



Case report: Patient #1

Irregular cycles with intermittent spotting

[Watch here](#)

Patient background

Before Mira



Summary

32 female

Irregular cycles lasting 50+ days with intermittent spotting

Never been pregnant



Situation

She has irregular ovulation and requires progesterone to regulate her cycles.

She had previously seen a nutritionist and other providers before this evaluation.



Past Medical History

High prolactin, Hashimotos



Supplements

Myoinisitol, NAC, Magensium, Fish oil, Vit D



Medications

Cabergoline

Patient background



Labs Cycle Day 3

- AMH 6 ng/mL
- LH 5.8 IU/L
- FSH 4.3 mIU/mL
- Testosterone 20 ng/dL
- HgbA1C 5.9
- DHEA 275 µg/dL
- Prolactin 24 ng/mL
- Estradiol 44 pg/mL
- TPO antibodies 38 IU/mL



Lifestyle

- Nutrition: Followed a gluten-free diet due to Hashimoto's; primarily ate meat and vegetables, excluding grains.
- Exercise: No regular exercise.
- Sleep: Relied on melatonin to support sleep.
- Gut Health: Bowel movements every other day; experienced constipation, bloating, and gas.

Tracking with Mira: Identified Uncoordinated and Poor Hormone Patterns

During Mira



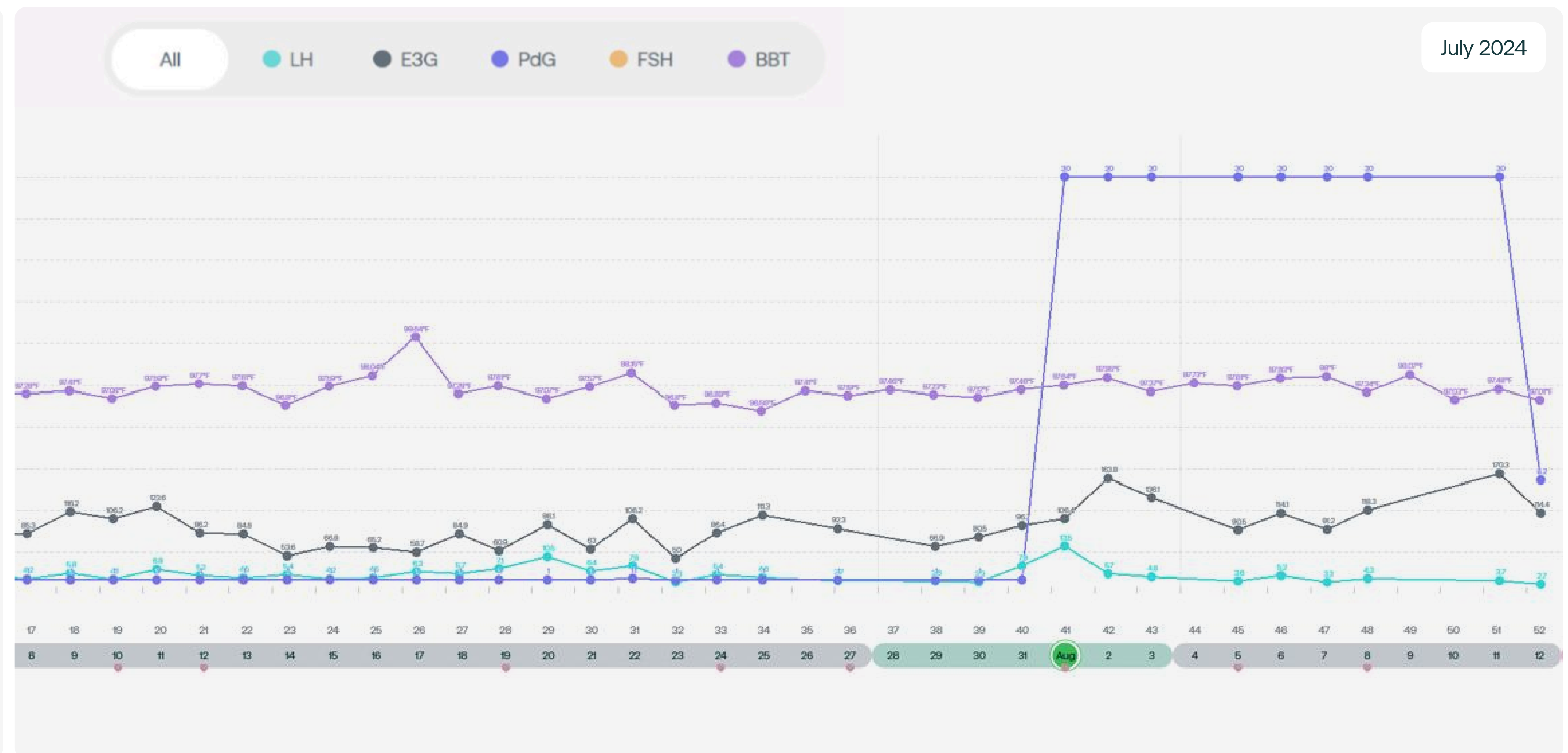
Mira data discovered

Uncoordinated and low E3G levels

Higher E3G in luteal phase than follicular phase

Small LH surge on CD 40 and 41

Oral progesterone supplementation CD 41-52



Tracking with Mira: Identified Poor Hormone Patterns and Suboptimal Ovulation

During Mira



Mira data discovered

Uncoordinated and low E3G levels

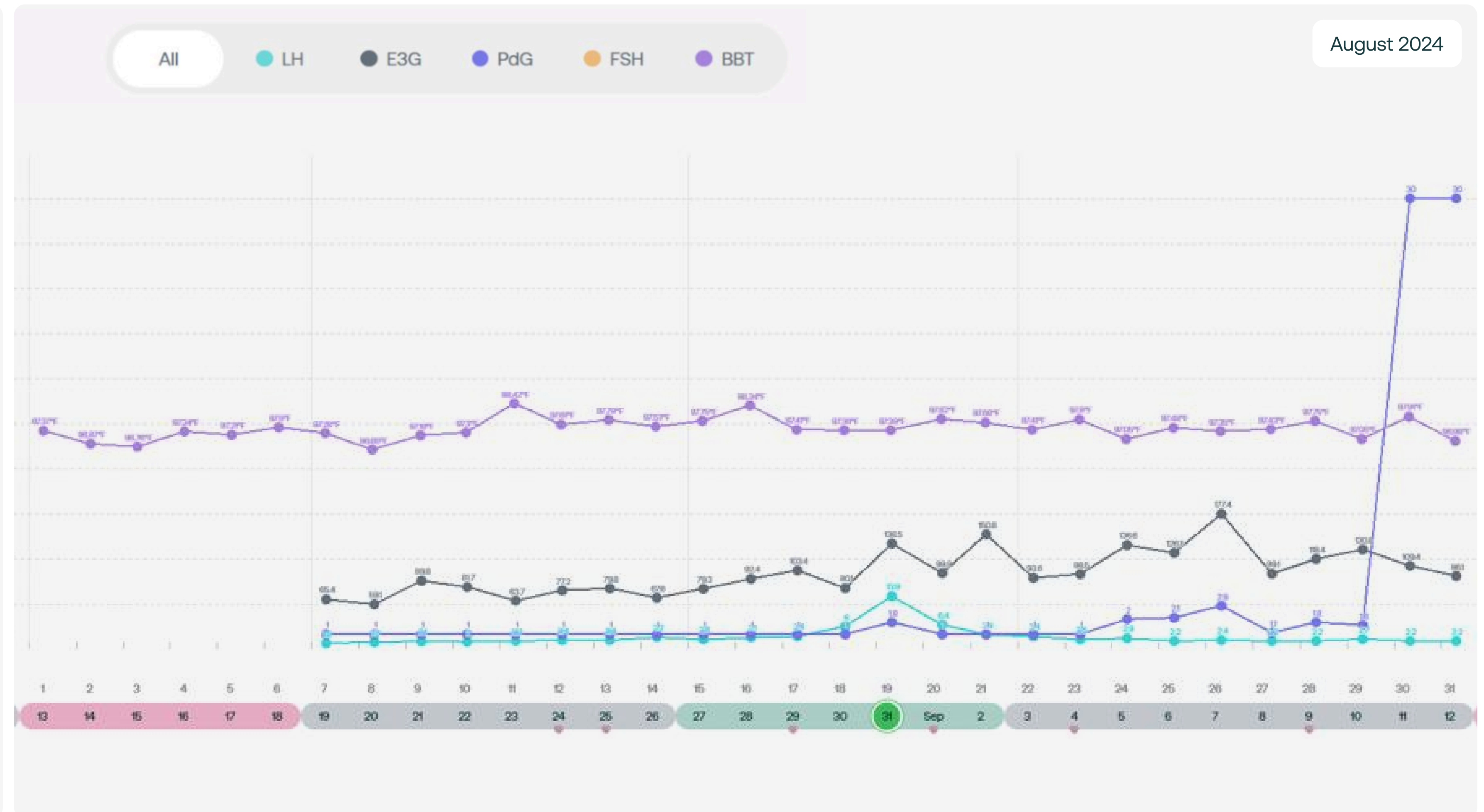
Higher E3G in luteal phase than follicular phase

