Webinar questions

Educational Questions	Answers
	Mira team: While research involving Mira has shown a strong correlation between serum hormone levels and urinary metabolites, it's crucial to understand that they are not directly equivalent (see research here). Urinary metabolites and serum hormones are measured in different units and reflect a correlation rather than a direct equivalence. Urinary metabolites, which are a result of the metabolism of serum hormones, offer a delayed reflection of these hormones. While urinary metabolite levels may fluctuate, they generally align with the overall pattern of serum hormone levels. Therefore, instead of comparing specific data points, it's more effective to focus on trends over time. Many healthcare providers utilize a combined approach, employing continuous monitoring with devices like Mira to track trends and periodic serum tests to obtain precise snapshots of hormone levels at specific points in time. In conclusion, while Mira can be a valuable tool for monitoring hormone trends, it's important to remember that it's not a substitute for traditional serum hormone tests.
1. How do we know that the progesterone production is poor? What are the optimal progesterone levels in Mira? What is considered optimal on MIRA for progesterone levels? How does that coincide with serum levels?	To confirm an ovulatory event using Mira PdG, you can look for one of these two patterns: Option 1- Three-Day Rise: Three consecutive days of rising PdG levels, with each day at least 1.25 times higher than the previous day after an LH surge. Option 2 - Sustained Elevated PdG: Multiple PdG levels consistently higher than baseline following an LH surge. For PdG ranges, please refer to our interpretation guide. Indicators of suboptimal PdG levels may include consistently low PdG readings, lack of sustained elevation during the luteal phase, a shortened luteal phase, or a premature decline in PdG before the end of the luteal phase. To better understand PdG decline during the menopausal transition—and to view chart examples of suboptimal PdG patterns—please refer to this document. Dr. Carrie Jones: To me, Mira seems to semi-align with bloodwork. Progesterone production is also a rise and fall. If I see a Mira result above 3-5 (and continues to rise) then I know she has ovulated and is making progesterone. I like to see progesterone get close to or above 10 at its peak. If her progesterone rises and then starts to decline, I know her progesterone production is not that robust. Same if her progesterone rises but then quickly falls back down.
2. When would you start supplementing progesterone for this patient?	Mira Team: Options for starting progesterone based on research: Start progesterone 36 hours after the onset of serum LH test or 24 hours after positive urinary LH test (Mizrachi) Start progesterone 3-4 days after LH surge (Mesen) Mizrachi Y, Weissman A, Rozen G, Rogers PAW, Stern C, Polyakov A. Timing of progesterone luteal support in natural cryopreserved embryo transfer cycles: back to basics. Reprod Biomed Online. 2022 Jul;45(1):63-68. doi: 10.1016/j.rbmo.2022.03.021. Epub 2022 Mar 31. PMID: 35534393. Mesen TB, Young SL. Progesterone and the luteal phase: a requisite to reproduction. Obstet Gynecol Clin North Am. 2015 Mar;42(1):135-51. doi: 10.1016/j.ogc.2014.10.003. Epub 2015 Jan 5. PMID: 25681845; PMCID: PMC4436586. Dr. Carrie Jones: I'm not sure which case they were mentioning but we usually suggest within 24-48 hours of the LH peak.
3. Do Mira FSH and LH values correlate with serum values?	Mira Team: Mira's FSH and LH values generally align with serum levels in terms of patterns and trends. While both are measured in the same units, urine and blood

	tests can produce slightly different values due to factors like timing and hormone metabolism. Dr. Carrie Jones: They seem very similar in my experience, yes.
4. At what level on MIRA do you decide to initiate estrogen detox?	Dr. Carrie Jones: Good question, I don't base estrogen detox entirely off Mira per se. If they have routinely higher than expected levels of estradiol and estrogenic symptoms, I usually then run a urine metabolite test.
5. What is your definition of optimal range for estrogen, LH, progesterone when looking at Mira?	Mira Team: Please refer to our interpretation guide for reference ranges.
6. Is that the same progesterone level expected for fertility?	Dr. Carrie Jones: Usually for fertility, we prefer progesterone to be in the double digits = 10ng/mL or higher. Ideally closer to 20ng/mL.
7. What level of PdG provides a protective effect?	Dr. Carrie Jones: Most serum research suggests that PdG levels above 3 ng/mL offer protective effects, with some studies indicating a threshold above 5 ng/mL. Mira has not yet established a specific PdG level for uterine protection based on its urinary measurements.
