

How Mira assists in clinical evaluation and treatment

Case Reports with Dr. Tara Harding



Simply [you] Wellness

HEALTHCARE ALL ABOUT YOU

Mira Webinar

Mira's Medical Affairs Specialist, Rose MacKenzie, interviews Dr. Tara Harding about how she uses Mira in her practice with PCOS and PMDD case reports.

Watch the webinar to learn:

- When and how to incorporate Mira into your practice
- How Mira can monitor your patient's responses to interventions/treatments
- Strategies to manage PCOS

[Watch now](#)



Case report: Patient #1

Patient background

28F

G2P1

Recent miscarriage in December 2023

TTC



Intake Form

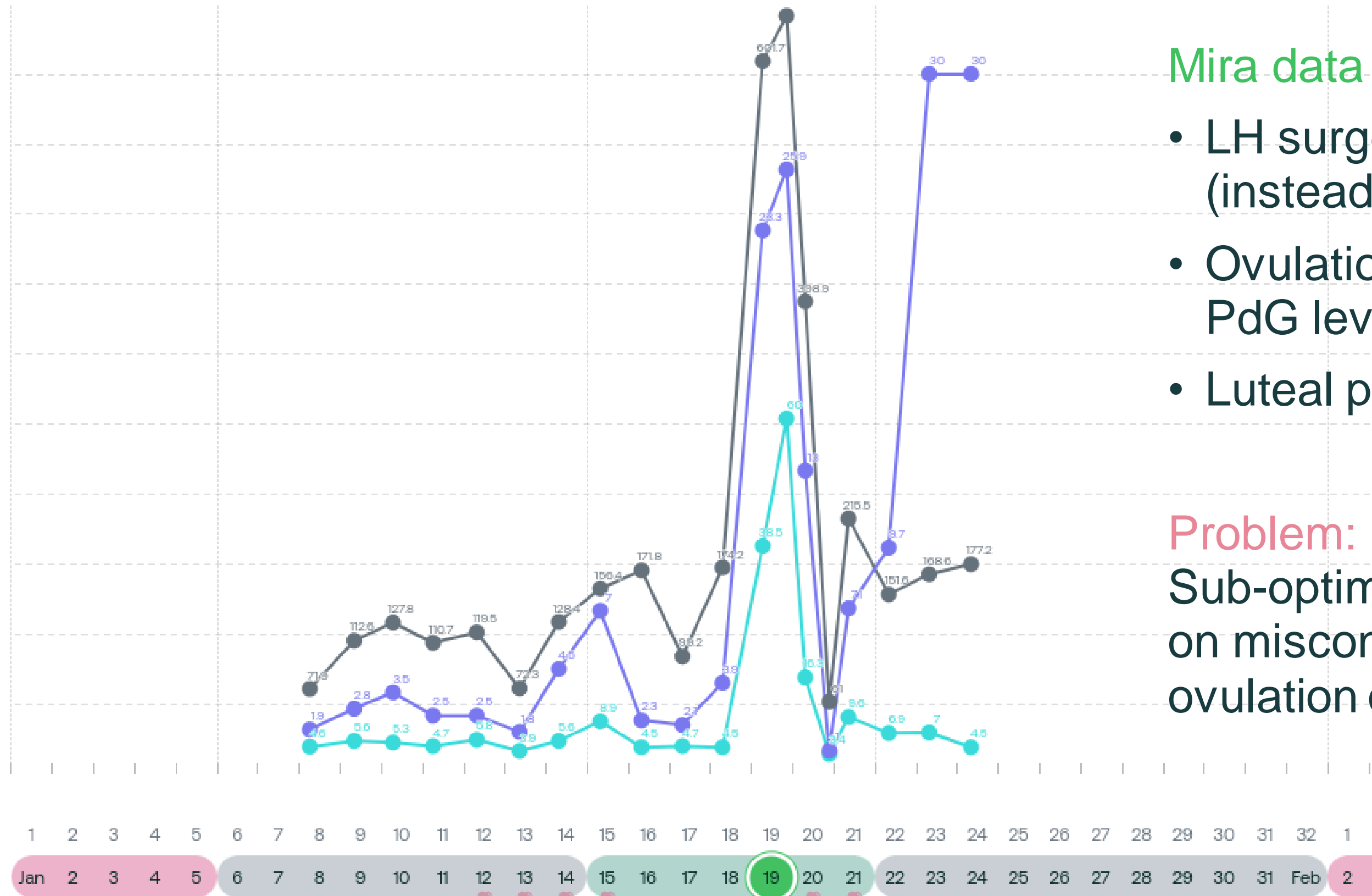
Provider suspected PCOS due to the following information on the intake form:

- long, irregular cycles
- acne
- insomnia
- anxiety
- recent miscarriage

Patient thought she ovulated on cycle day 14 (the same day every month)



Initial Mira Chart



Mira data discovered:

- LH surge on CD 19 and CD 20 (instead of CD 14 as patient thought)
- Ovulation confirmed with elevated PdG levels
- Luteal phase 12 days

Problem:

Sub-optimal intercourse timing based on misconception of consistent ovulation on CD 14



Labs

lipid panel — wnl

TSH — wnl

Prolactin — wnl

CBC (w/Plts & Autodiff) — wnl

free Testosterone — wnl

AMH — 16

total testosterone

17-hydroxyprogesterone — 103

androstenedione — wnl

fasting blood glucose

insulin level — wnl

DHEA-s — 299

Free T4 and T3 — wnl

anti TPO antibodies — wnl

sex hormone-binding globin — wnl

Medical Fact

Elevated AMH levels in PCOS is due to the high number of follicles in the early stage of development.

