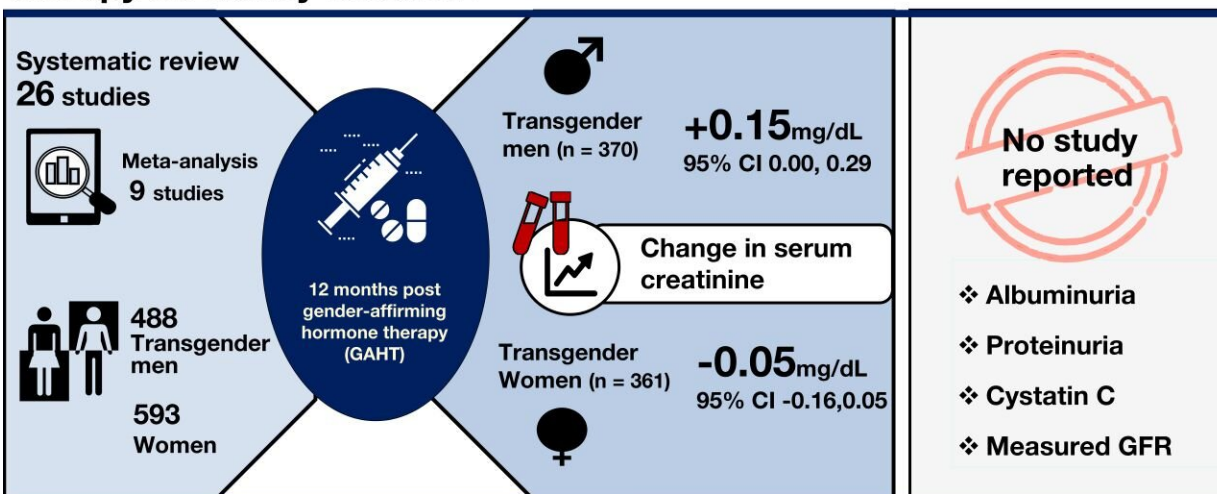


# Does gender-affirming hormone therapy affect markers of kidney health?

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## What is the impact of gender-affirming hormone therapy on kidney function?

CJASN<sup>®</sup>  
Clinical Journal of the American Society of Nephrology



Conclusions: GAHT increases serum creatinine in transgender men and does not impact serum creatinine in transgender women. The impact on GAHT on other kidney function biomarkers and measured GFR is unknown.

Emily Krupka, Sarah Curtis, Thomas Ferguson, et al. *The Impact of Gender-Affirming Hormone Therapy on Kidney Function*. CJASN doi: 10.2215/CJN.01890222. Visual Abstract by Divya Bajpai, MD, PhD

Graphical abstract. Credit: *Clinical Journal of the American Society of Nephrology* (2022). DOI: 10.2215/CJN.01890222

Gender-affirming hormone therapy modifies body composition and lean muscle mass in transgender persons. A recent analysis published in the *Clinical Journal of the American Society of Nephrology* examined the effects of masculinizing and feminizing gender-affirming hormone therapy on markers of kidney function.

For the analysis, a team led by David Collister, MD, Ph.D. (University of Alberta) searched the medical literature and identified 26 relevant studies. At 12 months after initiating gender-affirming [hormone](#) therapy, blood levels of creatinine (a marker of kidney function) increased by 0.15 mg/dL in transgender men and decreased by -0.05 mg/dL in [transgender women](#). (An increase in creatinine may indicate possible kidney dysfunction or simply reflect a change in underlying lean muscle mass.) No study reported the impact of gender-affirming hormone therapy on other markers or measures of kidney function (e.g. albumin or protein in the urine, cystatin C, directly measured kidney function), indicating the need for additional research.

"It is important to understand how gender-affirming hormone therapy impacts kidney physiology and how it changes values of common laboratory tests so that patients are properly assessed and not mislabeled with health or disease with regards to [kidney](#) function," said Dr. Collister.

An accompanying editorial notes that the analysis raises several important questions that should be the focus of subsequent investigations, most notably the mechanism through which gender-affirming hormone therapy is associated with changes in creatinine and whether it independently affects [kidney function](#).

**More information:** Emily Krupka et al, The Effect of Gender-Affirming Hormone Therapy on Measures of Kidney Function, *Clinical Journal of the American Society of Nephrology* (2022). [DOI: 10.2215/CJN.01890222](#)

Dinushika Mohottige et al, Advancing Kidney Health Equity, *Clinical Journal of the American Society of Nephrology* (2022). [DOI: 10.2215/CJN.08280722](#)

Provided by American Society of Nephrology (ASN)

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