Testing with ZRT

An **Overview of Testing** with ZRT Laboratory

The only way to know if hormones are in balance is to test them.

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The ZRT Difference

When choosing a laboratory, it's crucial to find a partner with **unmatched expertise** and **state-of-the-art technology** to deliver the most **accurate results.**

Advancing the Science of Testing

- Ongoing clinical research, published in peer-reviewed journals and presented at scientific meetings, in collaboration with investigators around the world including the CDC, NIH, the military and academic research centers.

Accuracy

- We ensure accurate test results for low-concentration hormones such as estradiol by using an extraction process for saliva testing.
- Precision and accuracy are maintained with rigorous proficiency testing, both internally and externally.

Flexibility & Convenience

- We offer all three test mediums (saliva, blood spot, and dried urine) and a varied menu of tests, allowing maximum flexibility and optimal timing of sampling.
- First-morning saliva sampling measures peak hormone levels and ensures correspondence with supplementation ranges that depend on time since last hormone use. No need to collect four daily samples except when testing diurnal cortisol.
- We determine reference ranges for individual patient ages, menstrual status, and hormone supplementation, so patients don't need to stop taking hormones to use our testing.

Comprehensive Test Reports

- Test results correlate hormone levels with reported symptoms and hormone supplementation.
- All reports are physician-reviewed with individualized comments, and include previous test results to compare current and past hormone levels to monitor patient progress.
- Secure, online access to test reports.

Provider Support

- On-call clinical consultants available without appointment to consult with medical practitioners regarding hormone testing and bioidentical treatment approaches.
- Complimentary educational webinars for medical professionals presented by physician experts in the areas of physiology and endocrinology; complimentary patient education webinars.

Patient & Provider Education

- Patient education brochures and point-of-sale displays.
- Online access to resource materials, webinars, and reference documents.

The Ease of Working with ZRT

You're already busy running your practice, so we've designed our services to keep things **simple.**

Live Customer Service Agents

Our Customer Service staff is available to assist you Monday–Friday, from 6am-5pm PT.

Reach us at **1.866.600.1636** or **info@zrtlab.com**

Secure Online Access | myZRT

After logging into the secure, online portal at www.myZRT.com, providers can manage many aspects of their ZRT account such as:

- Ordering kits
- Checking on the status of samples
- Downloading completed reports

Online Resources | www.zrtlab.com

Many educational and patient support documents are located on our company website such as:

- Collection Videos – **www.zrtlab.com/sample-collection/**
- Downloadable Instructions – **www.zrtlab.com/sample-collection/**
- Provider & Patient Education – **www.zrtlab.com/resources/**
- Frequently Asked Questions – **www.zrtlab.com/faq/**

ZRT also posts educational updates and links to useful resources:

- Recent provider webinars
- New educational patient materials
- New testing options

The ZRT Difference

Who, When & How to Test

ZRT test kits offer simple and convenient home collection of saliva, dried blood spot or dried urine samples. The resources we offer make sample collection easy – whether you prefer video or following detailed instructions.



Who to Test

Candidates for hormone testing include men and women who are struggling with:

- Hot flashes
- Night sweats
- Foggy thinking
- Decreased sex drive
- Vaginal dryness
- Acne
- Increased body/facial hair
- Heavy or irregular menses
- PMS/PMDD
- Fibrocystic breasts
- Breast cancer
- Infertility or PCOS
- Chronic stress and/or fatigue
- Weight gain, especially around the waist
- Heart palpitations
- Dry skin/brittle nails
- Cold hands and feet

Candidates for neurotransmitter testing include adults and children who are struggling with:

- Anxiety
- Depression
- Chronic fatigue
- Impulsivity
- Insomnia
- OCD or ADHD

Candidates for heavy metals & essential elements testing include adults and children who:

- Have exposure to well water or aging pipes
- Live in an older home or industrial area
- Have mercury dental work
- Consume foods like vegetables, rice and seafood that may be tainted by heavy metals
- Smoke cigarettes

When to Test

Hormones

- Pre-menopausal women should collect saliva, blood or urine on days 19-21 of their cycle. Women with irregular cycles should collect five days before they think their period will start.
- Post-menopausal and non-cycling women, men and children can collect any day of the month.
- See specialized instructions for those using hormones.

Neurotransmitters

- Cycling women can collect any day they aren't bleeding.
- Non-cycling women, men and children can collect any day of the month.

Heavy Metals & Essential Elements

- Cycling women can collect urine any day they aren't bleeding. They can collect blood any day.
- Non-cycling women, men and children can collect urine or blood any day of the month.

How to Test

Once you have identified a patient who can benefit from testing, follow these steps:

Alleviate Concerns

- Explain that the testing process is simple. ZRT saliva, blood spot, and urine test kits require no needles or lab visits.
- All samples can be collected at home and returned to the lab by UPS.

Walk Through the Test Kit

Walk through the test kit with patients, pointing out:

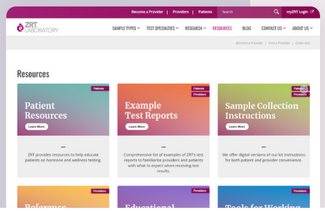
- Collection instructions QR code card
- Saliva tubes/blood spot lancets and filter card/urine cards
- Postage-paid return label/mailer bag



Review Collection

Encourage patients to read collection instructions prior to testing, identify their panel requirements in Section 1, and fill out the paperwork the night before collection, leaving only Section 5 of the form (Sample Collection Dates and Times) to fill in the day of collection.