Patient was diagnosed with PCOS after initial visit

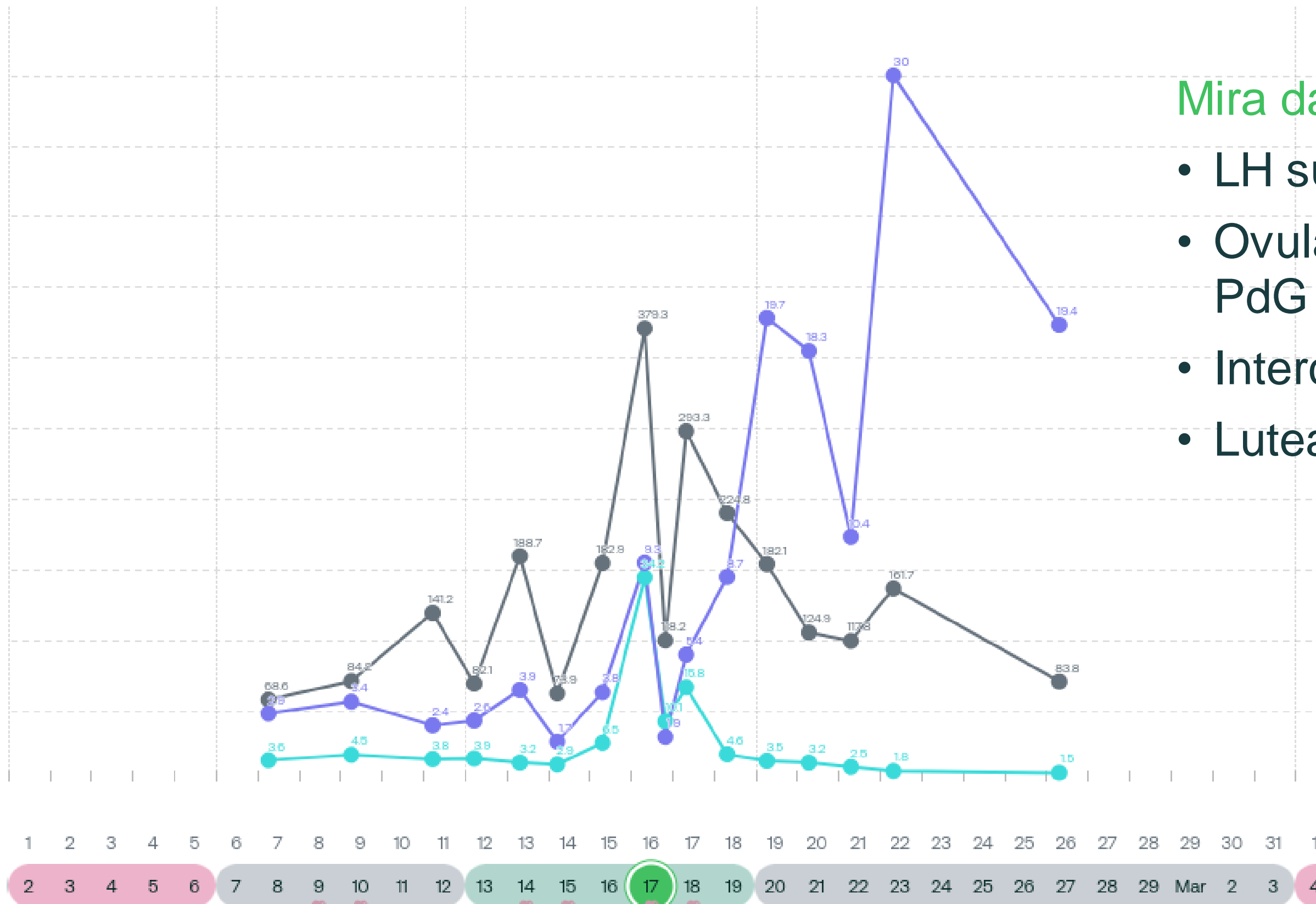


Treatment / Interventions / Assistance

- Supplements that contained Myo-inositol and D-chiro-inositol and NAC
- Interventions to improve sleep
- Cortisol decreasing techniques
- Nutrition implementations
 - Including eating every three to four hours
 - Protein and fiber with all meals and all snacks
- Low-dose naltrexone
- Miscarriage care



