# A Letter to Editor Regarding Efficacy of Salivary Urea and Creatinine Compared to Serum Levels in Chronic Kidney Disease Patients: A Cross-sectional Study

**Biochemistry Section** 

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Dear Editor,

The article in your issue 2024 Jan; Vol 18(1): BC05-BC08, titled "Efficacy of Salivary Urea and Creatinine Compared to Serum Levels in Chronic Kidney Disease Patients: A Cross-sectional Study".

We read this article with great interest. In this study, the authors tried to explore the use of saliva as a non invasive tool for evaluation of Chronic Kidney Disease (CKD).

Salivomics is a rapidly developing diagnostic field, in which saliva is used as a tool for evaluating systemic diseases like CKD, diabetes mellitus and rheumatoid arthritis [1]. In this study, the authors focussed on application of salivary urea and creatnine compared to their serum counterparts in CKD patients. The Glomerular Filtration Rate (GFR) is estimated for diagnosis and staging of CKD.

In routine clinical practice, serum creatinine is used to estimate GFR using prediction equations with the Modification of Diet in Renal Disease (MDRD) [2].

We wanted to point out certain facts-

The stages of CKD in the procedure should have mentioned **estimated GFR (eGFR)** as it is the parameter followed in the Kidney Disease: Improving Global Outcomes (KDIGO) classification [3]. As per the National Kidney Foundation Kidney Disease Outcomes Quality Initiative (NKF KDOQI) CKD is categorised on the basis of eGFR, which is as follows: G1-≥90, G2-60-89, G3a-45-59, G3b-30-44, G4-15-29, G5-√15 mL/min/1.73 m².

This recent classification, particularly stages 3a and 3b, is not mentioned in your article, which is essential as this classification is followed worldwide. The eGFR is a crucial measure used to assess the functioning of the kidneys. The main difference between GFR and eGFR is that GFR describes the flow rate of the filtered fluid through the kidneys whereas eGFR is a number that estimates the GFR [4]. GFR can be measured by plasma or urinary clearance of ideal filtration markers such as inulin, while eGFR can be calculated from a single blood test such as serum creatinine. Compared to measured GFR (mGFR) or GFR, eGFR is widely available, less expensive, and requires less time. Though GFR and eGFR are used interchangeably to be more precise, eGFR is the right terminology used by researchers worldwide.

In this article, the authors work is on CKD (1-3) stages patients, so it is very essential to mention the term eGFR and CKD classification  $\frac{1}{2}$ 

as per KDOQI. These points should have been mentioned in the article, hence pointed out.

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# **AUTHORS' RESPONSE**

In the "Letter to the Editor" the reader has mentioned that the CKD classification (3a and 3b) classification has not been elaborated. However, it is brought to light that the article focused on the role of saliva as a tool for CKD prognosis monitoring rather than CKD as a disease with its complete classification and diagnosis. Hence, it was not considered. But for future studies, this classification can be included.