

# Panel recommends improvements in estrogen testing accuracy

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Washington, DC-Unreliable estrogen measurements have had a negative impact on the treatment of and research into many hormone-related cancers and chronic conditions. To improve patient care, a panel of medical experts has called for accurate, standardized estrogen testing methods in a [statement](#) published in the Endocrine Society's *Journal of Clinical Endocrinology & Metabolism (JCEM)*.

The panel's recommendations are the first to address how improved testing methods can affect clinical care, and were developed based on discussions at an estrogen measurement workshop hosted by the Endocrine Society, AACC and the Partnership for Accurate Testing of Hormones (PATH).

[Estrogen](#) is primarily produced in the ovaries and is also produced in small amounts by the adrenal glands, which is why men as well as women have estrogen in their bodies. It is critical for fertility in women, and also plays a role in many health conditions, from precocious puberty to cancers of the breast, ovary, prostate and liver. Accurate blood tests for estrogen are necessary to diagnose patients with these conditions and ensure they receive appropriate, effective [treatment](#). Many medical studies also rely on estrogen tests, such as research assessing the connection between estrogen levels and the risk of breast or prostate cancer.

"Accurate data on patients' estrogen levels are needed to ensure appropriate and effective [patient care](#), reduce the need for retesting, and

enable clinicians to implement the latest [research](#) in patient care," said one of the authors and co-chair of the PATH Steering Committee, Hubert Vesper, PhD. "Research studies, however, found high inaccuracies among different estrogen tests, especially when the test is measuring low estrogen levels in postmenopausal women, men and children."

The expert panel called for improving the accuracy of measurements through standardization, and recommended clinicians, researchers and public health officials support standardization programs like CDC's and other efforts to ensure estrogen measurement is accurate and consistent.

The panel also advised clinicians and researchers to consider the purpose of the test when selecting an estrogen measurement method. Clinicians and researchers currently use several methods to measure estrogen, including mass spectrometry and immunoassays. The experts agreed both methods are valid, but that one may be more effective than the other depending on the situation. For instance, mass spectrometry—the more expensive, but also more sensitive testing method—may be appropriate in people who tend to have low estrogen levels, including postmenopausal women and children beginning puberty.

Additionally, the experts recommended that medical journals require authors to fully explain the estrogen measurement testing methods used in studies. Ensuring researchers explain the processes they used will help the field move toward standardized methods.

Provided by The Endocrine Society

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