

## Supplemental data

### Supplemental S1

Search strategy. Search was performed on February 24<sup>th</sup>, 2023. The comprehensive literature search string was prepared with the advice of a clinical librarian.

#### PUBMED

("Female"[MeSH] OR "Male"[MeSH] OR "Sex Factors"[MeSH] OR female\*[tiab] OR woman[tiab] OR women[tiab] OR men[tiab] OR male[tiab] OR males[tiab] OR sex[tiab] OR sexes[tiab] OR sex difference\*[tiab] OR sex factor\*[tiab] OR sex-specific\*[tiab] OR sex categor\*[tiab] OR sex related[tiab] OR gender difference\*[tiab]) AND ("Blood Pressure"[Mesh] OR "Hypertension"[Mesh] OR "Hypotension"[Mesh] OR blood pressur\*[tiab] OR mean arterial pressur\*[tiab] OR MAP[tiab] OR MABP[tiab] OR systolic pressur\*[tiab] OR diastolic pressur\*[tiab] OR systolic blood pressur\*[tiab] OR systolic BP[tiab] OR SBP[tiab] OR diasystolic blood pressur\*[tiab] OR diastolic BP[tiab] OR hypertens\*[tiab] OR hypotens\*[tiab]) AND ("Perioperative Period"[Mesh] OR "Perioperative Care"[Mesh] OR "Monitoring, Intraoperative"[Mesh] OR perioperat\*[tiab] OR peri-operat\*[tiab] OR preoperat\*[tiab] OR pre-operat\*[tiab] OR intraoperat\*[tiab] OR intra-operat\*[tiab] OR postoperat\*[tiab] OR post-operat\*[tiab] OR during surg\*[tiab] OR during operat\*[tiab] OR undergo\*[tiab]) AND (non-cardiac\*[tiab] OR noncardiac\*[tiab]) NOT ("Animals"[Mesh] NOT "Humans"[Mesh]) NOT ("Child"[Mesh] NOT "Adult"[Mesh]) NOT (pediatric\*[ti] OR paediatric\*[ti] OR child\*[ti] OR cardiac surg\*[ti] OR animal\*[ti] OR cat[ti] OR cats[ti])

#### EMBASE (OVID):

#	Searches	Results
1	female/ or male/ or *sex factor/ or *sex difference/ or *sex/	15345053
2	(female* or woman or women or men or male or males or sex or sexes or sex difference* or sex factor* or sex-specific* or sex categor* or sex related or gender difference*).ti,ab,kf.	5640732
3	1 or 2	16069387
4	*blood pressure/ or mean arterial pressure/ or *diastolic blood pressure/ or exp *systolic blood pressure/ or hypertension/ or hypotension/	1006511
5	(blood pressur* or mean arterial pressur* or MAP or MABP or systolic pressur* or diastolic pressur* or systolic blood pressur* or systolic BP or SBP or diasystolic blood pressur* or diastolic BP or hypertens* or hypotens*).ti,ab,kf.	1485330
6	4 or 5	1816834
7	perioperative period/ or perioperative monitoring/ or intraoperative monitoring/	65675
8	(perioperat* or peri-operat* or preoperat* or pre-operat* or intraoperat* or intra-operat* or postoperat* or post-operat* or during surg* or during operat* or undergo*).ti,ab,kf.	2499219

9	7 or 8	2509798
10	(non-cardiac* or noncardiac*).ti,ab,kf.	22347
11	3 and 6 and 9 and 10	1223
12	animal/ not human/	1584018
13	11 not 12	1223
14	child/ not adult/	1613658
15	13 not 14	1196
16	(pediatric* or paediatric* or child* or cardiac surg* or animal* or cat or cats).ti.	1673158
17	15 not 16	955
18	limit 17 to conference abstract status	250
19	17 not 18	705

## Supplemental S2

### Newcastle-Ottawa quality assessment scale

#### CASE CONTROL STUDIES

Note: A study can be awarded a maximum of one star for each numbered item within the Selection and Exposure categories. A maximum of two stars can be given for Comparability.

