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.

COMPARISON OF GONADOTROPIN-RELEASING HORMONE AGONIST DOSES FOR TRIGGERING OOCYTE MATURATION

Hajer Naveed, BA[1], Keri Bergin, B.S., M.D.[1], Morgan Baird, MPH[2], Kate Devine, MD[3], Luis R Hoyos, M.D.[4], Meike L Uhler, M.D.[5], Michael Vance Homer, M.D.[6], Erkan Buyuk, M.D.[2], Alan B. Copperman, M.D.[7] and Phillip A Romanski, M.D., M.SC.[2], (1)Icahn School of Medicine at Mount Sinai, New York, NY, (2)Reproductive Medicine Associates of New York, New York, NY, (3)Shady Grove Fertility, (4)IVF Florida, (5)Fertility Centers of Illinois, Chicago, IL, (6)Reproductive Science Center, (7)Icahn School of Medicine at Mount Sinai / Reproductive Medicine Associates of New York, New York, NY

Title:
COMPARISON OF GONADOTROPIN-RELEASING HORMONE AGONIST DOSES FOR TRIGGERING OOCYTE MATURATION

Submitter's E-mail Address:
hajer.naveed@icahn.mssm.edu

Preferred Presentation Type:
Oral or Poster

Study Type:
Retrospective Cohort Study (includes comparator groups)

Category - Subcategory(ies)s:
ART: Clinical
ART: Outcomes

*** 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.

Applying for an award

Trainee: Yes

Abstract Category:
All Other Categories

Applied for the In-Training Award for Research

Abstract Text:
OBJECTIVE: Leuprolide acetate, a gonadotropin releasing hormone agonist, is commonly used to "trigger" meiosis resumption in oocytes during ovarian stimulation. Adequate response to Leuprolide acetate is determined by the luteinizing hormone (LH) level the morning following its injection the night before. Commonly used Leuprolide acetate doses for ovulatory trigger include 40IU and 80IU. However, it is unknown whether a higher dose is associated with a difference in the post trigger LH level. The objective of this study was to assess the association between Leuprolide acetate trigger dose (40IU vs. 80IU) and risk of an inadequate LH response.

MATERIALS AND METHODS: This retrospective, multicenter cohort study included patients undergoing in-vitro fertilization or oocyte cryopreservation from January 1, 2017 to December 31, 2023. All patients received a Leuprolide acetate trigger, with or without an hCG trigger. Patients with a baseline LH level <2 IU/L were excluded. Group 1 received a 40IU (2mg) Leuprolide acetate dose and Group 2 received an 80IU (4mg) dose, based on individual clinic protocol. The primary outcome was an inadequate LH response, defined as a post-trigger LH <15 IU/L. Statistics were performed using Wilcoxon Rank-Sum Test and Poisson regression analysis adjusted for BMI and age. Sub-analyses of patients over 40 years and separately patients with BMI >25 were also performed.

RESULTS: A total of 26,203 cycles were included: Group 1 (40IU): 8,350 cycles; Group 2 (80IU): 17,853 cycles. The mean day 3 baseline LH level across all cycles was 6.3 IU/L. Mean post trigger LH was 70.3 IU/L in Group 1 and 55.0 IU/L in Group 2. The risk of an inadequate LH response was 0.6% (n= 51) for the 40IU dose and 3.7% (n= 661) for the 80IU group which was statistically significantly increased (aRR 5.50; 95% CI (4.11-7.37)). The mean baseline LH level in inadequate responders to Leuprolide acetate trigger was 4.7 IU/L, compared to 6.3 IU/L in adequate responders ($p<0.0001$). In patients over 40 or with BMI >25, similarly the 80IU dose was associated with a significantly higher likelihood of an inadequate LH response (aRR 5.73; 95% CI (2.65-12.40) and 4.05; 95% CI (2.75-5.99), respectively).

CONCLUSIONS: Overall, an inadequate LH response to a Leuprolide acetate ovulatory trigger during ovarian stimulation is an uncommon event in patients with a low suspicion for hypothalamic dysfunction, occurring in 2.7% of cycles in this cohort. Higher Leuprolide acetate trigger dose did not increase post trigger LH levels or reduce the likelihood of an inadequate LH response. Differences in lab assays, geographic distribution of patients, or variability in timing of blood draw may explain the higher LH levels associated with lower dose Leuprolide acetate trigger observed. While most patients with a low baseline LH level responded adequately to the trigger, caution should continue to be taken when using a Leuprolide acetate only trigger in this group.

