ultrasound guidance has been recommended to avoid phrenic nerve involvement.\textsuperscript{6}

The authors state in their sample size calculation, the mean duration and standard deviation of the ropivacaine ISB but fail to state the number of patients and the method of obtaining the values (pilot study or historic data). Also, the sample size is calculated for ropivacaine ISB without any adjunct, but the equivalence is sought between perineural and i.v. dexamethasone.

If the previous studies show that the data concerning the primary endpoint do not follow a normal distribution, sample size estimation can be difficult. The options in this scenario are to either perform a pilot of patients with perineural dexamethasone or to draw a rough estimate of parametric equivalents from the non-parametric data of previous studies to determine the mean and standard deviation.\textsuperscript{7} The latter approach would require a 10–15% inflation in the overall estimated sample size. An equivalence design can be similarly constructed after defining a suitable delta (to determine what duration is considered clinically equivalent between the two groups). In the present study, the equivalence limit was set at 360 min (6 h), which is not clinically relevant. In other words, if difference in the duration of analgesia between the two groups was 5.9 h, the trial would still show that both the groups are equivalent. If the authors considered a 2 h (120 min) difference between the i.v. and perineural groups to be clinically equivalent, 376 patients per group would be required and if the delta was set to 3 h (180 min), the sample per group would be 168. The duration of sensory block has not been objectively examined in the study, but time to rescue analgesic has been used as its surrogate.

From the present study, although we cannot definitely say that the duration of analgesia was equivalent in both the i.v. and perineural groups, the study results should not be ignored and future studies with larger sample of patients may conclusively answer the question.

Declaration of interest
None declared.

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\textsuperscript{1}Desmet M, Braems H, Reynvoet M, et al. I.V. and perineural dexamethasone are equivalent in increasing the analgesic duration of a single-shot interscalene block with ropivacaine for shoulder surgery: a prospective, randomized, placebo-controlled study. \textit{Br J Anaesth} 2013; \textbf{111}: 445–52

\textsuperset{2}Williams BA, Hough KA, Tsui BY, Ibinson JW, Gold MS, Gehbort GF. Neurotoxicity of adjuvants used in perineural anesthesia and analgesia in comparison with ropivacaine. \textit{Reg Anesth Pain Med} 2011; \textbf{36}: 225–30

\textsuperset{3}De Oliveira GS Jr, Almeida MD, Benzon HT, McCarthy RJ. Perioperative single dose systemic dexamethasone for postoperative pain: a meta-analysis of randomized controlled trials. \textit{Anesthesiology} 2011; \textbf{115}: 575–88

\textsuperset{4}Neal JM, Rathmell JP, Rowlingson JC. Publishing studies that involve ‘off-label’ use of drugs: formalizing Regional Anesthesia and Pain Medicine’s policy. \textit{Reg Anesth Pain Med} 2009; \textbf{34}: 391–2


\textsuperset{6}Falcao LF, Perez MV, de Castro I, Yamashita AM, Tardelli MA, Amaral JL. Minimum effective volume of 0.5% bupivacaine with epinephrine in ultrasound-guided interscalene brachial plexus block. \textit{Br J Anaesth} 2013; \textbf{110}: 450–5

\textsuperset{7}Cummings KC III, Napierkowski DE, Parra-Sanchez I, et al. Effect of dexamethasone on the duration of interscalene nerve blocks with ropivacaine or bupivacaine. \textit{Br J Anaesth} 2011; \textbf{107}: 446–53
doi:10.1093/bja/aet454

Dexamethasone for increasing analgesic duration of single-shot inter-scalene block

Editor—We read with great interest the article by Desmet and colleagues\textsuperset{2} about their randomized trial comparing analgesic duration of ropivacaine alone, ropivacaine with perineural dexamethasone, and ropivacaine with i.v. dexamethasone for shoulder surgery. The authors describe their analysis as ‘intention-to-treat’, yet the actual analysis did not include outcome data from a subset of randomized patients. Specifically, Desmet and colleagues state that ‘six patients had no primary or secondary outcome result because of inadherence to the protocol. These patients were not included in the intention-to-treat (ITT) analysis\textsuperset{1}. The exclusion of the six patients from analysis, in fact, precludes the label of ITT. Strict ITT analysis requires that all randomized patients are analysed according to the original treatment allocation, regardless of what subsequently occurred.\textsuperset{2} Thus, we believe that their analysis would be more aptly described as ‘per protocol’.