#### Selection

1) Is the case definition adequate?

- a) yes, with independent validation
- b) yes, eg record linkage or based on self reports
- c) no description

2) Representativeness of the cases

- a) consecutive or obviously representative series of cases
- b) potential for selection biases or not stated

3) Selection of Controls

- a) community controls
- b) hospital controls
- c) no description

4) Definition of Controls

- a) no history of disease (endpoint)
- b) no description of source

#### Comparability

1) Comparability of cases and controls on the basis of the design or analysis

- a) study controls for \_\_\_\_\_ (Select the most important factor.)
- b) study controls for any additional factor (This criteria could be modified to indicate specific control for a second important factor.)

#### Exposure

1) Ascertainment of exposure

- a) secure record (eg surgical records)

- b) structured interview where blind to case/control status
- c) interview not blinded to case/control status
- d) written self report or medical record only
- e) no description

2) Same method of ascertainment for cases and controls

- a) yes
- b) no

3) Non-Response rate

- a) same rate for both groups
- b) non respondents described
- c) rate different and no designation

## NEWCASTLE - OTTAWA QUALITY ASSESSMENT SCALE

### COHORT STUDIES

Note: A study can be awarded a maximum of one star for each numbered item within the Selection and Outcome categories. A maximum of two stars can be given for Comparability

#### Selection

##### 1) Representativeness of the exposed cohort

- a) truly representative of the average \_\_\_\_\_ (describe) in the community
- b) somewhat representative of the average \_\_\_\_\_ in the community
- c) selected group of users eg nurses, volunteers
- d) no description of the derivation of the cohort

##### 2) Selection of the non exposed cohort

- a) drawn from the same community as the exposed cohort
- b) drawn from a different source
- c) no description of the derivation of the non exposed cohort

##### 3) Ascertainment of exposure

- a) secure record (eg surgical records)
- b) structured interview
- c) written self report
- d) no description

##### 4) Demonstration that outcome of interest was not present at start of study

- a) yes
- b) no

#### Comparability

##### 1) Comparability of cohorts on the basis of the design or analysis

- a) study controls for \_\_\_\_\_ (select the most important factor)
- b) study controls for any additional factor (This criteria could be modified to indicate specific control for a second important factor.)

#### Outcome

##### 1) Assessment of outcome

- a) independent blind assessment
- b) record linkage

- c) self report
- d) no description

2) Was follow-up long enough for outcomes to occur

- a) yes (select an adequate follow up period for outcome of interest)
- b) no

3) Adequacy of follow up of cohorts

- a) complete follow up - all subjects accounted for
- b) subjects lost to follow up unlikely to introduce bias - small number lost - > \_\_\_\_ % (select an adequate %) follow up, or description provided of those lost)
- c) follow up rate < \_\_\_\_% (select an adequate %) and no description of those lost
- d) no statement

