

# The GeriJournal

Volume 18, Number 8

August 2023

*A publication of GeriatRx Pharmacy*



---

## RSV Vaccine

---

Full disclosure...I love vaccines, as I have no affection for viruses and pathogenic bacteria. As you might expect, Health Canada's recent approval of a new RSV vaccine has put a big smile on my face.

RSV (respiratory syncytial virus) is nasty. It wreaked havoc on children last fall and winter, clogging hospital emergency departments. Though illness is generally mild in young and middle-aged adults, seniors are at tremendous risk. Seniors over 65 years of age accounted for 22% of hospitalizations, and one in nine of those did not survive.

RSV symptoms resemble those of influenza and COVID. Testing is also not widely available so distinguishing this from these and other viruses can be difficult. RSV is more likely to cause lower respiratory symptoms (LRS), so wheezing, excess sputum, and shortness of breath should increase suspicion that RSV is at play.

RSV is particularly risky for adults with certain preexisting

comorbidities. Diabetes, CHF, CAD, and COPD are particularly concerning. Post-RSV seniors experience increased frailty, reduced lung capacity, and poorer quality of life. Acute MI frequency more than triples in the first seven days of the infection.

RSV is highly contagious and has a long incubation period (roughly 4 days), encouraging spread throughout care facilities. The elderly may shed the virus for nearly two weeks, further challenging infection control measures. To make matters worse, natural immunity is weak and residents are vulnerable to reinfection months after recovery from RSV infection.

Arexvy® is manufactured by Glaxo Smith Kline (GSK), the company that makes Shingrix. It is a protein subunit vaccine (not mRNA) with an adjuvant to enhance response. The approval was based on a study initiated in May of 2021. Arexvy® was given either once at study onset or annually and compared to placebo. LRS were reduced by 82.6% in Season 1 and sustained at 74.5% in Season 2. Protection from severe disease and in those with high-risk conditions was greater than 90%. The vaccine was well tolerated, with typical local and systemic side effects (fatigue, headache, arthralgia, myalgia, etc.) being transient and of mild to moderate intensity.

The US Advisory Committee on Immunization Practices (ACIP) recommends that adults  $\geq 60$  may receive a single dose of RSV vaccine, using shared clinical decision-making. Those at the highest risk are most likely to benefit. NACI, the Canadian equivalent of ACIP, has not made its recommendation. As a result, there will be no public funding for the vaccine here, but private insurance plans covering other vaccines will likely cover this product. A single dose will cost roughly \$250. Arexvy® will be available from GeriatRx or directly from GSK in mid-September.

---

## Metformin for Long-COVID

---

Extended symptoms, like brain fog, headache, and sleep disturbance are a major problem after COVID infection. A randomized control study in the US, COVID-OUT, tested three drugs, metformin, ivermectin, and fluvoxamine to see if any offered a solution. Metformin was the only successful agent, at a dose of 500mg on Day 1, 500mg BID X 4 days, then 500mg QAM and 1,000mg HS for 9 days. Long-COVID was reduced by 42% overall, and 64% when started in the first 3 days of symptom development. COVID vaccination was even more effective in preventing long-COVID. Consider metformin for at-risk residents, particularly if they have a poor vaccine history.

*Prepared by Randy Goodman  
Board Certified Geriatric Pharmacist*