

Appendix A: Results from the systematic literature search (n=134 articles)

nr	1 <sup>st</sup> author	Jrnl	publ. date	definitions	Measurement	Meas. interval
1	Smiley	An	April 06	IOH: SBP < 90 mmHg or decrease > 20% from baseline BL: not defined	non invasive	1 min.
2	Hanss	An	April 06	IOH: moderate: SBP < 100 mmHg, severe: SBP < 80 mmHg BL: none necessary	not defined	1 min.
3	Hanss	An	March 06	IOH: mild: SBP > 80% of baseline, moderate: SBP 70-80% of baseline, severe: SBP < 70% of baseline BL: not defined	not defined	not defined
4	Ngan Kee	An	Oct 06	IOH: SBP < 80% of baseline BL: mean of 3 successive measurements of SBP differing no more than 10%	non invasive	1 and 2 min.
5	Carvalho	An	Sept 05	IOH: SBP < 90% of baseline BL: average of 3 readings at admission	non invasive	2, 5 and 15 min.
6	Stafford-Smith	An	Aug 05	IOH: SBP decrease > 30 mmHg from baseline BL: average values during the 5 min after CPB separation and before heparin reversal	not defined	not defined
7	Ebert	An	July 05	IOH: decrease in blood pressure > 20 mmHg BL: 3 min period of baseline blood pressure measurement	invasive	continuous
8	Hanss	An	June 05	IOH: moderate: SBP 80-100 mmHg, severe: SBP < 80 mmHg	not defined	1 min.

				BL: none necessary		
9	Sia	An	March 05	IOH: SBP decrease > 20% from baseline	non invasive	5 min.
				BL: not defined		
10	Welsby	An	Feb 05	IOH: SBP < 100 mmHg; severe: >= 30 mmHg below baseline	not defined	not defined
				BL: median value derived from the 5 min before protamine administration		
11	Morelli	An	Jan 05	IOH: MBP < 60 mmHg or < 30% of prestudy value	invasive	continuous
				BL: mean of 4 sets of measurements obtained 24 hrs before surgery		
12	Cooper	An	July 04	IOH: SBP decrease to < 80% of baseline	non invasive	1 min.
				BL: lowest of 3 arterial pressure readings, taken 3 minutes apart before coming to the anesthetic room while sitting in bed		
13	Holthe	An	Feb 04	IOH: SBP decrease > 20% from baseline	non invasive	5 min.
				BL: mean of 2 preinfusion measurements		
14	Bronchard	An	Feb 04	IOH: SBP < 90 mmHg	not defined	not defined
				BL: none necessary		
15	Dyer	An	Sept 03	IOH: SBP decrease > 25% below baseline	non invasive	1 and 5 min.
				BL: mean of 2 consecutive readings taken 3 minutes before induction of anesthesia		
16	Sprung	An	Aug 03	IOH: SBP < 80 mmHg (episodes > 10 min. were recorded)	both	not defined

				BL: none necessary		
17	Boccara	An	June 03	IOH: SBP < 90 mmHg or decrease > 30% from baseline despite administration of 3 boluses ephedrine	invasive	continuous
				BL: average of 3 SBP measurements taken in the 24h before surgery		
18	Mercier	An	Sept 01	IOH: SBP < 100 mmHg or decrease to < 80% of baseline	non invasive	1 and 2 min.
				BL: average of 3 readings before preload of fluids		
19	Frolich	An	Aug 01	IOH: decrease in MBP > 20% from baseline	not defined	2 and 5 min.
				BL: mean of 5 readings on the preoperative holding		
20	Kazama	An	April 00	IOH: SBP < 75 mmHg or decrease > 40% from baseline (If persisted for > 2 – 3 min., it was corrected with ephedrine)	non invasive	1 min.
				BL: reading for 5 min. at commencement of monitoring		
21	Faberowski	An	Jan 00	IOH: SBP decrease > 20% from baseline	both	not defined
				BL: not defined		
22	Ben-David	An	Jan 00	IOH: SBP < 90 mmHg or decrease in MBP > 25 % from baseline	non invasive	2.5 min.
				BL: average of 3 consecutive reading after fluid administration		
23	Sharrock	BrJA	Feb 06	IOH: MBP < 55 mmHg	invasive	continuous
				BL: none necessary		
24	Saravanan	BrJA	Jan 06	IOH: SBP < 100 mmHg or decrease < 75% of baseline	non invasive	3 min.
				BL: average of 2 preoperative readings taken 5 min apart		

