TEST RESULTS

8605 SW Creekside Place
Beaverton, OR 97008
Phone: 503-466-2445 Fax: 503-466-1636

ZRT LABORATORY

 # R2017 00 00 000 U

Ordering Provider:
Getuwell Clinic

Samples Received
06/21/2017

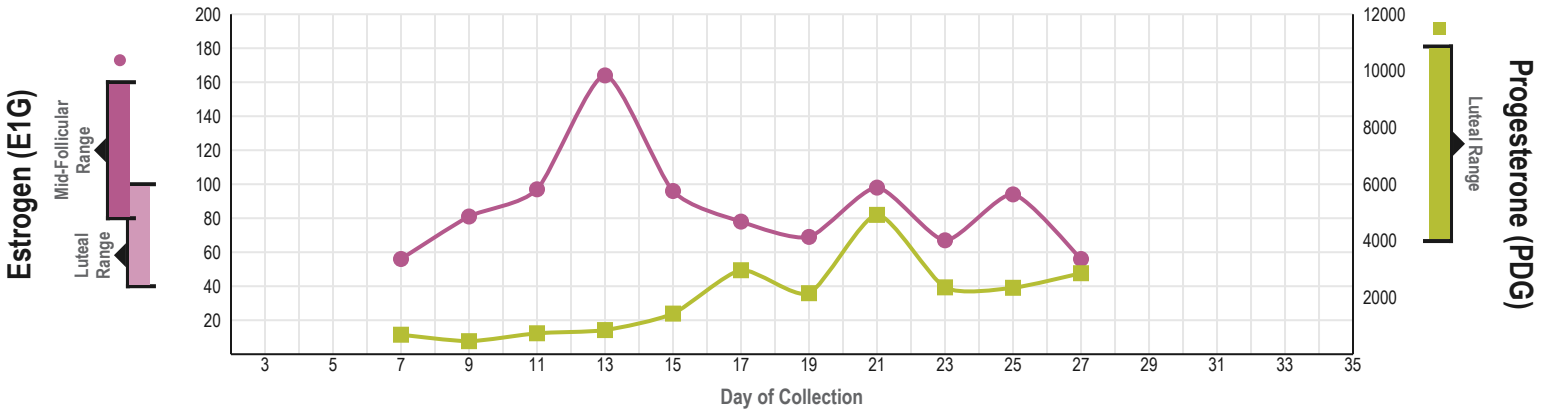
Report Date
06/23/2017

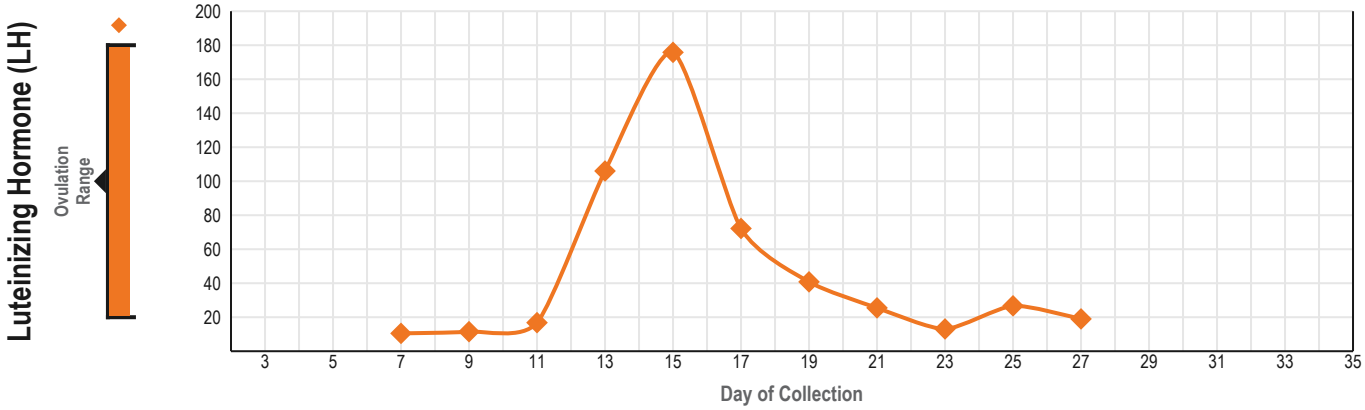
Samples Collected

Urine - 05/30/17 07:00
Urine - 06/01/17 07:15
Urine - 06/03/17 08:45
Urine - 06/05/17 08:30
Urine - 06/07/17 08:30
Urine - 06/09/17 08:00
Urine - 06/11/17 08:15
Urine - 06/13/17 07:15
Urine - 06/15/17 08:00
Urine - 06/17/17 08:15
Urine - 06/19/17 06:45

Patient Name: Menstrual Marsha
Patient Phone Number: 555 555 5555

Gender	DOB	Menses Status	Last Menses	Height	Weight
Female	6/9/1978 (39 yrs)	Pre-Menopausal	05/24/2017	5 ft 6 in	130 lb





Day	7	9	11	13	15	17	19	21	23	25	27
E1G ng/mg Cr	56	81	97	164	96	78	69	98	67	94	56
PDG ng/mg Cr	688	460	739	852	1434	2964	2154	4918	2360	2344	2859
Ratio: PDG/E1G	12	6	8	5	15	38	31	50	35	25	51
LH mIU/mg Cr	10.5	11.5	16.8	106.0	175.8	72.2	40.8	25.5	13.1	26.7	19.0
CRTN mg/mL	0.79	0.60	0.59	0.80	1.12	1.66	1.72	0.70	1.82	1.06	0.76

Estrogen (E1G) Ranges	Progesterone (PDG) Ranges	Luteinizing Hormone (LH) Ranges
Baseline Follicular 16.3-58.7 ng/mg Cr Mid-Follicular 76.6-160.9 ng/mg Cr Luteal 41.9-102.5 ng/mg Cr	Baseline Follicular 346-1719 ng/mg Cr Luteal 3994-10860 ng/mg Cr	Baseline Follicular 4.6-20.7 mIU/mg Cr Ovulation 30.2-175.1 mIU/mg Cr

< or > dl = Less than or greater than the detectable limit. N/A = Not applicable; 1 or more values used in this calculation is less or greater than the detectable limit.

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The above results and comments are for informational purposes only and are not to be construed as medical advice. Please consult your healthcare practitioner for diagnosis and treatment