Small LH surge on CD 40 and CD 41

Minimal PdG changes concern for suboptimal ovulation

Oral progesterone supplementation on CD 30 and CD 31

Concern for suboptimal ovulation



Targeted Intervention: Optimizing Glucose Management with CGM

During Mira



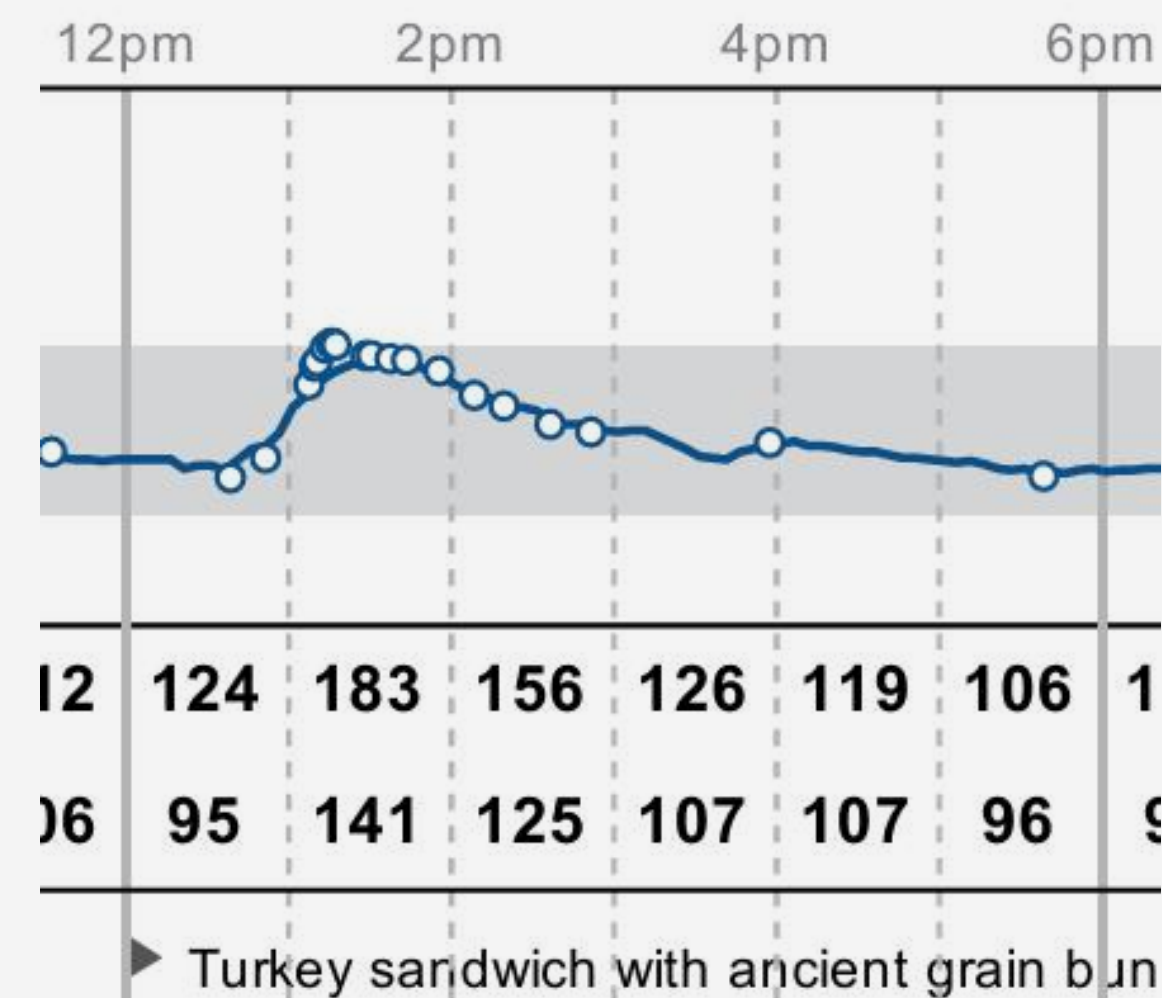
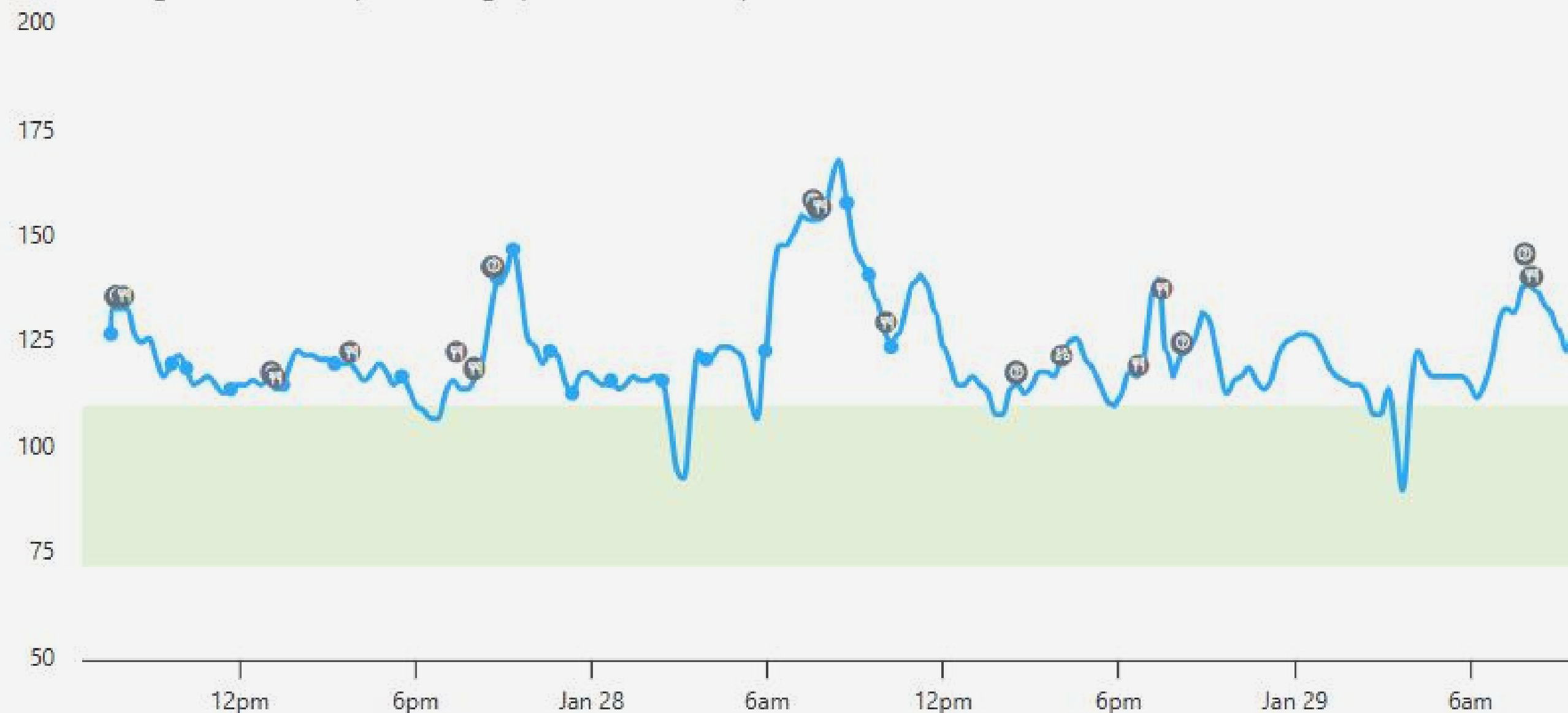
Continuous Glucose Monitoring

