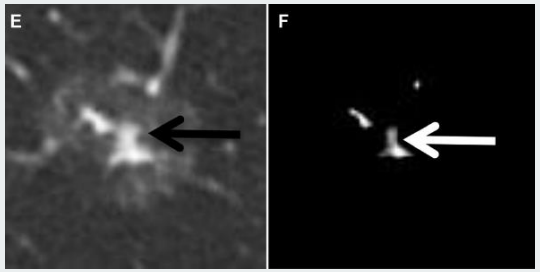
Classification of Subsolid Nodules



Pure GGNs

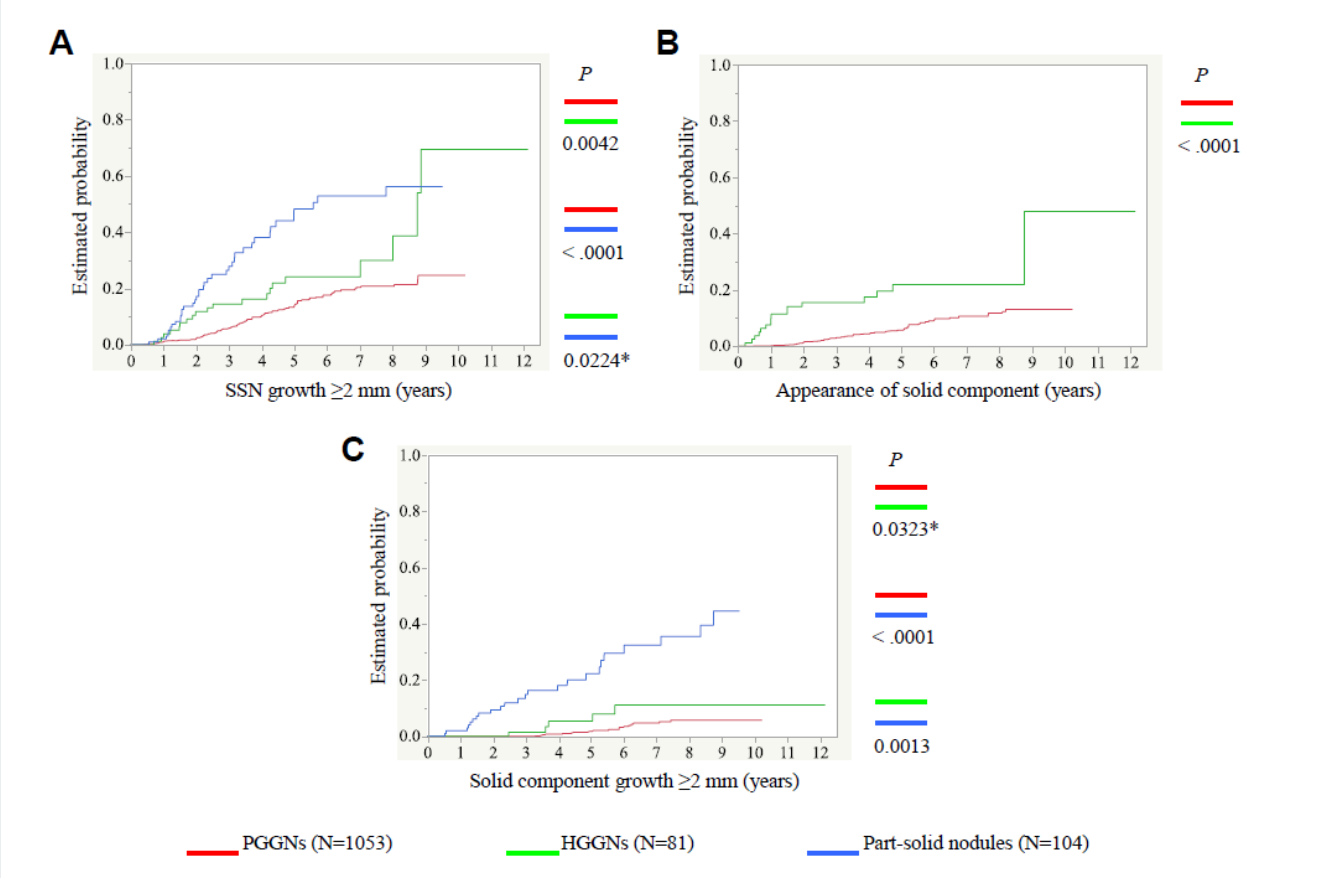


Heterogenous GGNs



Part-solid nodules

Growth Curves of Subsolid Nodules



PGGNs : 1053
HGGNs : 81
Part-solid : 104

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Conclusion

- PGGNs (5.4%) → part-solid : 3.8 ± 2.0 years
- HGGNs (19.8%)→part-solid : 2.1 ± 2.3 years
- 1% invasive adenocarcinoma (12/1229) : only part-solid