- Encourage patients to view ZRT's collection videos online at **www.zrtlab.com/sample-collection**



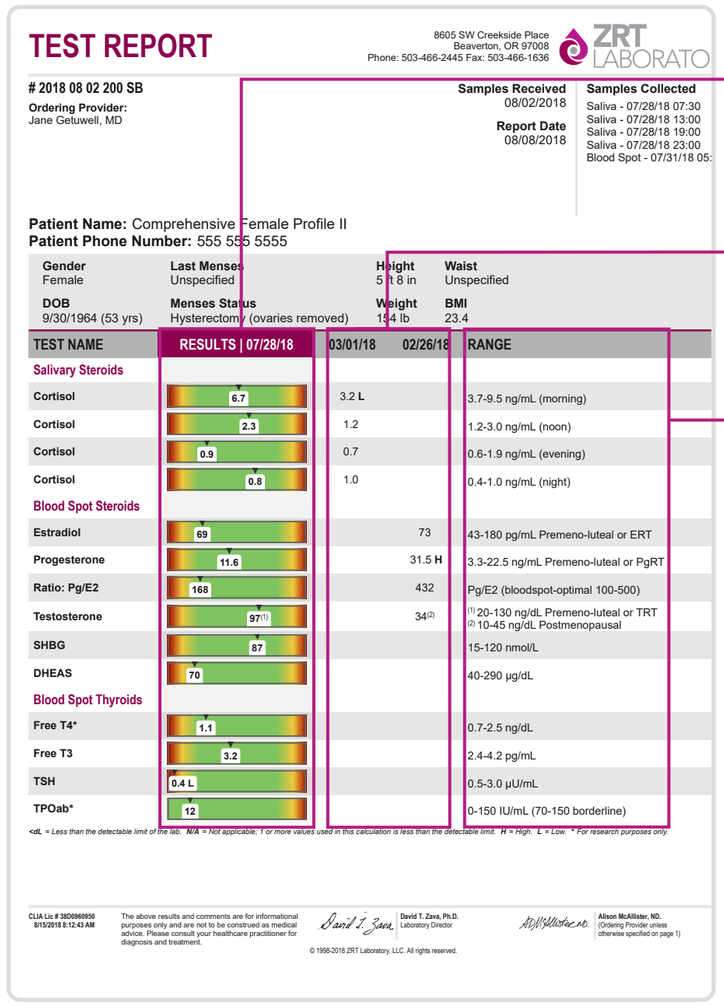
ZRT's Resource Library

Find comprehensive educational materials, symptom checklists, webinars and more at **www.zrtlab.com/resrouces**

Understanding ZRT's Test Reports

ZRT's test reports are the most comprehensive results available anywhere.

Patient test results are a comprehensive review of their tested levels in correlation with reported symptoms, hormone usage (if applicable) and menstrual history in women. Each test result is individually reviewed to produce a complete report with descriptive comments added by licensed physicians on staff.



TEST REPORT

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

ZRT LABORATORY

 # 2018 08 02 200 SB

Ordering Provider:
Jane Getuwell, MD

Samples Received
08/02/2018

Report Date
08/08/2018

Samples Collected
Saliva - 07/28/18 07:30
Saliva - 07/28/18 13:00
Saliva - 07/28/18 19:00
Saliva - 07/28/18 23:00
Blood Spot - 07/31/18 05:

Patient Name: Comprehensive Female Profile II
Patient Phone Number: 555 555 5555

Gender	Last Menses	Height	Waist
Female	Unspecified	5 ft 8 in	Unspecified
DOB	**Menses Status**	**Weight**	**BMI**
9/30/1964 (53 yrs)	Hysterectomy (ovaries removed)	154 lb	23.4

TEST NAME	RESULTS | 07/28/18	03/01/18	02/26/18	RANGE
Salivary Steroids				
Cortisol	6.7	3.2 **L**		3.7-9.5 ng/mL (morning)
Cortisol	2.3	1.2		1.2-3.0 ng/mL (noon)
Cortisol	0.9	0.7		0.6-1.9 ng/mL (evening)
Cortisol	0.8	1.0		0.4-1.0 ng/mL (night)
Blood Spot Steroids				
Estradiol	69		73	43-180 pg/mL Premeno-luteal or ERT
Progesterone	11.6		31.5 **H**	3.3-22.5 ng/mL Premeno-luteal or PgRT
Ratio: Pg/E2	168		432	Pg/E2 (bloodspot-optimal 100-500)
Testosterone	97(1)		34(2)	(1) 20-130 ng/dL Premeno-luteal or TRT (2) 10-45 ng/dL Postmenopausal
SHBG	87			15-120 nmol/L
DHEAS	70			40-290 µg/dL
Blood Spot Thyroids				
Free T4*	1.1			0.7-2.5 ng/dL
Free T3	3.2			2.4-4.2 pg/mL
TSH	0.4 L			0.5-3.0 µU/mL
TPOab*	12			0-150 IU/mL (70-150 borderline)

*<dL = Less than the detectable limit of the lab. N/A = Not applicable; 1 or more values used in this calculation is less than the detectable limit. H = High. L = Low. * For research purposes only.*

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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 page 1)

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Results

Results for each test are shown on a color-coded slider.

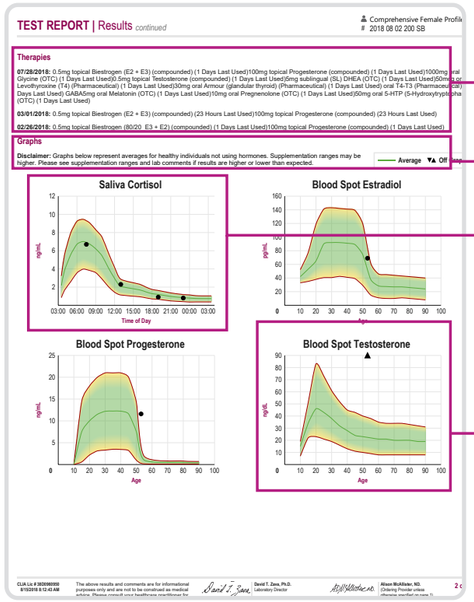
- Outside the Range
- High/Low Normal
- Within Range

ZRT is one of the few labs able to show historical test results, if available. These results are displayed directly next to the current results, so it's easy to see changes over time.

ZRT reports the normal/ expected range of each marker tested.

Note: If applicable, optimal ranges are provided.