Follow up Mira Chart—February

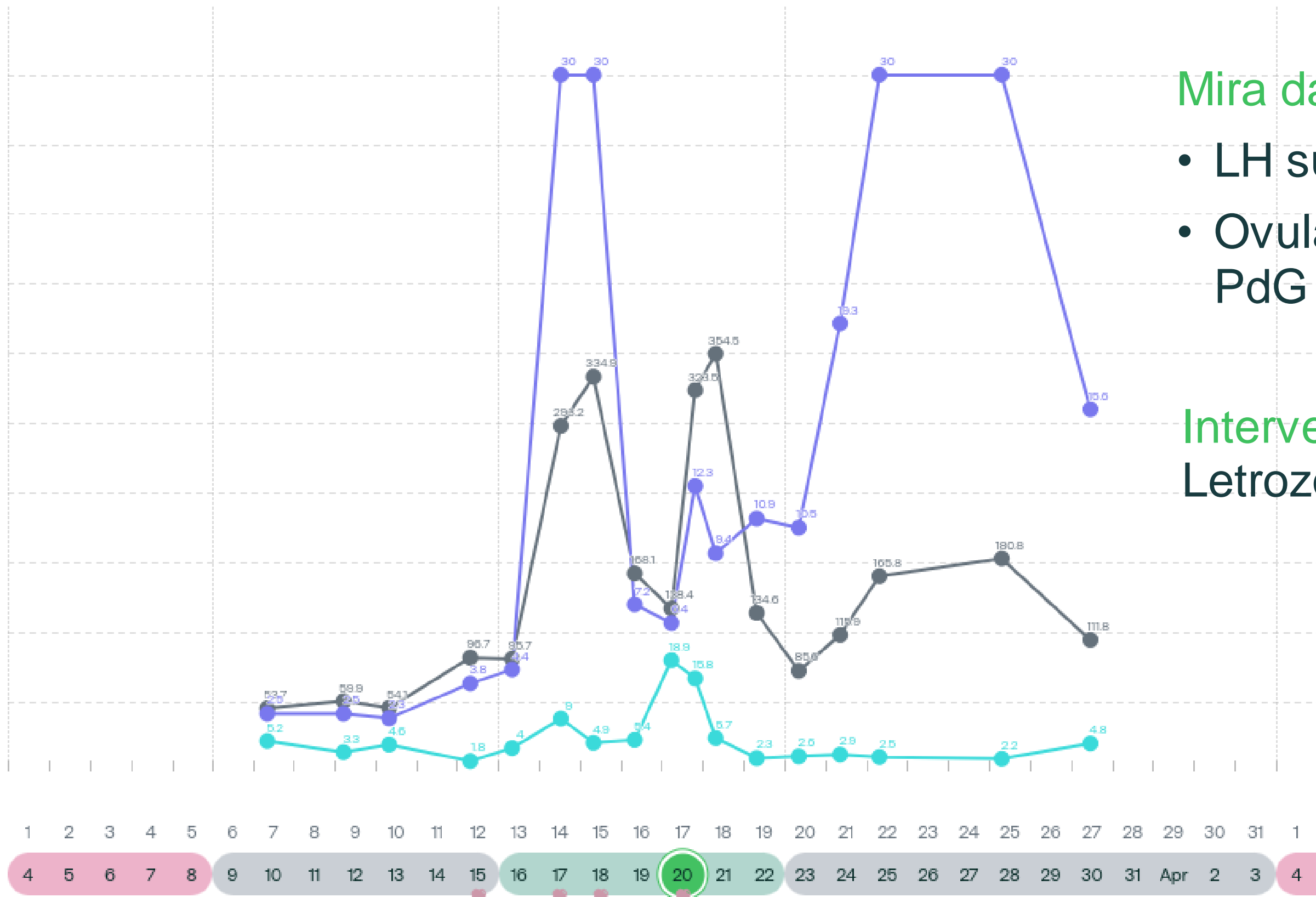


Mira data discovered:

- LH surge on CD 17 and CD 18
- Ovulation confirmed with elevated PdG levels
- Intercourse more effectively timed
- Luteal phase 14 days



Follow up Mira Chart—March



Mira data discovered:

