## **Accepted Manuscript**

A Virtual Patient Model for Mechanical Ventilation

S.E. Morton, J. Dickson, J.G. Chase, P. Docherty, T. Desaive, S.L. Howe, G.M. Shaw, M. Tawhai

PII: S0169-2607(18)30156-1

DOI: https://doi.org/10.1016/j.cmpb.2018.08.004

Reference: COMM 4765

To appear in: Computer Methods and Programs in Biomedicine

Received date: 31 January 2018
Revised date: 24 July 2018
Accepted date: 8 August 2018



Please cite this article as: S.E. Morton, J. Dickson, J.G. Chase, P. Docherty, T. Desaive, S.L. Howe, G.M. Shaw, M. Tawhai, A Virtual Patient Model for Mechanical Ventilation, *Computer Methods and Programs in Biomedicine* (2018), doi: https://doi.org/10.1016/j.cmpb.2018.08.004

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

#### ACCEPTED MANUSCRIPT

### Highlights

- Titrating PEEP to minimum elastance is a lung protective strategy in mechanical ventilation
- Clinical studies have shown excessive PIP can be dangerous
- The ability of this model to predict PIP could reduce the risk of titrating PEEP in VCV
- Development and validation of predictive in-silico models is presented
- Future use in virtual patients could improve clinician confidence and patient safety in delivering care



#### Download English Version:

# https://daneshyari.com/en/article/9952303

Download Persian Version:

https://daneshyari.com/article/9952303

Daneshyari.com