- Reference ranges are observed ranges based on collected laboratory data. Unlike other labs, patients do not need to stop hormone supplementation to use ZRT's testing because we have ranges adjusted for age, menstrual status, and supplementation types. This is the ideal method for tracking the effectiveness of hormone treatments.
- Providers can opt to show all reference ranges for the tests included on a separate page of the report.



TEST REPORT | Results *continued*

Comprehensive Female Profile
2018 08 02 200 SB

Therapies

07/28/2018: 0.5mg topical Biestrogen (E2 + E3) (compounded) (1 Days Last Used)100mg topical Progesterone (compounded) (1 Days Last Used)1000mg oral Glycine (OTC) (1 Days Last Used)0.5mg topical Testosterone (compounded) (1 Days Last Used)5mg sublingual (SL) DHEA (OTC) (1 Days Last Used)50mcg oral Levothyroxine (T4) (Pharmaceutical) (1 Days Last Used)30mg oral Armour (glandular thyroid) (Pharmaceutical) (1 Days Last Used) oral T4-T3 (Pharmaceutical) (1 Days Last Used) GABA5mg oral Melatonin (OTC) (1 Days Last Used)10mg oral Pregnenolone (OTC) (1 Days Last Used)50mg oral 5-HTP (5-Hydroxytryptophan (OTC) (1 Days Last Used)

03/01/2018: 0.5mg topical Biestrogen (E2 + E3) (compounded) (23 Hours Last Used)100mg topical Progesterone (compounded) (23 Hours Last Used)

02/26/2018: 0.5mg topical Biestrogen (80/20 E3 + E2) (compounded) (1 Days Last Used)100mg topical Progesterone (compounded) (1 Days Last Used)

Graphs

Disclaimer: Graphs below represent averages for healthy individuals not using hormones. Supplementation ranges may be higher. Please see supplementation ranges and lab comments if results are higher or lower than expected.

Average ▼▲ Off Scale

Saliva Cortisol

ng/mL

Time of Day

Blood Spot Estradiol

pg/mL

Age

Blood Spot Progesterone

ng/mL

Age

Blood Spot Testosterone

pg/mL

Age

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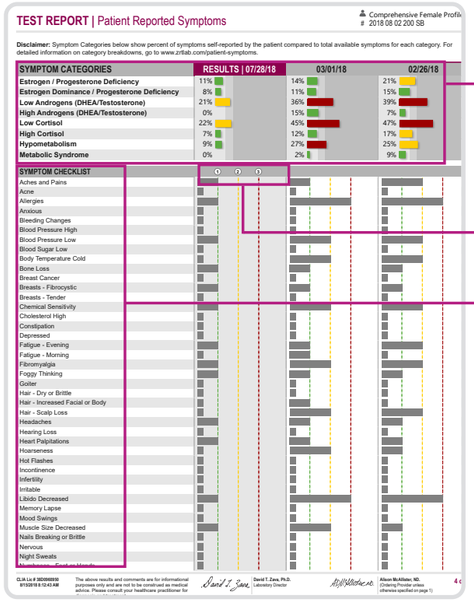
Graphs & Therapies

ZRT reports display patient-provided supplementation information (hormone, dose, delivery, timing).

Graphs show reported levels by age or time to assist interpretation.

For hormones that vary by time of day like cortisol and melatonin, the graph shows the range as it changes over the course of a day and the test results are plotted on the graph according to the actual time of day the sample was collected. Ranges within the graphs are color-coded to show the degree of variation from the center of the normal range.

For hormones that vary in level with age, reports include graphs based on our database of testers not using hormone supplementation, showing the variation in levels with age. The test result is marked on each graph to indicate where the result falls in relation to the observed range for the tester's actual age.



TEST REPORT | Patient Reported Symptoms

Comprehensive Female Profile
2018 08 02 200 SB

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 | 07/28/18	03/01/18	02/26/18
Estrogen / Progesterone Deficiency	11%	14%	21%
Estrogen Dominance / Progesterone Deficiency	8%	11%	15%
Low Androgens (DHEA/Testosterone)	21%	36%	39%
High Androgens (DHEA/Testosterone)	0%	15%	7%
Low Cortisol	22%	45%	47%
High Cortisol	7%	12%	17%
Hypometabolism	9%	27%	25%
Metabolic Syndrome	0%	2%	9%

SYMPTOM CHECKLIST	1	2	3
Aches and Pains			
Acne			
Allergies			
Anxious			
Bleeding Changes			
Blood Pressure High			
Blood Pressure Low			
Blood Sugar Low			
Body Temperature Cold			
Bone Loss			
Breast Cancer			
Breasts - Fibrocystic			
Breasts - Tender			
Chemical Sensitivity			
Cholesterol High			
Constipation			
Depressed			
Fatigue - Evening			
Fatigue - Morning			
Fibromyalgia			
Foggy Thinking			
Goiter			
Hair - Dry or Brittle			
Hair - Increased Facial or Body			
Hair - Scalp Loss			
Headaches			
Hearing Loss			
Heart Palpitations			
Hoarseness			
Hot Flashes			
Incontinence			
Infertility			
Irritable			
Libido Decreased			
Memory Lapse			
Mood Swings			
Muscle Size Decreased			
Nails Breaking or Brittle			
Nervous			
Night Sweats			

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Symptoms

Patient symptoms are summarized into eight hormone imbalance conditions and scored with ● red, ● yellow or ● green bars to indicate severity.

Symptoms rated **mild (1), moderate (2) or severe (3).**

Sixty-eight symptoms, self-reported by the patient on the test requisition.

- Please refer to our Symptom Guide available at **www.zrtlab.com** for details about symptom categories.

Comments *(not pictured)*

Individualized comments correlate lab results, symptoms, and hormone usage (if applicable). ZRT providers can choose to include their professional comments in addition to, or in lieu of, the lab comments. The Comments page is a thorough explanation that provides a better understanding of tested levels in relation to intensity of self-reported symptoms (mild, moderate, severe), menstrual history in women, and supplementation at the time of testing. The self-reported symptoms do not influence lab results, but are included in the individualized comments as they relate back to lab results.

