

Characterization of FE 999049 Tolerability in United States (US) Women Undergoing Controlled Ovarian Stimulation, A RITA Trial Analysis

V.L. SCHNELL¹, A. BRENNER², J. KAWULA², S. GROVER², E. FOSTER², O. ELCI², P. MANN², P. HEISER², on behalf of RITA trial investigators

¹ Shady Grove Fertility, Houston, TX

² Ferring Pharmaceuticals, Inc., Parsippany, NJ



PURPOSE & OBJECTIVES

- FE 999049 is a human cell line-derived recombinant follicle stimulating hormone (rFSH; **follitropin delta**) used in ovarian stimulation¹⁻⁴
- The efficacy and safety of follitropin delta were assessed in the RITA trials⁵
- Follitropin delta is administered subcutaneously using a **pre-filled injection pen**
- Objective:** To assess the frequency and intensity of injection site reactions associated with follitropin delta administration in the RITA trials

MATERIALS & METHODS

- RITA-1 and RITA-2 were randomized, double-blind, placebo-controlled, parallel-groups trials conducted in 24 US fertility clinics from 2018 to 2020
- Patients were randomized 10:1 to follitropin delta or placebo, provided in a pre-filled pen for subcutaneous injection (**Figure**)
 - RITA-1:** 18-34 years of age, daily starting dose of 12 µg follitropin delta (N=525) or placebo (N=53)
 - RITA-2:** 35-42 years of age, daily starting dose of 15 µg follitropin delta (N=533) or placebo (N=54)
- Dose adjustments in 3 µg increments, based on ovarian response, from day 5 of stimulation onward
- Preimplantation genetic testing was not permitted
- Local tolerability was assessed by the patient immediately, 30 minutes, and 24 hours after injection
- Injection site reactions** were classified as redness, pain, itching, swelling, or bruising with intensity rated as none, mild, moderate, or severe

CONCLUSIONS

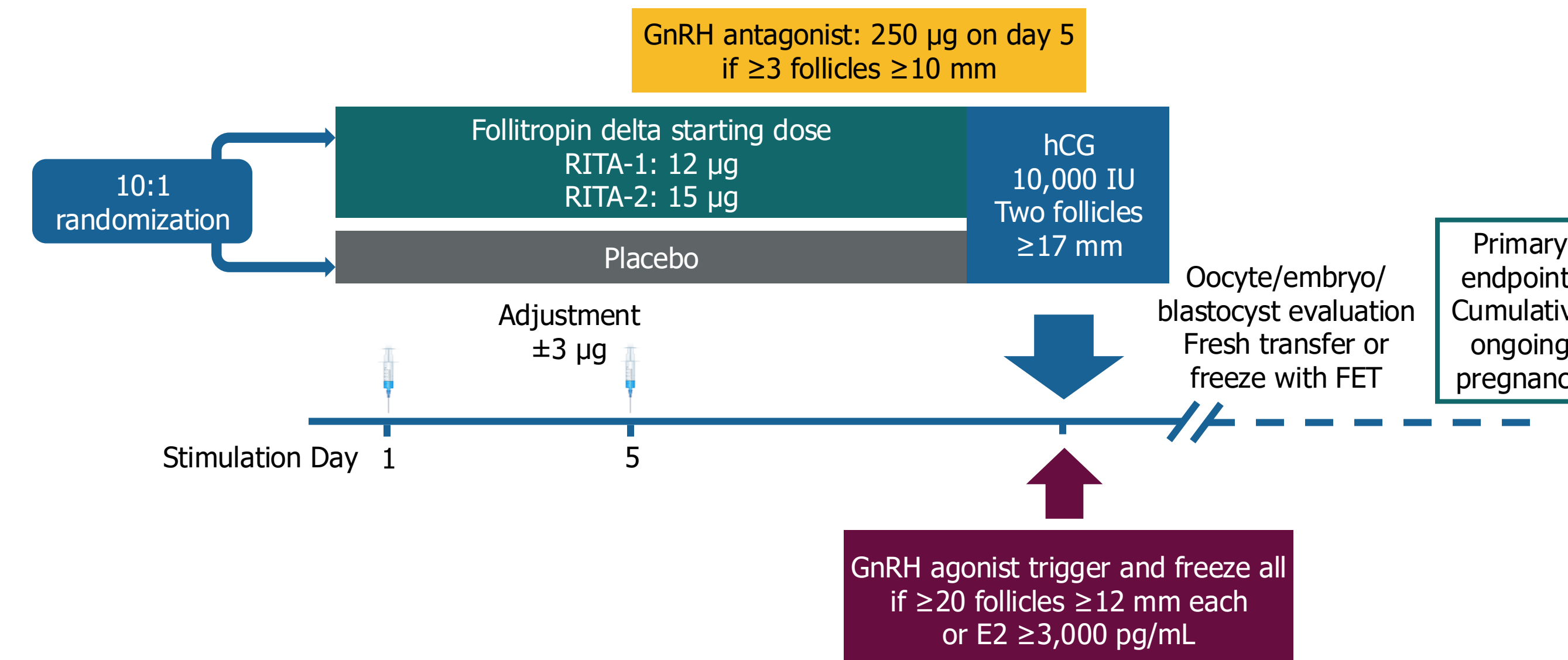
The RITA-1 and RITA-2 trials demonstrated high local tolerability of follitropin delta subcutaneous injection via a pre-filled pen, with incidence and severity of injection site reactions similar to those of placebo.

