

	covar	shared pars	AIC
G	Flu	all age-spec	13218.85
H	Flu	$\delta_a = \delta$	13216.32
I	Flu	$\delta_a = \delta, \tau_{<5} = \tau_{65+} = 0$	13212.32
J	Flu+rhinov	$\delta_a = \delta, \tau_{<5} = \tau_{65+} = \theta_{5-14} = \theta_{15-44} = 0$	13160.70
K	Flu+rhinov+RSV	$\delta_a = \delta, \tau_{<5} = \tau_{65+} = \theta_{5-14} = \theta_{15-44} = \zeta_{5-14} = \zeta_{15-44} = 0$	13143.67

S1 Table . Multivariate model comparison in terms of AIC and one-step ahead forecast ($\log(s(P,x))$)