reference	participants' characteristics	intervention group/ control group	outcomes	critical appraisal/ conclusion
Cui et al. 2010 Systemic administration of lidocaine reduces morphine requirements and postoperative pain of patients undergoing thoracic surgery after propofol-remifentanil-based anaesthesia. Eur J Anaesthesiol. 2010 jan;27(1):41-6.	**inclusion criteria** - ASA physical status I–II - age 18–65 yrs -undergoing thoracic surgery lasting 3–6 h between 1 Jan to 31 Jul 2008 **exclusion criteria** - chronic pain - taking analgesics or opioids within 7 days of surgery - history of drug or alcohol abuse - psychiatric disorder - obesity - acute CV disorder - CNS disease - inability to communicate with investigator - contraindication(s) to propofol, opioids, lidocaine or to self administration of morphine via PCA - surgery time >6 h- immediate extubation was not planned after surgery **demographic data**: group L group C age (yrs) 54(9) 51(10) weight (kg) 65(9) 60(10) height (cm) 168(8) 170(8) sex (m/f) 13/7 13/7 ASA status (I/II) 6/14 5/15 **patient flow and follow up:** total patient number included: 45 randomised in: group L: 20 group C: 20 excluded: 5 analysed: 40 follow-up: 2,6,12,24,36,48 h postop	**intervention prior to anaesthesia** - group L: IV lidocaine (33.0 µg/kg/min) at induction, stopped at skin closure - group C (control): IV physiological saline **mode of anaesthesia** - propofol-remifentanil (targeted cible) **surgical approach** Procedure (n) *Pulmonary lobectomy*: Group L 7 Group C 6 *Oesophagectomy*: Group L 9 Group C 9 *Cardiectomy*: Group L 4 Group C 5 **postoperative analgesia** - in PACU: Titration of morphine (1.0–2.0 mg/2 min) were given to keep the VRS-4 <2. - after 2h postop: PCA morphine, 1 mg with 5 min lo, for 48 h post op	**postoperative pain [VRS-4 in the first 2 h 0=no pain, 1= slight pain, 2= moderate pain, 3= intense or severe pain]** group L group C at 30 min ≤ 1 16 10 ≥ 2 4 10 S at 90 & 120 min (No data) NS **postoperative pain [VAS (mm): mean±SD]** group L group C at 6 h 23.1±15.6 34.2±15.4 S from 6-48 h (no data) (no data) NS **morphine consumption in the first 2 h (mg): mean±SD** group L group C at 30 min 0 (0–2.8) 6 (0.3–11.3) S 30–60 min 0 (0–0.75) 1.5 (0–4) S total amount of morphine given 0–120 min 0 (0–4) 8 (1.25–15.) S **PCA morphine consumption (mg): mean±SD** group L group C during 2–6 h (mg) 2 (0–3.) 4 (2–5.8) S during 6 to 48 h (mg) 11 (8.3–26.5) 20.5 (10–29) NS total doses of morphine given in 48 h 12 (9.3–28) 30.5 (11–47.8) NS	**methodological shortcomings** - outcomes not clearly defined - not reported how sample size was determined - no explanation of any interim analyses and/or stopping rules **level of evidence: 1** **authors' conclusion** "Systemic administration of lidocaine could reduce morphine requirements, postoperative pain and intraoperative propofol C(e) of patients undergoing thoracic surgery after propofol-remifentanil-based anaesthesia."