Aims & Scope:

In the postgenomic era, proteomic technology has rapidly developed to become a powerful tool in the research of human physiology, in particular in biological fluids, characterizing the comprehensive proteomic composition and identifying potential novel biomarkers for diagnosis, prognosis and therapy in different clinical aspects, including reproduction.

Both existing and emerging technologies for the detection and quantitation of new biomarkers promise to further our understanding of reproductive biology, and are easily applicable to the reproductive disease research. While traditional biochemical approaches continue to be the most widely applied strategies for sample fractionation, new ones are emerging, offering innovative solutions to the analysis of low abundance proteins from complex biological samples.

New molecular insights into sperm properties and into the role played by the sperm in fertilizing the egg are recently emerging.

Furthermore new molecular insight are emerging in order to identify the fertility protein pattern in cervical mucus and different studies are being performed aimed to describe the difference in protein patterns associated with diseases involved in female infertility (endometriosis, recurrent pregnancy loss).

This issue covers the current capabilities and advances in identification and clinical application of protein and peptide biomarkers in human reproduction.

Subtopic:

- Methodological advancement and procedures aimed to apply proteomic technology to the study of human reproduction;
- Advances in molecular genetics and molecular diagnostics of male and female infertility;
- Identification of protein biomarkers in reproduction by means of a molecular approach, and particularly/specifically proteomics;
- Application of protein/peptide markers in the clinical management of male and female infertility;
- Hormonal control in protein synthesis and function in male and female fertility;
- Development of molecular strategies (based on proteins/peptides) which will help to treat male and female infertility.

Key words: Reproduction, proteins, proteomics, fertility, infertility

Schedule:

Manuscript submission deadline: May 2017
Peer review due: July 2017
Revisions due: October 2017
Notification of acceptance: October 2017
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