

How Mira assists in clinical evaluation and treatment

Case Reports with Dr. Brett Baxter

NICHOLS
CHIROPRACTIC
FUNCTIONAL + MEDICINE



For Healthcare Professionals



Case report #1

PCOS while TTC

Patient background

34 Female
G0P0

Medical history: PCOS
TTC for 10 months

Tracking cycles with
traditional period app

Complaints of difficulty losing weight, hair loss, acne, facial hair growth, and inability to get pregnant after 10 months of trying



Plan

Work up to determine the status of PCOS

Insulin sensitivity

- Fasting trigs
- Fasting blood glucose
- Insulin
- HBA1C
- ALT

Testosterone-free and total

Estrogen dominance

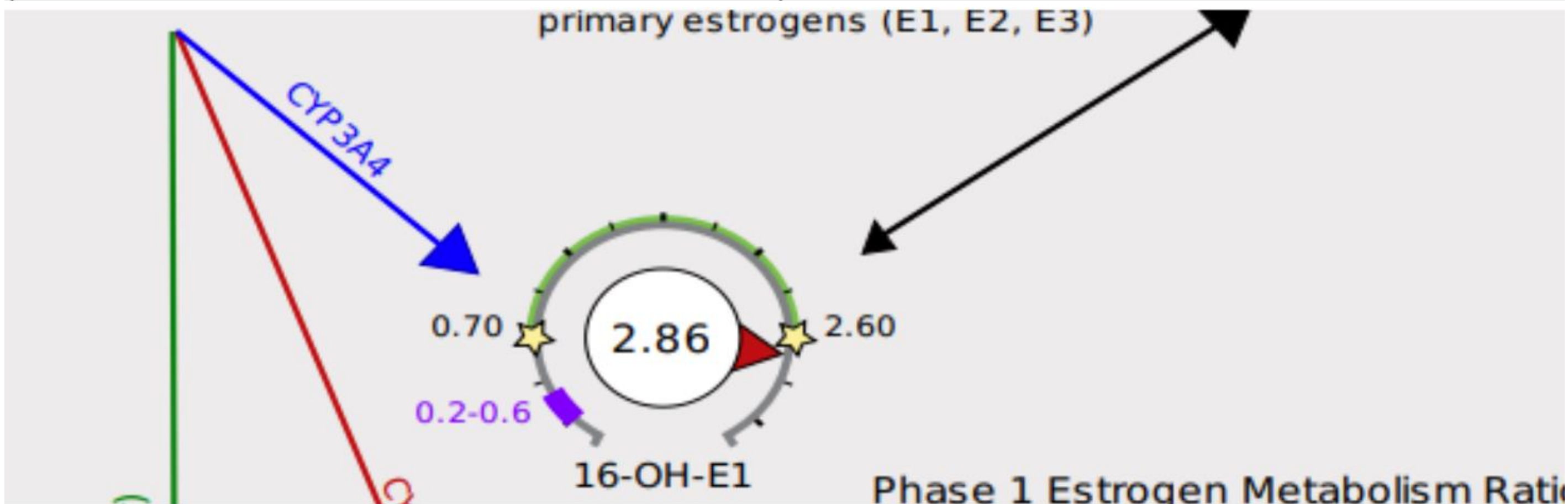
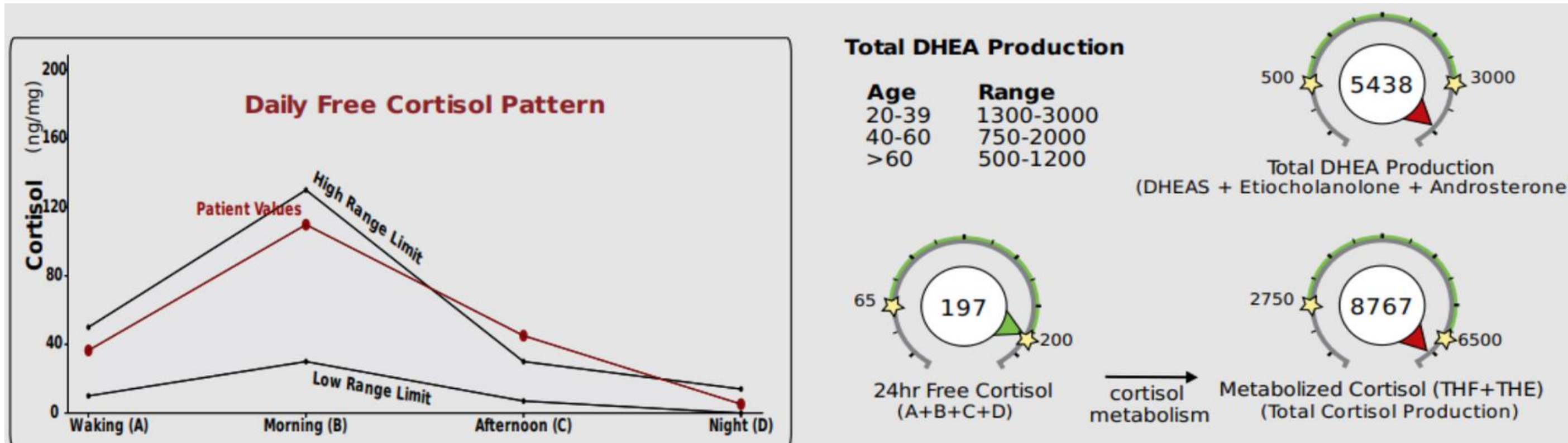
Methylation status

