Table S1 Literature search criteria

Date	Database	Search Terms
17.11.2020	Embase (Ovid)	1. Pain, Postoperative/ 2. postoperative or post-operative or post-operat* or postoperat* or "after operat*" or "follow* operat*" 3. postsurgical or post-surgical or post-surg* or postsurg* or "after surg*" or "follow* surg*" 4. 2 or 3 5. pain* or discomfort or analgesi* 6. 4 and 5 7. 1 or 6 8. chronic* or constant* or continu* or persist* or longterm or long-term or longstanding or long-standing or long lasting or longlasting 9. 7 and 8 10. 9 and 2010:2020.(sa_year). 11. Meta analysis/ 12. 10 and 11
19.07.2021	MEDLINE (Ovid)	1. Pain, Postoperative/ 2. postoperative or post-operative or post-operat* or postoperat* or "after operat*" or "follow* operat*" 3. postsurgical or post-surgical or post-surg* or postsurg* or "after surg*" or "follow* surg*" 4. 2 or 3 5. (pain* or discomfort or analgesi* 6. 4 and 5 7. 1 or 6 8. chronic* or constant* or continu* or persist* or longterm or long-term or longstanding or long-standing or long lasting or longlasting 9. 7 and 8 10. 9 and 2010:2020.(sa_year). 11. Meta-Analysis/ 12. 10 and 11
19.07.2021	Cochrane Database of Systematic Reviews (Ovid)	1. Pain, Postoperative 2. postoperative or post-operative or post-operat* or postoperat* or "after operat*" or "follow* operat*" 3. postsurgical or post-surgical or post-surg* or postsurg* or "after surg*" or "follow* surg*" 4. 2 or 3 5. (pain* or discomfort or analgesi* 6. 4 and 5 7. 1 or 6 8. chronic* or constant* or continu* or persist* or longterm or long-term or longstanding or long-standing or long lasting or longlasting 9. 7 and 8 10. 9 and 2010:2020.(sa_year). 11. Meta-Analysis/ 12. 10 and 11

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Reg Anesth Pain Med

Table S2 Full-text exclusions

Study title	Author, year	Reason for exclusion
Local anaesthetics and regional anaesthesia for preventing chronic pain after surgery.	Andreae, 2012	Wrong intervention
Efficacy of Intraoperative Dexmedetomidine Compared with Placebo for Postoperative Pain Management: A Meta-Analysis of Published Studies	Bellon, 2016	Pediatric population
Effect of perioperative systemic alpha2 agonists on postoperative morphine consumption and pain intensity: systematic review and meta-analysis of randomized controlled trials.	Blaudszun, 2012	Did not examine chronic pain
Pharmacotherapy for the prevention of chronic pain after surgery	Chaparro, 2012	Conference abstract
Effect of Perioperative Vitamin C Supplementation on Postoperative Pain and the Incidence of Chronic Regional Pain Syndrome: A Systematic Review and Meta-Analysis.	Chen, 2016	Wrong outcomes
The efficiency and safety of steroid addition to multimodal cocktail periarticular injection in knee joint arthroplasty: a meta-analysis of randomized controlled trials	Deng, 2019	Did not examine chronic pain
Perioperative single dose systemic dexamethasone for postoperative pain: a meta-analysis of randomized controlled trials.	DeOliveira, 2011	Did not examine chronic pain
Single dose oral celecoxib for acute postoperative pain in adults.	Derry, 2013	Did not examine chronic pain
Preoperative gabapentin for postoperative pain in orthopaedic surgery: Systematic review, meta-analysis and meta-regression	Doleman, 2015	Conference abstract
Pharmacological interventions for the prevention of acute postoperative pain in adults following brain surgery.	Galvin, 2019	Did not examine chronic pain
Single dose oral ketoprofen or dexketoprofen for acute postoperative pain in adults	Gaskell, 2017	Did not examine chronic pain
Intra-articular lidocaine versus intravenous analgesia and sedation for manual closed reduction of acute anterior shoulder dislocation: an updated meta-analysis.	Jiang, 2014	Wrong outcomes
The effects of continuous intravenous infusion of dexmedetomidine and remifentanil on postoperative pain: A systematic review and meta-analysis	Jin, 2019	Did not examine chronic pain
Interventions to reduce shoulder pain following gynaecological laparoscopic procedures	Kaloo, 2019	Wrong intervention
Continuous intravenous perioperative lidocaine infusion for postoperative pain and recovery.	Kranke, 2015	Did not examine chronic pain
The efficacy and safety of dexamethasone for pain management after total knee arthroplasty: A systematic review and meta-analysis.	Li, 2018	Did not examine chronic pain
The efficiency and safety of dexamethasone for pain control in total joint arthroplasty: A meta-analysis of randomized controlled trials.	Meng, 2017	Did not examine chronic pain

