

Omicron contains dozens of new mutations — but that doesn't mean the variant is more dangerous

The Omicron variant of the [coronavirus](#) has alarmed many scientists because of the sheer number of genetic mutations it carries — about 50 in all, including at least 26 that are unique to it. But [more does not necessarily mean worse](#): Mutations sometimes work together to make a virus more fearsome, but they may also cancel one another out.

“In principle, mutations can also work against each other,” said Jesse Bloom, an evolutionary biologist at the Fred Hutchinson Cancer Research Center in Seattle. “However, in this case evolutionary selection is more likely to lead to the spread of a new variant with favorable than unfavorable combinations of mutations.”

Still, this phenomenon, called epistasis, is why scientists are reluctant to speculate on [Omicron's attributes](#).

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Omicron carries a mutation called N501Y, which is thought to allow the virus to bind to human cells more tightly. This mutation was also present in the Alpha variant and was linked to its contagiousness.

“Nonetheless, it ended up being Delta, which doesn't have that particular mutation, that was more even more transmissible than Alpha,” Dr. Bloom said. “That's because Delta had other mutations that enhance transmissibility.”

[**This is an excerpt. Read the original post here.**](#)