- Vitamin B12
- Folate
- Homocysteine

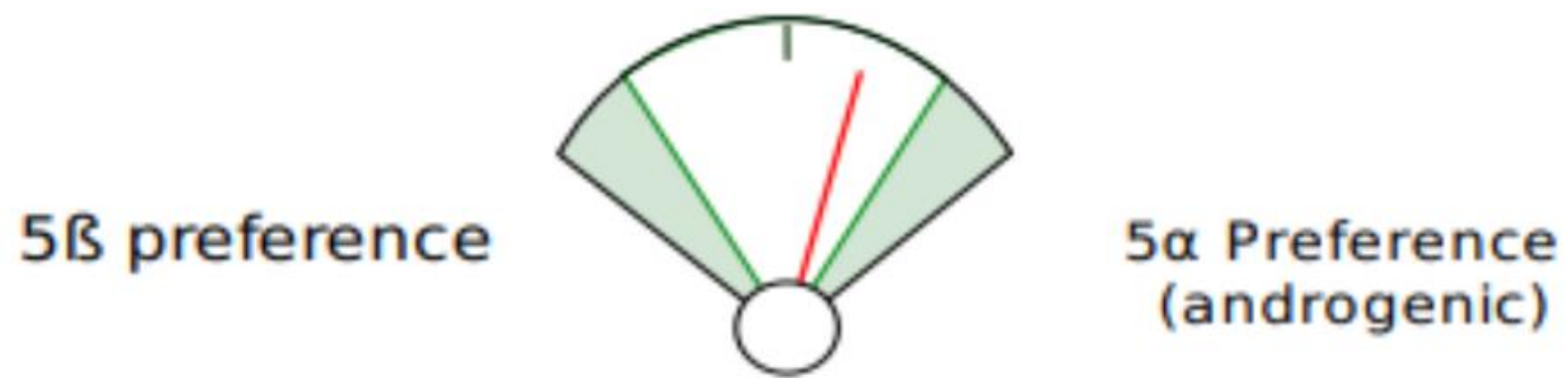
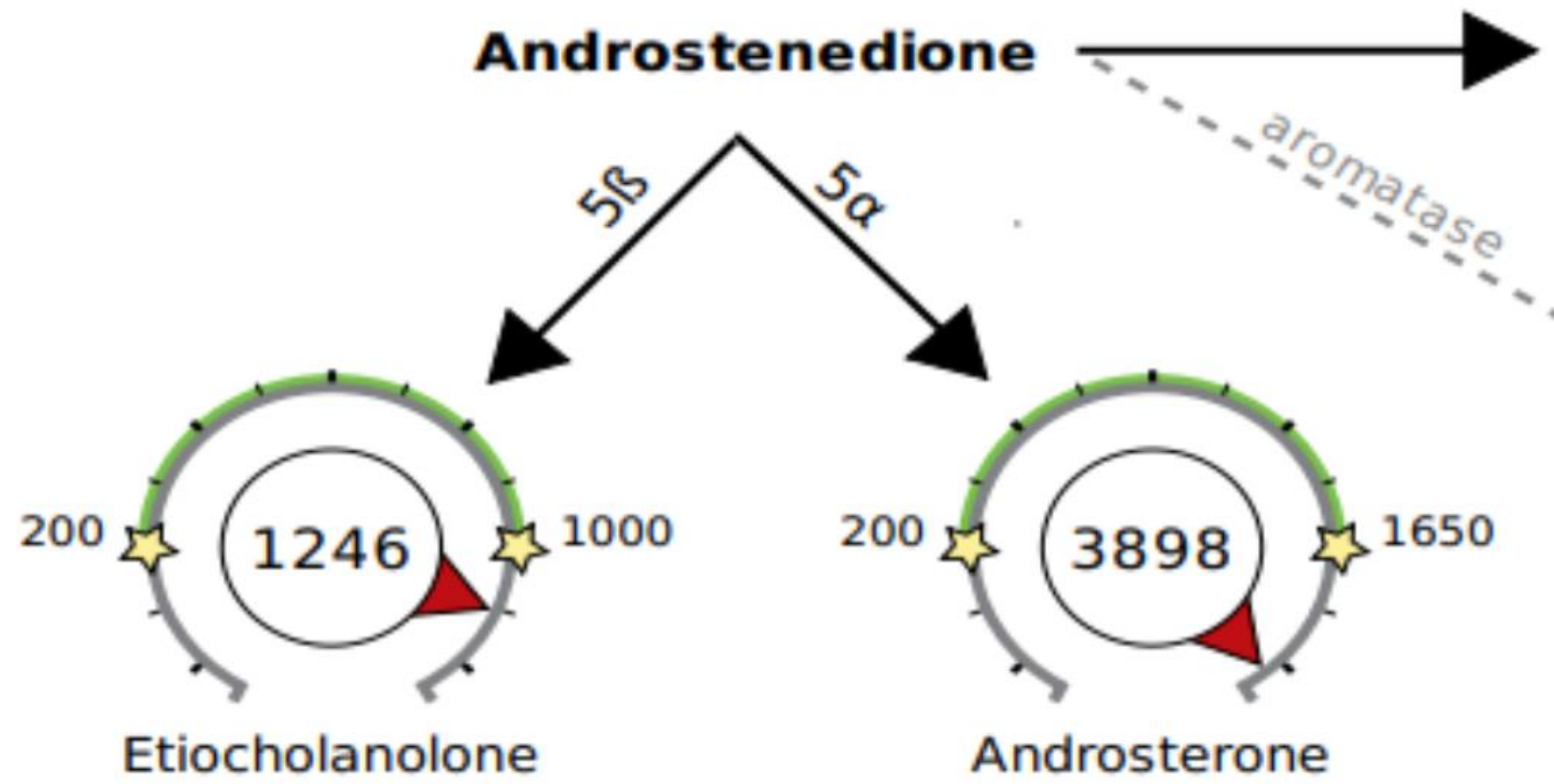
Vitamin D



Dutch Results



Dutch Results Continued



5 α -Reductase Activity

Lab Results

Comp. Metabolic Panel (14)

Glucose	102	High	mg/dL	65-99
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Vitamin D, 25-Hydroxy	19.3	Low	ng/mL	30.0-100.0
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Vitamin D deficiency has been defined by the Institute of

Insulin	41.9	High	uIU/mL	2.6-24.9
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Testosterone, Free and Total

Testosterone, Serum	41		ng/dL	8-48
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Free Testosterone (Direct)	13.8	High	pg/mL	0.0-4.2
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Results and Interventions

1. For high cortisol- implemented exercise and stress reduction techniques. Lowered inflammation.

2. For Estrogen dominance—topical progesterone, worked on insulin sensitivity and lowering inflammation, and gave herbs to help speed estrogen clearance through the liver.

