

26<sup>th</sup> of October 2005

Dear Doctor,

**First Trimester Screening in Twin Pregnancy**

PaLMS Feto-Maternal Medicine Laboratory has been receiving an increasing number of requests to perform first trimester screening in twin pregnancy.

It has been the standard practice of the laboratory not to perform serum screening in addition to nuchal translucency assessment of twin pregnancies due to the uncertainty of its clinical usefulness.

The reasons for these uncertainties are:

1. Twin pregnancies seem to be at a lower overall risk of aneuploidy compared with women of a similar age who have singleton pregnancies.<sup>1</sup>
2. The relative contribution of each feto-placental unit to the final blood test is uncertain.
3. The rigor with which the sensitivity and specificity of the test has been established in twin gestations is far less than that applied to singleton pregnancies. Even those who advocate calculating a risk have calculated it as a pseudo-risk because the advocates concede that the true risk cannot be estimated in twin pregnancies.<sup>2</sup>

Although these uncertainties exist our laboratory has decided to alter the standard practice and perform first trimester screening in twin pregnancies on request. It will be up to the individual referrers and clinicians to ascertain the clinical usefulness of the result in the presence of a twin pregnancy.

How the serum screening results affects clinical decision-making would be of interest to the laboratory. Should you decide to incorporate serum screening into risk assessment for twin pregnancies we ask that you inform us of how this has changed clinical management. To assist clinicians in providing such feedback we will be distributing a feedback form.

Your cooperation in assisting us to continue to provide a high quality service in line with your practice requirements is most appreciated.

Yours sincerely

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References

1. Jamar M. et al (2003) A low rate of trisomy 21 in twin pregnancies: a cytogenetics retrospective study. *Genet Couns.* 14 (4) 395-400
2. Wald N.J. et al (2003) Combining Nuchal Translucency and serum markers in prenatal screening for Down syndrome in twin pregnancies. *Prenat Diagn.* 23 (7) 588-592