## Supplemental S3

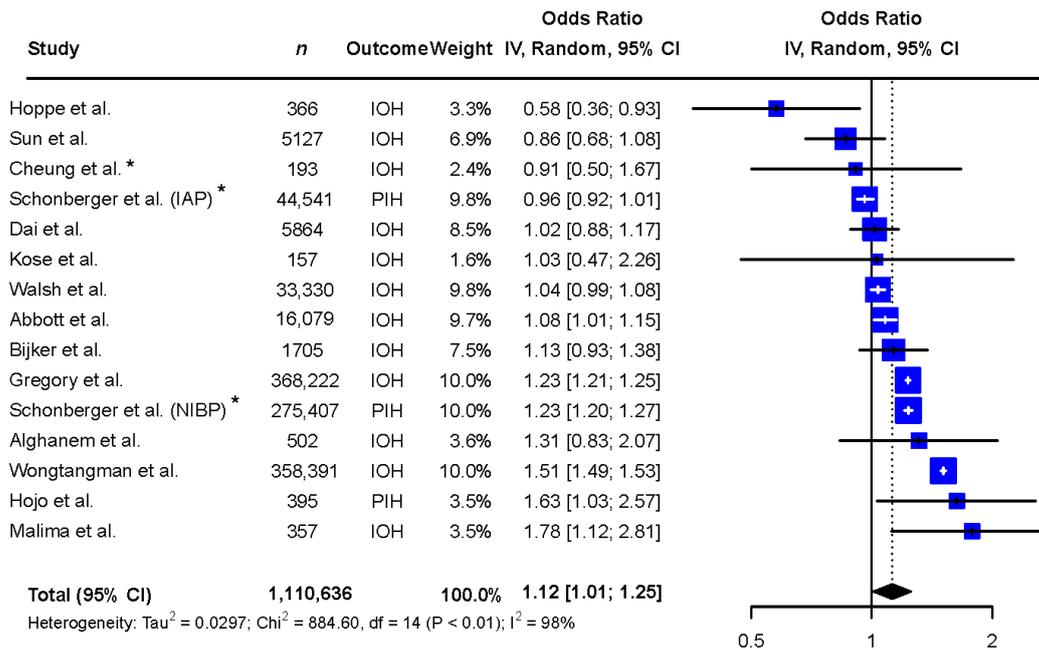


Figure S1. Sensitivity analysis: Least severe definition of intraoperative hypotension [6,9–15,25–28,30].

Abbreviations: *n*: number, CI: confidence interval, df: degrees of freedom, IAP: invasive arterial pressure, IOH: intraoperative hypotension, NIBP: non-invasive blood pressure, PIH: post-induction hypotension

\* Adjusted odds ratio based on multivariate analysis

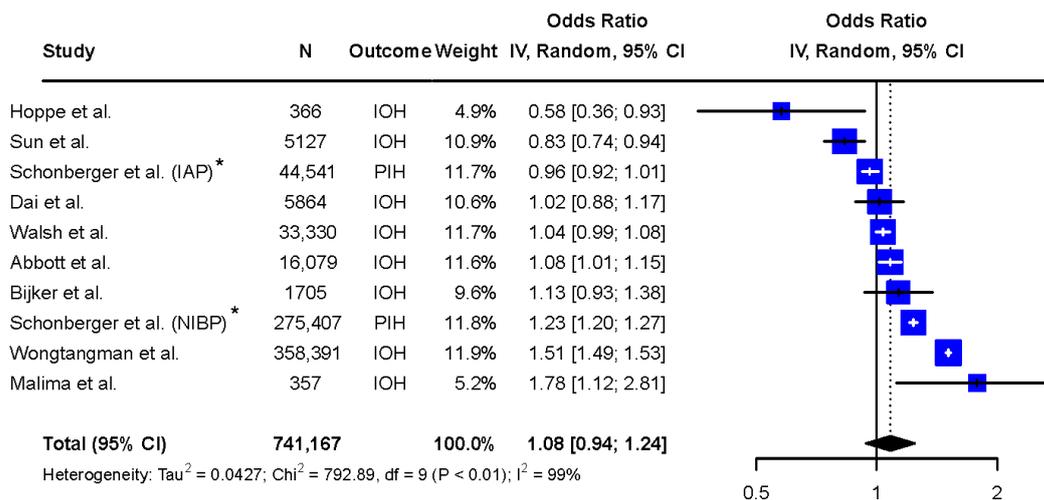


Figure S2. Sensitivity analysis: Representative study cohorts [6,10,12–14,26,29,30].

