Reviewer's report

Title: Interstitial Cystitis Anti-Proliferative Factor (APF) as a Cell-Cycle Modulator

Version: 2 Date: 15 March 2004

Reviewer: Jørgen Nordling

Reviewer's report:

General
The role of APF in Interstitial Cystitis is highly interesting and is presently the only objective parameter discriminating between IC patients and others. The present paper looks into the influence of APF on the cell cycle. The authors have used supernatant (APF) from in vitro grown epithelial cells from a patient with IC and from a patient with no urological complaints (mock). This is the smallest possible material. Cultured cells from a normal person was then treated with either APF or mock in 3 different doses. Cultured cells were then harvested and DNA Cytometry performed. PFA treated cultures showed higher proportion of tetraploid cells than mock treated. The paper do only superficially discuss the significance of the findings. It is concluded, that APF has a profound impact on cell cycle distribution. But also the mock preparation showed such an impact with increasing concentration. What does this change in distribution frequency mean. In the discussion it is stated, that this is possibly due to a G2/M block. As no absolute figures are given, it might at least partly be a more profound effect of APF on diploid cell proliferation, than on tetraploid or octaploid cells. APF is a very promising substance in the clinical scenario of IC, and all obtainable information on APF is therefore of value in the efforts being done to clarify this disease. The material is too small to draw farsighted conclusions.

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

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
Background Line 4: Sentence gives no meaning
Methods line 5: which should be White?
Discussion: Next last sentence "...similarly controlled experiments can any be detected by UV absorbance in the HPLC." I do not understand it.

Discretionary Revisions (which the author can choose to ignore)

What next?: Accept after discretionary revisions

Level of interest: An article whose findings are important to those with closely related research interests
Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:
none