

Supplementary Digital Content 1. The Search Strategy.

| PubMed | | |
|------------------|------------------|----------------|
| Search No | Query | Results |
| 1 | Beach chair | 383 |
| 2 | Beach-chair | 289 |
| 3 | Sitting | 23,051 |
| 4 | Position | 605,977 |
| 5 | 1 OR 2 | 383 |
| 6 | 3 OR 4 | 8,280 |
| 7 | 5 OR 6 | 8,641 |
| 8 | Anesth* | 675,987 |
| 9 | Surg* | 4,115,485 |
| 10 | 7 AND 8 | 1,044 |
| 11 | 7 AND 9 | 2,299 |
| 12 | 10 OR 11 | 2,692 |
| 13 | Shoulder surg* | 42,351 |
| 14 | Shoulder arthro* | 18,735 |
| 15 | 13 OR 14 | 44,974 |
| 16 | 12 AND 15 | 327 |
| 17 | Brain | 1,994,137 |
| 18 | Cerebral | 2,162,858 |

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| 19 | Regional | 5,907,782 |
| 20 | 17 OR 18 OR 19 | 7,702,903 |
| 21 | Oximet* | 19,545 |
| 22 | Desat* | 20,473 |
| 23 | Saturat* | 160,157 |
| 24 | RSO2 | 783 |
| 25 | Monitor* | 980,333 |
| 26 | 21 OR 22 OR 23 OR 24 OR 25 | 1,148,305 |
| 27 | 20 AND 26 | 349,545 |
| 28 | Prophyla* | 180075 |
| 29 | Prevent* | 2585145 |
| 30 | 28 OR 29 | 2660712 |
| 31 | 12 AND 26 | 394 |
| 32 | 12 AND 27 | 171 |
| 33 | 16 AND 27 | 80 |
| 34 | 16 AND 26 | 93 |
| 35 | 15 AND 26 | 901 |
| 36 | 15 AND 27 | 230 |
| 37 | 31 OR 30 | 89 |
| 38 | 32 OR 30 | 40 |
| 38 | 33 OR 30 | 25 |
| 38 | 34 OR 30 | 28 |
| 38 | 35 OR 30 | 184 |

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| 38 | 33 OR 30 | 62 |
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2. Ovid

| Ovid-MEDLINE | | |
|---------------------|-----------------------------------|----------------|
| Search No | Search | Results |
| 1 | Beach chair.ti,ab,kw. | 88 |
| 2 | Seated position.ti,ab,kw. | 358 |
| 3 | Sitting.ti,ab,kw. | 7059 |
| 4 | (sitting adj2 position).ti,ab,kw. | 1737 |
| 5 | Sitting position.ab,ti,kw. | 1543 |
| 6 | 1 or 2 or 3 or 5 | 7462 |
| 7 | Shoulder.ti,ab,kw. | 23169 |
| 8 | shoulder anaesth*.ti,ab,kw. | 1 |
| 9 | Shoulder surg*.ab,kw,ti. | 976 |
| 10 | Shoulder arthro*.ab,kw,ti. | 1839 |
| 11 | Arthroscopy.ab,kw,ti. | 5150 |
| 12 | (shoulder adj2 arthro*).ti,ab,kw. | 2458 |
| 13 | Arthroplasty.ti,ab,kw. | 27232 |
| 14 | 7 or 8 or 9 or 10 or 11 or 13 | 52824 |
| 15 | Brain.ti,ab,kw. | 279028 |
| 16 | Cerebral.ti,ab,kw. | 130069 |

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| 17 | Regional.ti,ab,kw. | 88725 |
| 18 | 15 or 16 or 17 | 441486 |
| 19 | Oximetry.ti,ab,kw. | 5642 |
| 20 | Oximet*.ti,ab,kw. | 6988 |
| 21 | oxygen*.ti,ab,kw. | 143763 |
| 22 | Desaturat*.ti,ab,kw. | 4181 |
| 23 | Saturat*.ti,ab,kw. | 35756 |
| 24 | rSO ₂ .ti,ab,kw. | 320 |
| 25 | Monitor*.ti,ab,kw. | 229456 |
| 26 | 19 or 20 or 21 or 22 or 23 or 24 or 25 | 387934 |
| 27 | Prophylaxis.ti,ab,kw. | 38155 |
| 28 | (Prevention and control).ti,ab,kw. | 34172 |
| 29 | Prophyla*.ti,ab,kw. | 59654 |
| 30 | Prevent*.ti,ab,kw. | 427402 |
| 31 | 27 or 28 or 29 or 30 | 470193 |
| 32 | Randomised control trial.ti,ab,kw. | 429 |
| 33 | quasi-random*.ti,ab,kw. | 673 |
| 34 | Randomized controlled trial.ti,ab,kw. | 37712 |
| 35 | Random*.ti,ab,kw. | 402686 |
| 36 | Randomi*.ti,ab,kw. | 275927 |
| 37 | clinical trial.ti,ab,kw. | 61869 |
| 38 | Control*.ti,ab,kw. | 1021551 |
| 39 | Trial*.ti,ab,kw. | 407798 |

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| 40 | 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 | 1389423 |
| 41 | 18 and 26 | 36274 |
| 42 | 14 and 41 | 99 |
| 43 | 6 and 14 | 259 |
| 44 | 41 and 43 | 32 |
| 45 | 31 and 42 and 43 | 8 |
| 46 | 6 or 14 | 60027 |
| 47 | 31 and 42 and 46 | 18 |
| 48 | 40 and 41 and 46 | 54 |

The search terms were used to search databases of MEDLINE, CCRCT, CINHAI (EBSCO host) and, Google Scholar (modified to suit each specific database with abstract, keywords and text with the removal of duplicates).