

## RBMO Digest September 2022

### Introduction

Believe it or not, as of next month I will no longer serve you as RBMO Chief Editor. After six and a half years it is time for a change, and I am most happy to be succeeded by two of my friends and esteemed peers; Professor Nick Macklon and Professor Juan Garcia-Velasco. I wish them all the best. The journal is doing well, but – as always – there are also many challenges facing us.

This may also be a good time for some personal reflections on how RBMO developed over the years. The journal was founded in the year 2000 by the famous IVF pioneer Professor Bob Edwards. He was eventually succeeded as Chief Editor by another embryologist – trained by Bob himself – Professor Jacques Cohen. I subsequently took over in January 2016 as the first clinician Chief Editor.



Over the years we have aimed at maintaining a broad scope across reproductive medicine; from basic science to societal public health issues, from male infertility to embryology, female health, and of course clinical ART; all given a focus through each of the specialist sections of the journal. We also included multiple new types of contribution, for example; invited reviews, frequent editorials addressing timely and urgent issues, opinion papers and invited countercurrent publications. The number of editors has increased significantly under my leadership, as has the number of young section editors.

The number of papers submitted has increased to over 1,000 per year, resulting in more than 200 papers published annually. And finally, the review process has been streamlined and significantly shortened. The performance of the journal has been outlined in detail in annual Chief Editor reports. It has been very gratifying to see the increased social media presence of the journal, along with a distinct and ongoing increase in the journal impact factor which is still considered an important marker for the success of scientific journals.

In conclusion, I am happy to step down as Chief Editor while the journal is doing so well, but it is no time to relax and sit back. It remains a challenge to bring basic science and clinical infertility care together, alongside increased concerns regarding science integrity.

Finally, I would like to express my gratitude to all who have been instrumental in making the journal what it is today, and I would like to invite readers interested in reproductive medicine, as well as clinical and basic science investigators, to continue their involvement with RBMO.

Bart CJM Fauser  
Chief Editor RBMO

## Hot Topics

Our Editors Richard Anderson and Mina Alikani select their hot topic articles from recently accepted papers, highlighting developments and progress across reproductive biomedicine.

### [PRSS55 is a novel potential causative gene for human male infertility](#)

Liu et al.

The genetics of male reproductive failure is a rapidly growing field. The gene PRSS55 can be added to the list, with mutation associated with sperm morphological and motility defects, but normal numbers of sperm: importantly ICSI was successful. Time for a sea-change in our approach to genetic testing of infertile men?

### [Modelling the Equilibrium Partitioning of Low Level Airborne Volatile Organic Compounds \(VOCs\) in Human In Vitro Fertilization \(IVF\) Laboratories](#)

Fox et al.

The potential impact of VOCs on ART outcomes has been speculated since the 1990s through correlational and anecdotal studies. In this paper, the authors have used 'equilibrium modelling' to further our understanding of how VOCs could partition from the air phase and exert their negative influence. This is an important theoretical advance. We urgently need to bring the theory to a practical level in the laboratory!

### [Comparison of embryo implantation potential between time-lapse incubators and standard incubators: a randomized controlled study](#)

Zhang et al.

This multicentre RCT shows an improved implantation rate in the first embryo transfer with time-lapse incubation. Is this attributable to a better embryo culture environment or better selection? Read this interesting paper to find out!

## Editor's Choice

Papers selected by Professor Fauser as highlights from each of our recent issues.

### [Non-invasive embryo selection strategy for clinical in vitro fertilization to avoid wastage of potentially competent embryos](#)

Chen et al.

### [Comparison of Machine Learning model with Cox regression for prediction of cumulative live birth rate after assisted reproductive techniques : an internal and external validation](#)

Bardet. et al.

### [Similar fertilization rates and preimplantation embryo development among testosterone-treated transgender men and cisgender women](#)

Amin et al.

## Reviews

All Review articles published in RBMO are made free to read on publication, to support access to current knowledge and enhance the skills of researchers, clinicians and reproductive biomedical professionals around the world.

[PGDIS position statement on the transfer of mosaic embryos 2021](#)

Leigh et al.

[Timing of progesterone luteal support in natural cryopreserved embryo transfer cycles: back to basics](#)

Mizrachi et al

[Effect of acupuncture on IVF-related anxiety: a systematic review and meta-analysis](#)

Hullender Rubin et al.

[Role of sperm DNA damage in creating de-novo mutations in human offspring: the 'post-meiotic oocyte collusion' hypothesis](#)

Aitken

[Oocyte activation during round spermatid injection: state of the art](#)

Tao

[Does advanced paternal age affect outcomes following assisted reproductive technology? A systematic review and meta-analysis](#)

Murugesu et al.

[Robertsonian translocation \(13;14\) and its clinical manifestations: a literature review](#)

Tunç & Ilgaz

## Countercurrent Contributions

A selection of the recent progressive convention-challenging articles from our new Countercurrent Contributions format.

[Early menopause results from instead of causes premature general ageing](#)

Joop S.E. Laven

[Recurrent implantation failure: a plea for a widely adopted rational definition](#)

Somigliana et al.

[IUI is a better alternative than IVF as the first-line treatment of unexplained infertility](#)

Roy Homburg

[Endometrial factor testing is a useful tool in clinical infertility management](#)

Carlos Simón

## Featured Section

### Clinical Assisted Reproductive Technology

Section Editor: Professor Pasquale Patrizio  
Yale University Fertility Center, USA

“Clinical and laboratory innovations are at the forefront of Assisted Reproductive Treatments. The field of fertility preservation is constantly brewing new ideas, expanding the indications to include transgender individual, non-oncological patients and elective procedures.

The next frontiers are implementation of artificial intelligence and machine learning into CART, and RBMO is ready!”



Recent highlights from our **Clinical Assisted Reproductive Technology** Section:

[Oocyte vitrification for elective fertility preservation: a SWOT analysis](#)

Gil-Arribas et al.

[Subcutaneous luteal phase progesterone rescue rectifies ongoing pregnancy rates in hormone replacement therapy vitrified–warmed blastocyst transfer cycles](#)

Yarali et al.

[Maternal body mass index associates with blastocyst euploidy and live birth rates: the tip of an iceberg?](#)

Faboizzi et al.

[Comparison of two mainstream endometrial preparation regimens in vitrified–warmed embryo transfers after PGT](#)

Fu et al.

[Complex mosaic blastocysts after preimplantation genetic testing: prevalence and outcomes after re-biopsy and re-vitrification](#)

Zhou et al.

[Oocyte or embryo number needed to optimize live birth and cumulative live birth rates in mild stimulation IVF cycles](#)

Kumar Datta et al.

[Factors predicting clinical outcomes from 494 vitrified oocyte donation cycles at a UK-regulated egg bank](#)

Pataia et al.

[Endometrial scratch in women undergoing first-time IVF treatment: a systematic review and meta-analysis of randomized controlled trials](#)

Metwally et al.

[Comparison of live birth rates after IVF—embryo transfer with and without preimplantation genetic testing for aneuploidies](#)

Sadecki et al.

[Outcome of vitrified-warmed blastocyst transfer performed on days 5–7 after urine LH detection](#)

Lovrec et al.

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REPRODUCTIVE BIOMEDICINE ONLINE REPRODUCTIVE TECHNOLOGY

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**A section of RBMO focussing on clinical aspects of assisted reproductive treatments encompassing ovarian stimulation, prediction models, and clinical trials, including IVF/ICSI, and PGT, as well as fertility preservation and gamete donation/surrogacy.**

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