

REPORT OF WORKING GROUP / ERS-ATS STATEMENT

Respiratory function measurements in infants: Symbols, abbreviations and units

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Introduction

Communication about infant lung function testing, as in any other field of science and medicine, requires the use of symbols, abbreviations, units, prefixes and suffixes. These should be unambiguous, and this is achieved by rigorous standardization by international scientific and medical bodies, and by governments. The present recommendations derive from the report of the European Community for Steel and Coal and the European Respiratory Society [1]. However, the list of abbreviations has been modified and extended by the joint ATS/ERS Working Party on "Infant Pulmonary Function Testing" to be appropriate for the field of infant lung function testing.

International system of units

The International System of Units (SI units), which has superseded previous systems of units, offers the great advantage that it is a coherent system. Hence, any relationship between units based on products and quotients of physical quantities does not require scaling factors.

Measurements are described in terms of a quantity. Quantities are characterized by their name, a symbol for the name, a name for the associated unit, and a symbol for that unit. Thus, for body weight the SI quantity is mass, symbol m , unit name and symbol kilogram and kg, respectively. A fifth quality is dimension, which

does not have bearing on the present text and is, therefore, not discussed.

SI base units pertinent to infant lung function testing are listed in table 1. Other units derive from these; a selection relevant to respiratory physiology is listed in table 2. For practical purposes, some non-SI units which are widely applied in everyday life have been retained for general use with the SI; relevant ones are listed in table 3.

The SI base units give rise to the unit for volume being m^3 , that for flow $m^3 \cdot s^{-1}$, and for pressure Pa. The former two units are cumbersome in daily practice, as both lung volumes and ventilatory flows are only small fractions of the units given; conversely, the pascal is

Table 1. — SI base units

| Name of quantity | Name of unit | Symbol for unit |
|---------------------------|--------------|-----------------|
| Length | metre | m |
| Mass | kilogram | kg |
| Time | second | s |
| Thermodynamic temperature | kelvin | K |
| Amount of substance | mole | mol |

Table 2. — Selected SI derived units

| Name of quantity | Name of unit | Symbol for unit | Definition of unit |
|---------------------|----------------|-----------------|----------------------------------|
| Frequency | hertz | Hz | s^{-1} |
| Force | newton | N | $m \cdot kg \cdot s^{-2}$ |
| Pressure | pascal | Pa | $N \cdot m^{-2}$ |
| Energy, work | joule | J | $N \cdot m$ |
| Power | watt | W | $J \cdot s^{-1}$ |
| Celsius temperature | degree Celsius | °C | * |
| Dynamic viscosity | poise | P | $10^{-1} \cdot Pa \cdot s$ |
| Kinematic viscosity | stokes | St | $10^{-4} \cdot m^2 \cdot s^{-1}$ |

*: Celsius temperature (t) is defined as the difference $t = T - T_0$ between the thermodynamic temperatures T and $T_0 = 273.15$ kelvin.

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Table 3. — Selected non-SI units retained

| Name of quantity | Name of unit | Symbol for unit | Definition of unit |
|------------------|-----------------------|-----------------|-----------------------|
| Time | minute | min | 60 s |
| | hour | h | 3600 s |
| | day | d | 86400 s |
| | year | a | 365 d |
| Volume | litre | L | 10^{-3} m^3 |
| Blood pressure | millimetre of mercury | mmHg | 133.322 Pa |

Table 4. — Selected SI prefixes

| Factor | Prefix | Symbol |
|-----------|--------|--------|
| 10^6 | mega | M |
| 10^3 | kilo | k |
| 10^2 | hecto | h |
| 10^1 | deca | da |
| 10^{-1} | deci | d |
| 10^{-2} | centi | c |
| 10^{-3} | milli | m |
| 10^{-6} | micro | μ |
| 10^{-9} | nano | n |

only a small fraction of pressures normally encountered. On that account, the litre and the kilopascal have been adopted as basic units in respiratory physiology. Furthermore, in respiratory physiology and medicine, the SI base units are extended with SI derived units (table 2) and SI prefixes (table 4).

