Reviewer's report

Title: Gene Expression in Lungs of Mice Lacking the 5-hydroxytryptamine Transporter Gene

Version: 2 Date: 28 July 2008

Reviewer: SAMI SAID

Reviewer's report:

1. Major Compulsory Revisions:

a) Introduction: There is an apparent conflict regarding the relationship of desfenfluramine and 5-HTT expression. Near the end of paragraph 1, you state: "desfenfluramine causes overexpression of 5-HTT, which in turn promotes the hypertensive process." The, at the beginning of paragraph 2, you write: "Attenuation of IPAH in experimental mice can occur pharmacologically through administration of a 5-HTT inhibitor, such as desfenfluramine. Does desfenfluramine inhibit or overexpress 5-HTT?

b) Does IPAH occur experimentally in mice? or is it only a clinical condition?

c) In discussing these results, the authors should refer to the report that deletion of a single gene, that of VIP, resulted in rather extensive, significant gene expression alterations related to vasoreactivity, vascular proliferation, and immune/inflammatory responses (Eur Respir J 31: 135-139, 2008).

d) Introduction, last paragraph: "The goal of this study was...to determine which of the potential pathways was the likely molecular source of protection against PAH." The conclusions do not provide the answer!

2. Minor Essential Revisions:

a) Abstract: Is modulation (i.e., inhibition) of 5-HTT or its overexpression considered to be a risk factor for PAH?

b) Under Methods, following Denver, CO, please explain "85 KPa."

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Declaration of competing interests:

I declare that I have no competing interests