

Supplemental Material

Table S1. Visual rating scores for the visualization of the lenticulostriate arteries in the pre-contrast and post-Ferumoxytol data for different volunteers (V1: Volunteer 1, V2: Volunteer 2, V3: Volunteer 3).

Ferumoxytol	MRA	SWI	tSWI	QSM
Dose				
Pre-contrast	1.0 (V1), 1.5(V2), 2.0 (V3)	0 (all subjects)	0 (all subjects)	0 (all subjects)
Post-1mg/kg	-	3.0 (V3)	2.0 (V3)	2.0 (V3)
Post-2mg/kg	-	2.0 (V1), 3.0 (V2)	2.0 (V1), 3.0 (V2)	2.0 (V1), 3.0 (V2)
Post-3mg/kg	-	2.5 (V3)	2.5 (V3)	1.5 (V3)
Post-4mg/kg	-	3.0 (V1)	3.0 (V1)	3.0 (V1)

Table S2. Visual rating scores for the visualization of the medullary veins in the pre-contrast and post-Ferumoxytol data for different volunteers (V1: Volunteer 1, V2: Volunteer 2, V3: Volunteer 3).

Ferumoxytol	MRA	SWI	tSWI	QSM
Dose				
Pre-contrast	0 (all subjects)	1.0 (all subjects)	1.0 (V1), 1.0 (V2), 1.5 (V3)	1.0 (all subjects)
Post-1mg/kg	-	1.5 (V3)	2.0 (V3)	2.0 (V3)
Post-2mg/kg	-	2.0 (V1 and V2)	2.0 (V1), 3.0 (V2)	2.0 (V1 and V2)
Post-3mg/kg	-	2.5 (V3)	3.0 (V3)	3.0 (V3)
Post-4mg/kg	-	3.0 (V1)	3.0 (V1)	3.0 (V1)