

## Repurposing Anti-Androgen Therapy For Covid-19 And Immunotherapy

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## The Invention

The present invention by UW Madison researchers is a method of using enzalutamide, or other AR antagonists, to treat lung inflammation. In working with AR in the lungs, the researchers note that AR doesn't act as a nuclear receptor as it does in the testes or ovaries. It tends to affect other signaling pathways. The researchers were able to show using gene knockdown experiments in a male and in a female cultured lung cancer cell line that one of the major inflammation markers, IL6, was downregulated in the male cells but not the female cells after treatment with the siRNA. They showed that enzalutamide also decreased this inflammatory marker. Using gene sequence analysis, they looked into the gene expression patterns reported from SARS-Cov2 patients' lung cells. The gene expression pattern they observed mirrored the postulated AR signaling pathway in lung cells from their cultured lung cancer cell work suggesting to them that treating COVID-19 patients with enzalutamide may decrease lung inflammation.

## **Tech Fields**

• Therapeutics & Vaccines : Inflammation

For current licensing status, please contact Rafael Diaz at rdiaz@warf.org or 608-960-9847