25	Coburn	BrJA	Feb 05	IOH: decrease in SBP > 20% from baseline in the absence of hypovolemia BL: not defined	non invasive	5 min.
26	Leone	BrJA	Nov 04	IOH: MBP < 55 mmHg BL: none necessary	non invasive	2 min.
27	Ngan Kee	BrJA	April 04	IOH: SBP 100%, 90% or 80% of baseline (three groups) BL: mean of three successive measurements of systolic blood pressure that differ no more than 10%	non invasive	1 min.
28	Godet	BrJA	March 04	IOH: SBP < 80 mmHg > 30 sec. and maintaining SBP within 30% of baseline BL: average of three repeated measurements the day before surgery	invasive	continuous
29	Adsumelli	BrJA	Nov 03	IOH: SBP < 100 mmHg or < 80% of baseline or MBP < 80% of baseline BL: average of 3 consecutive readings with less than 10% variation over 10 min before pre-hydration	non invasive	1 min.
30	De Baerdem.	BrJA	Nov 03	IOH: MBP < 60 mmHg BL: none necessary	non invasive	2.5 min.
31	Licker	BrJA	Oct 03	IOH: SBP < 90 mmHg (episodes lasting longer than 1 min. and requiring treatment were identified)	invasive	continuous

				BL: none necessary		
32	Sherman	BrJA	Aug 03	IOH: MBP decrease > 25% from baseline	non invasive	2 min.
				BL: not defined		
33	Ögün	BrJA	May 03	IOH: MBP decrease > 20% from baseline	not defined	1 and 2 min.
				BL: calculated from three measurements taken on the ward before surgery		
34	Whiteside	BrJA	March 03	IOH: SBP decrease > 30% from baseline	non invasive	2, 5 and 30 min.
				BL: not defined		
35	Habib	BrJA	March 02	IOH: SBP < 100 mmHg or decrease > 30% from baseline for > 60 s	non invasive	1 min.
				BL: mean of three readings of blood pressure measurements Before the start of the study		
36	Lerou	BrJA	Feb 02	IOH: SBP < 80 mmHg for at least 2 min SBP < 70 mmHg for 3 min with middle ear surgery	non invasive	1, 3 – 5 min.
				BL: none necessary		
37	Ray	BrJA	Feb 02	IOH: SBP decrease to < 70% of preinduction value > 5 min	not defined	5 min.
				BL: preinduction value		
38	Venn	BrJA	Jan 02	IOH: BP decrease > 20% from baseline levels severe: SBP decrease > 50%	not defined	not defined
				BL: not defined		

39	Blanc	BrJA	Dec 01	IOH: blood pressure decrease > 30% from baseline BL: measurement on preanesthetic consultation	not defined	not defined
40	Ngan Kee	BrJA	Nov 01	IOH: SBP decrease to < 90% of baseline BL: mean of three consecutive measurements with a difference of no more than 10%	not defined	1 min.
41	Ewaldsson	BrJA	Sept 01	IOH: SBP decrease to < 60% of baseline BL: not defined	non invasive	3 min.
42	Tandon	BrJA	May 01	IOH: MBP > 70 mmHg BL: none necessary	invasive	continuous
43	Vaughan	BrJA	April 01	IOH: SBP < 90 mmHg or decrease > 20mmHg from baseline BL: not defined	not defined	not defined
44	Ayorinde	BrJA	March 01	IOH: MBP decrease > 25% from baseline BL: lowest MBP recorded in the 10 minutes before surgery	non invasive	1 min.
45	Law	BrJA	Jan 01	IOH: SBP < 100mmHg or decrease to < 70% of the preoperative value BL: preoperative value	invasive	continuous
46	Maquire	BrJA	Jan 01	IOH: SBP < 100mmHg or decrease > 30% from baseline for > 60s. BL: not defined	non invasive	1 min.
47	Kinsella	BrJA	Aug 00	IOH: SBP decrease > 20% from baseline	non invasive	5 min.