Perioperative adjuvant corticosteroids for post-operative analgesia in elective knee surgery - A systematic review	Mohammad, 2017	Did not examine chronic pain
The efficacy and safety of first-line therapies for preventing chronic post-surgical pain: A network meta-analysis	Ning, 2018	Wrong outcomes
Perioperative Ketamine for Analgesia in Spine Surgery: A Meta-analysis of Randomized Controlled Trials.	Pendi, 2018	Did not examine chronic pain
Peri-operative steroids reduce pain, inflammatory response and hospitalisation length following knee arthroplasty without increased risk of acute complications: a meta-analysis	Previtali, 2019	Did not examine chronic pain
Is intraoperative dexmedetomidine a new option for postoperative pain treatment? A meta-analysis of randomized controlled trials.	Schnabel, 2013	Did not examine chronic pain
Perioperative systemic lidocaine for postoperative analgesia and recovery after abdominal surgery: A meta-analysis of randomized controlled trials	Sun, 2012	Did not examine chronic pain
Lidocaine for preventing postoperative sore throat	Tanaka, 2015	Did not examine chronic pain
Perioperative use of gabapentinoids for the management of postoperative pain: A systematic review & meta-analysis	Verret, 2018	Conference abstract
Efficacy and safety of intravenous lidocaine for postoperative analgesia and recovery after surgery: a systematic review with trial sequential analysis.	Weibel, 2016	Did not examine chronic pain
Continuous intravenous perioperative lidocaine infusion for postoperative pain and recovery in adults	Weibel, 2018	Did not examine chronic pain
The effectiveness of interventions for preventing chronic pain after total knee replacement: Systematic review and meta-analysis	Wylde, 2020	Conference abstract
The efficacy of pregabalin for the management of acute and chronic postoperative pain in thoracotomy: A meta-analysis with trial sequential analysis of randomized-controlled trials	Yu, 2019	Wrong outcomes

Table S3 Item descriptions for the AMSTAR 2 critical appraisal tool for systematic reviews

Item No.	Item
1.	Did the research questions and inclusion criteria for the review include the components of PICO?
2.	Did the report of the review contain an explicit statement that the review methods were established prior to the conduct of the review and did the report justify any significant deviations from the protocol?
3.	Did the review authors explain their selection of the study designs for inclusion in the review?
4.	Did the review authors use a comprehensive literature search strategy?
5.	Did the review authors perform study selection in duplicate?
6.	Did the review authors perform data extraction in duplicate?
7.	Did the review authors provide a list of excluded studies and justify the exclusions?
8.	Did the review authors describe the included studies in adequate detail?
9.	Did the review authors use a satisfactory technique for assessing the risk of bias (RoB) in individual studies that were included in the review?
10.	Did the review authors report on the sources of funding for the studies included in the review?
11.	If meta-analysis was performed, did the review authors use appropriate methods for statistical combination of results?
12.	If meta-analysis was performed, did the review authors assess the potential impact of RoB in individual studies on the results of the meta-analysis or other evidence synthesis?
13.	Did the review authors account for RoB in primary studies when interpreting/discussing the results of the review?
14.	Did the review authors provide a satisfactory explanation for, and discussion of, any heterogeneity observed in the results of the review?
15.	If they performed quantitative synthesis did the review authors carry out an adequate investigation of publication bias (small study bias) and discuss its likely impact on the results of the review?
16.	Did the review authors report any potential sources of conflict of interest, including any funding they received for conducting the review?

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Reg Anesth Pain Med

Table S4 AMSTAR 2 critical appraisal tool for systematic reviews

Study	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Quality
Bailey, 2018	Yes	Yes	No	Partial Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Moderate
Bi, 2020	Yes	No	No	Partial Yes	Yes	Yes	No	Yes	Yes	No	Yes	No	No	Yes	Yes	Yes	Critically low
Carley, 2021	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Low
Chang, 2017	No	No	No	Partial Yes	No	Yes	Partial Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Low
Chang, 2020	Yes	Partial Yes	No	Yes	Yes	Yes	Partial Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Low
Chaparro, 2013	Yes	Partial Yes	No	Partial Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Low
Clarke, 2012	Yes	No	No	Partial Yes	Yes	Yes	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Critically low
Hamilton, 2016	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Critically low
Jiang, 2018	Yes	No	No	Partial Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Low
Klatt, 2015	Yes	Partial Yes	Yes	Partial Yes	No	Yes	Partial Yes	Yes	No	No	Yes	No	No	Yes	Yes	Yes	Critically low
Lepot, 2020	Yes	Yes	No	Partial Yes	Yes	No	No	Partial Yes	Yes	No	Yes	No	Yes	Yes	No	Yes	Critically low
Martinez, 2017	No	Yes	No	Yes	Yes	Yes	Partial Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Low
McNicol, 2014	Yes	No	No	Partial Yes	No	Yes	Partial Yes	Yes	Yes	No	Yes	No	Yes	Yes	No	Yes	Critically low
Mishriky, 2014	Yes	No	No	Partial Yes	Yes	Yes	Partial Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Low
Rai, 2017	Yes	Yes	No	Partial Yes	Yes	Yes	Partial Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	Low
Riddell, 2019	Yes	Yes	No	Yes	Yes	Yes	Partial Yes	Yes	Yes	No	Yes	No	Yes	Yes	No	Yes	Low
Verret, 2020	Yes	Yes	No	Yes	Yes	Yes	Partial Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	High