

## NAME OF PROJECT

### **Review of Viscoelastic testing (TEG/ROTEM) in Obstetrics and Recommendations from the Women's Health SSC of the ISTH.**

Subcommittee

#### **SSC on Women's Health Issues in Thrombosis and Haemostasis**

Person responsible (Chair / Principal Investigator):

**Maha Othman/ Homa K. Ahmadzia**

**Collaborators: Ariunzaya Amgalan, Terrence Allen, Maha Othman, Elvira Grandone**

#### Description Abstract

State the application's broad, long-term objectives and specific aims, making reference to the health relatedness of the project. Suggested length is 2-3 paragraphs.

**There is evidence from literature that Thromboelastography® (TEG®) and Rotational Thromboelastometry (ROTEM®) may not be used in full capacity to diagnose/monitor pregnancy associated coagulopathies. A previously conducted world-wide survey under the auspice of ISTH SSC on Women's Health Issues in Thrombosis and Haemostasis and a recently published SSC communication have been able to highlight this issue and called for further research<sup>1</sup>. However, a comprehensive review and a recommendation for the ideal study design remain needed to guide the scientific community and to truly expand on the use and applications of these technologies in the field of obstetrics.**

**This proposal compliments and adds to a previous SSC project. We are proposing to conduct a systematic review which serve as a comprehensive and detailed evaluation of current studies related to thromboelastography (TEG) and rotational thromboelastometry (ROTEM) as they pertain to the field of obstetrics. We also believe this review complements and adds to the recent short communication published by the ISTH Women's Health Issues in JTH. The review will present in details both the advantages and limitations of the technology as well as identifies gaps in areas of research and expands further to recommend the future ideal study to fill those gaps.**

Design and methodology (Data expected to collect, sample size and statistical analysis):

Describe concisely the research design and methods for achieving these goals. Suggested length 2-3 paragraphs

**A systematic analytical review will be conducted to evaluate all the current studies using TEG and ROTEM including those examining references ranges in all pregnancy trimesters. Based on this, recommendations for ideal future studies will be made.**

Study population (Inclusion, exclusion, eligibility) (patient population; recruitment of participating institutions/physicians and subjects; minimum number needed; expected number): N/A

# SSC Subcommittee Project/Collaborative Project

Suggested length 2-3 paragraphs

Expected timeline: Jan 2020- April 2020

Project stage/set up: 1 month

Launch: NA

Duration: 1 month

Finalization/analysis: 1 month

Reporting: 1 month

Expected outcomes (ie. publications):

**The proposed review will summarize in details all findings from previous studies, guides to references ranges in all pregnancy trimesters, and highlights both the advantages and limitations of the technology as well as identifies gaps in areas of research. It will further expand to recommend the future ideal study to fill those gaps. A future study protocol may be generated and run under the auspice of the SSC to fill the gap (s)**

Publication type (SSC Communication, Guidance document or original article):

**Original article**

Description of project set/up and management, needed infrastructure and resources (summary):

N/A

Possible references:

- 1- Othman M, Han K, Elbatarny M, Kadir R. The Use of Viscoelastic Haemostatic Tests in Pregnancy and Puerperium: Review of the Current Evidence - Communication from the Women's Health SSC of the ISTH. Journal of Thrombosis and Haemostasis; 2019 Jul;17(7):1184-1189**