Reviewer's report

Title: Marked Improvement in Autoimmune Pulmonary Alveolar Proteinosis with Severe Hypoxemia in a Patient Treated with Ambroxol.

Version: 2  Date: 18 December 2014

Reviewer: Spyros Papiris

Which of the following best describes what type of case report this is?: Other

If other, please specify:

New treatment in autoimmune pulmonary proteinosis

Has the case been reported coherently?: No

Is the case report authentic?: Yes

Is the case report ethical?: Yes

Is there any missing information that you think must be added before publication?: No

Is this case worth reporting?: Yes

Is the case report persuasive?: Yes

Does the case report have explanatory value?: No

Does the case report have diagnostic value?: No

Will the case report make a difference to clinical practice?: Yes

Is the anonymity of the patient protected?: Yes

Comments to authors:

The points that the authors need to address are the following:

1. In the introduction section the phrase “The pathogenesis of PAP involves abnormal metabolism of surfactant resulting from dysfunction of granulocyte-macrophage colony-stimulating factor (GM-CSF)” is not correct. Please rephrase.

2. In the introduction section the phrase “Oral ambroxol should be considered for patients with PAP, even in those with severe respiratory compromise” should be
omitted. It is more of a conclusion than an introduction.

3. In the case presentation section what is the difference between %FEV1 of 105.2%; and FEV1% of 84.2%? Please explain.

4. In the discussion section the phrase “Dysfunction of GM-CSF, which plays a critical role in the surfactant system, is considered to play a primary role in the pathogenesis of PAP” is again misleading. The authors seem to confuse the three etiologic forms of PAP (congenital, secondary, autoimmune). Please explain where you are referring to and accordingly describe the pathogenesis of each one should you find it necessary.

5. In the discussion section the phrase “Oral ambroxol should be tried for PAP, even in patients with severe respiratory compromise, because it is a simple treatment, unlike WLL or inhaled GM-CSF” is not supported by current evidence. Oral ambroxol could, and not should, be tried in PAP and the treatments of WLL and iGM-CSF have many studies to support their use. The authors need to rephrase this and make it clear that ambroxol is not comparable or equivalent to WLL or iGM-CSF in the treatment of PAP.

6. It is imperative that the authors make at least a speculation on how ambroxol works in PAP.

**Level of interest:** An article of limited interest

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

**Declaration of competing interests:**

I declare that I have no competing interests