On-line Table 1. Studies comparing perfusion imaging findings with clinical outcome (Category 2)

Citation (reference number)	No. of Patients	Image Acquisition Parameter	Analysis Technique	Comparator or Adjunct Test	Outcome Measure
Warach et al, 1996[13]	12	T2*-WI	TTP	DWI	NIHSS, RS
Chalela et al, 2000[7]	15	CASL-PI	CBF	CVF literature values	NIHSS RS
Kluytmans et al, 2000[11]	38	T2*-WI	MTT, CBV	Final infarct size	NIHSS, Barthel index RS
Schellinger et al, 2000[15]	20			None	FIS
Warach et al, 2000[14]	81	T2*WI	MTT	None	NIHSS, FIS
Bruening et al, 2001[18]	24	T2*-WI	CBV, CBF, MTT	None	MMSE RS
Hillis et al, 2001[21]	50	Not reported	TIP	None	Word comprehension errors
Lev et al, 2001[5]	22	CT perfusion	CBV	CTA	NIHSS, FIS
Rohl et al, 2001[25]	22	T2*-WI	MTT	DWI	Scandinavian stroke scale, Barthel index
Arenillas et al, 2002[16]	30	T2*-WI	TTP	IS	NIHSS Rankin
Parsons et al, 2002[24]	19	T2*-WI	MTT	DWI	IS
Uno et al, 2002[27]	10	ASL	CBF	DWI, NIHSS	IS
Wintermark et al, 2002[6]	22	CT perfusion	CBV, CBF, MTT	MRA	NIHSS, FIS
Hermier et al, 2003[19]	28	T2*-WI	TTP	DWI	NIHSS, FIS
Nighoghossian et al, 2003[23]	29	T2*-WI	CBV, TTP	IS	NIHSS
Barber et al, 2004[17]	23	T2*-WI	MTT	None	NIHSS
Derex et al, 2004[8]	49	T2*-WI	TTP	DWI, NIHSS	NIHSS
Hillis et al, 2004[20]	10	T2*-WI	TTP	None	NIHSS: reduction of 3+ points
Liu et al, 2004[22]	39	T2*-WI	CBV	MRA	NIHSS
Singer et al, 2004[26]	17	T2*-WI	TTP	None	PET
Yamada et al, 2004[28]	26	CT perfusion	MTT, CBV, CBF	None	NIHSS
Hacke et al, 2005[10]	104	T2*-WI	MTT	None	NIHSS
Perkiö et al, 2005[12]	10	T2*-WI	MTT, CBV, FLHET	None	IS, NIHSS
Albers et al, 2006[3]	74	DSC, MRA, GRE	MTT	DWI, lesion volume	NIHSS, mRS, TOAST
Furlan et al, 2006[9]	37	T2*-WI	MTT	None	Reperfusion infarct size, NIHSS
Davis et al, 2008[4]	101	T2*-WI	TTP	DWI	NIHSS, mRS

Note:—ASL indicates arterial spin-labeling; CASL-PI, continuous arterial spin-labeling perfusion imaging; CBF, cerebral blood flow; CBV, cerebral blood volume; DSC, dynamic susceptibility contrast MR imaging; DWI, diffusion-weighted imaging; FLHET, cerebral blood flow heterogeneity; GRE, gradient recalled-echo; FIS, final infarct size; MMSE, Mini-Mental State Examination; MRA, MR angiography; mRS, modified Rankin Scale; MTT, mean transit time; NIHSS, National Institutes of Health Stroke Scale; PET, positron-emission tomography; PWI, perfusion-weighted imaging; RS, Rankin Scale; T2*-WI – T2* weighted imaging; TOAST, Trial of Org 10172 in Acute Stroke Treatment stroke subtype classification; TTP, time to peak; CTA, CT angiography.

On-line Table 2. Studies comparing perfusion imaging findings with final infarct size on subsequent imaging studies (Category 3)

Citation (reference number)	No. of Patients	Image Acquisition Parameter	Analysis Technique	Comparator or Adjunct Test	Outcomes
Warach et al, 2000[14]	81	T2*WI	MTT	None	FIS
Lev et al, 2001[5]	22	CT perfusion	CBV	CTA	FIS
Eastwood et al, 2002[30]	12	CT perfusion	CBV, CBF, MTT	None	FIS
Schaefer et al, 2002[43]	81	T2*WI	CBV, CBF, MTT	DWI	FIS
Fiehler et al, 2002[41]	32	T2*WI	CBV	DWI	FIS
Grandin et al, 2002[42]	66	T2*WI	CBV, CBF, MTT	DWI	FIS
Wintermark et al, 2002[6]	22	CT perfusion	CBV, CBF, MTT	MRA	FIS
Butcher et al, 2003[38]	35	T2*WI	CBV, MTT	Infarct vs. salvaged tissue	FIS
Hermier et al, 2003[19]	28	T2*WI	TTP	DWI	FIS
Thomalla et al, 2003[40]	10	T2*WI	TTP	DWI	FIS
Shih et al, 2003[44]	14	T2*WI	MTT	None	FIS
Schaefer et al, 2003[33]	30	T2*WI	CBV, CBF	DWI	FIS
Schramm et al, 2004[39]	22	CT perfusion	CBV, CBF, TTP	MR perfusion	FIS
Alsop et al, 2005[29]	20	T2*WI	CBV, CBF, MTT	None	Hemorrhage on follow-up MR or CT
Kim et al, 2005[31]	55	T2*WI	CBV, CBF, MTT	DWI	Hemorrhage on follow-up MR or CT
Murphy et al, 2006[32]	25	CT perfusion	CBV, CBF	CTA	FIS
Schaefer et al, 2006[34]	14	CT perfusion	CBV, CBF	None	FIS
Wintermark et al, 2006[36]	130	CT perfusion	CBV, CBF, MTT, TTP	None	FIS
Wu et al, 2006[37]	38	T2*WI	CBV, CBF, MTT	DWI	FIS
Tan et al, 2007[35]	113	CT perfusion	CBV, MTT	CTA	FIS

Note:—CBV indicates cerebral blood volume; CBF, cerebral blood flow; CTA, CT angiography; DWI, diffusion-weighted imaging; FIS, final infarct size; MRA, MR angiography; MTT, mean transit time; TTP, time to peak; T2*WI-T2*-weighted imaging.