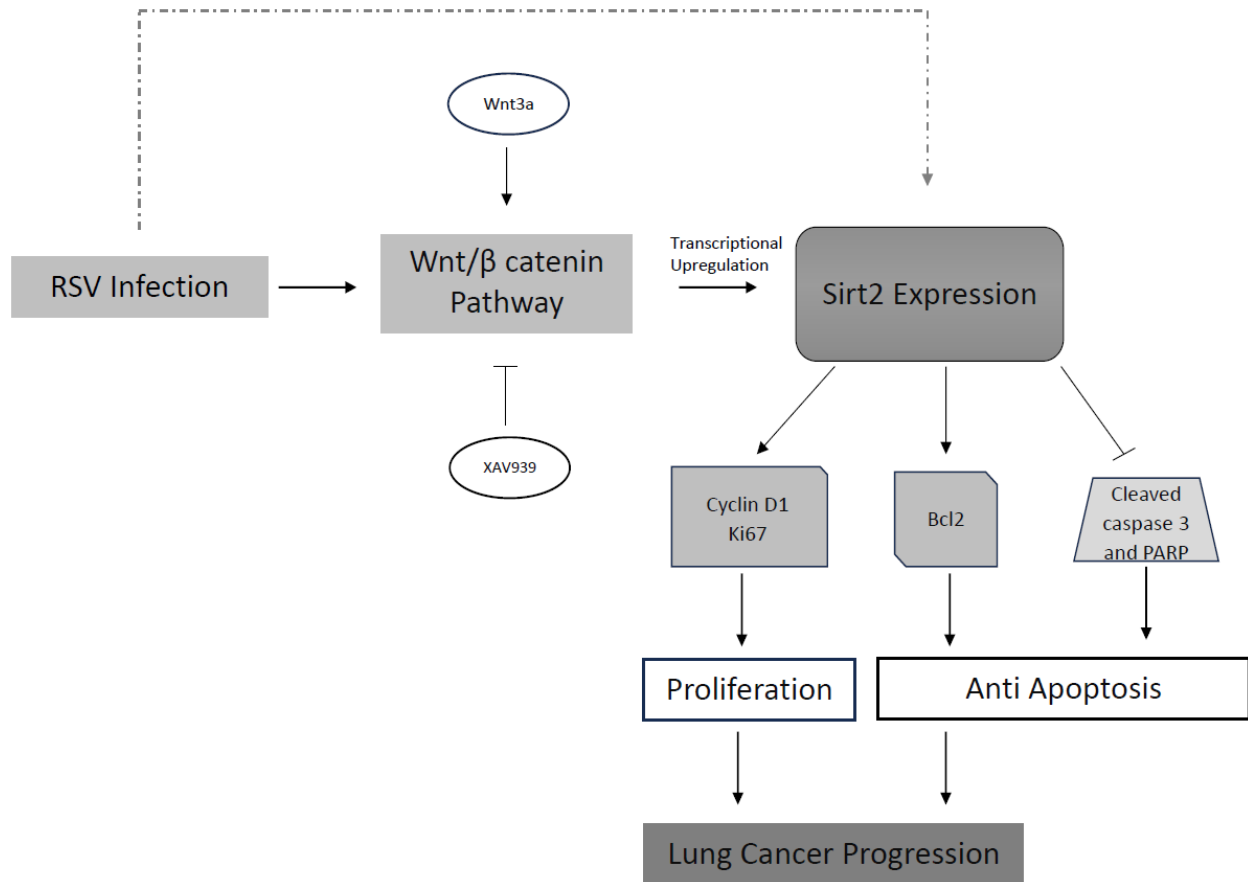


Appendix 1



Appendix 2: Regulation of SIRT2 Expression and Its Role in Lung Cancer Progression Mediated by RSV Infection and Wnt/ β -Catenin Pathway. RSV infection activates the Wnt/ β -catenin pathway, which transcriptionally upregulates SIRT2 expression. Wnt3a enhances this signaling, while XAV939 inhibits it. RSV indirectly boosts SIRT2 through the Wnt/ β -catenin pathway. SIRT2 promotes lung cancer progression by increasing proliferation markers (Cyclin D1, Ki-67, Bcl-2) and suppressing apoptotic markers (cleaved caspase-3, PARP). Experimental findings highlight synergistic effects of RSV and Wnt3a and the inhibitory role of XAV939 on SIRT2 expression.