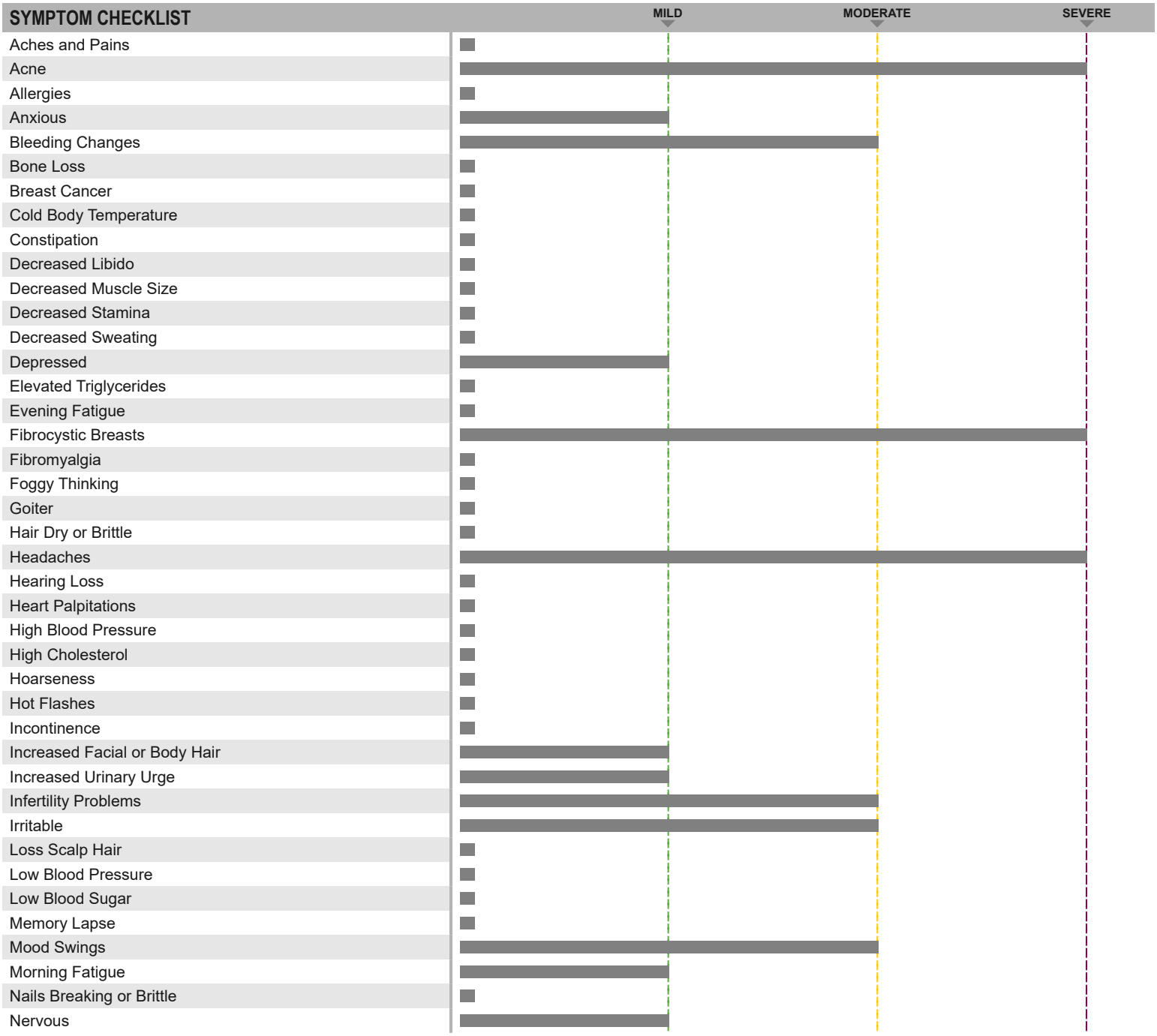
David T. Zava, Ph.D.
Laboratory Director

Alison McAllister, ND.
(Ordering Provider unless otherwise specified on pg1)

TEST RESULTS | Patient Reported Symptoms

Disclaimer: Symptom Categories below show percent of symptoms self-reported by the patient compared to total available symptoms for each category. For detailed information on category breakdowns, go to www.zrtlab.com/patient-symptoms.

SYMPTOM CATEGORIES	RESULTS | 05/28/2017
Estrogen / Progesterone Deficiency	27%
Estrogen Dominance / Progesterone Deficiency	47%
Low Androgens (DHEA/Testosterone)	8%
High Androgens (DHEA/Testosterone)	42%
Low Cortisol	16%
High Cortisol	26%
Hypometabolism	9%
Metabolic Syndrome	2%



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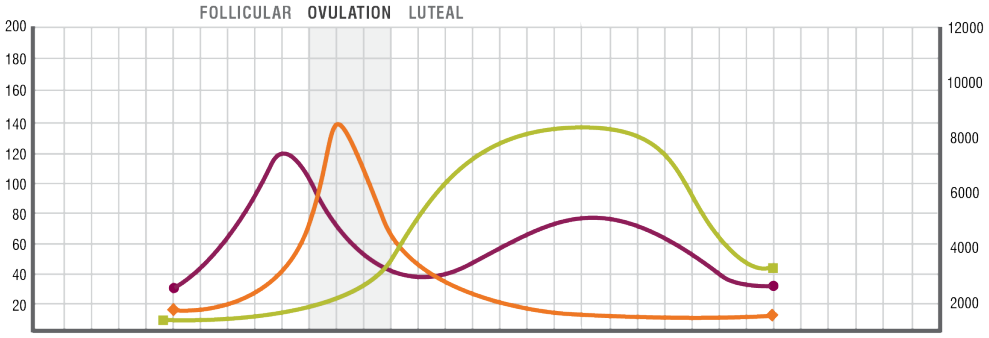
Common Menstrual Cycle Maps

