

Appendix - Summary of Findings

First Author (Source)	Year of Study	Sample Size	Place of Study	Study Design	Standard Reference	Data Comparison	Clinical Condition of Patients	Clinical Usefulness	Used Devices
Trafidlo (1)	2015	43	Lodz	RCT	None	Control group	Major spine surgery	Yes	INVOS 5100; Somanetics Corporation
Murniece (2)	2019	34	Riga	POS	None	Control group	Spinal neurosurgery	Yes	INVOS 4100
Soh (3)	2016	106	Seoul	POS	None	Normal volunteers	Spinal surgery	No	INVOS 5100; Somanetics Corporation ; Troy; MI
Calderon-Arnulphi (4)	2007	25	Chicago	POS	None	Baseline; contralateral hemisphere	Open neurovascular procedures	Yes	INVOS 3100A; Somanetics Corporation
Ebihara (5)	2012	66	Tokyo	POS	SPECT	Normal volunteers	Outpatient	Yes	ETG-4000; Hitachi Medical Corporation ; Tokyo; Japan
Bhatia (6)	2007	32	London	POS	Angiography	Baseline; contralateral hemisphere	Endovascular embolization	Yes	Invos 4100; Somanetics Corporation
Shafer (7)	2011	22	New Mexico	POS	Xe/CT	Between two modalities	Neurointensive care unit (SAH & TBI)	Yes	INVOS-5100; Somanetics Corporation
Mazzeo (8)	2012	25	Messina	Retrospective	None	Baseline; contralateral hemisphere	Endovascular embolization	Yes	INVOS-5100; Somanetics Corporation
Taussky (9)	2012	8	Florida	Retrospective	CT perfusion	Between two modalities	Neurointensive care unit (SAH, ICH & ischemic stroke)	Yes	INVOS Casmed

Matsumoto (10)	2009	64	Fukuoka	Retrospective	SPECT	Baseline vs. post reperfusion	Endovascular procedure (CHS during CAS)	Yes	INVOS-5100; Somanetics Corporation
Vilke (11)	2014	61	Lithuania	POS	None	Baseline; contralateral hemisphere	Neurointensive care unit (TBI)	Yes	INVOS-5100; Somanetics Corporation

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