

Retraction Notice

The impact of an endometrial receptivity array on personalizing embryo transfer in patients with infertility: a meta-analysis Tran et al., 2022

Introduction

Published in 2022 by Fertility and Sterility, the meta-analysis by Tran et al., claimed that ERA showed no significant improvement in IVF outcomes except in live birth rate for patients undergoing the 1st IVF cycle, thus questioning the effectiveness and utility of the ERA test.

However, after further review of this study by the ASRM Publication Committee and the Editor in Chief, significant errors were confirmed, and the journal officially retracted this publication on October 30, 2024.

Errors made by the authors

The ASRM Publication Committee and the Editor in Chief reviewed concerns relating to the methodology used for this meta-analysis and determined that two flaws undermined the validity of the conclusions:

- 1. **Triplication of results:** three out of four RCTs included in the analysis, were in fact, the same single study at various stages, resulting in the same patient outcomes being counted multiple times.
- 2. Incorrect analysis of group outcomes: cohort studies with different designs and comparison were pooled incorrectly.

For example, the authors stated that they analyzed ERA vs. Non-ERA patients and found no difference in clinical outcomes, hence no benefit of applying ERA. However, the authors instead actually analyzed ERA receptive vs. ERA non-receptive patients, in which both patient groups underwent ERA and a personalized embryo transfer according to their personalized window of implantation, therefore similar clinical outcomes would be expected.



Take home message

The retraction of the Tran et al. meta-analysis does not change the evidence base for ERA but highlights the need for critical assessment of published studies. Multiple clinical studies, including RCTs with verified data, support the value of ERA-guided embryo transfer for patients with RIF. For more details, see our ERA publications and clinical evidence overview.

