



NEWS RELEASE

Current Screening Thresholds May Miss Half of Patients with Primary Aldosterone, a Leading Cause of Severe High Blood Pressure, Finds Study in Hypertension

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Half of patients with the hormonal disorder, which raises risk of heart attack, stroke and kidney disease, may be undiagnosed under current screening thresholds

SECAUCUS, N.J., Oct. 19, 2026 /PRNewswire/ -- A new study finds that current medical guidelines may inadvertently lead to under-diagnosis of primary aldosteronism (PA), a hormonal disorder associated with hypertension that can significantly raise a person's risk of heart attack, stroke and kidney disease if left untreated.

Published in the journal Hypertension, a publication of the American Heart Association, the findings suggest that changing the diagnostic threshold for PA would double the detection rate, identifying thousands of high-risk patients who may otherwise be undiagnosed and untreated.

Researchers from Quest Diagnostics (NYSE: DGX), a leading provider of diagnostic information services, Mass General Brigham, Harvard Medical School and the University of Texas Southwestern Medical School conducted the study, based on deidentified results of lab tests performed by Quest on over 60,449 patients in the United States.

Primary aldosteronism occurs when the adrenal glands produce too much aldosterone, a hormone that helps regulate sodium and potassium in the blood. High blood pressure is a defining feature of the condition, though affected individuals may have other common symptoms like headaches or muscle cramps. If left untreated, several complications can occur.

In 2025, the Endocrine Society published guidelines that recommend screening for PA for all patients with high

blood pressure and included criteria for diagnosing PA. However, the new study suggests these guidelines are "overly restrictive," with laboratory cutoffs for aldosterone levels that detect only the most advanced cases of the disease. The guideline update also recommends plasma renin activity (PRA), a blood test that measures the conversion of renin in the kidneys, as the initial screening test.

When the researchers applied the 2025 criteria (PRA ≤ 1 ng/mL/h, aldosterone levels ≥ 7.5 ng/dL, ARR > 15) to the patient cohort, only 13.0% of individuals were identified as positive for PA. However, a broader, "permissive" set of criteria (PRA ≤ 1 ng/mL/h, aldosterone levels > 5 ng/dL, without an ARR requirement) applied to the same cohort identified approximately twice as many patients, 26.2%, with PA. Additionally, clinical conditions consistent with PA such as hypertension, hypokalemia, and atrial fibrillation (based on insurance claim billing), were enriched among patients categorized as positive for PA by the more permissive laboratory cutoffs.

Among patients identified by the more permissive criteria, a PRA score of < 0.5 ng/mL/hr had 1.27 times higher odds of having hypertension compared to those with a higher (or normal) PRA ($P < 0.0001$). Patients with a PRA of < 0.25 ng/mL/hr had 2.62 times higher odds of having atrial fibrillation ($P = 0.0032$). 79.0% of the additional patients identified by permissive criteria were missed by the 2025 criteria because they had aldosterone levels between 5 and 7.5 ng/dL, below the ES cutoff, while approximately one in five had aldosterone levels that met the ES criteria but did not meet the ARR threshold.

The findings suggest the 2025 guidelines may guide physicians to identify only the more advanced forms of the disease and that primary aldosteronism should be viewed as a spectrum rather than a positive or negative diagnosis of disease. Earlier detection using more relaxed diagnostic criteria may help clinicians identify and intervene with care with potential to prevent long-term cardiovascular complications.

"Our findings demonstrate that current international clinical guidelines for diagnosing primary aldosteronism are optimized to identify advanced disease but may be less sensitive for earlier or milder forms of PA," said lead author Marco Marcelli, MD, a board-certified endocrinologist and Medical Director at Quest Diagnostics. "Some patients with PA spend years on a diagnostic journey before learning their hypertension, headaches and other symptoms are due to a highly treatable condition. More expansive screening and diagnostic criteria may help the medical community to quickly identify these individuals hiding in plain sight before irreversible heart damage and other adverse outcomes have occurred."

The study's strengths include its large patient cohort and its limitations include its retrospective design and lack of confirmatory testing.

Primary aldosteronism is a serious condition that affects **as many as 5-10% of adults with high blood pressure**. Up to 25-30% of patients with hypertension may be diagnosed with PA if the criteria identified by the Quest group will

eventually be confirmed in prospective studies. High blood pressure is widely prevalent in the U.S., affecting nearly half of all adults (**almost 120 million individuals**). For many years, PA was considered uncommon; however, **a 2024 study** published in Hypertension by researchers at Quest Diagnostics shows PA is likely under-detected.

About Quest Diagnostics

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