

**Supplemental table e-5: Post-contrast FLAIR acquisition details.**

Study	Pre-contrast	Field strength	Contrast type	dose	Time from CA acquisition	TR	TI	TE	Slice thickness, 2D/3D
<b>Stroke studies</b>									
<b>Acute ischemic stroke</b>									
Choi et al., 2017									
Choi et al., 2017	Yes	3T	-	0.2mmol/kg	5min	11000	-	125	5mm, 2D
Dechambre et al., 2000	Yes	1.5T	Gd-DTPA	0.1mmol/kg	18-42h, 3d, 6d	10002	2200	148	5mm, 2D
Forster et al., 2016	Yes	1.5T	Gd-DOTA	0.1mmol/kg	Within 24h	8500/9000	2400/2500	115/89	5mm, 2D
Gupta et al., 2017	No	1.5T	-	0.1mmol/kg	24h	11000	-	140	5mm, 2D
Henning et al., 2008 ±	Yes	1.5T	-	-	-	9000	1750	85	7mm, 2D
Hjort et al., 2008	Yes	1.5T or 3T	Gd-BT-Do3A	-	2h and 24h	8650	-	120	-

Kim et al., 2005	-	1.5T	Gd-DTPA	20ml, unclear if ~2h, 3d there were multiple CAs		10000	2200	133	5mm, 2D
Latour et al., 2004 <sup>±</sup>	Yes, in all	1.5T	Gd-DTPA	0.1mmol/kg	10 min + variable - depending on clinical		-	-	-
Warach et al., 2004 <sup>±</sup>	but 5 cases				needs, up to 5d				
Luby et al., 2019	-	3T	Gd-DTPA	0.1mmol/kg, variable number of doses	-	-	-	-	-
Nadareishvili et al., 2018	Yes	1.5T	Gd-DTPA	0.1mmol/kg	24h	-	-	-	-
Ostwaldt et al., 2014 #	Yes	3T	Gd-BT-Do3A	5ml, multiple CAs	1.5-5h + multiple 8000 examinations	-	100	5mm, 2D	
Ostwaldt et al., 2015 #	Yes	3T	Gd-BT-Do3A	Between 0.04 and 0.31mmol/kg	~24h + variable 8000 depending on clinical needs	-	100	5mm, 2D	

Villringer et al., 2017 - 3T Gd-BT-Do3A 10ml - - - -

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**Acute ischemic stroke or transient ischemic attack (mixed cases)**

Lee et al., 2015 \* No 1.5T or Gd-BT-Do3A 0.2mmol/kg or ~5 min + multiple 11000 - 120-140 5mm, 2D  
3T fixed dose of 15ml examinations

Lee et al., 2016 \* No 1.5T or Gd-BT-Do3A 15ml ~5min +2.5-19h + 3-5d 11000 2500 120-140 5mm, 2D  
3T

Lee et al., 2018 - - - - - - - - -

Rozanski et al., 2010 Yes 3T Gd-BT-Do3A 4-6ml ~24h 8000 - 100 5mm, 2D  
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Jolink et al., 2019 Yes 7T Gd-BT-Do3A 0.1mmol/kg (max >10min  
or Gd-DOTA 10ml or 30ml) 8000 2325 300 <1mm, 3D

**Spontaneous intracerebral hemorrhage**

Kidwell et al., 2011	Yes, at 1.5T or - least in 3T	Variable doses (1- 4)	-	-	-	-
		78%				

#### **Acute ischemic stroke, spontaneous intracerebral hemorrhage or transient ischemic attack (mixed cases)**

Barr et al., 2010	Yes	3T	Gd-DTPA	0.1mmol/kg	~24h	-	-	-	-
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#### **Post-cardiovascular and intracranial vascular surgery studies**

##### **Carotid artery disease treatment**

Cho et al., 2014	Yes	1.5T	-	-	~24h	10002	2200	97.5	-, 2D
Ogami et al., 2011	Yes	1.5T	Gd-DTPA	15ml	On average >19h	8000	2000	114	6mm, 2D
Wilkinson et al., 2000	Yes	1.5T	Gd-DTPA	2x 20ml	Short (within the same session as CA)	6000	1800	95.9	5mm, 2D

##### **Aneurysm treatment**

Li et al., 2018 Yes, in 1.5T or Gd-BOPTA 0.1mmol/kg - 6000 1700 135 1.6mm, 3D  
81% of 3T cases

