



# NONINVASIVE CORTISOL SALIVA TESTING

Diagnose & Monitor Treatment of Hormonal Disorders



Testing Performed By Alimetric  
CLIA #: 01D2113023  
Certified High-Complexity Laboratory

## RELIABLE & ACCURATE

- Saliva can be used in a clinical setting to diagnose and monitor treatment of hormonal disorders.<sup>1</sup>
- SimplyTest Cortisol is a competitive enzyme immunoassay for the in vitro quantitative measurement of active free cortisol (hydrocortisone and hydroxycorticosterone).<sup>2</sup>
- SimplyTest Cortisol may be used to screen for Cushing's and Addison's disease.<sup>2</sup>
- Testing results available in 24-48 hours.

## EASILY SUPPORTS PATIENT IN-HOME SELF-COLLECTION

- Maintains post-collection in-device stability at room temperature.
- Saliva testing is less expensive than conventional serum testing.
- SimplyTest easily advances direct-to-consumer screening and monitoring application opportunities.

## PATIENT SATISFACTION

- Patients prefer the pain-free, non-invasive, and ease-of-use saliva testing offers.
- Saliva collection avoids the stress impact a blood draw can have on hormone levels.
- Reports demonstrate an increase in overall test participation & on-going compliance with frequent testing regimens when saliva is offered.<sup>3</sup>
- When screening or monitoring for disorders requires multiple samples in a day, week, or even months later, saliva easily enables the opportunity to deliver a testing sample with little to no impact to a patient's regular routine.



### NEURODEGENERATIVE DISORDER<sup>4,5</sup>

Chronic high cortisol is a major risk factor associated with several neurodegenerative disorders, dementia, and cognitive dysfunction.

### CARDIOVASCULAR DISEASE<sup>6,7,8</sup>

Long-term consistent stress affects all the cardiac risk factors such as blood pressure, triglycerides, and glucose leading to atherosclerosis.

### DIABETES<sup>9,10</sup>

Elevated cortisol levels over the long term spike the production of glucose, increasing the risk of type 2 diabetes.

### CHRONIC KIDNEY DISEASE<sup>11,12</sup>

Cortisol influences the renal blood flow and kidney function directly by negatively correlating with the glomerular filtration rate and tubular function.

### ONCOLOGY<sup>13,14</sup>

Chronic stress increases the production of certain growth factors and blood flow which accelerates cancerous tumor formation. Moreover, cortisol's immunosuppressive effects may increase cancer risks leading to lower immunosurveillance, immune escape, and oncogenic mutation.

[1] Hammerich, K. H., Donahue, T. F., Rosner, I. L., Cullen, J., Kuo, H. C., Hurwitz, L., Chen, Y., Bernstein, M., Coleman, J., Danila, D. C., & Metwalli, A. R. (2017). Alkaline phosphatase velocity predicts overall survival and bone metastasis in patients with castration-resistant prostate cancer. *Urologic oncology*, 35(7), 460.e21–460.e28. <https://doi.org/10.1016/j.urolonc.2017.02.001>

[2] Alimetric 2023, Cortisol Assay Validation Summary

[3] Dhima, M., Salinas, T. J., Wermers, R. A., Weaver, A. L., & Koka, S. (2013). Preference changes of adult outpatients for giving saliva, urine and blood for clinical testing after actual sample collection. *Journal of prosthodontic research*, 57(1), 51–56. <https://doi.org/10.1016/j.jpor.2012.09.004>

[4] <https://www.frontiersin.org/articles/10.3389/fnagi.2019.00043/full>

[5] <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6405479/>

[6] <https://www.urmc.rochester.edu/encyclopedia/content.aspx?ContentTypeID=1&ContentID=2171>

[7] <https://pubmed.ncbi.nlm.nih.gov/20739384/>

[8] <https://www.heart.org/en/healthy-living/healthy-lifestyle/stress-management/stress-and-heart-health>

[9] <https://dtc.ucsf.edu/types-of-diabetes/type2/understanding-type-2-diabetes/how-the-body-processes-sugar/blood-sugar-stress/>

[10] <https://pro.endocrineweb.com/type-2-diabetes/high-evening-cortisol-levels-linked-increased-risk-type-2-diabetes>

[11] <https://pubmed.ncbi.nlm.nih.gov/20655918/>

[12] <https://pubmed.ncbi.nlm.nih.gov/15012696/>

[13] <https://pubmed.ncbi.nlm.nih.gov/35755918/#:~:text=Cancer%20patients%20may%20have%20a,with%20different%20types%20of%20tumors.>

[14] <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7466429/>