				BL: lowest of two baseline reading of syst and diast pressure were taken between uterine contractions in left lat position		
48	Hall	BrJA	Jan 00	IOH: SBP < 80 mmHg for > 60s. BL: none necessary	non invasive	1 min.
49	Skucas	A&A	March 06	IOH: SBP < 90 mmHg BL: none necessary	both	not defined
50	McCutcheon	A&A	March 06	IOH: SBP < 100 mmHg or decrease > 30% from baseline BL: taken from patients attendance at a preoperative clinic in the weeks preceding surgery	invasive	continuous
51	Copejans	A&A	Jan 06	IOH: SBP < 95 mmHg or decrease > 25% from baseline BL: not defined	not defined	2 min.
52	Cherng	A&A	Dec 05	IOH: SBP < 100 mmHg or decrease > 30% from baseline BL: not defined	not defined	2.5 min.
53	Beaussier	A&A	Dec 05	IOH: SBP decrease > 20% from preoperative value BL: preoperative value	not defined	not defined
54	Asehnoune	A&A	Nov 05	IOH: SBP < 100 mmHg or decrease to < 70% from baseline BL: measurement after insertion of IV line	non invasive	2.5 min.
55	Reich	A&A	Sept 05	IOH: preinduction MBP < 70 mmHg, postinduction: MBP decrease > 40% and < 70 mmHg or < 60 mmHg	both	5 min. windows

				BL:	median MBP of all BP recordings before induction of anesthesia		
56	Hallworth	A&A	April 05	IOH:	SBP < 90 mmHg or decrease > 20% from baseline	not defined	not defined
				BL:	not defined		
57	Mannion	A&A	March 05	IOH:	SBP decrease > 30% from baseline	non invasive	5 min.
				BL:	not defined		
58	Comfere	A&A	March 05	IOH:	moderate: SBP ≤ 85 mm Hg, severe: SBP ≤ 65 mmHg	both	2 min.
				BL:	none necessary		
59	Nithara	A&A	Jan 05	IOH:	SBP < 80 mmHg	non invasive	2.5 min.
				BL:	none necessary		
60	Monk	A&A	Jan 05	IOH:	MBP < 55 mmHg or SBP < 80 mmHg	not defined	5 min.
				BL:	none necessary		
61	Chamchad	A&A	Dec 04	IOH:	SBP ≤ 75% of baseline	non invasive	1 min.
					within 20 minutes of intrathecal injection		
				BL:	baseline measured for 10 minutes preoperatively		
62	Jochum	A&A	Nov 04	IOH:	MBP decrease > 25%	non invasive	not defined
				BL:	not defined		
63	Casati	A&A	Nov 04	IOH:	SBP decrease > 30% from baseline	not defined	not defined
				BL:	recorder after volume expansion and before inducing spinal block		
64	Tanaka	A&A	Sept 04	IOH:	SBP < 70% of resting value	invasive	continuous
				BL:	not defined		



65	Evron	A&A	July 04	IOH: SBP < 100 mmHg or decrease > 20% from baseline BL: not defined	non invasive	not defined
66	Sun	A&A	July 04	IOH: SBP < 100 mmHg or decrease > 20% from baseline BL: obtained after hydration	non invasive	3 min.
67	Paech	A&A	May 04	IOH: SBP decrease > 20% from baseline BL: not defined	non invasive	3 min.
68	van de Velde	A&A	April 04	IOH: MBP decrease > 10% from prelabor baseline severe: MBP decrease > 15% from baseline BL: not defined	not defined	not defined
69	Ngan Kee	A&A	March 04	IOH: SBP decrease to < 80% of baseline BL: mean of three successive measurements in OR that had a difference of no more than 10%	non invasive	1 min.
70	Rohrig	A&A	March 04	IOH: decrease of MBP > 30% within a 10 min interval and administration of a vasoconstrictor or positive inotropic drug within 20 min after onset of decrease BL: no absolute baseline, but relative baseline in 10 min intervals	both	at least 5 min. (non inv.) 3 min. (invasive)
71	Goy	A&A	Feb 04	IOH: SBP decrease > 25% from baseline BL: not defined	non invasive	5 min.
72	Lee	A&A	Feb 04	IOH: SBP < 80 mmHg, SBP < 90 mmHg or decrease > 30%, SBP < 100 mmHg and decrease > 20%, SBP decrease > 20%,	not defined	not defined

					SBP < 100 mmHg or decrease > 30% (meta analysis)		
				BL:	not defined		
73	Frenea	A&A	Jan 04	IOH:	SBP < 100 mmHg or a decrease > 20% of control values	non invasive	15 min.
				BL:	not defined		
74	Aya	A&A	Sept 03	IOH:	MBP decrease to < 70% of baseline or SBP < 100 mmHg	not defined	2 and 5 min.
				BL:	mean of three consecutive measurements taken 2 minutes apart		
75	Ishiyama	A&A	Sept 03	IOH:	decrease in MBP > 30% from preanesthetic values	non invasive	2.5 min.
				BL:	not defined		
76	Sia	A&A	Aug 03	IOH:	SBP decrease of > 30 mmHg in < 5 min or any decrease < 90 mmHg + treatment by attending anesthesiologist	non invasive	5 min.
				BL:	not defined		
77	Beilin	A&A	July 03	IOH:	SBP decrease > 20%	non invasive	5 min.
				BL:	not defined		
78	Yoo	A&A	May 03	IOH:	SBP decrease to < 70% of the baseline value or < 90 mmHg	invasive	continuous
				BL:	determined 1 min before induction of anesthesia		
79	Dobryndnjov	A&A	May 03	IOH:	SBP decrease $\geq$ 20% from baseline values	non invasive	5 – 15 min.
				BL:	not defined		
80	Klasen	A&A	May 03	IOH:	decrease in MBP > 30% within 10 min, clinical relevant	both	at least