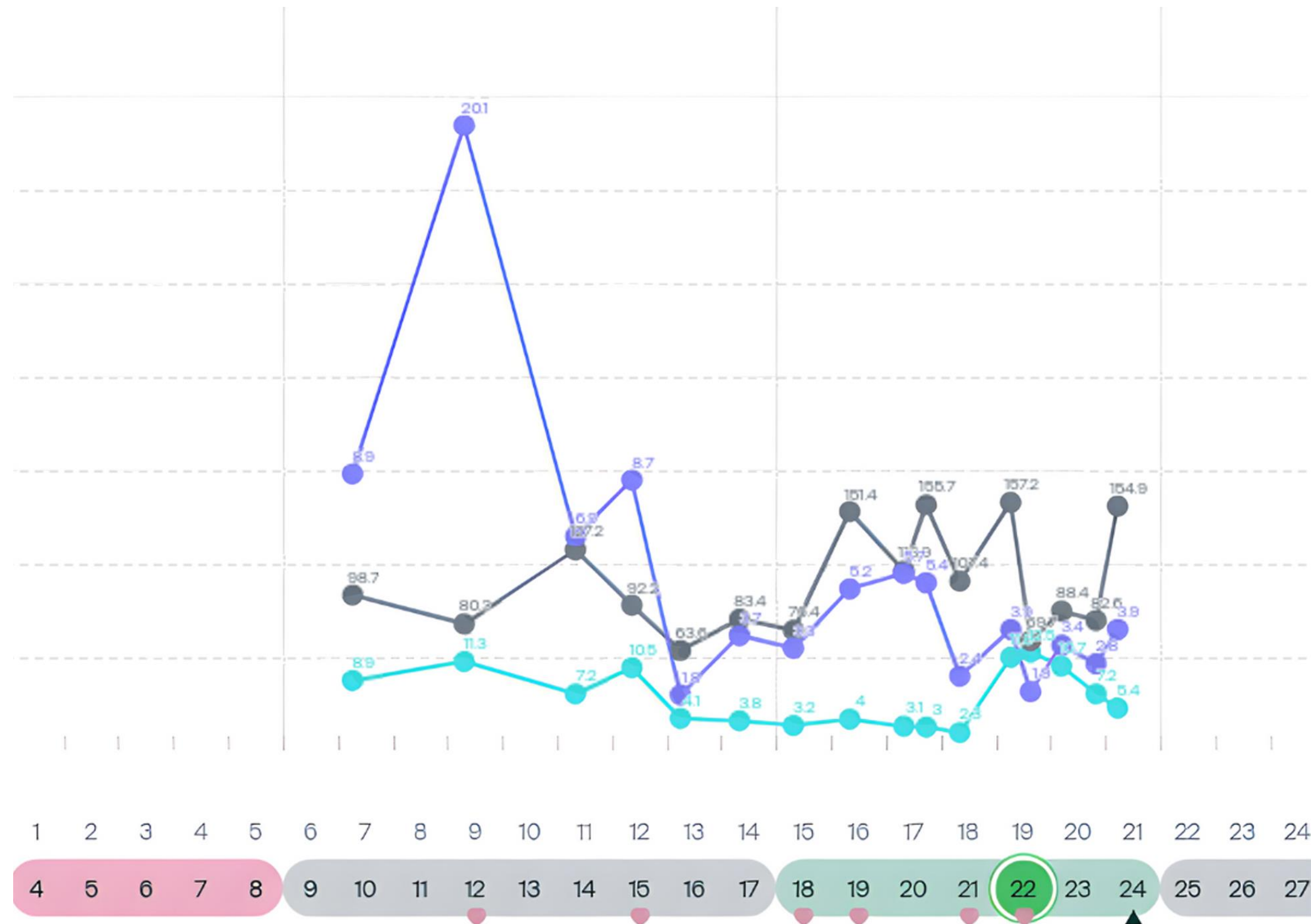
- LH surge on CD 17
- Ovulation confirmed with elevated PdG levels

Intervention:

Letrozole dose given



Follow up Mira Chart—April



Mira data discovered:

- LH surge on CD 19 and CD 20
- Poor response to new Letrozole dose
- Unable to confirm ovulation at this time

Intervention:

Letrozole dose adjusted



Provider Summary

Tracking her hormones with Mira helped:

- Educate the patient on the variability of unique ovulation day
- Identify her true day of ovulation
- Find her fertile window to time intercourse correctly
- Able to monitor the patient's response to medication
- Ensure her underlying hormones with PCOS are balanced



“In March and April we did two different doses of letrozole and were able to see a difference and how we may need to adjust her plan of care even more.”

