

Non contrast CT brain

Imaging required for imaging biobank		Remarks
All series and reconstructions: Baseline AND follow-up (24 hours)		obligatory
Data acquisition	Parameters	
Scan range	below foramen magnum - cranial vertex (includes entire sagittal sinus)	obligatory
Scan type	spiral with gantry/head tilt in orbitomeatal line	1 st choice
	spiral without gantry/head tilt in orbitomeatal line	2 nd choice
	sequential with gantry/head tilt in orbitomeatal line	3 rd choice
Collimation	number of detector rows available × ≤ 1,0 mm	preferred
Rotation time (n.a. for sequential scanning)	cooperative patient ≥ 1,0 second	preferred
	moving patient ≤ 0,4 seconds	preferred
Pitch (n.a. for sequential scanning)	cooperative patient 0,6-0,85	preferred
	moving patient 1,2-1,7	preferred
kVp	local practice	
mAs	local practice	
CTDI _{vol} 16cm indication	30-50mGy (iterative)	1 st choice
	50-70 mGy (filtered back projection)	2 nd choice
Image reconstruction		
Field of view	fit to skull	obligatory
Scan direction	caudal-cranial	preferred
Scan plane	axial	obligatory
Reconstructed slice width/increment	1: as close to 5,0 mm as possible / 3,0 mm	obligatory
	2: ≤ 1,0 mm / ≤ 0,7 mm	obligatory
Brain kernel	local practice	

n.a. = not applicable