RESULTS

Patient-reported injection site reactions and severity in the RITA trials

	Follitropin delta	Placebo
	Event (%)	Event (%)
ANY SYMPTOM		
Mild	5209 (4.1)	635 (4.8)
Moderate	137 (0.1)	12 (0.1)
Severe	12 (<0.1)	1 (<0.1)
REDNESS		
Mild	2348 (9.1)	265 (9.9)
Moderate	24 (0.1)	1 (<0.1)
Severe	4 (<0.1)	0 (0)
PAIN		
Mild	1022 (4.0)	170 (6.4)
Moderate	21 (0.1)	3 (0.1)
Severe	0 (0)	0 (0)
ITCHING		
Mild	199 (0.8)	24 (0.9)
Moderate	5 (<0.1)	0 (0)
Severe	0 (0)	0 (0)
SWELLING		
Mild	211 (0.8)	22 (0.8)
Moderate	8 (<0.1)	0 (0)
Severe	0 (0)	0 (0)
BRUISING		
Mild	1429 (5.6)	154 (5.8)
Moderate	79 (0.3)	8 (0.3)
Severe	8 (0.1)	1 (<0.1)

Ovarian Stimulation with Follitropin Delta in the RITA Trials



Primary Efficacy Endpoint

Cumulative ongoing pregnancy rate after 12 months:
RITA-1: 64.0%
RITA-2: 43.9%

Tolerability (Table)

Injection site reactions across all timepoints in both RITA trials:	
Follitropin delta: 4.2%	Placebo: 4.9%

In both groups across RITA-1 and RITA-2:

- Redness was the most frequently reported injection site reaction
- Most injection site reactions were reported as mild
- 0.1% of injection site reactions reported as moderate/severe

KEY TAKEAWAYS

- Follitropin delta was well-tolerated in the randomized, placebo-controlled RITA trials
- Patient-reported injection site reactions were similar for follitropin delta and placebo, administered subcutaneously using a pre-filled pen
- Follitropin delta provides an effective and well-tolerated treatment option for ovarian stimulation

ACKNOWLEDGEMENTS

The authors thank the patients, the investigators at the participating sites, and the clinical trial teams at Ferring Pharmaceuticals, especially Joan-Carles Arce MD, PhD, and Lisbeth Helmgard for contributions to trial design, and Jennifer Kawula, Alyssa Saputo, and Heidi Aasted for leading the operational execution.

CONTACT INFORMATION

Vicki L. Schnell, MD
vicki.schnell@sgfertility.com

REFERENCES

- Nyboe Andersen A, et al. Fertil Steril. 2017;107:387-396.e4.
- Qiao J, et al. Hum Reprod. 2021;36:2452-62.
- Ishihara O, Arce JC. Reprod Biomed Online. 2021;42:909-18.
- Nelson SM, et al. Fertil Steril. 2024;122:445-54.
- Scheiber MD, et al; RITA-1 and RITA-2 trial group. Fertil Steril. 2025:S0015-0282(25)00605-3.