MRI MSK Mass/Tumor

Updated 03/22/25 Reviewed 05/14/25

This protocols is for use with both osseous/bone and soft tissue masses/tumors.

Use small field-of-view (FOV) centered on the area of interest with borders marked with skin capsule.

Angle imaging planes as per routine protocols.

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

Pulse Sequence	PACS Name	plane	fat sat	slice (mm)	gap (mm)	first slice
T1	T1 AX	ax	no	5	1	top
T1	T1 FS AX	ax	yes	5	1	top
T2	T2 AX	ax	no	5	1	top
T2	T2 FS AX	ax	yes	5	1	top
T1	*T1 PRE BEST LONG	vary	no	5	1	vary
T2	*T2 FS PRE BEST LONG	vary	yes	5	1	vary

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	*T1 FS POST BEST LONG	vary	yes	5	1	vary
T1	T1 FS POST AX	ax	yes	5	1	top

* The best long axis plane is either coronal or sagittal depending on the location of the tumor:

Do sagittal plane if the tumor is in the anterior or posterior soft tissues relative to the bones.

Do coronal plane if the tumor is in the lateral or medial soft tissues relative to the bones.

Ask a MSK radiologist if you are unsure which plane to use.

RECON:

best long and axial subtractions