



Comprehensive Menopause Panel

MDL Test Number: 647, Tests Included: 27

Specimen Requirements:

Specimen	Collection Platform	Stability	Turnaround Time
Serum	2 Serum Separator Tube (SST)	Room Temperature	24 – 72 hrs.

Special handling and timing

This panel is drawn into serum separator tubes, but several of its tests place requirements on how and when they are collected. taken.

- **The day of the cycle should be recorded.** Several hormones in this panel are interpreted against where the patient is in her cycle, and are best drawn in the first few days of it, counting the first day of bleeding as day 1. If periods are irregular or absent, the request should say so rather than leave a cycle day to be assumed.
- **A morning draw is preferred.** Cortisol is highest in the early morning and falls throughout the day, testosterone follows the same pattern, and prolactin rises with sleep, stress, and the draw itself. The time of collection should be recorded on the request.

What is the Comprehensive Menopause Panel?

Menopause is a clinical diagnosis, made from the pattern of periods and symptoms rather than from a blood test. Hormone measurements matter for a different reason: the symptoms of the menopausal transition overlap almost completely with those of thyroid disease, anemia, vitamin deficiency, and depression, and telling them apart is what changes the treatment.

This panel measures the reproductive hormones that describe where a woman is in the transition, together with the conditions most often mistaken for it. It then goes further than a symptom panel, because the years around menopause are when bone loss accelerates and cardiovascular risk changes: it includes the bone formation marker, the hormones that regulate calcium, vitamin D, and the inflammatory marker.

The result is a picture of both halves of menopause — the symptoms a woman notices now, and the changes she does not.

Why order the Comprehensive Menopause Panel?

It is commonly used to:

- Investigate hot flashes, night sweats, poor sleep, low mood, irregular periods, or vaginal dryness, and separate the menopausal transition from the conditions that imitate it.
- Exclude thyroid disease, anemia and iron deficiency, and vitamin B12 or vitamin D deficiency, each of which produces much the same symptom picture and each of which is treated.

- Describe where a woman sits in the transition when that is uncertain, particularly after a hysterectomy or where contraception has masked the pattern of periods.
- Assess bone turnover as it accelerates through the transition, alongside the hormones that regulate calcium and the vitamin D status that underpins them.
- Assess cardiovascular and metabolic risk markers at the point in life when they change.
- Establish a baseline before menopausal hormone therapy begins, and provide the results against which later monitoring is compared.

Special Instructions

- **Protection from light:** Vitamin B12 and folate break down on exposure to light, so the sample is protected from the moment it is drawn. This is handled by the laboratory and the draw site and needs nothing from the patient.
- **Hormonal contraception and hormone treatment:** Combined pills, patches, rings, hormonal intrauterine devices, and menopausal hormone therapy change several of these results. Current or recently stopped treatment, and what form it takes, should be listed on the request.
- **Biotin supplements:** Biotin is sold on its own and is present in many hair, skin, and nail products, often at high doses. Several tests in this panel can be affected, and the most sensitive of them was tested by its manufacturer only up to a level that a high-dose supplement can exceed. Patients should tell the ordering provider what they take and at what dose.
- **Bone treatments must be listed:** Bisphosphonates, menopausal hormone therapy, raloxifene, and calcitonin all lower the bone formation marker in this panel, and that is a real effect on bone rather than an effect on the test. Current treatment, and when it started, should be on the request.
- **Recent supplements and infusions:** Iron tablets, iron infusions, vitamin B12 injections, and high-dose vitamin D taken shortly before the draw can all overstate the corresponding result. When these were last taken should be on the request.
- **Medicines and recent illness:** Steroids, some psychiatric medicines, and any recent significant illness can affect these results. A current medication list should accompany the request.



Which tests are included in this panel?

Each test below is also available individually, and a separate fact sheet for each one gives its reference ranges, limitations, and the conditions it is used to assess.

Free testosterone and the free androgen index, where included, are calculated from the total testosterone and SHBG results already in this panel. They are not separately charged.