LEGEND: E1G PDG LH

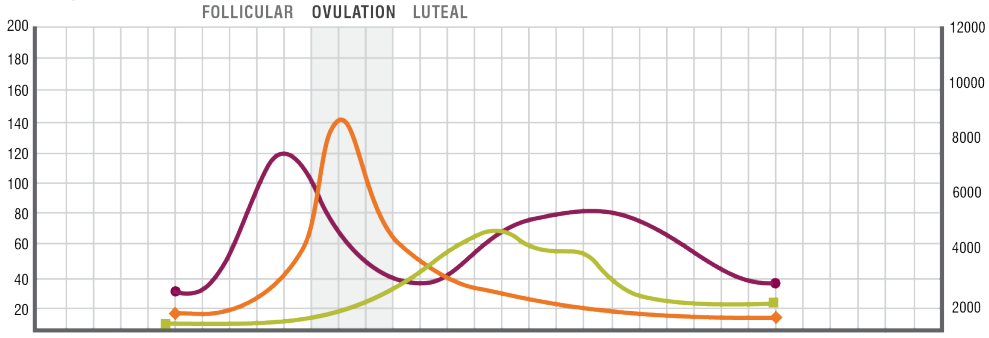
Example 1



Ovulatory Menstrual Cycle

This is an average menstrual cycle. The cycle is marked by a clear LH peak with a corresponding rise in estrogen showing a strong ovulation. There is a strong rise in progesterone and a secondary rise in estrogen peaking half-way between ovulation and the first day of the next period. A sudden drop of estrogen and progesterone occur just prior to the start of the next period.

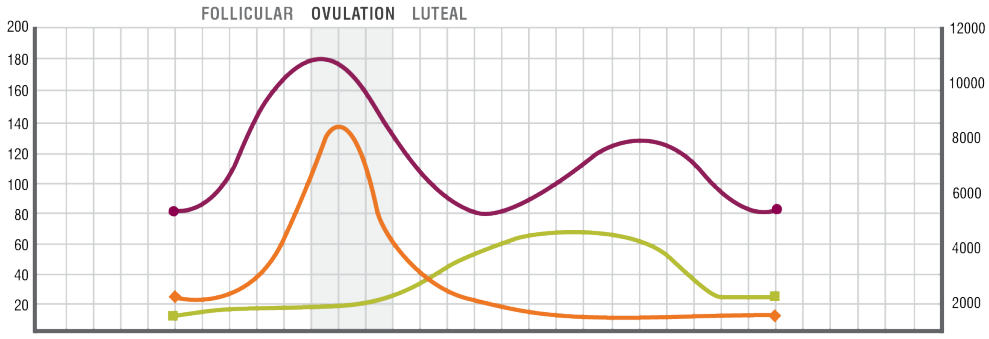
Example 2



Luteal Phase Defect Cycle

This cycle shows a clear LH peak with an associated luteal phase rise in estrogen. However, progesterone rises to a lower level than normal, resulting in a lower Pg/E2 ratio. This imbalance of progesterone and estrogen in the luteal phase can lead to symptoms of estrogen dominance, PMS symptoms, earlier menses or spotting before menses.

