

Your abstract submission has been received

Print this page

You have submitted the following abstract to the ASRM 2025 Scientific Congress & Expo. Receipt of this notice does not guarantee that your submission was complete or free of errors.

ARE EARLY B-HCG TRENDS INFLUENCED BY ENDOMETRIAL PREPARATION TYPE IN SINGLE EUPLOID EMBRYO TRANSFERS?

Tamar Alkon-Meadows, M.D.¹, Carlos Hernandez-Nieto, MD¹, Joseph A. Lee, BA¹, Martha Luna Rojas, M.D.¹, Morgan Baird, MPH¹, Shawn Kripalani, M.D., M.S.², Rebecca Zhuo, M.D.², Mikayla Meyler, BA¹, Alan B. Copperman, M.D.³ and Erkan Buyuk, M.D.¹, (1)Reproductive Medicine Associates of New York, New York, NY, (2)Icahn School of Medicine at Mount Sinai Hospital, New York, NY, New York, NY, (3)Icahn School of Medicine at Mount Sinai / Reproductive Medicine Associates of New York, New York, NY

Title:

ARE EARLY B-HCG TRENDS INFLUENCED BY ENDOMETRIAL PREPARATION TYPE IN SINGLE EUPLOID EMBRYO TRANSFERS?

Submitter's E-mail Address:

tamar.alkon@rmamexico.com

Preferred Presentation Type:

Oral or Poster

Study Type:

Retrospective Cohort Study (includes comparator groups)

Category - Subcategory(ies):

ART: Clinical

ART: Outcomes

Funding:

NA

*** Submission of an abstract for consideration for presentation implies that the presenting author & associated co-authors have legal and ethical rights to submit and present this work. Plagiarism and submitting work that an author has no rights to, will result in an investigation and penalty.**

*** I verify that I am in compliance with HIPAA standards to protect the privacy of the patients discussed in my presentation(s). I either have received written authorization from the patient, have removed any identifiable images or patient records from my presentation, or my presentation does not pertain to patient treatment.**

Permissions - Prior Publication or Presentation

This abstract contains original work, not published or presented previously at a meeting of another national or international scientific organization prior to this meeting and has not been submitted for publication at the time of this submission.

ACCME Disclosure

Nothing to disclose. No off-label or otherwise non-approved product use.

Did this abstract require approval by a local Institutional Review Board (IRB) or equivalent?

This abstract has been approved by a local Institutional Review Board (IRB) or equivalent.

This data will be submitted for separate scientific abstract and video presentations. The two presentations are NOT identical.

Agree

Applying for an award

Trainee: Yes

Abstract Category:

All Other Categories

Applied for the In-Training Award for Research**Abstract Text:****OBJECTIVE:**

Early serum β -human chorionic gonadotropin (β -hCG) serves as an initial indicator of pregnancy following in vitro fertilization. While endometrial preparation protocols, such as modified natural (mNC) versus synthetic, are known to influence pregnancy outcomes, their effect on β -hCG thresholds has not been well characterized. This study aims to investigate whether initial β -hCG levels and subsequent rise differ between mNC and synthetic cycles following single euploid embryo transfer (SEET).

MATERIALS AND METHODS:

This retrospective study, conducted at a private, academic center, included patients who underwent autologous SEET with a positive pregnancy test (serum β -hCG ≥ 2.5 mIU/mL) between January 2016 and January 2025. Patients were categorized by endometrial preparation protocol: mNC triggered with Ovidrel 250 μ g supported with vaginal progesterone, and synthetic preparation. Each mNC case was matched 3:1 to a synthetic endometrial preparation cycle based on patient age at oocyte retrieval and at SEET, body mass index, embryo grade at transfer, and day of embryo biopsy. Only cases with β -hCG measured on day 9 post-transfer were included. The primary outcome was serum β -hCG levels on days 9 and 11 post-transfer. Secondary outcomes included the rate of β -hCG rise between days 9 and 11, live birth and clinical pregnancy loss rates. Statistical analyses included Mann–Whitney U test, Chi-square test, mixed effects models, and multivariable linear regression with generalized estimating equations. A sample size of 103 mNC and 309 synthetic cases was calculated to detect a 15% difference in mean β -hCG levels on day 9 and 11 with 80% power ($\alpha=0.05$).