Conducted for one month, with an average glucose level of 112

Diagnosed with insulin resistance and prediabetes, a condition that had not been previously discussed with her.

Glucose Levels

Click and drag to zoom into a portion of graph. Green band represents health zone



Workup and Interventions

During Mira



IgE Testing

Positive for corn sensitivity, leading to the elimination of corn from her diet.

Gut Health Testing

Revealed poor digestion. She was started on digestive enzymes, IgG supplementation for leaky gut, and incorporated daily apple cider vinegar.

Additional Interventions

Diet

Reintroduced gluten to support hormone production

Consumed 60-80g of protein per day

Incorporated whole grains 1-3 times per day

Added omega-3 rich foods

Supplements

Started DHEA 25mg to support estradiol production

Medications

Initiated metformin, gradually increasing to 1000mg daily, then reducing to 500mg daily as diet improved

Tracking with Mira: Monitoring Responses to Interventions

After Mira



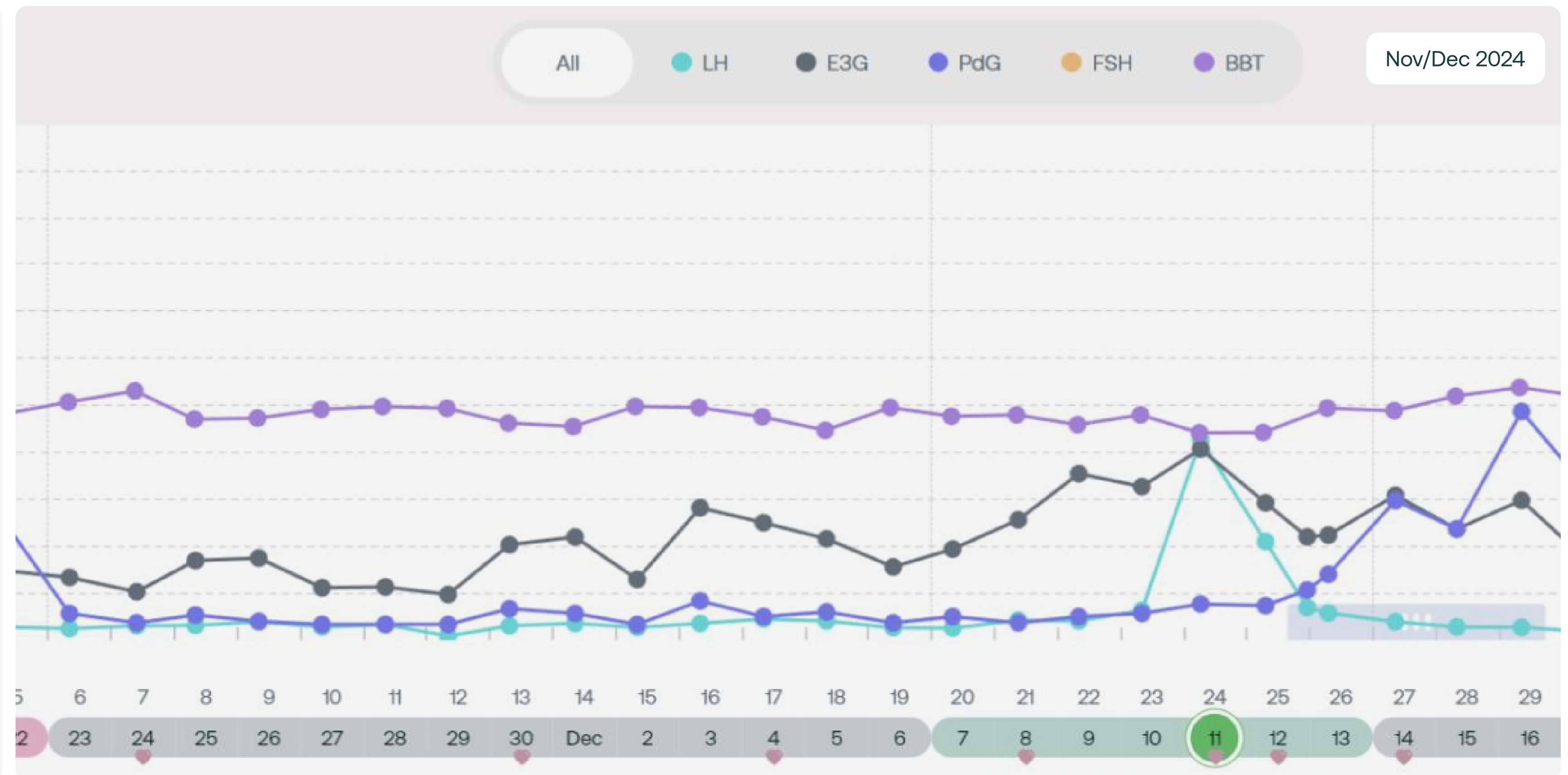
Mira data discovered

Improved coordinated with rising E3G pattern leading to LH surge

LH surge on CD 24 and 25

Small LH surge on CD 40 and 41

Rising PdG after LH surge confirming ovulation



Outcome After Dietary and Supplement Changes

After Mira



Reduced TPO antibodies to 19 IU/mL



Normalized prolactin to 5.5ng/mL, allowing her to discontinue cabergoline



Achieved natural ovulation without medication, with an LH surge on cycle day 24, accompanied by an estradiol surge and post-peak progesterone rise