

Response to reviewers n°2

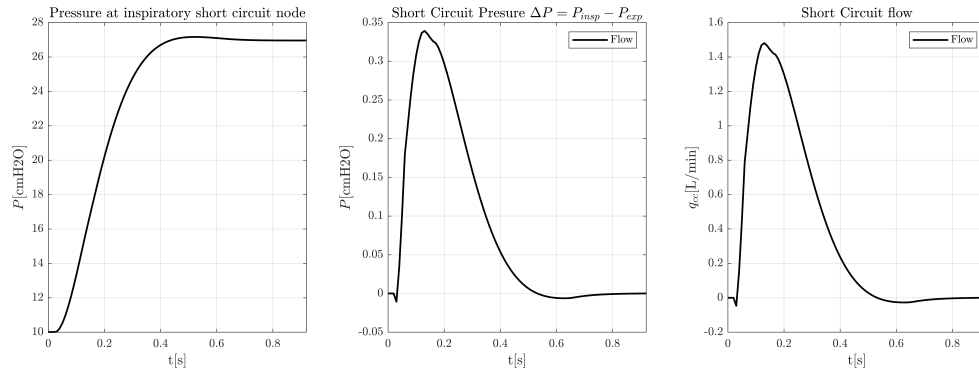


Figure 1: Short Circuit differential pressure and flow during inspiration

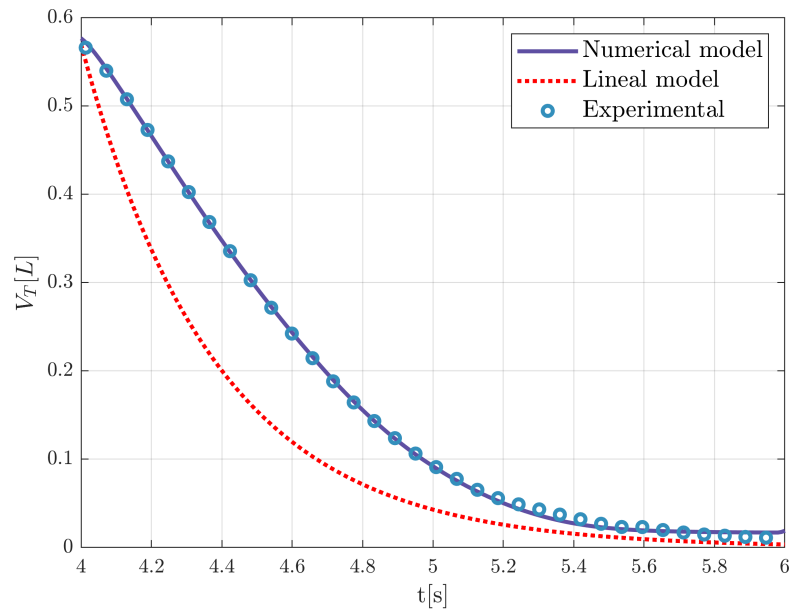


Figure 2: Comparison between linear model, Numerical model and experiments.

Element	Resistance [cmH_2O (L/s)]	Compliance [$mL/(cmH_2O)$]
Peep Valve	3	-
Oneway	2	-
Filter	1	-
Patient 1	5	35
Patient 2	5	35
Ventilator	1.5	-

