



## Correspondence

### Dopexamine and survival: areas of consistency

We read with interest Gopal et al.'s meta-analysis of the effects of dopexamine on survival and its accompanying editorial [1, 2]. The meta-analysis did not find a significant improvement in survival associated with dopexamine infusion, in contrast with the findings of our own work [3]. However, the results of both this meta-analysis and our meta-regression analysis are consistent with the hypothesis that a survival benefit exists. Whilst we could continue to debate issues of study design, trial selection and the approach to handling important potential confounders, these have already been explored in considerable depth in the article and editorial. Instead we would like to draw attention to the areas of consistency between these analyses and the wider implications for this field of research.

Gopal and colleagues acknowledge the continued uncertainty surrounding the survival benefit of peri-operative dopexamine infusion and the need for large clinical trials to resolve this question. We drew the same conclusion following our own work and Pandit [2] acknowledges the need for further investigation in his editorial. Successive reports produced by the National Confidential Enquiry into Patient Outcome and Death (NCEPOD) have emphasised the healthcare implications of poor outcomes follow-

ing major surgery [4]. Our own work with the Intensive Care National Audit and Research Centre (ICNARC) has confirmed the existence of a large UK population of patients undergoing major non-cardiac surgery who have a very high incidence of complications, prolonged inpatient stays and a hospital mortality rate of 12% [5]. Clearly, there is an urgent need to develop new approaches to peri-operative care that might reduce complication rates and improve survival. The benefits of the most promising of these should then be confirmed in large clinical trials.

Together with colleagues from across the UK, we are shortly to commence recruitment into a large pragmatic randomised trial of a peri-operative haemodynamic intervention that incorporates low dose dopexamine infusion and stroke volume guided fluid therapy (OPTIMISE trial). The findings of clinical trials and meta-analyses performed to date illustrate the equipoise that now exists on this issue. Funded by the National Institute for Health Research (UK) and supported by ICNARC, on completion this trial will shed considerable light on this important area of clinical practice.

#### Disclosure

RP and CH are named inventors on a patent application relating to dopexamine.

R. Pearse

D. Bennett

C. Hinds

Barts and The London School of Medicine and Dentistry

Guys and St. Thomas' NHS

Foundation Trust London, UK

E-mail: Rupert.Pearse@

bartsandthelondon.nhs.uk

### References

- 1 Gopal S, Jayakumar D, Nelson PN. Meta-analysis on the effect of dopexamine on in-hospital mortality. *Anaesthesia* 2009; **64**: 589–94.
- 2 Pandit JJ. Meta-analyses of the effects of dopexamine in major surgery: do all roads lead to Rome? *Anaesthesia* 2009; **64**: 585–8.
- 3 Pearse RM, Belsey JD, Cole JN, Bennett ED. Effect of dopexamine infusion on mortality following major surgery: individual patient data meta-regression analysis of published clinical trials. *Critical Care Medicine* 2008; **36**: 1323–9.
- 4 Cullinane M, Gray AJ, Hargraves CM, Lansdown M, Martin IC, Schubert M. *The 2003 Report of the National Confidential Enquiry into Peri-Operative Deaths*. London: NCEPOD, 2003.
- 5 Pearse RM, Harrison DA, James P, et al. Identification and characterisation of the high-risk surgical population in the United Kingdom. *Critical Care* 2006; **10**: R81.

A response to a previously published article or letter can be submitted to the Online Correspondence section at [www.anaesthesiacorrespondence.com](http://www.anaesthesiacorrespondence.com).

All correspondence intended for publication in *Anaesthesia* should be submitted as an e-mail attachment to [anaesthesia@nottingham.ac.uk](mailto:anaesthesia@nottingham.ac.uk). All correspondence submissions should be accompanied by a completed author declaration form as requested in the Guidelines to Authors which can be accessed at <http://www.wiley.com/bw/submit.asp?ref=0003-2409>. The author declaration form should be sent as an email attachment.

Copy should be prepared in the usual style of the Correspondence section. Authors must follow the advice about references and other matters contained in the Author Guidelines at <http://www.wiley.com/bw/submit.asp?ref=0003-2409&site=1>. Correspondence presented in any other style or format will be returned to the author for revision.

Copyright of *Anaesthesia* is the property of Blackwell Publishing Limited and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.