Given the advantages of having a complete data set, we wish to enquire if the authors sought to collect outcome information on the six inadherent patients. Obtaining outcome data (with permission) on patients who have withdrawn, or continuing follow-up on participants regardless of actual intervention received, compliance, or discovery of ineligibility post-randomization would have allowed for a true ITT analysis.\textsuperset{3} Since outcome data for the six patients are not available, we would appreciate if the authors could provide clarification of the specific nature of the inadherence (lost to follow-up, did not receive allocated treatment, etc.) in each of the six cases. This additional transparency would allow the reader to assess the degree of potential systematic differences between the inadherent and adherent patients, and/or extent of a possible relationship between treatment allocation and inadherence.\textsuperset{4}

Declaration of interest
None declared.
Ethnicity and acute kidney injury: the correct definition of acute kidney injury?

Editor—We read with great interest the article by Chew and colleagues1 on the association of ethnicity and acute kidney injury (AKI) after cardiac surgery in a South East Asian population. The role of genetics in health and pathology is a fascinating area of study which requires much more exploration. There are, however, some questions we would like to pose.

The study’s main outcome was postoperative AKI defined as ‘a 25% or greater increase in preoperative to a maximum postoperative serum creatinine level within three days after surgery’. We feel that the relatively low fractional change in serum creatinine used by the authors to define AKI has led to a larger number of patients being categorized as having AKI. We would be interested to know if these differences in rates of AKI between the ethnic groups persist when the evidence-based international consensus definitions of AKI such as the RIFLE criteria2 and Acute Kidney Injury Network (AKIN)3 staging system are used.

The RIFLE criteria for acute renal dysfunction were developed by the consensus conference of the Acute Dialysis Quality Initiative in 2003. This system uses GFR criteria or urine output criteria to classify patients into three severity categories—risk, injury, and failure—and two outcome categories—loss and end-stage renal failure. The RIFLE criteria define ‘Risk’ as an increase in serum creatinine of 1.5 times the baseline and ‘Injury’ as an increase in serum creatinine two times the baseline. Both the ‘risk’ and ‘injury’ classifications are highly sensitive in determining potential AKI. AKIN, an international group of nephrologists and critical care experts, agreed by consensus a staging system for the spectrum of AKI, where mild AKI is defined as a percentage increase in serum creatinine of more than or equal to 50% (1.5-fold) from baseline. If the authors had used these widely accepted classification systems, we suspect that the statistics would be quite different.

On a final point of interest, we would be fascinated to know if there was any difference in the distribution of the ethnic groups between the two hospitals or between individual surgeons? Could patients’ self-selection in terms of presentation to a particular hospital or to a particular surgeon be having an impact on their outcome?

Organ failure related to ethnicity

Editor—We read with great interest the article by Chew and colleagues1 dealing with acute kidney failure (AKI) after cardiac surgery comparing three groups of people: Indians, Malays, and Chinese, all from South Asia. This prospective study determined that the ethnic populations of India and the Malays were at a higher risk for developing renal failure than Chinese. It is not surprising that this may occur since the life styles of these people are so different from Chinese. The genetics are different and also food intake, cultural background, and environment. All must be taken into consideration to determine health status which in many South Asian countries is below standard. The people of these populations are known not to live long lives because of various illnesses and conditions. By and large, Chinese people are healthier than other South Asian countries.

The authors of the article1 point out themselves that genetics plays a major role in developing renal failure post-cardiac surgery and their results show the gene–environment interaction.

We would like to suggest a different retrospective or prospective scientific investigation concerning this problem of...