Dr. Tara Harding



Case report: Patient #2

Patient background

33 year old female
TTC

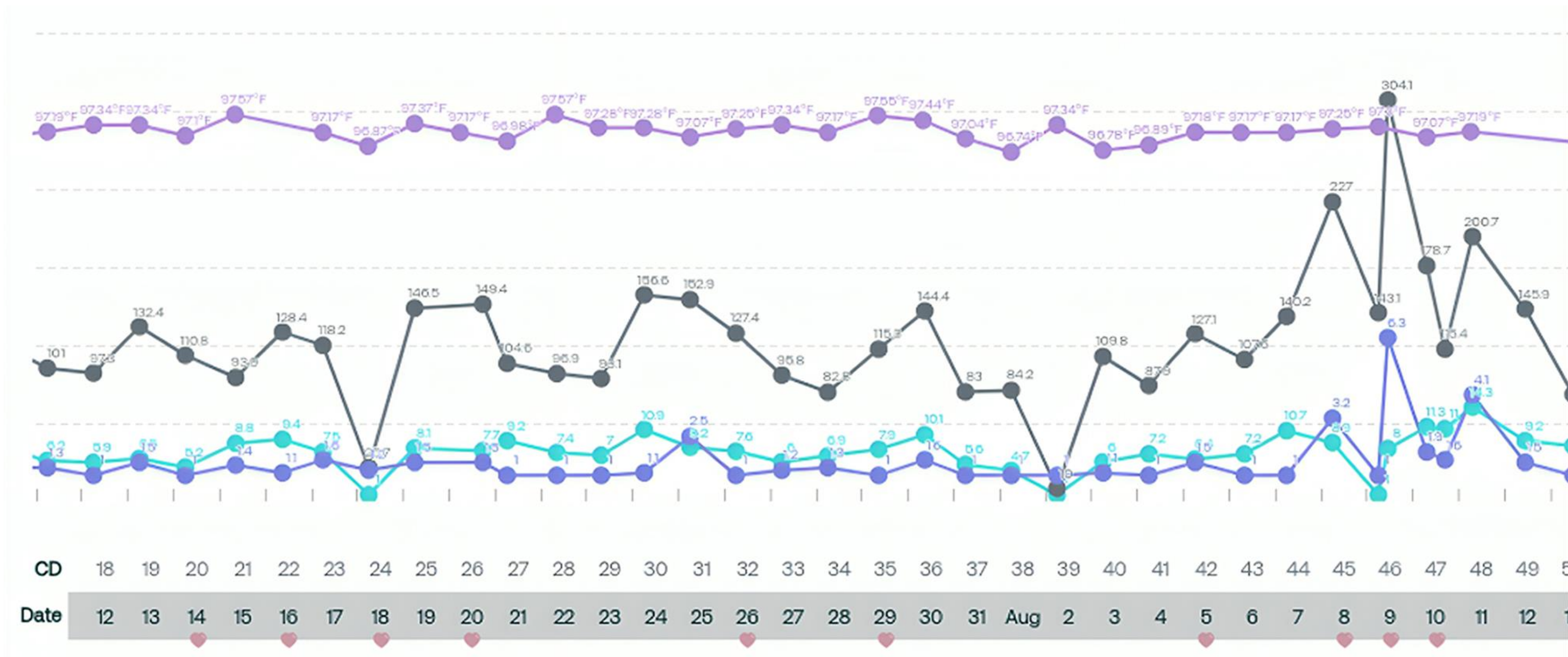
Weight: 179 lbs
Height: 63 in
BMI: 31.715

Amenorrhea

After initial visit implemented
a PCOS plan



Initial Mira Chart—July / August 2023



Mira data discovered:

- Lack of coordinated hormones
- Lack of LH surge
- Lack of PdG changes
- Continued amenorrhea

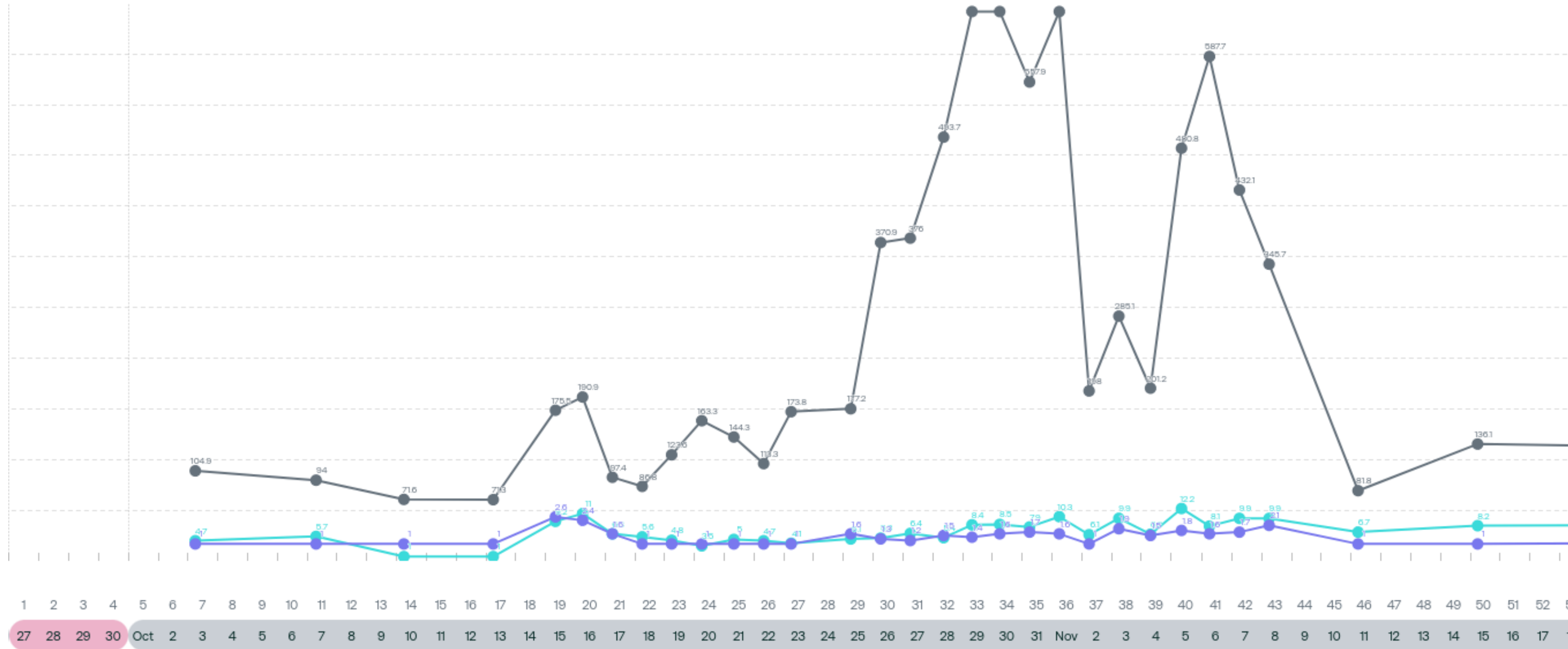


Treatment / Interventions / Assistance

- Lifestyle modifications
- Nutrition
- High dose myoinositol
- NAC
- Fish oil
- PCOS blends
- Tea
- Low dose naltrexone (LDN)



