



UKE Paper of the Month August 2020

SARS-CoV-2 renal tropism associates with acute kidney injury

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[The Lancet August 17th, 2020](#)

This highly interdisciplinary work included seven UKE institutes and departments and was headed by the teams of Legal Medicine, Microbiology and the III. Department of Medicine and resulted in two closely related publications:

SARS-CoV-2 renal tropism associates with acute kidney injury

Series of 63 COVID-19 autopsies revealing SARS CoV-2 organ replication and association of renal tropism, renal function and mortality. The main results were:

- 1.) Renal tropism is associated with a reduction of patient survival time.
- 2.) Renal tropism is associated with an increased occurrence of acute kidney injury.
- 3.) SARS-CoV-2 actively replicates in kidney tissue.

In May, the related paper *Multiorgan and renal tropism of SRAS-CoV-2* was published (New England Journal of Medicine, 2020. doi: 10.1056/NEJMc2011400) revealing the SARS-CoV-2 multi-tropism with the following key findings:

- 1.) Defining SARS-CoV-2 as a “multi-organ virus”.
- 2.) Characterizing the kidneys as a top target of SARS-CoV-2.
- 3.) Identifying the association between co-morbidities and SARS-CoV-2 multi-tropism.

Both studies changed the perception of SARS CoV-2 and received broad international media, press and scientific attention.

The work was supported by funding from the CRC1192 and CRC841, DFG and the BMBF (FibroMap and STOP-FSGS).