ORIGINAL ARTICLE

Long-Term Follow-up of Small Pulmonary Ground-Glass Nodules Stable for 3 Years: Implications of the Proper Follow-up Period and Risk Factors for Subsequent Growth

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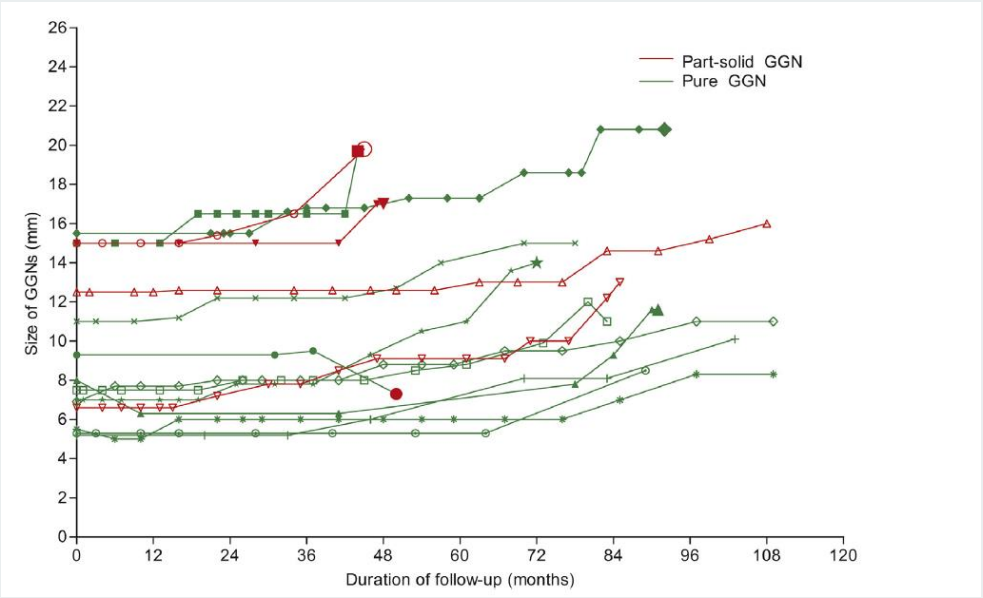
Yeon Joo Lee, MD,[a,b] Jong Sun Park, MD, PhD,[a,b] Young-Jae Cho, MD,[a,b]
Ho Il Yoon, MD, PhD,[a,b] Jae Ho Lee, MD, PhD,[a,b] Choon-Taek Lee, MD, PhD[a,b,*]

J Thorac Oncol 2016; 11:1453–1459.

