

March 3, 2020

Use of NSAIDs for COVID-19

The FDA released a statement regarding the use of non-steroidal anti-inflammatory drugs (NSAIDs) for COVID-19. The FDA would like the public to know that there is currently no scientific evidence that NSAIDs worsen coronavirus disease.

The Issue:

- March 11 2020 In a letter published in the Lancet, it was noted that the SARS-CoV and SARS-CoV-2 virus binds to angiotensin-converting enzyme 2 (ACE2). Some medications such as ACE-Inhibitors, Angiotensin Receptor Blockers, thiazolidinediones, and ibuprofen may upregulate and increase the amount of ACE2 in the body. In *theory* this increase in ACE2 could enable the virus to more easily bind to lung, intestinal, blood, and kidney tissue.
- March 14 2020 A tweet from French Health Minister Veran was disseminated across social media platforms resulting in widespread concern. *“The taking of anti-inflammatories (ibuprofen, cortisone ...) could be a factor in aggravating the infection,”* he wrote. *“In case of fever, take paracetamol. If you are already taking anti-inflammatory drugs, or if you are in doubt, ask your doctor’s advice.”*
- March 17 2020 The World Health Organization released a recommendation that patients who are self-medicating should avoid ibuprofen if they have COVID-19 symptoms.
- March 18 2020 A number of organizations cautioned that there is no scientific evidence to indicate ibuprofen increases the risk of severe COVID-19. The WHO modified their recommendation “based on current available information, WHO does not recommend against the use of ibuprofen.” The FDA will continue to investigate this issue.

Recommendations:

- Ibuprofen should always be used cautiously in patients. All NSAIDs can increase the risk of kidney and gastrointestinal injury in susceptible patients. If ibuprofen is to be used, it should be used at the lowest effective dose and for the shortest period of time.
- Consider other treatment options for fever if desired such as acetaminophen.
- FDA encourages health care professionals to report adverse events or quality problems experienced with the use of any medication to FDA’s [MedWatch Adverse Event Reporting](#) program. Instructions for documenting and reporting Adverse Drug Events can be found on the [IHS Pharmacovigilance website](#).

Follow this link to view the [FDA drug safety alert](#) in its entirety.