



Date: October 19, 2020
To: Edmonton Zone, North Zone, Central Zone (excluding Hanna, Three Hills and Drumheller)
From: Alberta Precision Laboratories (APL), Edmonton Zone
Re: Addition of biochemistry for first trimester prenatal risk assessment in twin pregnancies

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Key Message:

- Effective October 19, 2020, first trimester prenatal risk assessment performed in Edmonton for twin pregnancies will include serum biochemistry in addition to maternal age and nuchal translucency

Why this is important:

- First trimester prenatal risk assessment for singleton pregnancies is determined from maternal age, nuchal translucency, and serum biochemistry measuring free beta-hCG (β -hCG) and pregnancy associated plasma protein A (PAPP-A).
- First trimester prenatal risk assessment for twin pregnancies has been based on maternal age and nuchal translucency.
- Inclusion of serum biochemistry in first trimester prenatal risk assessment for twin pregnancies improves the detection rate for fetal aneuploidies and decreases the false-positive rate.
- First trimester prenatal risk assessment for higher order multiples (e.g. triplets) is unchanged and will be continued to be performed by maternal age and nuchal translucency.

Action Required:

- Collection of a serum sample following ultrasound for nuchal translucency measurement and gestational dating for twin pregnancies.
- Refer to APL Test Directory for collection instructions:
[First Trimester Prenatal Screen, serum \(G&G North UAH\)](#)

Inquiries and feedback may be directed to:

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This bulletin has been reviewed and approved by:

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