

☒NEW TEST ☐TEST CHANGE

NOTIFICATION DATE: 06/23/2023

EFFECTIVE DATE: 06/29/2023

Aldosterone: Direct Renin Ratio (ARR)

On the effective date, Northwell Health Laboratories, as part of its commitment to improved patient care, will now perform the Aldosterone: Direct Renin Ratio (ARR) test.

The Endocrine Society clinical practice guidelines recommends using aldosterone/renin ratio for the evaluation of possible cases of primary hyperaldosteronism, which is the most common cause of secondary hypertension¹. The Aldosterone: Direct Renin Ratio test is determined by direct measurement of aldosterone and renin concentrations; the ratio is determined by calculation. An elevated aldosterone/renin ratio should be followed by one or more confirmatory tests (e.g., oral sodium loading, saline infusion, fludrocortisone suppression, or captopril challenge) to definitively confirm or exclude the diagnosis of primary hyperaldosteronism.

Note that ARR requires the collection of two different blood tubes. One serum tube (for aldosterone testing) **AND** one plasma tube (for direct renin testing).

Test Requirement	New
Specimen Type/ Volume	1 mL Serum (min 0.5 mL) for aldosterone <u>And</u> 1 mL Plasma (min 0.8 mL) for direct renin
Collection Container/Tube	1 Gold top tube (Serum separator tube) <u>And</u> 1 Lavender top tube (EDTA tube)
Methodology	Chemiluminescence Immunoassay
Transport Temperature	Serum: Refrigerated (for aldosterone testing) Plasma: Frozen (for direct renin testing)
Computer Interface Code	PDM #231034
Test Order	ARR

If you have any questions, please contact Client Services at (800) 472-5757.

Reference

1. The Journal of Clinical Endocrinology & Metabolism, Volume 101, Issue 5, 1 May 2016, Pages 1889–1916, <https://doi.org/10.1210/jc.2015-4061>

