Reviewer's report

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

**Version:** 1  **Date:** 23 December 2005

**Reviewer:** Serge Adnot

**Reviewer's report:**

General
In this manuscript, the authors investigated the potential effects of propofol and etomidate applied in vitro on isolated pulmonary vessels from normoxic and chronically hypoxic rats, on one hand, and from human pulmonary arteries, on the other hand. They found that both drugs induced major relaxation of precontracted vessels whatever vessels were from normoxic rats, chronically hypoxic rats, or humans.

This study appears to be well done and is of clinical relevance regarding anesthesia in patients with pulmonary hypertension.

I have only a few comments. In figure 2 showing vasoreactivity of human pulmonary arteries, the relaxant activity of propofol appears very weak, even at high concentration. Only a striking effect of etomidate is obtained at the highest dose, which may appear much higher than the range achieved with pharmacological doses. The authors should comment this.

It is also said in the manuscript that propofol and etomidate similarly relaxed rat and human pulmonary arterial rings. This apparently is not the case.

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

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

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**Discretionary Revisions (which the author can choose to ignore)**

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**What next?:** Accept after minor essential revisions

**Quality of written English:** Acceptable