Mira Chart—Oct 2023



Mira data discovered:

- Lack of LH surge
- Fluctating E3G levels without coordination with LH
- Lack of PdG changes
- Unable to confirm ovulation at this time



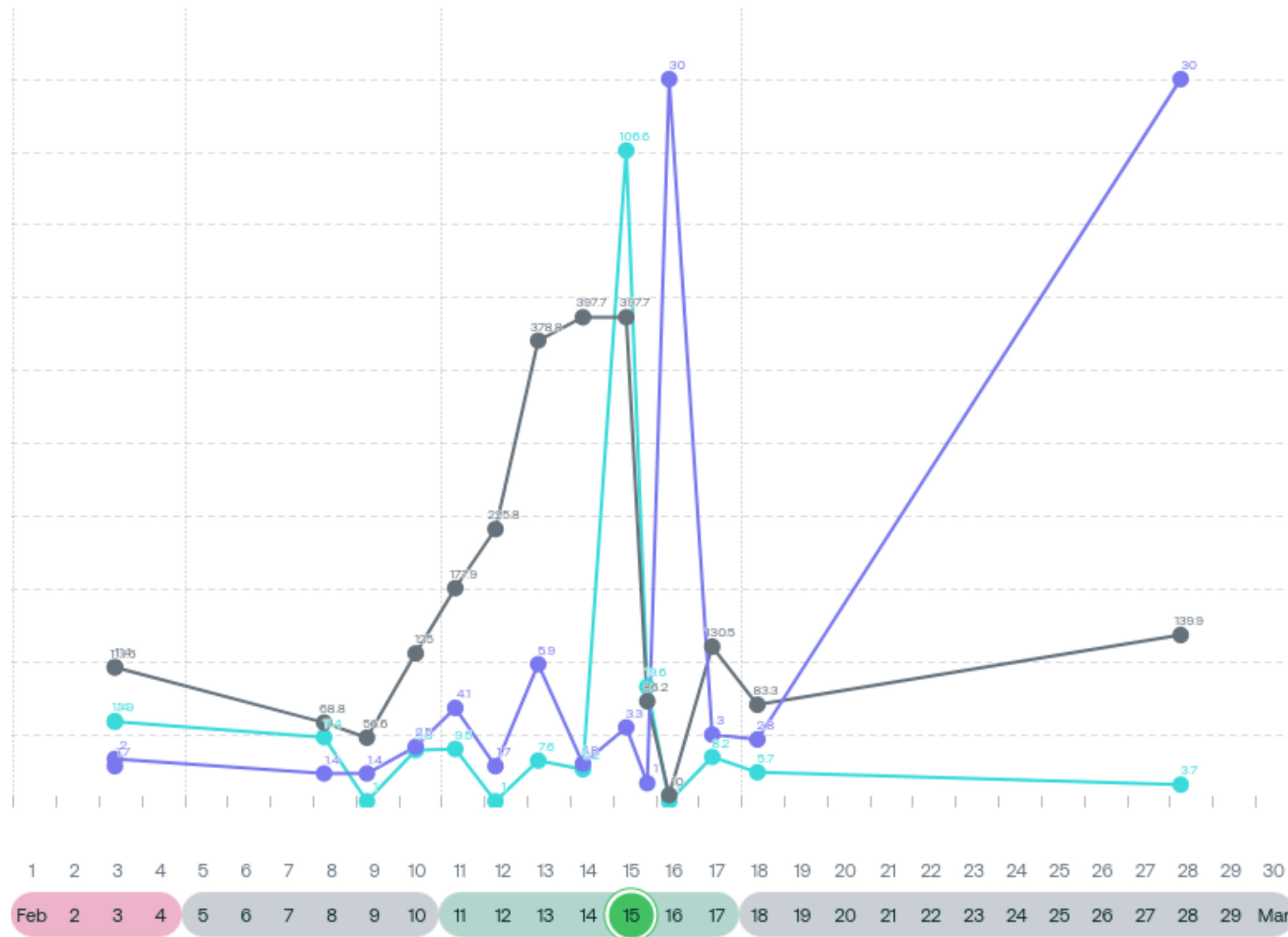
Re-evaluation

- The patient continued to have anovulatory cycles despite interventions
- Decided to start Tirzipatide. This strategy helped her to not only get a period but finally ovulate
- Once the patient was ovulating and having periods, started letrozole for ovulation support
- Began bio-identical progesterone after ovulation

Provider message on glucose-dependent insulinotropic polypeptide (GIP) receptor and glucagon-like peptide-1 (GLP-1) receptor agonists: enhance the body's sensitivity to insulin, these medications help reduce insulin levels. By lowering the insulin levels it lowers testosterone and DHEA levels. With normalized testosterone and DHEA, we see that normal growth and development of ovarian follicles is able to happen.