Symbols

Symbols for quantities

Symbols are used to designate specific quantities, including basic quantities (*e.g.* volume, time, pressure, amount of chemical substance) and derived quantities (*e.g.* volume by unit time or flow). Letters from the Latin or Greek alphabet are commonly employed as symbols, either roman type as in the USA or italics as recommended by the European Respiratory Society and the European Community for Steel and Coal [1]. As the number of letters available is limited, inevitably one symbol may be used to designate more than one quantity (*e.g.* Celsius temperature and time are both denoted by *t*).

Table 5. — Examples of notations of commonly used indices of pulmonary function

| | |
|-------------------|---|
| Compliance | CL ; C_w ; C_{rs} ; CL_{dyn} ; $C_{rs,st}$; $C_{rs,MOT}$ |
| Resistance | R_{aw} ; RL ; R_{rs} ; $R_{aw,E}$; RL,I ; $R_{rs,int}$ |
| Lung volumes | FRC_{pleth} ; FRC_{He} ; FRC_{N_2} |
| Volumes and flows | VT ; $V_{ds,app}$; V' ; $V'_{max,FRC}$ |
| Pressures | PA ; P_m ; P_{ao} ; P_{a,CO_2} ; P_{t,CO_2} ; $P_{L,ti,vis}$; $P(A-a)_O_2$ |
| Timing | t_I ; t_E ; t_{tot} ; t_{PTEF}/t_E |

Symbols for quantities may be specified by one or more subscripts and/or prescripts (abbreviations) and/or modifying signs (dashes, dots, primes), for example $\Delta V'$. Subscripts other than numbers are printed in roman small capitals or lower case letters. The order of specification is location (where), time (when), condition or quality (what, how). Specifications are printed either in line with the primary symbol, when they are preferably printed in smaller font size, or as subscripts. When more than one subscript is used, these are separated by a comma. Examples include $P_{L,ti,vis}$ ($P_{L,ti,vis}$) for pressure in the lung (where) to overcome tissue viscous (what) resistance; and $F_{sp,1,He}$ ($F_{sp,1,He}$) for fractional concentration of helium (what) measured in the spirometer (where) at time 1. Further examples of the notation of commonly used indices are given in table 5.

Symbols for units

Symbols for SI and non-SI units are roman lower case letters (*e.g.* m for metre), unless the name of the unit is derived from a proper name, in which case it consists of a capital roman letter (*e.g.* K for kelvin), or a capital roman and a lower case letter (*e.g.* Pa for pascal); the exception is ohm (Ω). Prefixes are used to modify symbols for units and are single roman capitals or lower case letters (except deca, da). Selected SI prefixed are listed in table 4.

Practical amendments

It is recommended that time be reported in seconds for quantities which relate to instantaneous events; time averaged quantities should be reported in units which are appropriate to the length of time over which they are obtained (*e.g.* seconds, minutes, hours). For special purposes, the units day (day), month (m) and year (a) may be used.

Volume of gas is usually expressed in LBTPS. Note that, in this case, the subscript refers to the unit. In a previous recommendation [1] the symbol for litre when not associated with prefixes was printed in italics, as the distinction between 1 (one) and l (for litre) with most fonts was often too subtle. The Working Party considers that the capital L is more practical; thus, the notation is L for litre and mL for millilitre. Note that the basic unit is the litre, but that for infant lung function testing it is sometimes practical to express results in millilitre. Similarly, whilst the basic unit for the amount of gas is the mole, it is more practical to express results in mmol. In the same vein, the unit of length is the metre, but obviously *e.g.* crown-heel length may be reported as cm. In the case of resistance, it is practical to adhere to the set of coherent basic units. Thus, when expressing volume in L, flow in $L \cdot s^{-1}$, one avoids cumbersome figures when converting to conductance, specific conductance and specific resistance.

For the partial or total pressure of gas, the basic unit in respiratory physiology is kPa; however, for blood pressure the mmHg is temporarily permitted.