RESULTS:

A total of 142 mNC and 426 synthetic SEET cycles were analyzed. Serum β -hCG levels were significantly higher in the mNC group compared to the synthetic group on both day 9 (177.2 ± 99.2 vs. 139.0 ± 70.0 mIU/mL, $p = 0.02$) and day 11 (438.2 ± 205.0 vs. 355.1 ± 198.0 mIU/mL, $p = 0.001$). The rate of β -hCG rise from day 9 to day 11 was greater in the mNC group (147.3%) compared to the synthetic group (138.3%), though this difference was not statistically significant ($p = 0.71$). Live birth rates were similar between groups (mNC group: 63%; synthetic group: 62% ($p = 0.88$)) as were clinical pregnancy loss rates (mNC group: 5.6%; synthetic group: 10% ($p = 0.10$)). After adjustment for age, body mass index, endometrial thickness at transfer, embryo grade, and day of embryo biopsy, no significant association between endometrial preparation type and β -hCG levels on day 9 ($R^2: 0.01$, $p=0.97$) or day 11 ($R^2: 0.01$, $p=0.95$) was observed.

CONCLUSIONS:

Serum β -hCG levels on days 9 and 11 post-transfer do not appear to be influenced by the method of endometrial preparation. Additionally, the rate of β -hCG rise, live birth rates, and clinical pregnancy loss do not differ between modified mNC and synthetic SEET cycles. These findings suggest that while endometrial preparation remains essential, the specific type used does not significantly influence early pregnancy dynamics or reproductive outcomes.

IMPACT STATEMENT:

The type of endometrial preparation, mNC or synthetic, does not appear to alter early pregnancy progression or live birth rates in SEET cycles.

First Presenting Author***Presenting Author***

Tamar Alkon-Meadows, M.D.

Email: tamar.alkon@rmamexico.com -- Will not be published

Reproductive Medicine Associates of New York
635 Madison Ave.
10th Floor
New York NY 10022
USA

Within the past 2 years, have you or your spouse/partner had any potential COI?

No

Signature: Tamar Alkon -M

CV Upload:

 [Tamar Alkon CV 3.docx](#)

Second Author

Carlos Hernandez-Nieto, MD

Email: chernandez@rmany.com -- Will not be published

Reproductive Medicine Associates of New York
635 Madison Ave 10th Fl
New York NY 10022-1009
USA

Within the past 2 years, have you or your spouse/partner had any potential COI?

No

Signature: Carlos Hernandez-Nieto



CV Upload: [CHN CV Apr24.docx](#)Third Author

Joseph A. Lee, BA

Email: jlee@rmany.com -- Will not be published

Reproductive Medicine Associates of New York
Director of Research Ops
635 Madison Ave 10th Fl
New York NY 10022-1009
USA

Biographical Sketch Early success, marked by his first publication in CELL at Harvard Medical School, inspired Joseph to continue his research endeavors in reproductive endocrinology and infertility. Joseph has been with Reproductive Medicine Associates of New York since 2011. Joseph has authored over 400 peer-reviewed abstracts & manuscripts. Passionate about development, he cultivates relationship with investors & entrepreneurs to advance reproductive endocrinology & infertility care.
Within the past 2 years, have you or your spouse/partner had any potential COI?

No

Signature: Joseph Adam Lee

**CV Upload:** [Joseph Lee CV.docx](#)Fourth Author

Martha Luna Rojas, M.D.

Email: martha.luna@rmamexico.com -- Will not be published

Reproductive Medicine Associates of New York
635 Madison Ave.

10th Floor
New York NY 10022
USA

Biographical Sketch Dr. Martha Luna is a board certified reproductive endocrinologist and infertility specialist . She joined RMA of New York in 2005 and is currently Medical Director of RMA International Mexico located in Mexico City. She completed her fellowship in RMA NY/ Mount Sinai School of Medicine and holds a masters degree by EVMS. Dr. Luna is a clinical professor of the Obstetrics and Gynecology residency program at the American British Cowdray (ABC) Hospital in Mexico City and serves as the Co-Chair of the REI Fellowship Program in Hospital Angeles del Pedregal in Mexico City. She is President of the Mexican Society for Reproductive Medicine (AMMR). Belongs to the Global Associate Panel of Fertility and Sterility.