3. Increase 5 alpha-reductase activity resulting in high androgenic metabolites—herbs to reduce this enzymatic function and reduce metabolites.

4. Blood labs - high insulin and fasting glucose. High free testosterone, low vit. D and omega 3's. Fixed these nutrient deficiencies, implemented daily walking practice and low-carb diet.

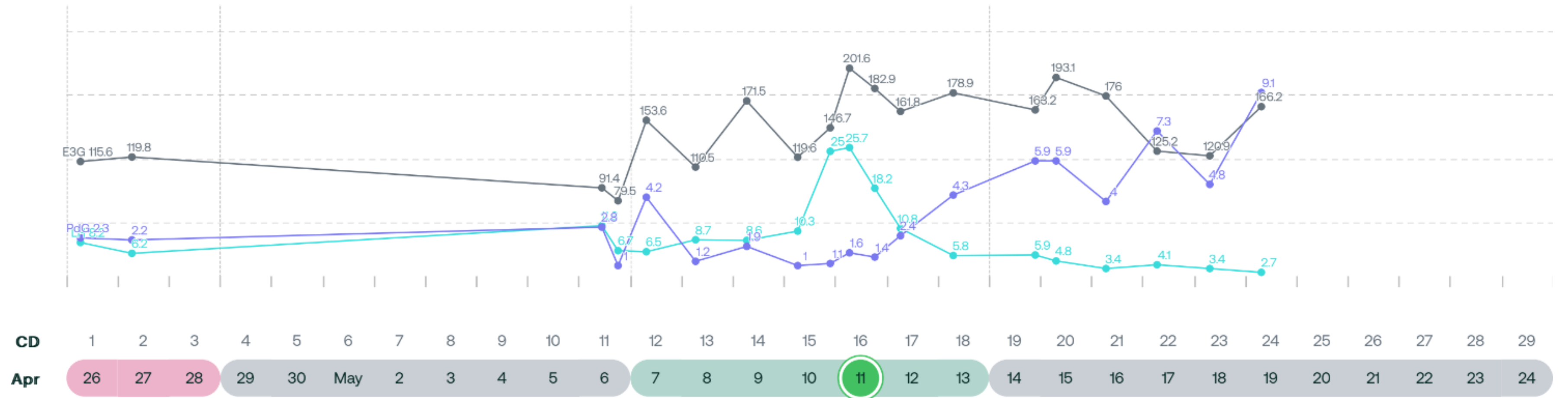


Monitoring Hormone Data with Mira

- Started tracking hormones with Mira in February 2023 to monitor hormone patterns and identify LH surge
- Mira was used as a guide to show improvements after interventions
- Allowed for precise tracking of the cycle to optimize changes in hormones and fertility.



Mira Data



Mira data discovered:

