## HRCT SCANNING PROTOCOL CHECKLIST FOR PATIENTS WITH SUSPECTED ILD

## PRIOR TO SCAN¹

	Review HRCT script for patient information, including:				
	- Patient's age and sex				
	- Relevant clinical history, including possible exposures or history of pertinent diseases—particularly connective tissue disorders—and the presence of any clinical symptoms that may indicate the cause of lung disease				
SI	ETTING HRCT PARAMETERS <sup>2</sup> :				
	e ATS/ERS/JRS/ALAT Clinical Practice Guideline recommends the following scanning otocol to optimize image interpretation of HRCT scans				
	Noncontrast examination				
	Volumetric acquisition with a selection of:				
	O Sub-millimetric collimation				
	O Shortest rotation time				
	O Highest pitch				
	O Tube potential and tube current, appropriate to patient size				
	O Use of techniques available to avoid unnecessary radiation exposure (eg, tube current modulation)				
	Reconstruction of thin-section CT images (≤1.5 mm):				
	O Contiguous or overlapping				
	O High-spatial-frequency algorithm				
	O Iterative reconstruction algorithm if validated on the CT unit (if not, filtered back projection)				
	Number of acquisitions				
	O Supine: inspiratory and expiratory scans				
	O Prone: only inspiratory scans				

ALAT, Latin American Thoracic Society; ATS, American Thoracic Society; CT, computed tomography; ERS, European Respiratory Society; HRCT, high-resolution computed tomography; ILD, interstitial lung disease; JRS, Japanese Respiratory Society.

☐ Recommended radiation dose for the inspiratory volumetric acquisition: 1-3 mSv\*

O Inspiratory scan should be obtained at full inspiration

\*Dose for the inspiratory volumetric acquisition. Strong recommendation to avoid "ultralow-dose CT" (<1 mSv).

## **IMAGE REPORTING CHECKLIST** FOR HRCT SCANNING PATTERNS

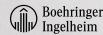
## **DOCUMENTING APPROPRIATE SCANNING PATTERN<sup>2</sup>**

Note the description and location of abnormalities, the presence of any typical features, and importantly, the absence of exclusionary features for the differential diagnosis.

	UIP	Probable UIP	Indeterminate for UIP	Alternative diagnosis
CT FEATURES				
Honeycombing				
Peripheral bronchiolectasis				
Mild GGO			*	
Reticulation			*	
Distortion			*	
Pulmonary ossification				
Cysts				
Marked mosaic attenuation				
Predominant GGO				
Profuse micronodules				
Centrilobular nodules				
Nodules				
Consolidation				
Non-specific features of lung infiltration			☐ †	
PREDOMINANT DISTRIBUTION				
Subpleural lung (peripheral)			_*	
Peribronchovascular lung (central)				
Perilymphatic				
Diffuse	<b>□</b> ‡			
Anterior lung				
Posterior lung				
Upper lung				
Mid lung				
Lower lung				
Symmetrical				
Asymmetrical	<b>□</b> ‡			
Homogeneous				
Heterogeneous				
Absence of predominant distribution			<b>□</b> †	

**References: 1.** American College of Radiology. ACR-STR practice parameter for the performance of high-resolution computed tomography (HRCT) of the lungs in adults. https://www.acr.org/-/media/ACR/Files/Practice-Parameters/ HRCT-Lungs.pdf. Accessed November 16, 2021. 2. Raghu G et al. Am J Respir Crit Care Med. 2018:198(5):e44-e68.

‡Occurs occasionally.



<sup>\*</sup>These features of the indeterminate pattern can be considered "early UIP pattern." †These features of the indeterminate pattern can be considered "truly indeterminate."

GGO, ground glass opacity; UIP, usual interstitial pneumonia.