Clinical Experts

Call 1.866.600.1636 to Speak to a Clinician

Our clinical experts are available for peer-to-peer conversations that cover how to interpret our results and how to handle challenging patient cases.

Our experts also perform collaborative clinical research with groups such as the CDC, NIH and academic research groups worldwide. We have published research in peer-reviewed journals and presented at scientific meetings.



Dr. Alison McAllister
Head Clinician

Dr. Alison McAllister is the lead clinical consultant for ZRT. She sees patients in her own practice several days a week, and has worked with ZRT for over 17 years – helping hundreds of doctors understand hormone balance and the role that hormones, neurotransmitters and elements play in overall health. She is an expert in thyroid function, fertility and PCOS. In addition, Dr. McAllister also regularly lectures for groups such as the A4M and IFM at industry conferences.



Dr. Beth Baldwin
Clinical Consultant

Dr. Beth Baldwin earned her ND at Bastyr University in 2004. She has since worked in private practice, community health and clinical research, focusing on women's health throughout the lifespan, bioidentical hormone replacement and neurodevelopmental disorders. Dr. Baldwin also served as director of medical affairs for a professional nutraceutical manufacturer for over a decade. As a member of ZRT Laboratory's Clinical Consultant team, Dr. Baldwin shares her knowledge to promote safe approaches to hormonal health.



Staff clinicians available **9am-5pm PT, Mon-Fri at 1.866.600.1636** for peer-to-peer consultations. **No charge, no appointment necessary, no time limits.**

Scientific Experts



Dr. David Zava
Founder

ZRT's founder Dr. David Zava, a biochemist by trade and a teacher at heart, is animated when he talks about his work. He didn't start out trying to build a company — as a researcher, he wanted to provide health care practitioners and patients with a deeper understanding of the role hormones play in wellness.

The more he studied, the more test results he reviewed, and the more patient stories he heard, the more he knew he needed to channel his knowledge into something that enables people to be actively involved in their own health.

To this day, he's continually searching to understand more fully how the world around us impacts our well-being, and how our lifestyle choices, environment and genetics impact the delicate balance of our hormones.

His hands-on approach trickles down through ZRT Laboratory, so much so that the company is renowned for the way it supports people and their health on such a personal level.

ZRT Laboratory embodies Dr. Zava's vision, and is recognized the world over as a team devoted to providing the most accurate results with the most educated insight into their meaning.



Our Laboratory Team

ZRT Laboratory was founded on rigorous scientific research. Our commitment to innovation includes developing and extensively validating new tests before they are offered commercially. We actively collaborate with academic institutions, research organizations, hospitals, and public health agencies, including projects funded by the National Institutes of Health and the Centers for Disease Control and Prevention. Our research has been published in peer-reviewed journals and presented at scientific meetings and international conferences.

Our laboratory team of experienced scientists, technicians, and clinical researchers ensures the accuracy and reliability of every test. Through specialized expertise in hormone and wellness testing, ongoing education, rigorous quality control, and advanced technology, we deliver high-quality, evidence-based diagnostic tools that support healthcare professionals and improve patient outcomes worldwide.

Overview of Kits
Panel Menu



Single-Tube Saliva Kit

S-101 **Saliva Cortisol:** C

S-102 **Saliva LCMS Estradiol:** E2

S-103 **Saliva LCMS Progesterone:** Pg

S-104 **Saliva LCMS Testosterone:** T

S-123 **LCMS Hormones 3:** E2, Pg, T

S-124 **LCMS Hormones 5:** E2, Pg, T, DHEAs, C

S-125 **LCMS Hormones 7:** E2, E3, E1, Pg, T, DHEAs, C

S-126 **LCMS Hormones 17:** E2, E3, E1, PregS, Pg, AlloP, 17OHPg, Adione, T, D, DS, 7keto, 11DC, C, Cn, Ccn, Ald

S-127 **LCMS Hormones 23:** E2, E3, E1, EE, PregS, Pg, AlloP, 17OHPg, Adione, T, DHT, D, DS, 7keto, 11DC, C, Cn, Ccn, Ald, Mel, ANZ, FIN, LTZ



Saliva Kit

S-120 **4-Point Cortisol:** C(x4)

S-121 **Adrenal Stress:** DHEAs, C(x4)

S-140 **LCMS Hormones 3 with 4-Point Cortisol**

S-141 **LCMS Hormones 5 with 4-Point Cortisol**

S-142 **LCMS Hormones 7 with 4-Point Cortisol**

S-143 **LCMS Hormones 17 with 4-Point Cortisol**

S-144 **LCMS Hormones 23 with 4-Point Cortisol**

S-145 **LCMS Hormones 5 with 2-Point Cortisol:** E2, Pg, T, DS, C(x2)

S-146 **LCMS Hormones 7 with 2-Point Cortisol:** E2, E3, E1, Pg, T, DS, C(x2)



Saliva Cortisol Awakening Response Kit

S-122 **Cortisol Awakening Response:** DHEAs, C(x6)



Dried Blood Spot Kit

B-201 **Blood Spot SHBG:** SHBG

B-202 **Blood Spot PSA:** PSA

B-203 **Blood Spot TSH:** TSH

B-205 **Blood Spot AMH:** AMH

B-204 **Luteinizing Hormone and Follicle-Stimulating Hormone:** LH, FSH

B-206 **Blood Spot hsCRP:** hsCRP

B-207 **Blood Spot Insulin:** IN

B-208 **Blood Spot HbA1c:** HbA1c

B-209 **Blood Spot Prolactin:** Prolactin

B-220 **Thyroids:** TSH, FT3, FT4, TPOab, Tgbn, TT4

B-221 **Lipids:** HDL, TG, CH

B-222 **CardioMetabolic:** IN, HbA1c, HDL, TG, CH, hsCRP

B-223 **LCMS Vitamin D:** D2, D3

B-224 **ICPMS Toxic and Essential Elements:** Zn, Cu, Mg, Se, Cd, Hg

B-240 **LCMS Hormones 3 with SHBG:** E2, Pg, T, SHBG

B-241 **LCMS Hormones 5 with SHBG:** E2, Pg, T, DS, C, SHBG

B-242 **LCMS Hormones 7 with SHBG:** E2, E3, E1, Pg, T, DS, C, SHBG

B-243 **LCMS Hormones 7 with SHBG and Thyroids**

B-246 **Male LCMS Testosterone with SHBG and PSA**

B-247 **Male LCMS Hormones 3 with SHBG and PSA**

B-248 **Male LCMS Hormones 5 with SHBG and PSA**

B-249 **Male Vitality Basic:** T (LC-MS) + SHBG, PSA, LH, FSH, TSH, PRL

B-250 **Male Vitality Advanced:** E2, Pg, T, DHEAs, C (LC-MS) + SHBG, PSA, LH, FSH, TSH, PRL