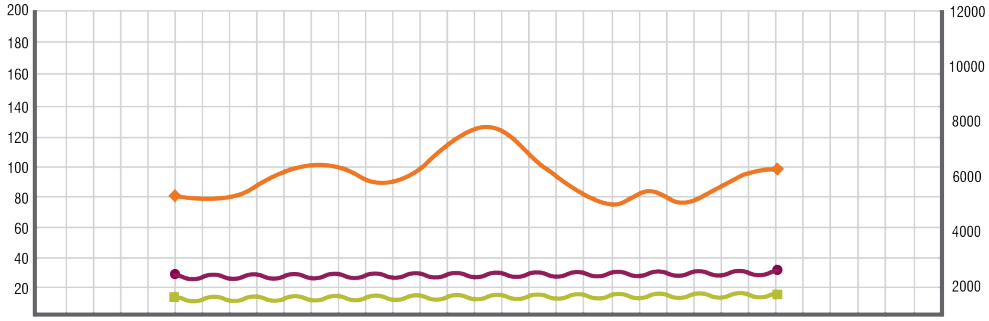
Example 3



Peri-Menopausal Cycle

This cycle represents the earlier stage of peri-menopause. It shows a pattern of higher estrogen excretion, a lower overall LH peak and lower progesterone excretion. Also, the progesterone does not rise above estrogen after the LH peak. As peri-menopause moves toward the post-menopausal state, the LH peak will disappear as LH will start to become more elevated and estrogen will drop.

Example 4



Postmenopausal Cycle

This cycle shows that ovulation is not occurring. LH levels are consistently elevated. Estrogen levels are more uniform and lower as compared to an ovulatory cycle and progesterone levels are consistently low. The period does not come before the final strip has been collected.

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Lab Comments

Ovulation was most likely on day 15-17 of the menstrual cycle

This menstrual mapping shows a likely luteal phase defect with an early drop in progesterone prior to the end of the menstrual cycle. Progesterone levels are also below estrogen almost the entire luteal phase suggesting lower overall progesterone levels and lower ratios of progesterone to estrogen production. Progesterone in the luteal phase comes from the corpus luteum which is the scar left on the ovary after ovulation. Progesterone in the luteal phase helps stop the proliferation of the endometrium, creates a secretory endometrium, creates spiral blood vessels in the endometrium and overall create an endometrium optimal for blastocyst and embryo development. In women who are trying to conceive, luteal phase defect can result in an endometrium that is not receptive for implantation and may be a contributor to infertility. In women who are not trying to conceive, luteal phase defect may contribute to symptoms of heavier menstrual bleeding, menstrual spotting, migraines and headaches, fibrocystic breast changes, breast tenderness, irritability and insomnia. Progesterone changes may also contribute to night sweats in women generally over the age of 35. Luteal phase support such as Vitex/chaste tree, Maca, infertility medication like Clomid, HCG, or Letrozole, and/or progesterone supplementation may be beneficial to help with symptoms.

Menstrual mapping tests for the hormones estrone-3-glucuronide (E1G), progesterone (pregnanediol), and luteinizing hormone (LH). These 3 hormones have shown excellent correlation with ovarian ultrasounds to the timing of ovulation. The early phase of the menstrual cycle is called the follicular phase and is a time when estrogen rises, building until it peaks at approximately the same time as LH. During this time estrogen is proliferating the endometrium (lining of the uterus) as well as proliferating breast glandular tissue. During the luteal phase (after ovulation), estrogen levels are expected to return to average follicular levels producing an average estrogen level throughout the cycle.

LH levels peak approximately 12-36 hours prior to ovulation.

During the second half of the cycle, after ovulation, progesterone levels will rise after ovulation has occurred. In an optimal cycle, progesterone levels will rise to levels greater than estrogen and peak approximately 7 days after ovulation. Progesterone levels are expected to fall after the peak in the absence of pregnancy. During this time, hormones are produced by the corpus luteum, the scar left on the ovary after ovulation. The endometrium is preparing for the possibility of pregnancy, stopping the proliferation of the endometrium and changing the endometrium into a secretory endometrium which secretes nutrients into the uterus for healthy embryo implantation and growth. In cycles where pregnancy does not occur, which is most menstrual cycles, progesterone still serves to oppose the growth stimulating effects of estrogen. Most PMS symptoms start when progesterone levels start to fall after the progesterone peak and are generally at their worst 3 days prior to the period.

Hormonal symptoms are generally due to changes in hormone levels. Thus, symptoms are common during the period where hormones are low, the rise in estrogen at the end of the period, the peaks of ovulation, and the drops in progesterone and estrogen at the end of the period. Optimizing ovulation and progesterone levels are commonly beneficial in alleviating symptoms.

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