## Supplementary

Table S1 Scoring table of thoracic surgeon

	Image identification scoring table of thoracic surgeon							
Patient number	E	By original CT images	S	By fused images				
	Coronal plane	Sagittal plane	Axial plane	Coronal plane	Sagittal plane	Axial plane		
1				•	•	•		
2				•	•	•		
3				•	•			
4				•	•	•		
5				•	•	•		
6				•	•	•		
7				•	•	•		
8			•	•	•	•		
9				•		•		
10				•	•	•		
11					•	•		
12			•	•	•	•		
13				•		•		
14				•	•	•		
15	•		•	•	•	•		
16			•	•	•	•		
17				•		•		
18						•		
19			•	•		•		
20				•	•	•		
21				•	•	•		
22				•	•	•		
23				•	•	•		
24				•		•		
25				•	•	•		
26			•		•	•		
27				•	•	•		
28				•	•	•		
29				•	•	•		
30				•	•	•		
31				•	•	•		

CT, computed tomography.

Table S2 Scoring table of radiologist

	Image identification scoring table of radiologist							
Patient number	В	y Original CT Image	es	By Fused Images				
	Coronal plane	Sagittal plane	Axial plane	Coronal plane	Sagittal plane	Axial plane		
1				•	•	•		
2				•	•	•		
3		•		•	•	•		
4				•	•	•		
5		•		•	•	•		
6		•	•	•	•	•		
7			•			•		
8			•	•	•	•		
9				•		•		
10			•	•	•	•		
11				•		•		
12				•	•	•		
13				•		•		
14			•	•	•	•		
15			•	•	•	•		
16			•	•	•	•		
17				•		•		
18				•		•		
19				•		•		
20				•	•	•		
21				•	•	•		
22				•	•	•		
23				•	•	•		
24	•			•	•	•		
25				•		•		
26					•	•		
27				•	•	•		
28				•	•	•		
29				•	•	•		
30	•			•	•	•		
31				•	•	•		

CT, computed tomography.

Table S3 Cross-tabulation of identification of the two sets of images by the two doctors

Observer		Total		
Observer	1	2	3	- Iotai
Thoracic surgeon				
1	1	1	0	2
2	0	7	0	7
3	1	0	21	22
Total	2	8	21	31

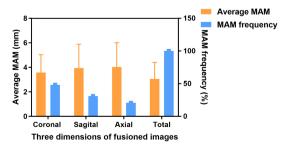
Table S4 Kappa coefficient for agreement testing of the two doctors

Statistics	Value	Asymptotic standard error	Approximate T	Asymptotic significance
Agreement measurement (Kappa)	0.859	0.091	5.783	<0.001
Number of valid cases	31			

Table S5 Correlation of image quality after fusion with lesion size, location, and CT value

Variables	В	Standard error	Wald	Degrees of freedom	Significance	Exp (B)
Step 1						
GGN site	-0.162	0.468	0.120	1	0.729	0.850
GGN size	-0.522	0.426	1.500	1	0.221	0.593
GGN CT value	0.040	0.015	7.201	1	0.007	1.041
Constant	29.223	11.333	6.649	1	0.010	4914371182713.370
Step 2						
GGN size	-0.572	0.415	1.901	1	0.168	0.565
GGN CT value	0.042	0.015	7.542	1	0.006	1.042
Constant	30.054	11.655	6.650	1	0.010	11284024123492.076
Step 3						
GGN CT value	0.033	0.013	6.919	1	0.009	1.034
Constant	20.345	7.711	6.962	1	0.008	685223389.734

CT, computed tomography; GGN, ground-glass nodule.



**Figure S1** The MAM appeared in the coronal plane, accounting for 48.27% of the total, with an average of 3.60±1.43 mm. The MAM appeared in the sagittal plane, accounting for 31.03% of the total, with an average of 3.94±1.94 mm. The MAM appeared in the axial plane, accounting for 20.69% of the total, with an average of 4.04±1.96 mm. The average of the all MAM of the three dimensions was 3.05±1.35 mm. MAM, minimum ablative margin.