Table 1: Linear values used in figure 2

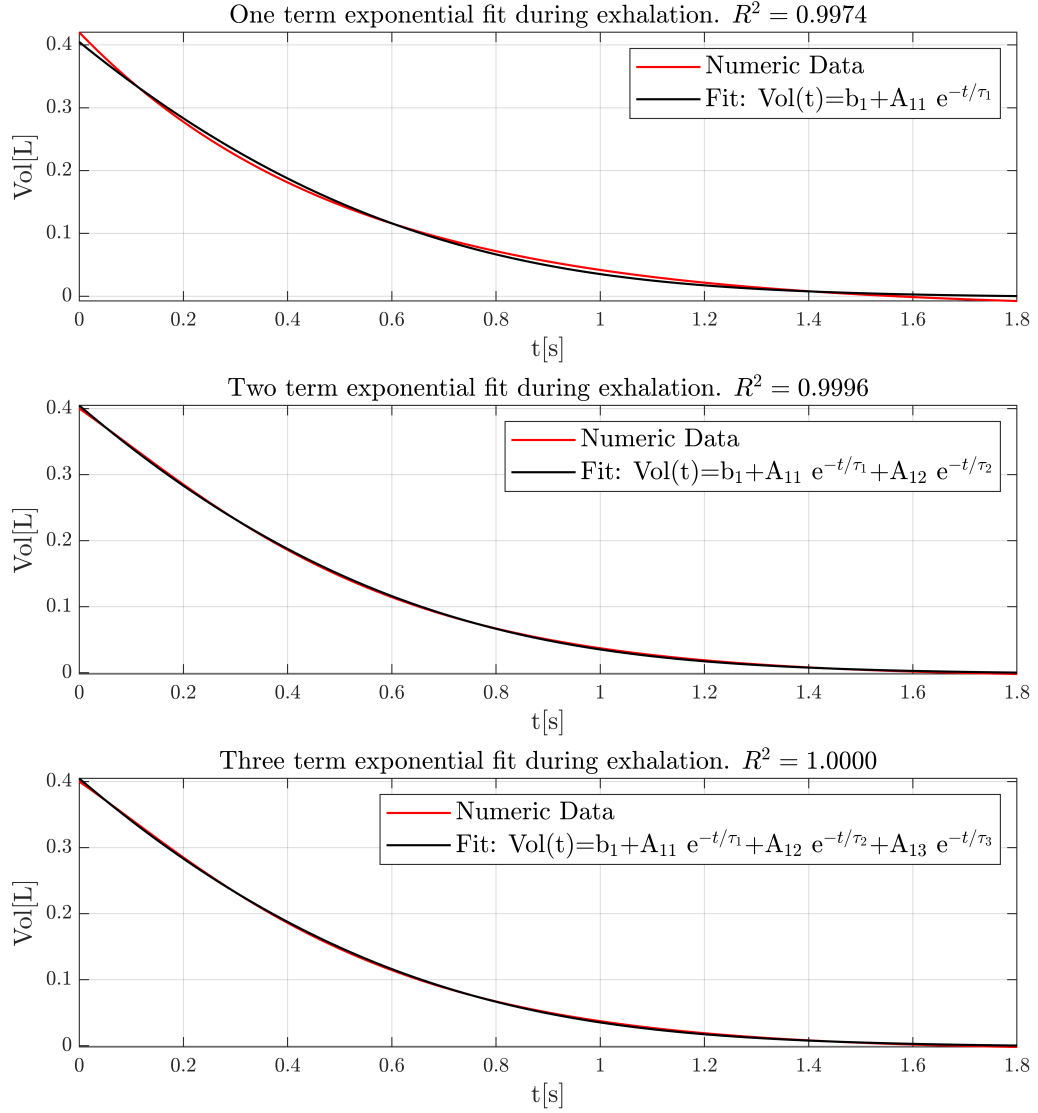


Figure 3: Fitting numerical results with exponential functions, including one, two or three terms

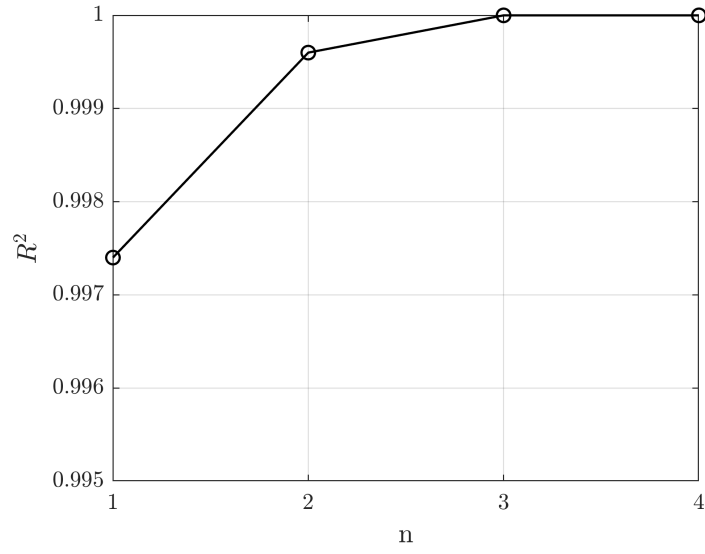


Figure 4: Coefficient of determination R^2 against number of exponential terms.

