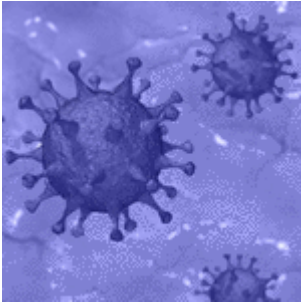


# Is there a SARS-CoV-2 receptor (ACE2) expression difference between males and females?



In a recent article by Song et al., titled “Expression of ACE2, the SARS-CoV-2 receptor, and TMPRSS2 in prostate epithelial cells” analysed publicly available single-cell RNA sequencing dataset and identified higher ACE2 expression on epithelial cells from normal human prostate and the lung. Song et al., observed higher ACE2 receptor expression in lung tissue from males compared with females, and prostate epithelial cells co-expressed higher expression of TMPRSS2 and ACE2.

*“Whether differences in TMPRSS2 and ACE2 expression mediate SARS-CoV-2 pathogenesis and whether androgen signalling can affect COVID-19 disease remain to be studied; sex differences in TMPRSS2 expression alone may not drive the higher burden of SARS-CoV-2 disease among men. Further research into TMPRSS2 expression and its modulation within the lung and other relevant cell types that may impact ACE2 and SARS-CoV-2 pathogenesis is needed.”*

Journal Article: Song et al., 2020. [Expression of ACE2, the SARS-CoV-2 Receptor, and TMPRSS2 5 in Prostate Epithelial Cells.](#) European Association of Urology

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