Reviewer's report

Title: High resolution array comparative genomic hybridization and flow cytometry analysis of spontaneous abortions and mors in utero samples

Version: 1 Date: 3 June 2009

Reviewer: Moncef Benkhalifa

Reviewer's report:

this manuscript is confirming the contribution of chromosomal abnormalities in reproductive pathology and mainly in first trimester

this article showed clearly the benefit of array CGH for molecular karyotyping and the feasibility of the method non cultured cells

this manuscript is acceptable for publication with minor revisions

Major compulsory Revisions: Non
Minor Essential Revisions:

Background

page 3: add more references about chromosomes abnormalities on gametes, zygote and early embryo blocking (Pellestor et al, Benkhalifa et al, Munne et al, Gianarolli et al, Martin et al)

Methods

Flow cytometry

give more detail about the protocol specially for the trouble shooting of the technique and clarify if there is a correction factor compared to internal control

Array CGH

explain if the clones are printed in duplicate or quatruplicate

what's the risk rate of SNV in your bank

the hybridisation was done on reverse and forward slides or not

in which base the hybridisation is accepted or rejected

give more detail about the software and the data analysis

what's the sensitivity of the system for low mosaic

give more explanation about the identification of balanced disorders

Results

the history of maternal contamination should clarified more

flow cytometry: one result is missing

give more explanation about the DNA index and the risk of mosaicism

Discussions
can you discuss more the benefit of FCM compared to others techniques and the adverse benefit of the method
also discuss the limitations of array CGH in genetic diagnosis more than chromosomes
and future development of arrays in general diagnostics

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

i declare that i have no competing interests