Mira Chart



Mira data discovered:

- Coordinated E3G changes leading to the LH surge
- LH surge on CD 15
- PdG changes after LH surge confirming ovulation

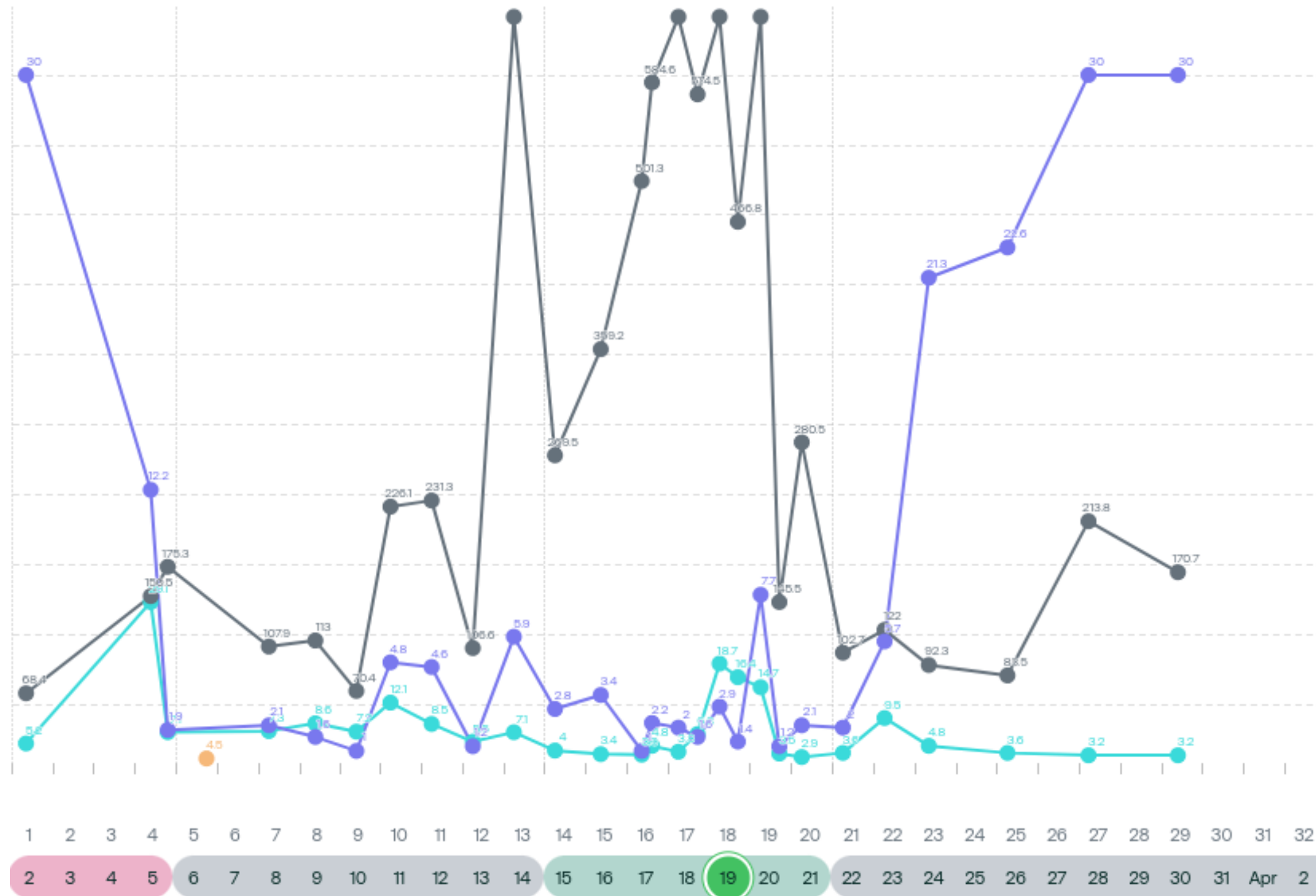
Intervention:

- Letrozole
- Progesterone supplement after LH surge



Mira Chart

Conception Cycle



Mira data discovered:

- Elevated E3G before LH surge
- LH surge on CD 18 and CD 19
- PdG changes after LH surge confirming ovulation

Intervention:

- Letrozole
- Progesterone supplement after LH surge



Provider Summary

Tirzipatide helped to reduce insulin levels which improved testosterone and DHEA levels allowing for normal growth and development of ovarian follicles.

Ensure her underlying hormones with PCOS were balanced.

Able to monitor the patient's response to medication.

Properly time medications and intercourse.



Case report: Patient #3

Patient background

37 year old female

Perimenopause

Planned hysterectomy

Patient purchased Mira to see if she could determine which hormone was responsible for her symptoms.