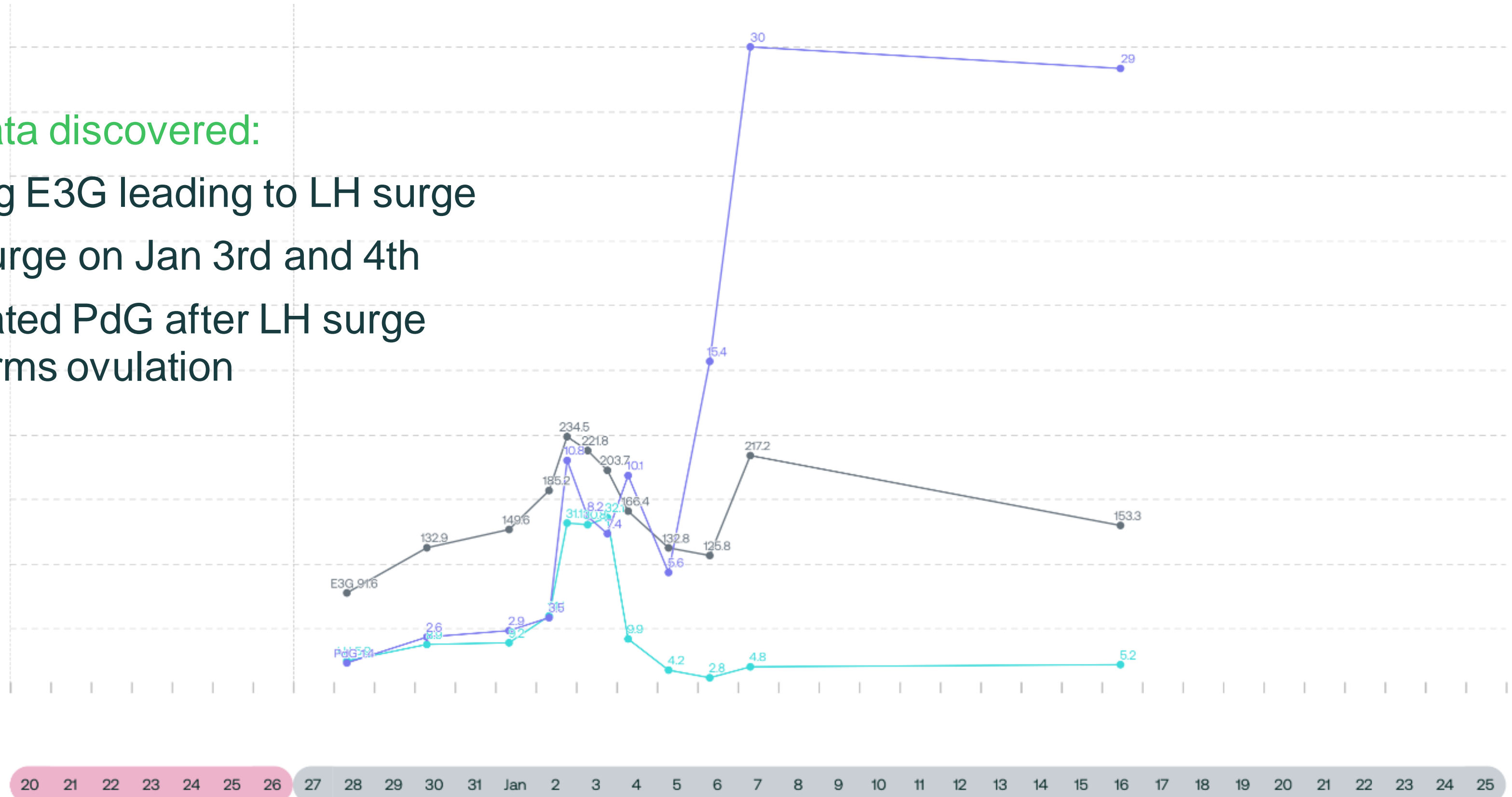
- Rising E3G leading to LH surge but abnormal E3G pattern in luteal phase
- LH surge on CD 15 and CD 16
- Rising PdG after LH surge confirms ovulation, however, abnormally low PdG levels



Follow Up Mira Data: Conception Cycle

Mira data discovered:

- Rising E3G leading to LH surge
- LH surge on Jan 3rd and 4th
- Elevated PdG after LH surge confirms ovulation



Summary

Provider identified unmanaged PCOS

Implemented targeted interventions to manage PCOS

Incorporating Mira helped to monitor hormone patterns and responses to interventions

The patient reached her goal of conception