Saliva + Dried Urine Hormone Metabolites Kit

U-323 **Dried Urine GCMS Estrogen Metabolites:** E2, E1, E3, 2-OH E2, 2-OH E1, 4-OH E2, 4-OH E1, 16aOH E1, 2-MeO E2, 2-MeO E1, 4-MeO E2, 4-MeO E1, BPA, Crtn

U-324 **Dried Urine GCMS Hormone Metabolites:** E2, E1, E3, 2-OH E2, 2-OH E1, 4-OH E2, 4-OH E1, 16aOH E1, 2-MeO E2, 2-MeO E1, 4-MeO E2, 4-MeO E1, BPA, Pgdiol, AlloP, AlloPd, 3aHP, 20aHP, DOC, Ccn, TC, TCn, ThC, ThCn, D, Adione, Andro, Etio, T, Epi-T, 5a-DHT, 5a3a, Crtn

U-321 **Dried Urine LCMS Diurnal Hormones I:** FC(x4), FCn(x4), MT6s(x4), Crtn(x4)

U-340 **Dried Urine GCMS Estrogen Metabolites and LCMS Diurnal Hormones I**

U-341 **Dried Urine GCMS Hormone Metabolites and LCMS Diurnal Hormones I**

SU-845 **Saliva 4-Point Cortisol + Dried Urine GCMS Estrogen Hormone Metabolites**

SU-846 **Saliva 4-Point Cortisol + Dried Urine GCMS Hormone Metabolites**



Saliva + Dried Urine Neurotransmitter Kit

U-325 **Dried Urine LCMS Neurotransmitters:** Trp, 5-HT, 5-HIAA, GABA, Gly, Tau, Glu, Gln, His, HIST, N-MeHist, PEA, Tyr, Tyra, DA, DOPAC, HVA, NE, NMN, Epi, VMA, Kyn, KynAc, 3OHKyn, Xanth, Crtn

U-321 **Dried Urine LCMS Diurnal Hormones I:** FC(x4), FCn(x4), MT6s(x4), Crtn(x4)

U-322 **Dried Urine LCMS Diurnal Hormones II:** FC(x4), FCn(x4), NE(x4), Epi(x4), MT6s(x4), Crtn(x4)

U-342 Dried Urine LCMS Neurotransmitters and Diurnal Hormones I

U-343 Dried Urine LCMS Neurotransmitters and Diurnal Hormones II

SU-843 Saliva 4-Point Cortisol + Dried Urine LCMS Neurotransmitters

SU-840 Saliva LCMS Hormones 7 + Dried Urine LCMS Neurotransmitters

SU-841 Saliva LCMS Hormones 7 + Dried Urine LCMS Neurotransmitters and Diurnal Hormones I

SU-842 Saliva LCMS Hormones 7 + Dried Urine LCMS Neurotransmitters and Diurnal Hormones II

SU-844 Saliva LCMS Hormones 7 with 4-Point Cortisol + Dried Urine LCMS Neurotransmitters



Saliva + Dried Blood Spot Kit

SB-640 Saliva 4-Point Cortisol + Blood Spot Thyroids

SB-641 Saliva 4-Point Cortisol + Blood Spot CardioMetabolic

SB-642 Saliva 4-Point Cortisol + Blood Spot Thyroids and CardioMetabolic

SB-643 Saliva 4-Point Cortisol + Blood Spot LCMS Hormones 7 with SHBG

SB-644 Saliva 4-Point Cortisol + Blood Spot LCMS Hormones 7 with SHBG and Thyroids

SB-645 Saliva 4-Point Cortisol + Blood Spot LCMS Hormones 7 with SHBG and CardioMetabolic

SB-646 Saliva 4-Point Cortisol + Blood Spot LCMS Hormones 7 with SHBG, Thyroids and CardioMetabolic

SB-647 Saliva LCMS Hormones 7 + Blood Spot Thyroids

SB-648 Saliva LCMS Hormones 7 + Blood Spot CardioMetabolic

SB-649 Saliva LCMS Hormones 7 + Blood Spot Thyroids and CardioMetabolic

SB-650 Saliva LCMS Hormones 7 with 4-Point Cortisol + Blood Spot Thyroids

SB-651 Saliva LCMS Hormones 7 with 4-Point Cortisol + Blood Spot CardioMetabolic

SB-652 Saliva LCMS Hormones 7 with 4-Point Cortisol + Blood Spot Thyroids and CardioMetabolic

SB-653 Saliva LCMS Hormones 7 with 4-Point Cortisol + Blood Spot Thyroids, CardioMetabolic + LCMS Vitamin D

SB-654 Saliva 4-Point Cortisol + Blood Spot LCMS Hormones 7 with SHBG, Thyroids, CardioMetabolic Markers, and LCMS Vitamin D



Blood Spot + Dried Urine Heavy Metals & Essential Elements Kit

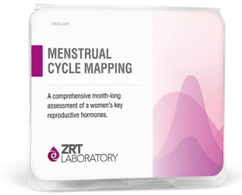
U-326 **Dried Urine ICPMS Iodine:** I, Crtn

