

Appendix 1. Preferred Terms and Symbols

Primary Symbols	
S	Saturation
C	content
F	Fractional concentration
T	Temperature
P	Pressure
V	Volume
Qualifying symbols are denoted by subscripted character; uppercase for values in the lungs and lowercase for values in the blood	
A	Alveolar
I	Inspired
B	Barometric
L	Lung
D	Dead space
T	Tidal
E	Expired
\bar{E}	Mixed expired
a	Arterial
b	Blood
c	Capillary
v	Venous
c'	Pulmonary end-capillary
\bar{v}	Mixed venous
t	Time
Pulmonary Function testing	
D/V_A	
DLCOb	Lung diffusing capacity determined by the single-breath technique
ERV	Expiratory reserve volume
FEF _{25-75%}	Forced expiratory flow over the middle half of the FVC
FEV ₁	Forced expiratory volume in the first second
FEV _t	Forced expiratory volume in the first <i>t</i> seconds
FRC	Functional residual capacity
FVC	Forced vital capacity
IC	Inspiratory capacity
IRV	Inspiratory reserve volume
IVC	Inspiratory vital capacity
MVV	Maximal voluntary ventilation
PEF	Peak expiratory flow
RV	Residual volume
RV/TLC%	Residual volume expressed as percent of TLC
TGV	thoracic gas volume

TLC	Total lung capacity
V_A	Alveolar gas volume
VC	Vital capacity
Ventilation	
f	Breathing frequency
V_T	Tidal volume
\dot{V}_A	Alveolar ventilation
\dot{V}_D	Dead space ventilation
\dot{V}_{CO_2}	Carbon dioxide production
\dot{V}_{O_2}	Oxygen consumption
V/Q	ventilation-perfusion ratio
Pulmonary mechanics	
C	Compliance
E	Elastance
Gaw	Airway conductance
$P_{0.1}$	Airway occlusion pressure at 0.1 s
P_A	Alveolar pressure
P_{aw}	Pressure in the airway
\bar{P}_{aw}	Mean pressure
$P_{E_{max}}$	Maximal expiratory pressure
P_{es}	Esophageal pressure
$P_{I_{max}}$	Maximal inspiratory pressure
PIP	Peak inspiratory pressure
P_L	Transpulmonary pressure
P_{pl}	Intrapleural pressure
P_{plat}	Plateau pressure
R	Resistance
R_{aw}	Airway resistance
R_E	Expiratory resistance
R_I	Inspiratory resistance
sGaw	Specific airway conductance
WOB	Work of breathing
Blood gases	
\bar{P}	Mean pressure
P_{O_2}	Partial pressure of oxygen
P_{aO_2}	Arterial partial pressure of oxygen
P_{AO_2}	Alveolar partial pressure of oxygen
P_{aCO_2}	Arterial partial pressure of carbon dioxide
P_{ACO_2}	Alveolar partial pressure of carbon dioxide
P_{ETCO_2}	End-tidal partial pressure of carbon dioxide

