



ACMT, AACT, AAPCC Joint Statement on the Dangers of Oleandrin Toxicity

August 20, 2020

The [American College of Medical Toxicology](#) (ACMT), the [American Academy of Clinical Toxicology](#) (AACT), and the [American Association of Poison Control Centers](#) has issued the following joint statement in response to recent discussions proposing use of oleandrin as a potential treatment for COVID-19:

As physicians, pharmacists, and experts in pharmacology and poisoning, we are extremely concerned, based on the available scientific data and our clinical experience, about the proposed use of oleandrin for treatment of COVID-19.

Oleandrin is a cardioactive steroid extracted from the oleander plant (*Nerium oleander*). Each year, exposures to oleander and related compounds result in thousands of poisonings worldwide. These drugs are cardiac poisons capable of causing bradycardia (slow heart rate), dysrhythmias (irregular heartbeats), and death.

Although closely-related compounds such as digoxin are used to treat heart failure and atrial fibrillation, these medications are rigorously tested, FDA-approved, pharmaceutically produced, and their place in therapy has been established over decades of use. Even when used appropriately, blood levels must be closely monitored to prevent toxicity. Treatment of toxicity from cardioactive steroids is expensive and, unfortunately, not always successful.

We are aware of a preprint publication suggesting that oleandrin may inhibit replication of SARS-CoV-2 in vitro. This is true of many other chemicals, as well. This does not mean oleandrin is safe or effective for the treatment or prevention of coronavirus in humans. It is often the case that drugs that appear effective in "test tube" or animal models are found to be ineffective or harmful in humans. Before any treatment can be seriously considered for any disease, it needs to be rigorously studied for both safety and efficacy. If oleandrin is to be seriously considered as a potential coronavirus treatment, we expect to see peer-reviewed research for that use.

As physicians, scientists, and citizens, we share the desire for effective treatments for this devastating pandemic. However, a potentially dangerous treatment with no evidence of benefit is worse than no treatment at all. Preparations made from oleander are available for purchase, but we caution consumers strongly against use of capsules, tablets, or teas, or any product made from this plant. People with suspected oleandrin toxicity should be managed in consultation with a clinical toxicologist. Patients and clinicians can reach their regional poison center at 1-800-222-1222, 24 hours/7 days a week/365 days a year.

In the strongest terms possible, we recommend against the use of oleandrin outside of rigorous, medically-supervised clinical research with regulatory oversight, and we implore consumers to not rush to use an untested remedy with potentially life-threatening toxicity.

Sincerely,

American College of Medical Toxicology, Board of Directors
American Academy of Clinical Toxicology, Board of Trustees
American Association of Poison Control Centers