Growth Patterns of GGNs

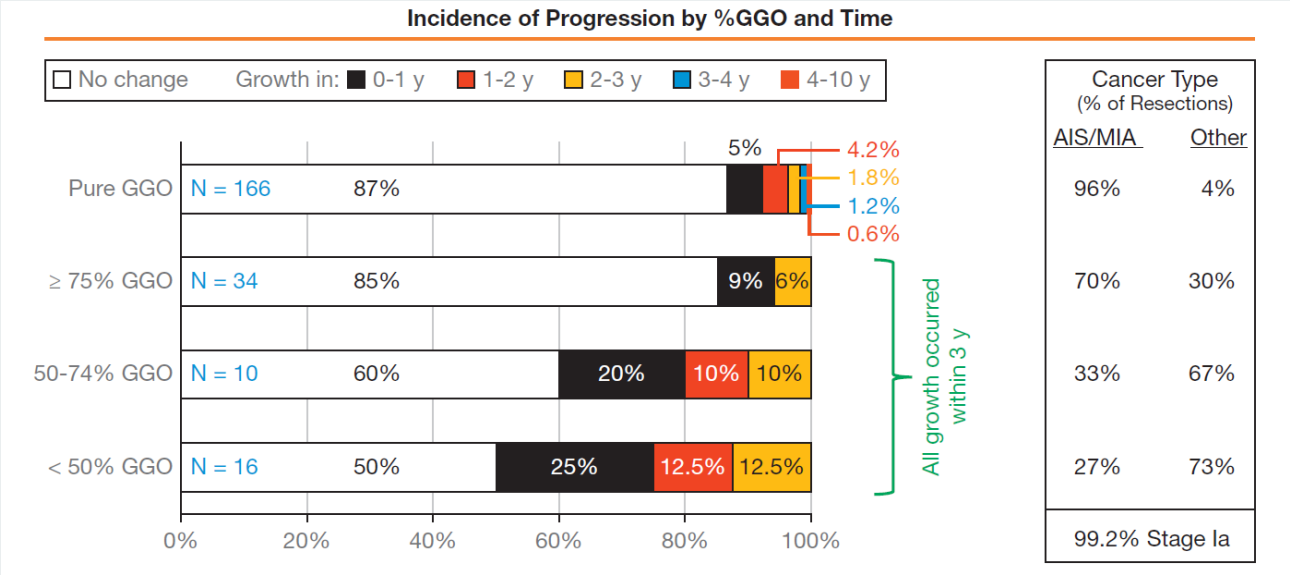


- 3.3 % (15/453) ↑
- 7 resected
  - MIA : 2
  - Adeno : 5
- All stage IA
- Longer follow up is required

J Thorac Oncol 2016; 11:1453–1459.

Long-term Outcomes of Patients With Ground-Glass Opacities Detected Using CT Scanning

Shigeki Sawada, MD, PhD; Natsumi Yamashita, MD, PhD; Ryujiro Sugimoto, MD, PhD; Tsuyoshi Ueno, MD, PhD; and Motohiro Yamashita, MD, PhD



226 pts, 124 op
Follow up 10-15 years

Chest 2017;151:308–315.