Table 6. — Conversion factors

| Quantity | Traditional unit | SI unit |
|--------------------------------|---|--|
| Compliance | 1 L·cmH ₂ O ⁻¹ | 10.2 L·kPa ⁻¹ |
| Conductance | 1 L·s ⁻¹ ·cmH ₂ O ⁻¹ | 10.2 L·s ⁻¹ ·kPa ⁻¹ |
| Elastance | 1 cmH ₂ O·L ⁻¹ | 0.098 kPa·L ⁻¹ |
| Gas concentration [§] | 1 mL·100 mL ⁻¹ | 0.45 mmol·L ⁻¹ |
| Gas flow [§] | 1 mL·min ⁻¹ | 0.045 mmol·min ⁻¹ |
| Pressure | 1 cmH ₂ O | 0.098 kPa |
| | 1 mmHg | 0.133 kPa |
| Resistance | 1 cmH ₂ O·L ⁻¹ ·s | 0.098 kPa·L ⁻¹ ·s |
| Transfer factor [§] | 1 mL·min ⁻¹ ·mmHg ⁻¹ | 0.335 mol·min ⁻¹ ·kPa ⁻¹ |
| ca-v _{O₂} | 1 mL·100 mL ⁻¹ | 0.45 mmol·L ⁻¹ |
| Hb concentration | 1 g·100 mL ⁻¹ | 0.616 mmol·L ⁻¹ |

§: the volume of 1 mole at STPD \cong 22.4 litre. Thus, an oxygen consumption of 20 mL·min⁻¹ comes to 0.9 mmol·min⁻¹, an oxygen concentration of 20% to 9 mmol·L⁻¹.

Special notations and mathematical operations

| | |
|---------------------|---|
| \bar{X} | mean value of X |
| X' | time derivative of X (e.g. V' for instantaneous flow) |
| X'' | second time derivative of X (e.g. V'' for volume acceleration) |
| \bar{X}' | time averaged value of X' (units of time to be specified) (e.g. \bar{V}'_E in L·min ⁻¹ for minute ventilation) |
| ΔX_A | change of X for specification A, e.g. $\Delta Pa_{a,O_2}$ |
| X _{A-B} | difference between X-values for specifications A and B, e.g. PA_{A-O_2} |
| X _{A,B} | different specifications of X are separated by a comma |
| %X | X as a percentage of the reference value |
| X%Y | X as a percentage of Y |
| X/Y | division is indicated by a solidus (stroke) |
| X·Y | multiplication is indicated by a raised dot |
| X·Y·Z ⁻¹ | } examples of mathematical notations |
| X·Y/Z | |
| (X·Y) ⁻¹ | |

The working party recommends X' for the instantaneous time derivative and \bar{X}' for the averaged time derivative, as these can be easily handled by word processors. For the same reason, the second time derivative of X is indicated by X''. Where it is typographically impractical to indicate that one is dealing with an averaged time derivative, X' is permitted.

The notation X/Y is allowed, except with complex notations. More than one solidus should never be used in a notation, because it is ambiguous. For example A/B/C can be interpreted either as A·B⁻¹·C⁻¹, when it had better been written as A/(B·C) or A·C·B⁻¹, when it would have been unambiguous when written as A/(B/C).

Conversion of units

Table 6 lists some of commonly used traditional and SI units, and conversion factors to transform from the traditional to the new units.

Abbreviations

Abbreviations are employed to facilitate written and spoken communication and are commonly specific to individual languages. However, there is a tendency for many abbreviations to be adopted worldwide; they are also used in mathematical formulae and equations. Such abbreviations have acquired the attributes of symbols. Commonly accepted standard abbreviations for quantities are usually written in one or more capital letters (thus, lung capacities and their subdivisions are denoted by TLC, RV, FRC, etc.), but there are many exceptions (e.g. Hb, cAMP, coA, ATPase). The abbreviations can be specified by one or more subscripts and/or modifying signs (dashes, dots, primes). Subscripts are numbers or letters printed in roman small capital or small lower case type, e.g. FEV₁.

The following tables contain abbreviations, symbols and units for commonly used lung function indices. Gas volumes are at BTPS, unless otherwise indicated. Qualifying abbreviations are usually one or more roman lower case letters. However, for several qualifications, capital letters are (also) accepted.

The symbol for time is *t*, hence the working group wishes to discourage the use of *e.g.* T_e, T_i, T_E, T_I and recommends the use of *t_E* and *t_I* instead.

Flow describes the rate of change of volume (volume rate), and flow rate is, therefore, equivalent to volume acceleration. Hence, flow rather than flow rate should be used to denote the rate of change of volume.