Test No.	Analyte	CPT Code	Method
610	Follicle-Stimulating Hormone (FSH)	83001	Immunoassay
611	Estradiol (E2)	82670	Immunoassay
612	Thyroid-Stimulating Hormone (TSH)	84443	Immunoassay
614	Luteinizing Hormone (LH)	83002	Immunoassay
616	Triiodothyronine, Free (Free T3)	84481	Immunoassay
617	Thyroxine, Free (Free T4)	84439	Immunoassay
618	Parathyroid Hormone, Intact (PTH)	83970	Immunoassay
620	IGFBP-3	83520, 82397	Immunoassay
621	Androstenedione	82157	Immunoassay
622	Testosterone, Total	84403	Immunoassay
630	Progesterone	84144	Immunoassay
631	DHEA-Sulfate (DHEA-S)	82627	Immunoassay
638	Anti-Thyroid Peroxidase Antibody (Anti-TPO)	86376	Immunoassay
639	Sex Hormone-Binding Globulin (SHBG)	84270	Immunoassay
640	Human Chorionic Gonadotropin (hCG)	84703, 84702	Immunoassay
641	Cortisol	82533	Immunoassay
652	Anti-Thyroglobulin Antibody (Anti-TG)	86800	Immunoassay
653	Anti-Müllerian Hormone (AMH)	82166	Immunoassay
654	Prolactin	84146	Immunoassay
655	Vitamin B12	82607	Immunoassay
657	Ferritin	82728	Immunoassay
658	Ostase (Bone-Specific Alkaline Phosphatase)	84080	Immunoassay
659	Vitamin D, 25-OH	82306	Immunoassay
660	Insulin-like Growth Factor 1 (IGF-1)	84305	Immunoassay
663	C-Reactive Protein, High Sensitivity (hsCRP)	86141	Immunoassay
685	Free Testosterone	—	Calculated
696	Free Androgen Index (FAI)	—	Calculated

Limitations:

Every laboratory panel has limits. For this one, the main ones are:

- Menopause is not diagnosed by blood tests. In a woman over 45 with typical symptoms, the diagnosis is clinical, and hormone results are used to exclude other explanations rather than to confirm it.
- Each result is a snapshot of one moment. Several of these hormones change substantially across the menstrual cycle and through the day, so a single set of results should be interpreted against when the sample was taken.
- Hormone levels swing widely and unpredictably during the transition. A single set of results can look premenopausal one month and postmenopausal the next, which is why they are read alongside the pattern of periods.
- Results are interpreted against the reference range printed on the report for each individual test. Those ranges differ by age and, for several of these tests, by where the patient is in her cycle.
- These results are one piece of a larger picture. They are meant to be read together with the patient's symptoms, medical history, and examination — never on their own

What are some references that discuss the medical necessity of this panel?

1. Harlow, S. D. et al. Executive summary of the Stages of Reproductive Aging Workshop +10: addressing the unfinished agenda of staging reproductive aging. *J. Clin. Endocrinol. Metab.* **97**, 1159–1168 (2012).
2. The NAMS 2022 Hormone Therapy Position Statement Advisory Panel. The 2022 hormone therapy position statement of The North American Menopause Society. *Menopause* **29**, 767–794 (2022).
3. LeBoff, M. S. et al. The clinician's guide to prevention and treatment of osteoporosis. *Osteoporos. Int.* **33**, 2049–2102 (2022).
4. Demay, M. B. et al. Vitamin D for the prevention of disease: an Endocrine Society clinical practice guideline. *J. Clin. Endocrinol. Metab.* **109**, 1907–1947 (2024).
5. Jonklaas, J. et al. Guidelines for the treatment of hypothyroidism. *Thyroid* **24**, 1670–1751 (2014).
6. Melmed, S. et al. Diagnosis and treatment of hyperprolactinemia: an Endocrine Society clinical practice guideline. *J. Clin. Endocrinol. Metab.* **96**, 273–288 (2011).

