practice."[3] In our opinion, this statement expresses appropriate and adequate express caution regarding the application of these data to clinical practice.

We would also like to comment regarding the statistical analysis and presentation in the article by Kalkman *et al.*,[2] as questioned by Dr. Raghunathan *et al.* Their study focused on effect sizes and not on statistical significance judgments. This was a prudent choice because of the pilot nature and goals of the effort. This clear focus on effect sizes is made abundantly clear by the fact that in the article by Kalkman *et al.*[2] there is not a single *P* value reported. Instead, Kalkman *et al.*[2] referenced the size of the observed effects throughout. For a properly powered study, making a claim about an effect that is not statistically significant is, indeed, anathema. However, in this clearly defined pilot study, reminding a reader than an observed effect size did not reach statistical significance is actually a responsible practice. The uncovered effect sizes in a pilot study are estimates of their population values, but as Kalkman *et al.*[2] overtly stated, these estimates are in the context of very wide confidence intervals.

We strongly believe that there is a place for small n research in ANESTHESIOLOGY. Small n research is tricky to report. We have a sophisticated community of researchers (mostly bench scientists) who successfully add to our knowledge base while using studies that are not optimally powered. Again, this reinforces the importance of clear effect size reporting (as in the two mentioned studies), *a priori* power analyses to overtly report assumptions, and exact *P* value reporting to arm a reader with enough information to properly interpret experimental effects.

Regarding their statement on *post hoc* power analyses, Raghunathan *et al.* are wise to be concerned about power calculations that are based on observed *P* values. We agree with this sentiment, articulately voiced by Hoenig and Heisey,[4] and for that reason actively discourage such power calculations. The provided power calculation, though, was clearly presented as the primary aim of the study, and posits that the observed risks are the population values, and to reject a null hypothesis of no added risk (under a traditional set of inference assumptions), a future prospective study would need to study 2,268 children (thus making it similar to power analyses conducted throughout the research world; this one is simply in print). There is a difference between stating "These differences would be statistically significant with n patients" *versus* "If these differences are population values, we need n patients to reject a null hypothesis in our next study." In that regard, Kalkman *et al.*[2] have succeeded in providing a context for interpreting their study.

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"Innocent Prattle" and the Quality of Scientific Discourse

To the Editor:—We read with interest the editorial titled "Innocent Prattle" by Dr. Lagasse[1] that accompanied our article on anesthesia mortality.[2] As we described, the recent 10th revision of the *International Classification of Diseases* (ICD-10) codes now includes extensive data on anesthesia complications. Its adoption by the United States to classify death certificate data offers both the opportunity and the obligation for researchers to engage in thoughtful analyses of these data. Our study was the first to accept that challenge. As stated in our article,[2] our objectives were "to develop a comprehensive set of anesthesia safety indicators based on the latest version of the ICD and to apply these indicators to a national data system for understanding the epidemiology of anesthesia-related mortality." By any measure, we have achieved these objectives despite Dr. Lagasse's critique. It is well recognized and extensively discussed in our article that administrative data, such as those from ICD-coded, multiple-cause-of-death files, may underestimate the true incidence of adverse outcomes of medical care. It has been estimated, for example, that adverse drug effects reported to the US Food and Drug Administration account for substantially less (< 20%) than the true incidence.[3] However, such data can and have been crucial in detecting trends, identifying safety problems, and defining strategies to improve drug safety. In addition, thoughtful analyses will allow further granularity to be either detected from the current data or built into future ICD editions. Dr. Lagasse seems to disagree with our view that the opportunity should not be lost to analyze the ICD-10–coded mortality data as presented in our article and seems to view such analyses as "innocent prattle."

Although vigorous argument, discussion, and even disagreement are essential and useful parts of the scientific process, derogatory comments about colleagues' work are not. It would be a pity if learned publications fall into the trap of adopting the headline style of some popular tabloid newspapers. A deeper reading of the message of Hans Christian Andersen might be that substance and reality (read: scientific data) trump posturing and belief regardless of one's perceived status. We will look forward to the application and validation by the scientific community of the techniques described in our article to monitor anesthesia safety and improve patient outcomes in the future.

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