U-327 **Dried Urine ICPMS Toxic and Essential Elements:** I, Br, Se, Li, As, Cd, Hg, Crtn

BU-744 Blood Spot Thyroids + Dried Urine ICPMS Iodine

BU-745 Blood Spot Thyroids + Dried Urine ICPMS Toxic and Essential Elements

BU-746 Blood Spot ICPMS Toxic and Essential Elements + Dried Urine ICPMS Toxic and Essential Elements



Dried Urine Menstrual Cycle Mapping Kit

U-328 **Menstrual Cycle Mapping:** E1G(x15), PDG(x15), LH(x15), Crtn(x15)



Dried Blood Spot Fertility Kit

B-244 **Fertility Basic:** AMH, LH, FSH, TSH, Prolactin, C

B-245 **Fertility Advanced:** AMH, LH, FSH, TSH, Prolactin, C + E2, Pg, T, DHEAs (LC-MS)

B-204 **LH/FSH:** LH, FSH

B-205 **AMH:** AMH

B-209 **Prolactin:** Prolactin

About ZRT Laboratory Test Kits

ZRT's all-inclusive test kits are designed for private sample collection at home, at the optimal time.
Learn more about testing with ZRT at zrtlab.com.

Overview of Kits

Directory of Tests

Saliva, blood spot and dried urine are used for the minimally-invasive hormone testing that is the hallmark of ZRT Laboratory. The simplicity of sample collection and stability of samples in storage and transport have made these ideal for clinical use as well as research. See the table for a list of all our tests and assay methods used.

Saliva

Analyte	Abbreviation	Methodology	Units	Test Range	Reported Units	CPT Code
Estradiol	E2	LCMS	pg/mL	0.3-500	pg/mL	82670
Estriol	E3	LCMS	pg/mL	0.9-2000	pg/mL	82677
Estrone	E1	LCMS	pg/mL	0.4-500	pg/mL	82679
Ethinyl Estradiol	EE	LCMS	pg/mL	0.4-200	pg/mL	82670
Pregnenolone Sulfate	PregS	LCMS	pg/mL	1-972	pg/mL	84140
Progesterone	Pg	LCMS	pg/mL	5-7000	pg/mL	84144
Allopregnanolone	AlloP	LCMS	pg/mL	15-2500	pg/mL	84140
17OH-Progesterone	17OHPg	LCMS	pg/mL	2-630	pg/mL	83498
Androstenedione	Adione	LCMS	pg/mL	5-2300	pg/mL	82157
Testosterone	T	LCMS	pg/mL	3-5000	pg/mL	84402
5α-Dihydrotestosterone	DHT	LCMS	pg/mL	7-920	pg/mL	82642
Dehydroepiandrosterone	DHEA / D	LCMS	pg/mL	60-1900	pg/mL	82626
Dehydroepiandrosterone Sulfate	DHEAs / DS	LCMS	ng/mL	0.1-40	ng/mL	82627
7-keto Dehydroepiandrosterone	7keto	LCMS	pg/mL	26-4700	pg/mL	82542
11-Deoxycortisol	11DC	LCMS	pg/mL	3-410	pg/mL	82634
Cortisol	C	LCMS	ng/mL	0.1-50	ng/mL	82530
Cortisone	Cn	LCMS	ng/mL	0.1-80	ng/mL	82530
Corticosterone	Cnn	LCMS	pg/mL	4-1800	pg/mL	82528
Aldosterone	Ald	LCMS	pg/mL	10-560	pg/mL	82088
Melatonin	Mel	LCMS	pg/mL	2-10000	pg/mL	82542
Anastrozole	ANZ	LCMS	pg/mL	5-1700	pg/mL	82542
Finasteride	FIN	LCMS	pg/mL	5-5000	pg/mL	82542
Letrozole	LTZ	LCMS	pg/mL	5-5000	pg/mL	82542
Cortisol	C	ECLIA	ng/mL	0.2-50	ng/mL	82530
Dehydroepiandrosterone Sulfate	DHEAs / DS	ECLIA	ng/mL	0.8-80	ng/mL	82627

Blood Spot

Analyte	Abbreviation	Methodology	Units	Test Range	Reported Units	CPT Code
Estradiol	E2	LCMS	pg/mL	9.8-5621	pg/mL	82670
Estriol	E3	LCMS	pg/mL	40-11900	pg/mL	82677
Estrone	E1	LCMS	pg/mL	14.8-1340	pg/mL	82679
Progesterone	Pg	LCMS	ng/mL	0.13-86.6	ng/mL	84144
Testosterone	T	LCMS	ng/dL	6.6-4430	ng/dL	84403
Dehydroepiandrosterone Sulfate	DHEAs / DS	LCMS	µg/dL	4.4-1124	µg/dL	82627
Cortisol	C	LCMS	µg/dL	0.08-74.8	µg/dL	82533
Vitamin D, 25-OH, D2	D2	LCMS	ng/mL	2-800	ng/mL	82306
Vitamin D, 25-OH, D3	D3	LCMS	ng/mL	2-1000	ng/mL	82306
Zinc	Zn	ICPMS	mg/L	0.039-20	mg/L	84630
Copper	Cu	ICPMS	mg/L	0.006-5	mg/L	82525
Magnesium	Mg	ICPMS	mg/L	0.74-100	mg/L	83735
Selenium	Se	ICPMS	µg/L	4.06-2000	µg/L	84255
Cadmium	Cd	ICPMS	µg/L	0.093-100	µg/L	82300
Lead (Research Only)	Pb	ICPMS	µg/dL	0.265-100	µg/dL	83655
Mercury	Hg	ICPMS	µg/L	0.071-100	µg/L	83825
Sex Hormone Binding Globulin	SHBG	ECLIA	nmol/L	10-300	nmol/L	84270
Prostate-Specific Antigen	PSA	ECLIA	ng/mL	0.3-19.4	ng/mL	84153
Thyroid-Stimulating Hormone	TSH	ECLIA	µIU/mL	0.1-36	µIU/mL	84443
Free T3 / Free Triiodothyronine	FT3	ECLIA	pg/mL	1.40-11	pg/mL	84481
Free T4 / Free Thyroxine	FT4	ECLIA	ng/dL	0.25-2.20	ng/dL	84439
Total T4 / Thyroxine	TT4	ECLIA	µg/dL	2.0-14.4	µg/dL	84436
Thyroglobulin	Tgbn	ECLIA	ng/mL	1-325	ng/mL	84432
Luteinizing Hormone	LH	ECLIA	mIU/mL	0.5-200	mIU/mL	83002
Follicle-Stimulating Hormone	FSH	ECLIA	mIU/mL	0.4-220	mIU/mL	83001
Prolactin	PRL	ECLIA	ng/mL	4.0-127	ng/mL	84146
Cortisol	C	ECLIA	µg/dL	1-35	µg/dL	82530
Anti-Mullerian Hormone	AMH	ECLIA	ng/mL	0.06-11.5	ng/mL	82166
High-Sensitivity C-Reactive Protein	hsCRP	PHOT	mg/L	0.24-11	mg/L	86141
Hemoglobin A1c	HbA1c	PHOT	%	2.3-14.1	%	83036
Triglycerides	TG	PHOT	mg/dL	50-600	mg/dL	84478
Cholesterol	CH	PHOT	mg/dL	100-300	mg/dL	82465
High-Density Lipoprotein	HDL	PHOT	mg/dL	30-80	mg/dL	83718
Insulin	In	EIA	µIU/mL	1-100	µIU/mL	83525
Thyroid Peroxidase Antibodies	TPOab	EIA	IU/mL	1.5-3000	IU/mL	86376