Suthiphosuwan et al., No 1.5T Gd-BOPTA 20ml Short (after contrast-enhanced MRA) 11000 2800 140 5mm, 2D  
2018

#### Cardiac surgery

Merino et al., 2013 Yes, in 1.5T or - 0.1mmol/kg <1h in ~ 50% of 9000 2200/2600 140-120 3.5-4mm,  
~50% of 3T patients, 30.4h in other 2D  
cases half

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#### MS studies

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Absinta et al., 2015 Yes, in 3T Gd-DTPA 0.1mmol/kg ≥10min; median (IQR) 4800/6000 1800/1860 125/354 1mm, 3D  
46% of (15%) or Gd- MS cases = 26 (11) min  
cases BT-Do3A (85%)

Bergsland et al., 2019	Yes	3T	Gd-DTPA	0.1mmol/kg	10min	9000	2420	600	1mm, 3D
§									(TEeff = 110)
Coulette et al., 2019	No	3T	-	0.1mm/kg	12min	8000	2400	388	1mm, 3D
Eisele et al., 2015	Yes	3T	Gd-DOTA	0.1mmol/kg	>10min	8500	2500	136	5mm, 2D
Harrison et al., 2017 &	Yes	7T	Gd-HP-Do3A	0.1mmol/kg	20min	8000	2077	400	0.7mm, 3D
Ighani et al., 2020 &	Yes	7T	Gd-HP-Do3A	0.1mmol/kg	20min	8000	2077	400	0.7mm, 3D
Jonas et al., 2018 &	Yes	7T	Gd-HP-Do3A	0.1mmol/kg	20min	8000	2077	400	0.7mm, 3D
Zivadinov et al., 2017	Yes	3T	Gd- BT-DO3A	0.1mmol/kg	10min	-	-	-	1mm, 3D; -, 2D
§									
Zivadinov et al., 2018	Yes	3T	Gd-DTPA	0.1mmol/kg	10min	9000	2420	600	1mm, 3D
§									(TEeff = 110)
Zurawski et al., 2020	Yes	7T	Gd-DOTA	0.1mmol/kg	10min	9000	2500	301	0.7mm, 3D

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**Studies in meningitis**

Ahmad et al., 2005	Yes	1.5T	Gd-DTPA-	0.1mm/kg	3-4min	9000	2500	TEeff	=	5mm, 2D
			BMA							88
Alonso et al., 2015	Yes	3T	-	-	-	-	-	-	-	-
Fukuoka et al., 2010	Yes	3T	Gd-DTPA	0.1mmol/kg	Short (1 or 2 sequences after CA)	6000	2000	420		0.9mm, 3D
Splendiani et al., 2005	Yes	1.5T	-	0.1mmol/kg	0-2min	10000	2200	147		5mm, 2D

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**Studies in other diseases**

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**Memory clinic patients**

Freeze et al., 2017 @	Yes	3T	Gd-BT-DO3A	0.1mmol/kg, max 16min 10ml		4800	1650	290		1mm, 3D
Freeze et al., 2019 @	Yes	3T	Gd-BT-DO3A	0.1mmol/kg	16min and >1.5h	4800	1650	290 and 500		1mm, 3D

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**Mixed (non-MS) infectious and non-infectious diseases**

Absinta et al., 2017 Yes, in 3T - 0.1mmol/kg  $\geq$ 10min - - -  
81% of cases

## **Familial amyloid polyneuropathy**

Hirai et al., 2005 Yes 1.5T Gd-DTPA 0.1mmol/kg 0min and 3h, 6h, and 6000 2000 120 5mm, 2D  
24h

Abbreviations: TR, repetition time; TI, inversion time; TE, echo time; -, unknown; ~, approximately; Gd-DTPA, gadopentetate (Magnevist ®); Gd-DOTA, gadoterate (Dotarem ®); Gd-BT-Do3A, gadobutrol (Gadavist ®); Gd-BOPTA, gadobenate (MultiHance ®); MRA, magnetic resonance angiography; IQR, interquartile range; MS, multiple sclerosis; Gd-HP-Do3A, gadoteridol (Prohance ®); Gd-DTPA-BMA, gadodiamide (Omniscan™); TEeff, effective echo time.

#\*±&\$@ Studies with (suspected) overlapping study samples.