IMPACT STATEMENT: Patients and physicians can be reassured that variability in Leuprolide acetate trigger dose between clinics is not associated with the likelihood of an inadequate LH response. No advantage was observed with an 80IU Leuprolide acetate trigger dose compared to a 40IU dose.

First Presenting Author

Presenting Author

Hajer Naveed, BA
Email: hajer.naveed@icahn.mssm.edu -- Will not be published

Icahn School of Medicine at Mount Sinai
Obstetrics, Gynecology, and Reproductive Science
1176 Fifth Ave, Klingenstein Pavilion
9th Floor
New York NY 10029
USA

Within the past 2 years, have you or your spouse/partner had any potential COI?
No

Signature: Hajer Naveed

CV Upload:

Hajer Naveed _ CV.pdf

Second Author

Keri Bergin, B.S., M.D.
Email: bergin.keri@gmail.com -- Will not be published

Icahn School of Medicine at Mount Sinai
Obstetrics, Gynecology, and Reproductive Science
1176 Fifth Ave, Klingenstein Pavilion
New York NY 10029
USA

Within the past 2 years, have you or your spouse/partner had any potential COI?
No
Signature: Keri A. Bergin

CV Upload:

Keri Bergin CV2023.pdf

Third 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

Fourth Author

Kate Devine, MD
Email: kate.devine@sgfertility.com -- Will not be published

Shady Grove Fertility

Within the past 2 years, have you or your spouse/partner had any potential COI?
No
Signature: Kathleen M. Devine

Fifth Author

Luis R Hoyos, M.D.
Email: luis.hoyos@ivfflorida.com -- Will not be published

IVF Florida

Within the past 2 years, have you or your spouse/partner had any potential COI?
No
Signature: Luis Hoyos, M.D.

Sixth Author

Meike L Uhler, M.D.
Email: meike.uhler@fcionline.com -- Will not be published

Fertility Centers of Illinois
Chicago IL
USA

Within the past 2 years, have you or your spouse/partner had any potential COI?
No
Signature: Meike Uhler, MD

Seventh Author

Michael Vance Homer, M.D.
Email: michael.homer@rscbayarea.com -- Will not be published

Reproductive Science Center

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

Organization Name	Relationship Type	Who has this Relationship?	
Alife	Paid Consultant Relationship Began - Monday, April 8, 2024	Self	

Organization Name	Relationship Type	Who has this Relationship?	
	Relationship Ended -		
Ferring Pharmaceutical	Speaker's Bureau Relationship Began - Saturday, March 1, 2025 Relationship Ended -	Self	
Lovu Health	Direct Stockholder Relationship Began - Saturday, June 1, 2024 Relationship Ended -	Self	
U. S. Fertility	Direct Stockholder Relationship Began - Saturday, August 1, 2020 Relationship Ended -	Self	
USF Pharmaceutical Contracting Alliance	Direct Stockholder Relationship Began - Wednesday, January 1, 2020 Relationship Ended -	Self	

Signature: Michael Vance Homer, M.D..

Eighth 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.

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
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

Phillip A Romanski, M.D., M.SC.
Email: phillip.romanski@gmail.com -- Will not be published

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

Biographical Sketch Phillip Romanski, M.D., M.Sc., is a Reproductive Endocrinology and Infertility physician at RMA of New York in Manhattan and is a faculty member at the National Institutes of Health. He is an expert in family-building including the evaluation and management of female and male infertility, third-party reproduction, and fertility preservation. Dr. Romanski completed his residency in Obstetrics and Gynecology at Harvard Medical School (Brigham and Women's Hospital/Massachusetts General Hospital) and his fellowship in Reproductive Endocrinology and Infertility at the Weill Cornell Medical Center/NewYork-Presbyterian Hospital. Dr. Romanski additionally serves as the Associate Research Director for US Fertility and has authored over 60 peer-reviewed research publications with a particular interest in patients with a history of unsuccessful treatment and patients with diminished ovarian reserve. In recognition of his research contributions, he has received multiple national awards and has subsequently been invited to speak at both national and international conferences to present his work.
Within the past 2 years, have you or your spouse/partner had any potential COI?
No
Signature: Phillip Romanski, M.D.,M.SC.

CV Upload:

Mount Sinai CV.docx

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