Abbreviations: *n*: number, CI: confidence interval, df: degrees of freedom, IAP: invasive arterial pressure, IOH: intraoperative hypotension, NIBP: non-invasive blood pressure, PIH: post-induction hypotension

\* Adjusted odds ratio based on multivariate analysis

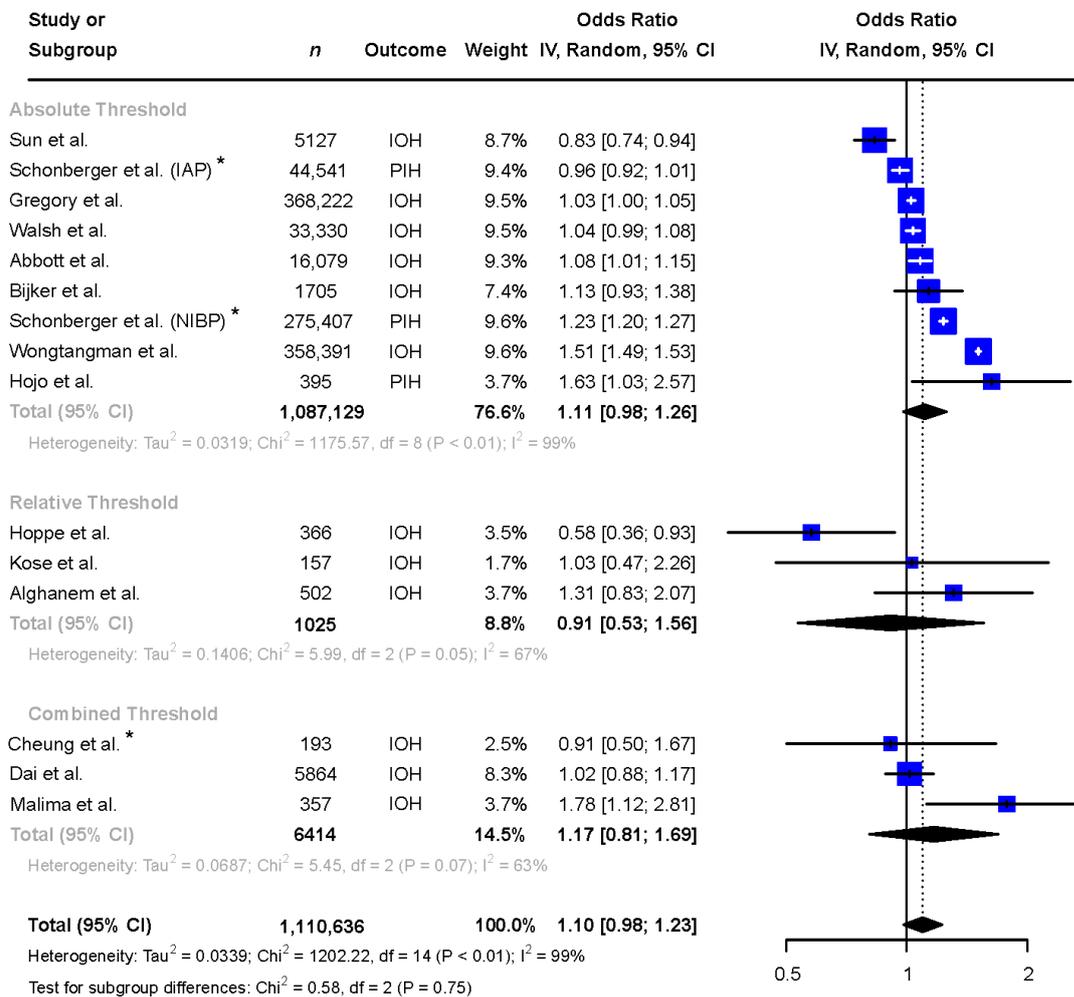


Figure S3. Subgroup analysis: absolute versus relative versus combined thresholds for intraoperative hypotension [6,9–15,25–30].

Abbreviations: n: number, CI: confidence interval, df: degrees of freedom, IAP: invasive arterial pressure, IOH: intraoperative hypotension, NIBP: non-invasive blood pressure, PIH: post-induction hypotension

\* Adjusted odds ratio based on multivariate analysis