					when intervention by attending anesthesiologist within 20 min		5 min. (non inv.)
				BL:	not defined		3 min. (invasive)
81	Kawamata	A&A	March 03	IOH:	SBP < 80 mmHg	non invasive	not defined
				BL:	none necessary		
82	Jellish	A&A	March 03	IOH:	MBP decrease > 20% of baseline	not defined	not defined
				BL:	not defined		
83	De Castro	A&A	Jan 03	IOH:	SBP < 80 mmHg > 1 min	invasive	continuous
				BL:	average of 3 repeated measures on the day before surgery		
84	Omais	A&A	Dec 02	IOH:	MBP decrease > 15% less than preanesthetic values	non invasive	5 min.
				BL:	not defined		
85	Morley	A&A	Nov 02	IOH:	MBP decrease to < 75% of baseline	non invasive	5 min.
				BL:	not defined		
86	Paech	A&A	Nov 02	IOH:	SBP < 90 mmHg or decrease > 30% from baseline	not defined	5 min.
				BL:	not defined		
87	Nishikawa	A&A	Sept 02	IOH:	SBP < 90 mmHg or MBP decrease of > 25% from baseline	non invasive	1 and 5 min.
				BL:	average of 3 consecutive readings taken after fluids infusion		
88	Landau	A&A	Sept 02	IOH:	SBP < 100 mmHg and/or decrease $\geq$ 25% from baseline	not defined	5 and 15 min.
				BL:	not defined		
89	Hentgen	A&A	Sept 02	IOH:	MBP decrease to < 70% from baseline values	non invasive	5 min.
				BL:	mean of 3 measurements: preoperative visit,		

				time of preanesthetic medication, preinduction value			
90	Plaud	A&A	Aug 02	IOH: MBP decrease > 20% from control value BL: last value before mivacurium injection	invasive	continuous	
91	Gebhard	A&A	Aug 02	IOH: SBP decrease to < 70% from baseline or < 90 mmHg BL: not defined	non invasive	not defined	
92	Hartmann	A&A	June 02	IOH: MBP decrease > 30% within a 10 min interval + therapeutic intervention by attending anesthesiologist BL: not defined	both	at least 5 min. (non inv.) 3 min. (invasive)	
93	Casati	A&A	May 02	IOH: MBP decrease > 20% from preoperative values BL: day before surgery	both	continuous (registered every 5 min.)	
94	Simon	A&A	May 02	IOH: SBP decrease > 30% from preanesthetic value or < 90 mmHg BL: average of the values obtained at the ward before epidural administration	non invasive	5 and 15 min.	
95	Lee	A&A	April 02	IOH: SBP decrease > 10 mmHg from baseline BL: not defined	not defined	not defined	
96	Meerschaert	A&A	April 02	IOH: MBP < 65mmHg or < 30% of baseline value BL: mean of 2 sets of measurements obtained at rest for 10 min. at 24h before surgery	invasive	continuous	

97	Koelzow	A&A	April 02	IOH: in 5 min after reperfusion: SBP < 70 mmHg thereafter: SBP < 100 mmHg BL: none necessary	invasive	continuous
98	Mojica	A&A	Feb 02	IOH: SBP decrease $\geq$ 30% from baseline BL: measured immediately before administration of bupivacaine	non invasive	2 and 5 min.
99	Madan	A&A	Dec 01	IOH: MBP decrease > 20% BL: preblock value	non invasive	not defined
100	Kirkbride	A&A	Nov 01	IOH: MBP < 50 mmHg BL: none necessary	non invasive	1 min.
101	Godet	A&A	Sept 01	IOH: SBP decrease > 30% from baseline + SBP < 80 mmHg > 1 min. BL: average of 3 repeated measures on the day before surgery	invasive	continuous
102	Murthy	A&A	June 01	IOH: blood pressure decrease > 20% from baseline BL: not defined	not defined	1 min.
103	Chen	A&A	April 01	IOH: SBP < 90 mmHg BL: none necessary	not defined	2 and 30 min.
104	Yeh	A&A	March 01	IOH: SBP < 90 mmHg or decrease > 20% from baseline BL: not defined	not defined	5 min.
105	Greilich	A&A	Jan 01	IOH: SBP decrease > 20% from baseline or < 80 mmHg for > 1 min. BL: not defined	not defined	5 min.