8. How long is the washout period if coming off HRT before baseline Mira testing?	Mira Team: If the goal is to avoid detecting the effects of HRT, waiting **5-7 days after stopping most HRT** is usually enough before starting Mira testing. Dr. Carrie Jones: It depends on the route of hormone administration. For example, oral progesterone and oral estradiol are usually out quickly so I usually say stop a week before doing Mira. Pellets last for months and are harder to gauge when they are out of the system. Injections are usually out in a few days to a week(ish) depending on the dose. Topical can vary as it likes to accumulate in the adipose tissue.
9. *Do you recommend women stop hormones and/or supportive supplements before testing? Any other modifications to lifestyle/diet before testing?*	Mira Team: **Generally, no—we don't recommend discontinuing hormones or supportive supplements before testing**, unless the goal is to observe the woman's baseline hormone activity without any external influence. In some cases, providers may choose to test both before and after initiating support in order to evaluate its impact.
10. *Do you have any ethnicity specific data or seen any patterns in hormone levels in terms of different ethnic groups?*	Mira Team: **At this time, we don't collect ethnicity-specific data from our users, so we're unable to report on hormone trends by ethnic group.** However, many researchers are using Mira in studies across diverse populations, so we anticipate more insights becoming available as that work progresses. Currently, we're better able to categorize hormone patterns based on clinical context—such as PCOS, perimenopause, or age—rather than by ethnicity.
11. What about post-menopausal but still seem to be cycling by symptoms (not periods)—is this a thing? Is this related to this ovulatory cycle then?	Answered live
12. I believe that the body ovulates alternating between the right and left ovary every cycle, so would it be a good idea to test for at least 2–4 cycles to determine consistency?	Mira Team: While it's commonly assumed that ovaries alternate each cycle (and this may be true for some patients), in reality, this can vary considerably between individuals and even from cycle to cycle. For this reason, we generally recommend testing over at least three cycles. Doing so helps providers identify meaningful patterns and trends, establish a more reliable baseline, and gain clearer insight into each patient's ovulatory function and overall cycle regularity. Dr. Carrie Jones: It does not necessarily ovulate right then left. Some women have a dominant side. Others may go 2 months on one side then flip. Regardless, testing 2-4 cycles is still a good idea.
13. Would estrogen levels look this way for women with increased exposure to phyto- or xenoestrogens?	Dr. Carrie Jones: Phytoestrogens and xenoestrogens don't show up on urine tests to my knowledge. Certain xenoestrogens such as atrazine can increase aromatase and therefore increase estrogen levels.
14. Can you use Mira to see what is going on with a combination of endogenous hormones and any estradiol or progesterone given with HRT?	Mira Team: Yes, Mira can be used alongside hormone replacement therapy (HRT), but it's important to interpret the results with clinical context in mind. While Mira is not designed to determine whether HRT is "working" or to guide dose changes on its own, it provides valuable real-time data on hormone trends that can support clinical decisions. Hormone absorption and route of administration (oral, transdermal, vaginal, etc.) significantly impact how exogenous hormones appear in urine: • **Oral progesterone** can cause PdG to reach Mira's maximum detectable threshold. • **Topical progesterone** typically has minimal impact on urinary PdG due to

	differences in absorption. • **Transdermal estradiol** may result in modest increases in E3G but still allows endogenous estrogen fluctuations to be observed if the endogenous levels continue to rise higher than supplementation. During perimenopause, when hormone levels naturally fluctuate, Mira can help monitor whether HRT is contributing to more coordinated hormonal patterns (e.g., identifying ovulatory vs. anovulatory cycles, luteal phase support, or estrogen variability). Comparing hormone trends before and after starting HRT can offer insights into how the body is responding, even if Mira doesn't replace clinical diagnostics. We recommend reviewing our Clinical Insights on Hormonal Monitoring with Mira and exploring our Perimenopause Resource Hub for additional training and case examples. Dr. Carrie Jones: Mira can't differentiate between which are endogenous hormones and which are HRT hormones.
15. How do you decide when a female is going through menopause if she's had a uterine ablation and no longer has menstrual cycles?	Mira Team: When menstrual bleeding is no longer a reliable indicator—such as after a uterine ablation—tracking hormone patterns with Mira can provide valuable insight into where a woman is in the menopausal transition. In women transitioning to menopause, you'll may observe: • Irregular or absent LH and PdG changes (indicating fewer or anovulatory cycles) • Fluctuating or declining E3G • Progressive rise in baseline FSH • Increasing cycle irregularity in hormone trends By observing these hormone patterns across several weeks or months, Mira helps providers assess whether the patient is still ovulating or entering the later stages of perimenopause or menopause—even in the absence of a period. Dr. Carrie Jones: I usually start with a serum FSH test. If she's below 25.8, consider Mira testing to see how her hormones look through the month to ascertain patterns. If her serum FSH test is above 25.8, she's likely postmenopausal.