Urine

Analyte	Abbreviation	Methodology	Units	Test Range	Reported Units	CPT Code
Tryptophan	Trp	LCMS	ng/mL	314-30000	µg/g Crtn	82139
Serotonin	5-HT	LCMS	ng/mL	29-1943	µg/g Crtn	84260
5-Hydroxyindoleacetic Acid	5HIAA	LCMS	ng/mL	1242-28901	µg/g Crtn	83497
Gamma-Aminobutyric Acid	GABA	LCMS	ng/mL	4-10768	µg/g Crtn	82139
Glycine	Gly	LCMS	µg/mL	2-523	mg/g Crtn	82139
Taurine	Tau	LCMS	µg/mL	6-500	mg/g Crtn	82139
Glutamate	Glu	LCMS	ng/mL	308-20901	µg/g Crtn	82139
Glutamine	Gln	LCMS	µg/mL	4-500	mg/g Crtn	82139
Histidine	His	LCMS	µg/mL	2-250	mg/g Crtn	82139
Histamine	Hist	LCMS	ng/mL	0.6-1474	µg/g Crtn	83088
N-Methylhistamine	NMeHist	LCMS	ng/mL	22-2000	µg/g Crtn	82542
Phenethylamine	PEA	LCMS	ng/mL	3.2-2074	µg/g Crtn	82542
Tyrosine	Tyr	LCMS	ng/mL	360-40000	µg/g Crtn	84510
Tyramine	Tyra	LCMS	ng/mL	28-2500	µg/g Crtn	82542
Dopamine	DA	LCMS	ng/mL	28-3130	µg/g Crtn	82384
3,4-Dihydroxyphenylacetic Acid	DOPAC	LCMS	ng/mL	190-9546	µg/g Crtn	82384
Homovanillic Acid	HVA	LCMS	ng/mL	626-12955	µg/g Crtn	83150
Norepinephrine	NE	LCMS	ng/mL	0.8-211	µg/g Crtn	82384
Normetanephrine	NMN	LCMS	ng/mL	5.4-114	µg/g Crtn	83835
Epinephrine	Epi	LCMS	ng/mL	0.4-91	µg/g Crtn	82384
Vanillylmandelic Acid	VMA	LCMS	ng/mL	6-12728	µg/g Crtn	84585
Kynurenine	Kyn	LCMS	ng/mL	146-10000	µg/g Crtn	82139
Kynurenic Acid	KynAc	LCMS	ng/mL	118-20000	µg/g Crtn	83921
3-Hydroxykynurenine	3-OHKyn	LCMS	ng/mL	68-30000	µg/g Crtn	82139
Xanthurenic Acid	Xanth	LCMS	ng/mL	64-10000	µg/g Crtn	83921
Creatinine	Crtn	LCMS	mg/mL	0.07-3.5	mg/mL	82570
Free Cortisol	FC	LCMS	ng/mL	0.7-275	µg/g Crtn	82530
Free Cortisone	FCn	LCMS	ng/mL	1.4-3.50	µg/g Crtn	82530

