Reviewer's report

Title: Effect of propofol and etomidate on normoxic and chronically hypoxic pulmonary artery

Version: 1 Date: 5 December 2005

Reviewer: William L Young

Reviewer's report:

General

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

The authors have done a very thorough study of the effects of E and P on pulmonary artery vasoresponsiveness to describe the effect of chronic hypoxia.

1. The authors have studied pulmonary artery, but, although it may be representative of the resistance circulation, a strong enough case is not made to extrapolate from the larger conductance vessels to the smaller resistive vessels.

2. There are no physiological data. The authors point to historical data, and should clearly defend why heart-filling pressures should be accepted from the historical group and why they did not measure them in this set of experiments.

3. There is no clear presentation of the disconnect between observing an effect in PHE vs. KCL precontracted PA. What is the physiological and, potentially, clinical significance of this observation?

4. Use of propofol and etomidate is generally dictated by the degree of hemodynamic stability in clinical practice. In a patient with significant pulmonary hypertension that is suspected or known, etomidate would be the drug of choice for an induction agent. The authors should address the clinical applicability of their findings.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of limited interest

Quality of written English: Acceptable
Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests.