Reviewer’s report

Title: Hidden chromosomal abnormalities in Pleuropulmonary Blastomas identified by Multiplex FISH

Version: 1 Date: 28 June 2005

Reviewer: Christine J Harrison

Reviewer’s report:

General

This paper describes the pathological and cytogenetic findings in two cases of type II PPB at initial diagnosis and relapse. Their karyotypes were complex, as previously noted by other authors, with many of the abnormalities being defined by a range of FISH techniques, MFISH, interphase and metaphase FISH with specific probes.

The karyotypes of both cases 1 and 2 should be written to incorporate the revisions as a result of FISH. Since FISH is essentially a cytogenetic technique, to separate the banded from the FISH is very outdated. The ISCN should be corrected, for example, -#, +der# is not acceptable.

At relapse, the karyotype of case 2 was normal, however FISH with the chromosome 8 centromeric probe indicated multiple copies of chromosome 8. This the authors suggest shows the presence of an abnormal clone related to the one at diagnosis, although presumably with doubling as the clone at diagnosis had three extra copies of chromosome 8.

Although not adding significantly to the literature, these two cases add to the 23 previously published ones with cytogenetics and the one with MFISH reported. No new genes were specifically identified, although gene involvement was discussed. Among the 22 published cases, multiple copies of chromosome 8 were identified, which reflects case 2 and the doubled population of case 1. Structural abnormalities were in the two cases here, previously seen in a small number of cases. Deletion of 17p was also common, which may implicate deletion of TP53. Abnormalities of 11p seem to be recurrent.

This paper provides an interesting literature review of this rare type of childhood tumour. The karyotypes must be revised and the manuscript could be shortened without losing the message.

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

The karyotypes must be revised and the manuscript could be shortened

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 whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

"I declare that I have no competing interests'