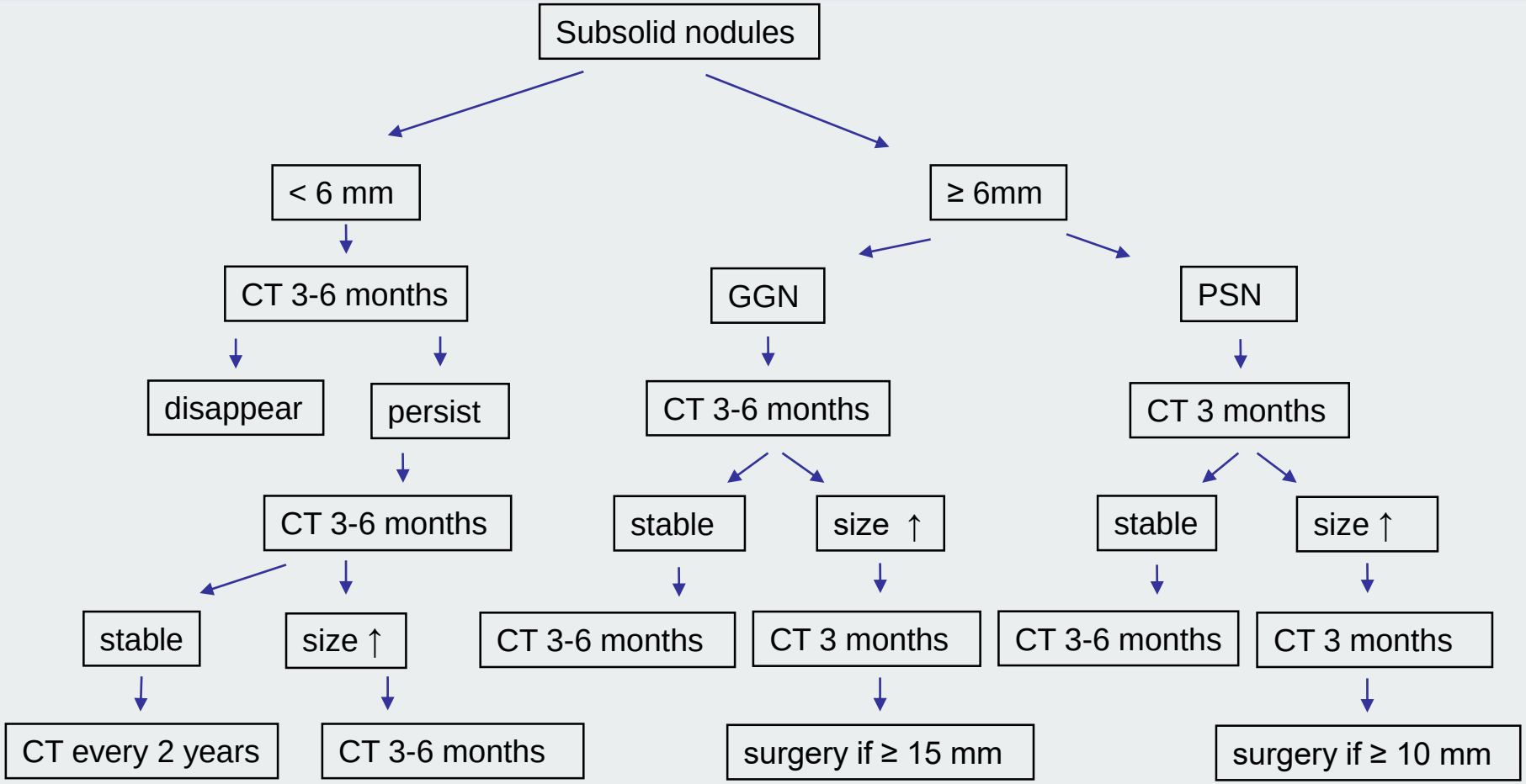
Management Subsolid Solitary Pulmonary Nodule in CMUH

Characteristic	n	%
Sex	149	
Male	71	48
Female	78	52
Median age (range), y	56.2 (24-81)	
Median tumor size (range), mm	7.2 (3-10)	
Extent of resection		
Wedge resection	109	73
Segmentectomy	30	20
Lobectomy	10	7

Management Subsolid Solitary Pulmonary Nodule in CMUH

Characteristic	n	%
Histologic subtype		
Benign	93	62
Malignant	56	**38**
AAH	**3**	**2**
AIS	**11**	**7**
MIA	**4**	**3**
Adenocarcinoma	**34**	**23**
Others	**4**	**3**
LN status	17	11
metastatic LNs	0/83	0
Current status		
Alive	149	100

Management Subsolid Solitary Pulmonary Nodule in CMUH



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Management Subsolid Solitary Pulmonary Nodule in CMUH

- At least follow up one time
- Surgery until change
- Routine lymph node dissection may not be necessary
- Limited resection may be indicated
- Not base on frozen pathology

Thanks For Your Attention