Extremely elevated insulin

Symptoms: nausea, vomiting, headaches, fatigue



Treatment / Interventions / Assistance

Supplements:

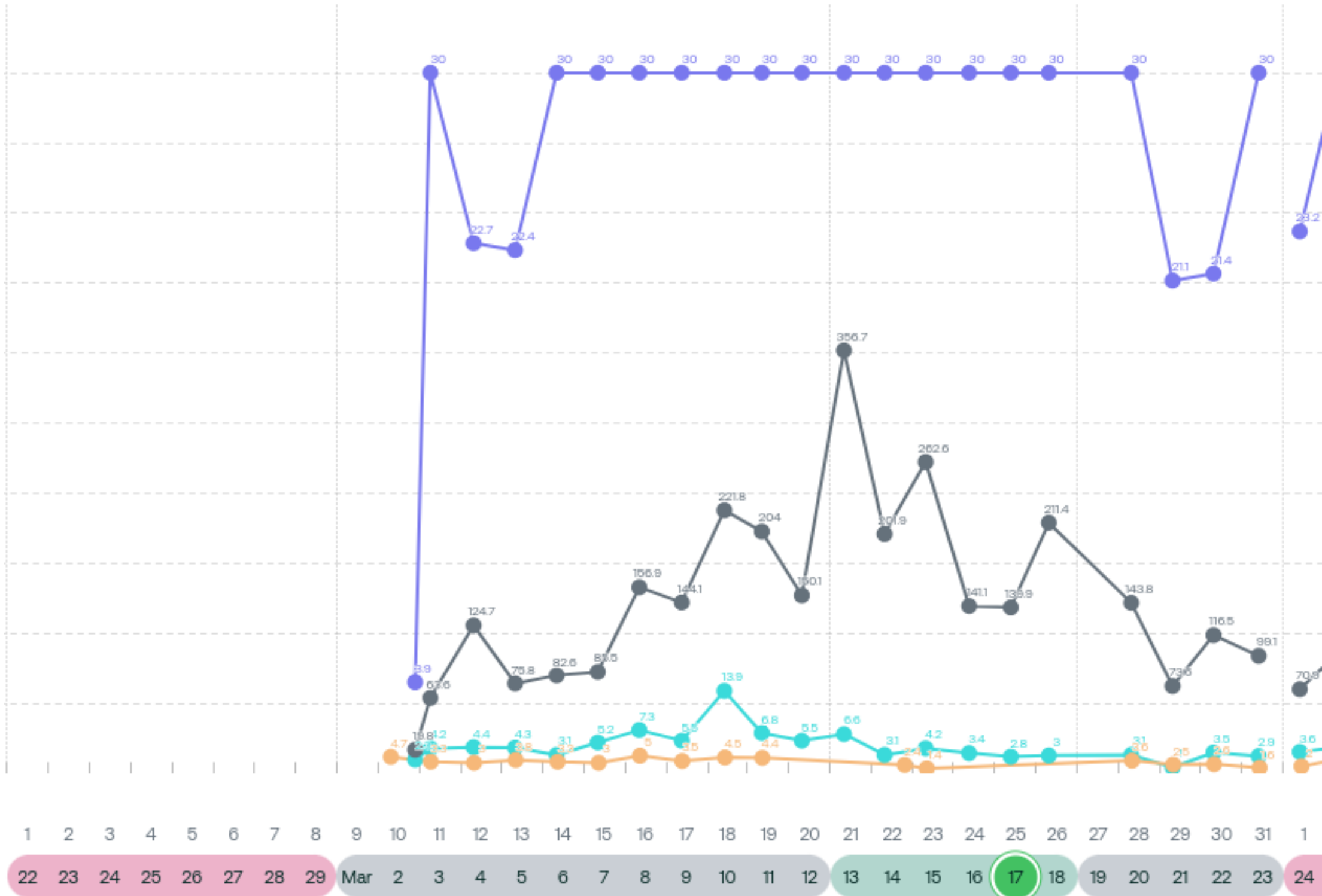
- Myo-inositol twice daily
- NAC
- Vitamin D
- Magnesium
- Vitamin B complex
- Vitamin D weekly
- Fish oil
- Organ complex

Medications:

- Low-dose semiglutide (for extremely elevated insulin)
- Progesterone trochee



Mira Chart



Mira data discovered:

- Evidence of progesterone supplementation
- Fluctuating E3G levels

Patient discovered her symptoms of nausea, vomiting, headaches, fatigue coordinated with elevated E3G levels



Provider Summary

Seeing how high her estrogen levels were on Mira helped us better navigate what steps we need to take with her hormones since we already had progesterone in place to treat her PMDD.



“

Mira has revolutionized my practice by providing real-time insights into my patients' daily hormone levels, allowing for precise monitoring of their menstrual cycles.

This technology enables me to educate patients on the specifics of their cycle, particularly highlighting the role of progesterone as a key indicator of ovulation.

With Mira, we can demonstrate how ovulation can vary from month to month, empowering patients with knowledge and enhancing their reproductive health management.

*Dr. Tara Harding (Brandner), DNP, FNP-C;
Simply You Clinic*



Thank you!