Norepinephrine	NE	LCMS	ng/mL	0.3-514.9	µg/g Crtn	82384
Epinephrine	Epi	LCMS	ng/mL	0.2-459.1	µg/g Crtn	82384
Melatonin	MT6s	LCMS	ng/mL	0.5-1588	µg/g Crtn	82542
Creatinine	Crtn	LCMS	mg/mL	0.07-3.5	mg/mL	82570
Estradiol	E2	GCMS	ng/mL	0.06-25	µg/g Crtn	82670
Estriol	E3	GCMS	ng/mL	0.14-500	µg/g Crtn	82677
Estrone	E1	GCMS	ng/mL	0.08-100	µg/g Crtn	82679
2-OH Estradiol	2-OH E2	GCMS	ng/mL	0.07-10	µg/g Crtn	82670
2-OH Estrone	2-OH E1	GCMS	ng/mL	0.04-25	µg/g Crtn	82679
4-OH Estradiol	4-OH E2	GCMS	ng/mL	0.008-10	µg/g Crtn	82670
4-OH Estrone	4-OH E1	GCMS	ng/mL	0.09-25	µg/g Crtn	82679
16α-OH Estrone	16αOH E1	GCMS	ng/mL	0.02-100	µg/g Crtn	82679
2-MeO Estradiol	2-MeO E2	GCMS	ng/mL	0.005-10	µg/g Crtn	82670
2-MeO Estrone	2-MeO E1	GCMS	ng/mL	0.002-25	µg/g Crtn	82679
4-MeO Estradiol	4-MeO E2	GCMS	ng/mL	0.006-10	µg/g Crtn	82670
4-MeO Estrone	4-MeO E1	GCMS	ng/mL	0.002-10	µg/g Crtn	82679
Bisphenol A	BPA	GCMS	ng/mL	1.49-10	µg/g Crtn	82542
Pregnanediol	Pgdiol	GCMS	ng/mL	9.76-5000	µg/g Crtn	84135
Allopregnanolone	AlloP	GCMS	ng/mL	0.12-25	µg/g Crtn	84140
Allopregnanediol	AlloPd	GCMS	ng/mL	0.36-400	µg/g Crtn	84135
3α-Dihydroprogesterone	3αHP	GCMS	ng/mL	0.02-10	µg/g Crtn	84144
20α-Dihydroprogesterone	20αHP	GCMS	ng/mL	0.06-25	µg/g Crtn	83498
Deoxycorticosterone	DOC	GCMS	ng/mL	0.02-10	µg/g Crtn	82633
Corticosterone	Ccn	GCMS	ng/mL	0.09-50	µg/g Crtn	82528
Total Cortisol	TC	GCMS	ng/mL	0.25-400	µg/g Crtn	82533
Total Cortisone	TCn	GCMS	ng/mL	0.29-400	µg/g Crtn	82533
Tetrahydrocortisol	Thc	GCMS	ng/mL	4.21-2000	µg/g Crtn	82696
Tetrahydrocortisone	ThCn	GCMS	ng/mL	0.2-200	µg/g Crtn	83491
Dehydroepiandrosterone	DHEA	GCMS	ng/mL	1.01-2500	µg/g Crtn	82626
Androstenedione	Adione	GCMS	ng/mL	0.36-25	µg/g Crtn	82157
Androsterone	Andro	GCMS	ng/mL	2.18-2500	µg/g Crtn	82160
Etiocholanolone	Etio	GCMS	ng/mL	3.56-2500	µg/g Crtn	82696
Testosterone	T	GCMS	ng/mL	0.11-200	µg/g Crtn	84403
Epi-Testosterone	Epi-T	GCMS	ng/mL	0.02-200	µg/g Crtn	82542
5α-Dihydrotestosterone	5α-DHT	GCMS	ng/mL	0.02-50	µg/g Crtn	82642
5α,3α-Androstanediol	5α3α	GCMS	ng/mL	0.07-25	µg/g Crtn	82154
Creatinine	Crtn	GCMS	mg/mL	0.07-3.5	mg/mL	82570
Iodine	I	ICPMS	µg/L	1.86-10000	µg/g Crtn	84311
Bromine	Br	ICPMS	µg/L	37.8-100000	µg/g Crtn	84311
Selenium	Se	ICPMS	µg/L	1.96-1000	µg/g Crtn	84255
Lithium	Li	ICPMS	µg/L	0.38-10000	µg/g Crtn	80178
Arsenic	As	ICPMS	µg/L	0.21-1000	µg/g Crtn	82175
Cadmium	Cd	ICPMS	µg/L	0.136-100	µg/g Crtn	82300
Mercury	Hg	ICPMS	µg/L	0.045-100	µg/g Crtn	83825
Creatinine	Crtn	ICPMS	mg/mL	0.03-4	mg/mL	82570
Estrone-3-Glucuronide	E1G	EIA	ng/mL	4-466	ng/mg Crtn	82679
Pregnanediol-3-Glucuronide	PDG	EIA	ng/mL	57.6-30691	ng/mg Crtn	84135
Luteinizing Hormone	LH	EIA	mIU/mL	1.1-400	mIU/mg Crtn	83002
Creatinine	Crtn	EIA	mg/mL	0.03-4.0	mg/mL	82570

Payment Options & General Information

Bill Provider (Domestic + Canada)

- Provider distributes kits to patients
- Provider is responsible for payment to ZRT and will be billed twice monthly for completed reports
- Automatic payment methods are available for provider convenience (required in Canada)
- Patient insurance billing is the responsibility of the provider (except Medicare, see below)
- Return shipping included

Patient Pay (Domestic Only)

- Provider distributes kits to patients
- Patient is responsible for payment to ZRT Laboratory
- We will courtesy bill a select group of insurances as a non-contracted provider at ZRT retail price
- Return shipping included

International

- Provider distributes kits to patients
- Provider is billed twice monthly for any report that has been completed (Patient Pay not available)
- Automatic payment required with this option
- International shipping charges apply for outbound orders
- Patient is responsible for return shipping costs

Insurance Billing

ZRT Laboratory will courtesy bill the following insurance companies: Original Medicare Part B, Medicare Advantage Plans, Champ VA and TRICARE as a non-contracted provider at the ZRT retail price. Please note we do not file secondary insurance. We recommend patients check with their insurance companies regarding coverage prior to testing.

Medicare

Prepayment is required for saliva testing or for any test ordered by providers outside the scope of their practices (ND, DC, LAC, etc.) or who are not enrolled with Medicare, as it is not covered. All providers must order Medicare Kits separately from standard test kits to satisfy Medicare regulations. ZRT Laboratory will courtesy bill Medicare for all payment options.

CPT Codes

The American Medical Association's Current Procedural Terminology (CPT®) codes in ZRT Laboratory's Test Directory are provided for informational purposes only. CPT codes are provided only as a guide to assist providers with billing. ZRT recommends that clients confirm CPT codes with their Medicare administrative contractor, as requirements may differ. CPT coding is the sole responsibility of the billing party. ZRT assumes no responsibility for billing errors due to reliance on the published CPT codes.

Health Insurance Portability & Accountability Act (HIPAA)

ZRT Laboratory is committed to complying with privacy and security standards outlined in the HIPAA and the Health Information Technology for Economic and Clinical Health Act. Notice of Privacy Practices may be found at **www.zrtlab.com.**

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