admission for adrenal crisis while on steroid replacement. Of the 100 patients who were on oral steroids at enrolment in the original study and evaluated for steroid-induced AI, 60 patients (60.0%) successfully discontinued steroid use over a median duration of 2 months (IQR 0-7.8 months). Notably, higher WSC and baseline ACTH levels were significantly associated with an increased likelihood of successful steroid weaning, with p-values of <0.001 and 0.031, respectively. **Conclusion:** In this cohort, the baseline biochemical assessment by WSC correctly categorized patients' adrenal function as assessed by long term clinical outcomes and offers an alternative to the ACTH stimulation test but with offering greater convenience.

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Adrenal (Excluding Mineralocorticoids)

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Long term outcomes in patients assessed by Waking Salivary Cortisone as a screening test for adrenal insufficiency

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Background: Adrenal insufficiency (AI) is a prevalent condition globally. While the adrenocorticotropic hormone (ACTH) stimulation test remains the diagnostic gold standard, it necessitates clinic attendance and venesection. In a diagnostic accuracy study, we demonstrated that waking salivary cortisone (WSC) sampled at home accurately predicts the 30-minute cortisol post ACTH stimulation performed in clinic. Here, we analyze the cohort of patients reported in the original study to assess the reliability of the test from the perspective of long-term clinical outcomes. **Method:** This is a retrospective, longitudinal study spanning from the sampling of WSC to December 2024. In 204 patients with complete data, we reviewed hospital admission records, latest medication and laboratory results. **Results:** At baseline, 115/204 patients (56.4%) had an intact hypothalamus-pituitary-adrenal (HPA) axis as diagnosed using a WSC while 89 patients (43.6%) were diagnosed with AI. Over a median follow up of 53 months (IQR 49-59 months), none of the patients with an intact HPA axis were diagnosed with AI or experienced an adrenal crisis while 4 patients in the AI group had an