

**Mini-Symposium:  
Ovum, sperm, implantation and reproductive immunology**

## **Preface**

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Reproductive immunology is very important for the achievement and maintenance of a successful pregnancy. Moreover, there are some immunological abnormalities and disorders such as implantation failures, recurrent pregnancy loss, hypertensive disorders of pregnancy and so on. Besides, before pregnancy and in the early stage of pregnancy, reproductive immunology has very important roles in oocyte and sperm maturation, and fertilization and implantation.

This mini-symposium focuses on the physiology of folliculogenesis, oocytes, sperm and implantation. Dr. Kawano introduces the role of platelet-activating factor in folliculogenesis. Dr. Hasegawa describes the purpose and physiological roles of zona pellucida, especially in assisted reproductive technology. Seminal plasma is a very important immuno-modulator in reproduction, and Dr. Watanabe explains the novel effect of seminal plasma in intracytoplasmic sperm injection using chromosomal analysis; and the immunological mechanisms of implantation are described by Dr. Chishima.

Reproductive immunology is a complicated subject which is difficult to learn and understand. I hope this mini-symposium will help us further our understanding of reproductive immunology and encourage young researchers' interest in the field of reproductive immunology. I also hope this mini-symposium will be helpful to clinicians treating infertile patients with immunological abnormalities.