



## NRC Publications Archive Archives des publications du CNRC

### **Maternal plasma levels of follistatin-related gene protein in the first trimester of pregnancies with Down syndrome**

Miron, P.; Lambert, J.; Marcil, A.; Cowans, N. J.; Stamatopoulou, A.; Spencer, K.

This publication could be one of several versions: author's original, accepted manuscript or the publisher's version. / La version de cette publication peut être l'une des suivantes : la version prépublication de l'auteur, la version acceptée du manuscrit ou la version de l'éditeur.

For the publisher's version, please access the DOI link below./ Pour consulter la version de l'éditeur, utilisez le lien DOI ci-dessous.

#### **Publisher's version / Version de l'éditeur:**

<https://doi.org/10.1002/pd.2441>

*Prenatal Diagnosis*, 30, 3, pp. 224-228, 2010-03-01

#### **NRC Publications Record / Notice d'Archives des publications de CNRC:**

<https://nrc-publications.canada.ca/eng/view/object/?id=731c15d5-e23e-4d75-ab85-68e0baa7a22f>

<https://publications-cnrc.canada.ca/fra/voir/objet?id=731c15d5-e23e-4d75-ab85-68e0baa7a228>

Access and use of this website and the material on it are subject to the Terms and Conditions set forth at

<https://nrc-publications.canada.ca/eng/copyright>

READ THESE TERMS AND CONDITIONS CAREFULLY BEFORE USING THIS WEBSITE.

L'accès à ce site Web et l'utilisation de son contenu sont assujettis aux conditions présentées dans le site

<https://publications-cnrc.canada.ca/fra/droits>

LISEZ CES CONDITIONS ATTENTIVEMENT AVANT D'UTILISER CE SITE WEB.

**Questions?** Contact the NRC Publications Archive team at

PublicationsArchive-ArchivesPublications@nrc-cnrc.gc.ca. If you wish to email the authors directly, please see the first page of the publication for their contact information.

**Vous avez des questions?** Nous pouvons vous aider. Pour communiquer directement avec un auteur, consultez la première page de la revue dans laquelle son article a été publié afin de trouver ses coordonnées. Si vous n'arrivez pas à les repérer, communiquez avec nous à PublicationsArchive-ArchivesPublications@nrc-cnrc.gc.ca.



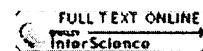
National Research  
Council Canada

Conseil national de  
recherches Canada

Canada

**PubMed**

Search: cowans AND marcil

U S National Library of Medicine  
National Institutes of Health

Display Settings: Abstract

Prenat Diagn. 2010 Mar;30(3):224-8.

## Maternal plasma levels of follistatin-related gene protein in the first trimester of pregnancies with Down syndrome.

Miron P, Lambert J, Marcil A, Cowans NJ, Stamatopoulou A, Spencer K.

Department of Obstetrics and Gynaecology, Hôpital Maisonneuve-Rosemont, Faculty of Medicine, Université de Montréal, Quebec, Canada. pierre.miron@umontreal.ca

**Abstract**

**OBJECTIVE:** To determine maternal plasma levels of follistatin-related gene protein (FLRG) in the first trimester of pregnancy and assess its potential role as a marker for prenatal screening of Down syndrome.

**METHODS:** Maternal plasma levels of FLRG were determined in 100 pregnant women with normal fetuses in their first trimester of pregnancy (i.e. 11th to 15th weeks). These results were compared with 20 cases with Down syndrome fetuses, taking into consideration clinical and demographic variables, such as maternal age, maternal weight, gestational age, smoking status and ethnicity.

**RESULTS:** Maternal plasma median of FLRG in the normal population was 1.41 ng/mL with 95% confidence interval (CI) of 1.37-1.70 and interquartile range (IQR) of 0.88, during the 11th to 15th weeks of pregnancy. Maternal age and weight were the only variables significantly related to FLRG levels ( $p = 0.030$  and  $0.020$ , respectively). Only maternal and gestational ages were related to Down syndrome ( $p = 0.039$  and  $0.006$ , respectively). Maternal plasma levels of FLRG were not significantly different in the presence of Down syndrome fetuses compared to normal population ( $p = 0.63$ ).

**CONCLUSION:** FLRG can be successfully detected in maternal plasma in the first trimester of pregnancy. However, its levels are not significantly altered in the presence of Down syndrome fetuses.

Copyright (c) 2010 John Wiley &amp; Sons, Ltd.

PMID: 20063262 [PubMed - indexed for MEDLINE]

MeSH Terms, Substances

LinkOut - more resources