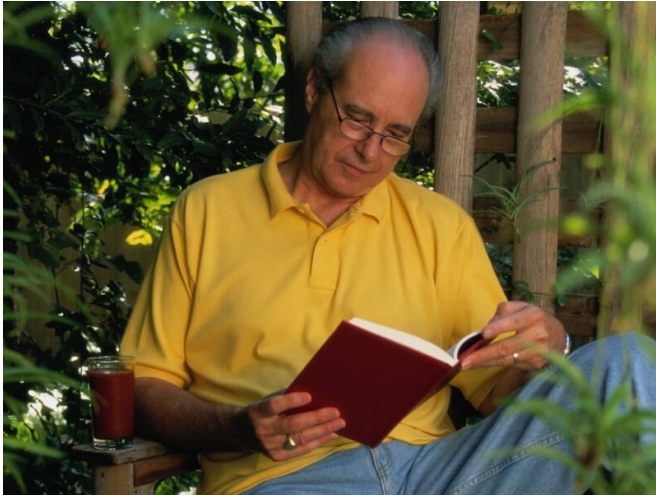


# Gene tied to balding may also raise COVID risks for men

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It's long been known that COVID-19 is more fatal for men than women, and new research links some of that excess risk to a gene known to cause a form of hair loss in males.

A U.S. team of researchers first suspected the link when they noticed that men with a common form of hormone-sensitive hair loss, known as [androgenetic alopecia](#), were also more prone to being hospitalized with COVID-19.

"Among hospitalized men with COVID-19, 79% presented with androgenetic alopecia compared to 31%-53% that would be expected in a similar aged match population," said researchers led by Dr. Andy Goren, chief medical officer at Applied Biology Inc. in Irvine, Calif. They presented their findings May 6 at the virtual spring meeting of the European Academy of Dermatology and Venereology (EADV).

The researchers noted that androgenetic alopecia is caused by the activity of the [androgen](#) receptor

(AR) gene, which in some men can lead to hair loss. An enzyme called TMPRSS2, key to COVID-19 infection, is also androgen-sensitive, and might be affected by the AR gene as well, Goren's group explained.

One key segment on the AR gene appears to affect both COVID-19 severity and the propensity of men to lose their hair due to androgenetic alopecia.

In the new study, the Irvine group conducted a genetic analysis of 65 men hospitalized with COVID-19. They found that men with certain structural differences in the AR gene were more likely to develop severe COVID-19. Speaking in a meeting press release, Goren said the AR gene aberration "could be used as a biomarker to help identify male COVID-19 patients most at risk for ICU admissions."

He also believes that "the identification of a biomarker connected with the androgen receptor is another piece of evidence highlighting the important role of androgens [male hormones] in COVID-19 disease severity."

Dr. Teresa Murray Amato is chair of emergency medicine at Long Island Jewish Forest Hills in New York City and has seen many severe cases of COVID-19. She wasn't connected to the new research, but said it "did show a significant correlation between a higher number of androgen receptors and a higher incidence of ICU admissions for patients infected with COVID-19."

Amato added, "While the study is small and the exact association is not completely understood, it may show at least one answer to why men were more likely to be admitted to ICU and have overall higher mortality with COVID-19 infections."

According to Amato, more research is needed to determine whether "medications that block androgen receptors will be useful in treating a

subset of [COVID-19] patients."

Because the findings were presented at a medical meeting, they should be considered preliminary until published in a peer-reviewed journal.

**More information:** Find out more about the treatment of COVID-19 at the [U.S. Food and Drug Administration](#).

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