1) A\_Model\_Protection\_final.m:

This code will generate a file 'V\_varyFixedparms\_sample2\_v1.mat' containing 10,000 virtual patients.

2) B\_Model\_Protection\_final.m:

This code will generate a file 'V\_varyFixedparms\_sample2\_v1\_Scale\_10.mat' containing 10,000 virtual patients. The IC50 values are scaled with omega.

3) C\_ModelPredict\_Protection\_final.m:

This code will compute protection as a function of scaled NT50 shown in Figure 5.

Run the codes in the following order:

A\_Model\_Protection\_final.m

B\_Model\_Protection\_final.m

C\_ModelPredict\_Protection\_final.m

Note that there will run-to-run variability.