

MRI Chest

Updated 11/04/23

Reviewed 05/14/25

Indications: pericardial, mediastinal, thymic masses/cysts and bronchogenic cysts.

This protocol is not used for chest wall masses (use MSK protocols) or cardiac exams.

Check with rad to see if any additional sequences are needed based on history and/or prior images.

If no prior imaging, do axial T2 HASTE nonFS of the entire thorax to find the lesion.

Chest FOV: supraclavicular to adrenals (top/bottom coverage), anterior to posterior subq fat (front/back coverage),
right to left subq fat (right/left coverage).

Go to MRIMaster.com for a guide of proper positioning.

Pulse Sequence	PACS Name	plane	fat sat	slice (mm)	gap (mm)	first slice
T2 HASTE/SSFSE	T2 COR	cor	no	5	1	front
T2 HASTE/SSFSE	T2 SAG	sag	no	5	1	right
T2 HASTE/SSFSE	T2 AX	ax	no	5	1	top
T2 HASTE/SSFSE	T2 FS AX	ax	yes	5	1	top
Diffusion (b50, b800, ADC)	DIFFUSION AX	ax	yes	7	1.4	top
In/Out Phase w/ DIXON	IN/OUT AX	ax	no	5	1	top
T1 VIBE/LAVA	T1 FS PRE COR	cor	yes	3.5	0.6	front
T1 VIBE/LAVA	T1 FS PRE SAG	sag	yes	3.5	0.6	right
T1 VIBE/LAVA	T1 FS PRE AX	ax	yes	3.5	0.6	top

CONTRAST - 2 mL/sec standard dose gadolinium (0.2 mL/kg Clariscan or 0.1 mL/kg Gadavist) followed by 20 mL saline flush.

T1 VIBE/LAVA	T1 FS 20 SEC AX	ax	yes	3.5	0.6	top
T1 VIBE/LAVA	T1 FS 70 SEC AX	ax	yes	3.5	0.6	top
T1 VIBE/LAVA	T1 FS POST COR	cor	yes	3.5	0.6	front
T1 VIBE/LAVA	T1 FS POST SAG	sag	yes	3.5	0.6	right
T1 VIBE/LAVA	T1 FS POST AX	ax	yes	3.5	0.6	top

RECONS:

axial, coronal and sagittal subtractions