106	Bertrand	A&A	Jan 01	IOH: SBP decrease > 30% from baseline + SBP < 80 mmHg > 1 min. BL: average of 3 repeated measures on the day before surgery	invasive	continuous
107	Lim	A&A	Nov 00	IOH: SBP decrease > 30% from baseline or < 100 mmHg BL: not defined	non invasive	1, 3 and 5 min.
108	Joshi	A&A	Nov 00	IOH: SBP ≤ 80 mmHg or requiring treatment with a pharmacologic drug BL: none necessary	not defined	not defined
109	Kross	A&A	Oct 00	IOH: MBP < 60 mmHg > 5 min BL: none necessary	both	5 and 15 min.
110	Pawlowski	A&A	Sept 00	IOH: SBP ≤ 80 mmHg BL: none necessary	not defined	not defined
111	Ngan Kee	A&A	June 00	IOH: SBP decrease > 20% and to < 100 mmHg BL: mean of 3 successive measurements, 1 min apart	non invasive	1 min.
112	De Kock	A&A	June 00	IOH: SBP decrease > 20% from baseline BL: not defined	invasive	continuous
113	Fragen	A&A	March 00	IOH: SBP < 80 mmHg BL: none necessary	not defined	not defined
114	Bernard	A&A	Feb 00	IOH: SBP < 100 mmHg or decrease > 25% BL: not defined	not defined	not defined

115	Vercauteren	A&A	Feb 00	IOH: SBP < 100 mmHg or decrease > 30% from baseline BL: Measured on admission to the labor and delivery suite	not defined	1 min.
116	Harten	Anae	April 05	IOH: SBP < 100 mmHg or decrease > 30% from baseline BL: not defined	non invasive	2 min.
117	Kansal	Anae	Jan 05	IOH: SBP < 100 mmHg or decrease > 20% from baseline BL: measured during pre-anesthetic visit: average of three readings with patient lying supine	non invasive	1 min.
118	Matot	Anae	Sept 04	IOH: SBP < 85 mmHg BL: none necessary	not defined	not defined
119	Kararmaz	Anae	June 03	IOH: SBP < 90 mmHg or decrease > 30% from baseline BL: not defined	non invasive	3 and 5 min.
120	Mendonca	Anae	May 03	IOH: decrease in blood pressure > 20% from baseline BL: the second of two readings of blood pressure, taken 2 minutes apart in the sitting position with the cuff on the right arm	non invasive	2 min.
121	Ngan Kee	Anae	Feb 03	IOH: SBP decrease to < 80% of baseline BL: not defined	not defined	1 min.
122	Loke	Anae	Feb 02	IOH: SBP < 90 mmHg BL: none necessary	non invasive	1 min.
123	Rees	Anae	Jan 02	IOH: SBP < 100 mmHg or decrease to < 80% of baseline BL: the second of two measurements of blood pressure	non invasive	1 min.

124	Kwak	Anae	Jan 02	IOH: SBP < 100 mmHg BL: none necessary	invasive	continuous
125	Rucklidge	Anae	Jan 02	IOH: MBP decrease > 20% BL: mean of two blood pressure readings, measured at rest at arrival in the operating theatre	non invasive	3 min.
126	Kampe	Anae	Dec 01	IOH: SBP < 80 mmHg or decrease > 30% from baseline BL: not defined	non invasive	not defined
127	Naja	Anae	Dec 01	IOH: blood pressure decrease > 25% from baseline BL: blood pressure recorded immediately before block	non invasive	not defined
128	Chiu	Anae	Sept 01	IOH: SBP < 80 mm Hg BL: none necessary	non invasive	1 min.
129	Nathan	Anae	March 01	IOH: SBP decrease > 30% from baseline BL: pre anesthetic value after artery canula insertion	invasive	continuous
130	Matot	Anae	March 00	IOH: SBP < 90 mmHg or decrease > 30% from preprocedural values BL: not defined	non invasive	2 min.

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A&A = Anesthesia and Analgesia, Anae = Anaesthesia, An = Anesthesiology, BrJA = British Journal of Anaesthesia, BL = baseline, IOH = intraoperative hypotension, MBP = mean blood pressure, SBP = systolic blood pressure