

## Review of: "Non-Invasive Prenatal Testing (NIPT) for Aneuploidy in a Setting with a High Consanguineous Rate – A Retrospective Cohort Review of 1,153 Cases"

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Potential competing interests: No potential competing interests to declare.

Thank you for asking me to review this paper written by a team in Qatar concerning the accuracy of NIPT in a specific population.

The study is a retrospective one and it was well designed .The data collected was complete. We have always this idea about the limitation and the accuracy of NIPT in a consanguinous couples and this work highlights this problem and give us a answer about this .

I have two comments:

The first one is about i beleive an error in writting: the table 5 where they write that "shows the details of the high-risk tests that were confirmed by karyotyping. There were 10 cases of trisomy 21, 6 cases of trisomy 13, and 4 cases of trisomy 18......" This correspond i beleive to table 6 and not to table 5

The second one is about the content: if it's possible just to highlight that in consanguinous couples the risk of genetiec disease in the fetus is increased because of the recessive transmission and not the risk of aneuploidy. So NIPT is a good test to rule out aneuploidy like trsiomy 13,18 and 21 but not a good test to rule out recessive diseases specific to consanguinity. And in these couples good counseling is to offer them ultrasound and genetic consultation.

This work highlights the utility and performance of NIPT in consanguinous and it is well designed.

Thank you fot your trust

Regards