16. Is there any scenario that it would be appropriate to use on clients who use oral birth control?	Mira Team: Yes, in certain scenarios. While combined oral contraceptives are designed to suppress ovulation and reduce hormonal fluctuations, some individuals may still experience background ovarian activity or cyclical symptoms such as mood changes, breast tenderness, or changes in libido. In these cases, Mira can be a useful tool to assess whether hormones are fluctuating, providing insight into the degree of ovulatory suppression or potential hormonal deprivation. Additionally, Mira can be helpful in the transition time before or after discontinuing oral birth control. Tracking hormone levels can establish a baseline and help determine how quickly natural hormone production resumes and whether ovulation returns. In the case of hormonal IUDs—which do not consistently suppress ovulation—Mira may also detect ovulatory hormone patterns even in amenorrheic individuals. This can aid in: • Identifying whether ovulation is occurring, • Understanding the timing of hormonal fluctuations, and • Assessing whether symptoms may be hormonally driven.
17. What is the significance of testing 17-Pregnenolone in the hormone hierarchy?	Mira Team: At this time, Mira does not test 17-Pregnenolone. Dr. Carrie Jones: I don't test 17-Pregnenolone .
Testing or Use of Device	
1. If someone misses the first morning urine, what have you seen (less accurate)? Is there somewhere they can indicate this within the app?	For the most accurate and consistent results, we recommend collecting urine after the longest period of sleep—typically first morning urine (FMU)—ensuring it's a naturally concentrated sample. This means holding urine for at least 4 hours and limiting fluid intake for at least 2 hours before testing. Testing outside of this window, especially later in the day, can lead to less concentrated urine and may dilute hormone metabolites, potentially resulting in lower-than-expected readings. While this doesn't always significantly affect interpretation, it can reduce the reliability of the data, especially when tracking subtle hormonal changes. Currently, there is no feature within the app to specifically mark whether FMU was

	used. However, each test result includes a timestamp, which can help providers identify deviations from a patient's usual testing pattern. If a test is logged later than usual, it may suggest that FMU was missed. It's always helpful to confirm testing habits directly with the patient and encourage them to use FMU whenever possible—except during the LH surge, when the app may prompt a second test to capture the peak.
2. Does biotin distort Mira testing?	High doses of biotin (5,000 mcg or more) may interfere with Mira test results. To reduce the risk of interference, consider discontinuing biotin supplementation at least 48 hours prior to testing.
3. What tracker of symptoms do you use? Is it provided by Mira or separate	Yes, Mira offers symptom tracking where you can log symptoms (rated as mild, moderate, or severe) and also include things like intercourse, cervical mucus, basal body temperature (BBT), medications, and other lifestyle details. There's also a note section for adding any additional observations.
General	
1. How does the company protect client data? There are fears among women about using cycle tracking apps. Is the data 100% encrypted and does not provide any info that could be used in a legal way?	Mira takes data privacy seriously. All user data is encrypted in transit and at rest using secure AWS infrastructure. We are HIPAA- and GDPR-compliant, ensuring protected health information (PHI) is stored and handled safely. Mira does not sell user data, and we do not share PHI with the government or any unauthorized third parties. Users have full control and can permanently delete their data at any time.
2. How is Mira training on interpretations? This starts to feel complicated with so many individualized scenarios.	Mira supports with interpretation through 1:1 calls with our clinical team (book here), along with extensive educational resources like guides, protocols, case reports, interpretation guide, webinars, and mini courses (explore here).
3. What is the advantage for practitioners monetarily since you can order a device without a practitioner?	We offer higher discounts and partnership options for practitioners. As a Partner, your patients receive up to 37% off when they purchase using your unique code. As an Affiliate partner, you can earn up to 17% commission on each sale. Once you join our Affiliate platform via Impact, you'll receive a personal affiliate link to share with your patients. Every order placed through your link is tracked, and you control how and when you get paid.
4. I am curious about logistics of practice use for Mira. How to use this within a program, charge for patient or include in program?	Dropshipping is the best option for incorporating Mira into your programs. You can order Mira at a 35% provider discount using your unique dropship code and have it shipped directly to your patient's home—no need to manage inventory, commissions, or payouts.
5. How many wands do you need to use for 3 months? Feels like that would be expensive for client?	Tracking with Mira over a 3-month period typically costs around $300 USD when using the 30% provider discount. The exact number of test wands needed may vary based on cycle length and how frequently each hormone is tracked. On average, users use approximately 10–20 wands per cycle. **Ways to save:** • **30% discount** through a provider discount code. • **Additional 10% off** with a monthly wand subscription. • **Reduced testing frequency**, such as testing every other day during the luteal phase, can also help conserve wands while still gaining valuable insights.