$P_{\bar{E}CO_2}$	Mixed exhaled partial pressure of carbon dioxide
$P_{\bar{v}CO_2}$	Mixed venous partial pressure of oxygen
P_{tcO_2}	tcPO2 transcutaneous partial pressure of oxygen
P_{tcCO_2}	tcPO2 transcutaneous partial pressure of carbon dioxide
$P(A-a)O_2$	Alveolar-arterial PO_2 difference
$P(a/A)O_2$	Arterial to alveolar PO_2 ratio
C_{aO_2}	Arterial oxygen content
$C_{\bar{v}CO_2}$	Mixed venous oxygen content
$C_c'O_2$	Pulmonary capillary oxygen content
S_{aO_2}	Arterial oxygen saturation
S_{pO_2}	Oxygen saturation as measured by pulse oximetry
$S_{\bar{v}CO_2}$	Mixed venous oxygen saturation
$C(a - \bar{v})O_2$	Arterial-venous oxygen content difference
pH	
\dot{Q}	Blood flow
\dot{Q}_T	Cardiac output
Q	Blood volume
\dot{Q}_S/\dot{Q}_T	Shunt fraction
R	Respiratory quotient
Ventilator Nomenclature	
APRV	Airway pressure release ventilation
AVAPS	Average volume assured pressure support
CMV	Continuous mandatory ventilation (rather than assist-control)
CPAP	Continuous positive airway pressure
EPAP	Expiratory positive airway pressure
F_{IO_2}	Fraction of inspired oxygen (expressed as a fraction, not percent)
HFJV	High frequency jet ventilation
HFOV	High frequency oscillatory ventilation
I:E	Inspiratory time to expiratory time ratio
IPAP	Inspiratory positive airway pressure
NAVA	Neurally adjusted ventilatory assist
NIV	Noninvasive ventilation (rather than NPPV)
PAV	Proportional assist ventilation
PC-CMV	Pressure-control continuous mandatory ventilation (rather than pressure assist-control)
PC-IMV	Pressure-control intermittent mandatory ventilation
PCIRV	Pressure control inverse ration ventilation
PEEP	Positive end-expiratory pressure
PRVC	Pressure regulated volume control
PSV	Pressure support ventilation
T_E	Expiratory time
T_I	Inspiratory time

VC-CMV	Volume-control continuous mandatory ventilation (preferred rather than volume assist-control)
VC-IMV	Volume-control intermittent mandatory ventilation
VDR	Volumetric diffusion respiration
VS	Volume support
Other preferred terms	
6MWD	Six-minute walk distance
6MWT	Six-minute walk test
AARC	American Association for Respiratory Care
ABG	Arterial blood gas
ALS	Amyotrophic lateral sclerosis
ARDS	Acute respiratory distress syndrome
ARF	Acute respiratory failure
ATPS	Ambient temperature and pressure saturated
BMI	Body mass index
BPAP	Bilevel positive airway pressure (rather than BiPAP)
BTPS	Body temperature and pressure saturated
CCI	Chronic critical illness
CDC	Centers for Disease and Prevention
CF	Cystic fibrosis
CI	Confidence interval
CMS	Centers for Medicare and Medicaid services
CO	Carbon monoxide
COPD	Chronic obstructive pulmonary disease
CPR	Cardiopulmonary resuscitation
CPT	Chest physical therapy
CT	Computed tomography
DNR	Do not resuscitate
DPI	Dry powder inhaler
EAdi	Electrical activity of the diaphragm
EBUS	Endobronchial ultrasound
ECLS	Extracorporeal life support
ECMO	Extracorporeal membrane oxygenation
EIB	Exercise-induced bronchospasm
FDA	US Food and Drug Administration
HFNC	High flow nasal cannula
HME	Heat and moisture exchanger
HMEF	Heat and moisture exchanging filter
HRCT	High resolution computed tomography
Hz	Hertz
IBW	Ideal body weight
IBW	Ideal body weight
ICP	Intracranial pressure
ICU	Intensive care unit

ICU	Intensive care unit
ILD	Interstitial lung disease
IQR	Interquartile range
MDI	Metered dose inhaler
MRI	Magnetic resonance imaging
NG	Nasogastric (tube)
NIH	National Institutes of Health
NO	Nitric oxide
OSA	Obstructive sleep apnea
PAP	Positive airway pressure
PEP	Positive expiratory pressure
PFT	Pulmonary function test or testing
PMV	Prolonged mechanical ventilation
PSG	Polysomnography
r	Correlation coefficient
RSBI	Rapid shallow breathing index
RT	Respiratory therapist
SBT	Spontaneous breathing trial
SD	Standard deviation
SE	Standard error
STPD	Standard temperature and pressure dry
TBLB	Transbronchial lung biopsy
TBNA	Transbronchial needle aspiration
VA	Veterans Administration
VAE	Ventilator-associated event
VAC	Ventilator-associated condition
VAP	Ventilator-associated pneumonia
VILI	Ventilator induced lung injury