Within the past 2 years, have you or your spouse/partner had any potential COI?

No

Signature: Martha Luna, MD



CV Upload:

 [Person_57204_resume_2845_0.docx](#)

Fifth Author

Morgan Baird, MPH

Email: mbaird@rmaofny.com -- Will not be published

Reproductive Medicine Associates of New York
635 Madison Avenue
10th Fl.
New York NY 10022-1009
USA

Within the past 2 years, have you or your spouse/partner had any potential COI?

No

Signature: Morgan Baird, MPH

Sixth Author

Shawn Kripalani, M.D., M.S.

Email: shawn.kripalani@mountsinai.org -- Will not be published

Icahn School of Medicine at Mount Sinai Hospital, New York, NY
1176 5th Ave
New York NY 10029-6503
USA

Within the past 2 years, have you or your spouse/partner had any potential COI?

No

Signature: Shawn Kripalani, MD, MS

CV Upload:

 [Shawn Kripalani CV.pdf](#)

Seventh Author

Rebecca Zhuo, M.D.

Email: Rebecca.zhuo@mountsinai.org -- Will not be published

Icahn School of Medicine at Mount Sinai Hospital, New York, NY
1176 5th Ave
New York NY 10029-6503
USA

Within the past 2 years, have you or your spouse/partner had any potential COI?

No

Signature: Rebecca Zhuo, MD

**CV Upload:** [Rebecca Zhuo CV.pdf](#)Eighth Author

Mikayla Meyler, BA

Email: mmeyler@rmany.com -- Will not be published

Reproductive Medicine Associates of New York
635 Madison Ave 10th Fl
New York NY 10022-1009
USA

Within the past 2 years, have you or your spouse/partner had any potential COI?

No

Signature: Mikayla Meyler

Ninth Author

Alan B. Copperman, M.D.

Email: acopperman@rmany.com -- Will not be published

Icahn School of Medicine at Mount Sinai / Reproductive Medicine Associates of New York
Department of Obstetrics, Gynecology, and Reproductive Science
New York NY 10022-1009
USA

Within the past 2 years, have you or your spouse/partner had any potential COI?

Yes

Organization Name	Relationship Type	Who has this Relationship?	
Progyny	Company Officer Relationship Began - Friday, August 25, 2017 Relationship Ended - Thursday, June 1, 2023 Paid Consultant Relationship Began - Relationship Ended - Direct Stockholder Relationship Began - Friday, August 25, 2017 Relationship Ended - Friday, November 1, 2024	Self	

Signature: Alan B Copperman



CV Upload:

 Alan B. Copperman M.D. - CV (March 2024).docx

Tenth Author

Erkan Buyuk, M.D.

Email: ebuyuk@rmaofny.com -- Will not be published

Reproductive Medicine Associates of New York
 635 Madison Ave Fl 10
 New York NY 10022-1009
 USA

Within the past 2 years, have you or your spouse/partner had any potential COI?

No

Signature: Erkan Buyuk, M.D.

If necessary, you can make changes to your abstract submission until Wednesday, April 30, 2025 at 4:00 pm (EDT).

To access your submission in the future, use the link to your user portal from one of the automatic confirmation emails that were sent to you during the submission.

Or point your browser to <https://asrm.confex.com/asrm/2025/gateway.cgi>

You will be prompted to login with your ASRM account prior to accessing the user portal. If you do not yet have an ASRM account, the screen will redirect you to the site where you can register for a new account.

When registering for a new ASRM account:

- Please use the email address that is associated with the submission and your first and last name as they appear on the submission when creating this account.
- An ASRM account for login must be completed before you can access the user portal.

Any changes that you make will be reflected instantly in what is seen by the reviewers. You DO NOT need to go through all of the submission steps in order to change one thing. If you want to change the title, for example, just click "Title" in the abstract control panel and submit the new title.

When you have completed your submission, you may close this browser window.

If you would like to submit another abstract, click [here](#).

[Tell us what you think of the abstract submission process](#)

[Home Page](#)