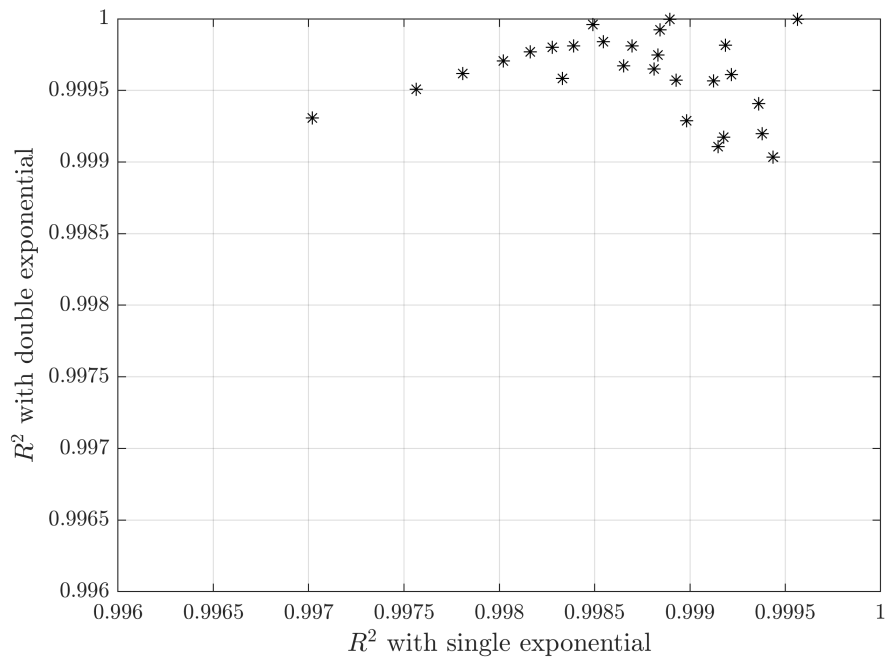


Figure 5: Coefficient of determination comparison between fitting with one term and two term exponential functions.

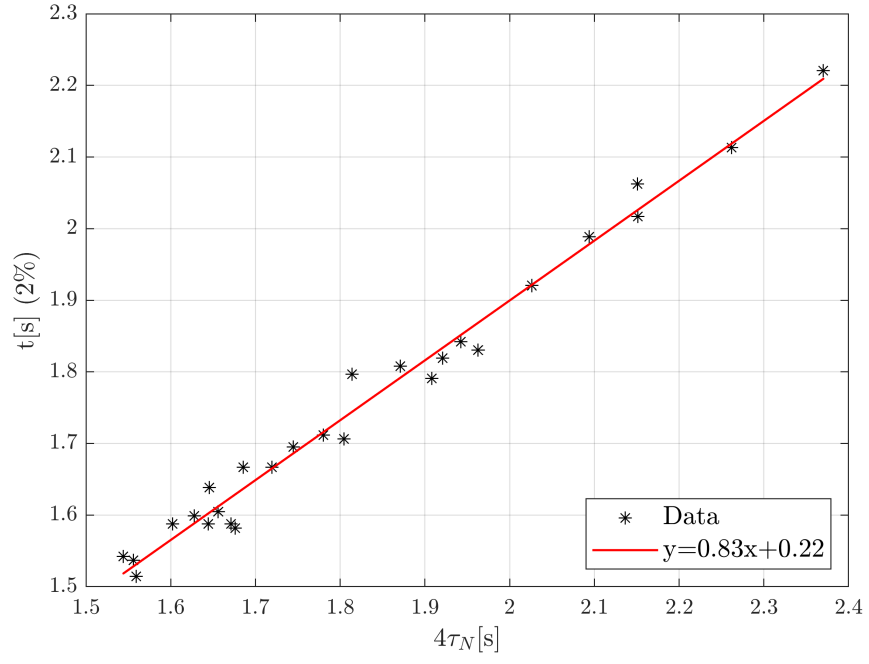


Figure 6: Comparison between the exhalatory characteristic times using the 2% criteria with two term exponential function and the 4τ using only one term exponential function.