Functional residual capacity (FRC) is by definition the volume of gas remaining in the lung at end expiration, irrespective of the determinants of the FRC. In healthy adults and normal children, the FRC at rest usually coincides with the elastic equilibrium volume (EEV), *i.e.* the volume at which the outward recoil of chest wall balances the inward recoil of the lungs, so that net recoil pressure is zero. This is confusingly referred to as "passive FRC". In infants and those with lung disease, the lung volume at end expiration may be maintained above EEV, and this is often referred to as "dynamic FRC". The correct term for end expiratory volume in either circumstance is FRC.

The thoracic gas volume is the volume of gas in the thorax at any point in time and any level of alveolar pressure. It is usually measured by whole body plethysmography; in patients with obstructive lung disease it may give appreciably higher results than gas dilution methods. Therefore, lung volumes thus assessed are commonly denoted by TGV. As TGV may be determined at any level of lung inflation, the level should be specified. Thus, TGV is too unspecific, and it is suggested that its use be abandoned, but that the measurement method is denoted in a subscript. Thus, the FRC measured by whole body plethysmography, helium or nitrogen dilution method is denoted as FRC_{pleth}, FRC_{He} and FRC_{N₂}, respectively. This applies, similarly, to other lung volumes.

Specific compliance is frequently used in adult respiratory pathophysiology, when it is the ratio of static lung compliance and lung volume. In fact, the term volumic

| Abbreviation Symbol | Description - Quantity - Unit | | | | |
|------------------------|--|--|---|---|---|
| | English | Français | Deutsch | Nederlands | Dansk |
| A, alv | alveolar | alvéolaire | alveolär | alveolair | alveolær |
| A | age:yr | âge: années | Alter: Jahre | leeftijd: jaar | alder: år |
| A | area: m ² | surface: m ² | Fläche: m ² | oppervlak: m ² | overflade: m ² |
| a | arterial | artériel | arterieell | arterieel | arteriel |
| ab | absolute | absolu | absolut | absoluut | absolut |
| an | anatomic | anatomique | anatomisch | anatomisch | anatomisk |
| ao | airway opening | orifice des voies aériennes | Atemwegsöffnung | luchtwegopening | luftvejsmunding (mund og næse- åbning) |
| app | apparatus | appareillage | Gerät | apparaat | apparat |
| AS | active sleep | sommeil paradoxal | aktiver Schlaf (REM-Schlaf) | actieve (REM-) slaap | aktiv søvn |
| ATP | ambient tempera- ture and baromet- ric pressure | température et pression baromé- trique ambiantes | Umgebungs- Temperatur und Barometerdruck | omgevingstempe- ratuur en barome- trische druk | omgivende tempe- ratur og barometer- tryk |
| ATPD | ambient tempera- ture and baromet- ric pressure, dry | température et pression baromé- trique ambiantes, du gaz sec | Umgebungs-Tempe- ratur und Barometer- druck, trocken | omgevingstempe- ratuur en barome- trische druk, droog | omgivende tempe- ratur og barometer- tryk, tør |
| ATPS | ambient temperatu- re and barometric pressure, saturated with water vapour under these condi- tions | température et pression baromé- trique ambiantes, du gaz saturé en vapeur d'eau dans ces conditions | Umgebungs-Tempe- ratur und Barometer- druck 100% Wasserdampf, Sättigung | omgevingstempe- ratuur en barome- trische druk en verzadigd met waterdamp bij die omstandigheden | omgivende tempe- ratur og barometer- tryk, mættet med vanddamp |
| aw | airway | voies aériennes | Atemweg | luchtweg | luftvej |
| B, b | barometric | barométrique | barometrisch | barometrisch | barometer |
| BM, W | body mass: kg (see also W) | poids du corps: kg (voyez aussi W) | Körpergewicht: kg (siehe auch W) | lichaamsgewicht: kg (zie ook W) | legemsmasse: kg (se også W) |
| BMI | body mass index: body mass/stature ² | index de poids corporel: poids/taille ² | Körpergewichts- index: Gewicht/Länge ² | Quetelet index: gewicht/lenge ² | legemsmasse- indeks: vægt/højde ² |
| BMR | basal metabolic rate: kJ·min ⁻¹ | métabolisme de base: kJ·min ⁻¹ | Grundumsatz: kJ·min ⁻¹ | basaal metabo- lisme: kJ·min ⁻¹ | basalstofskifte: kJ·min ⁻¹ |
| br | bronchial | bronchique | bronchial | bronchiaal | bronkial |
| bs | body surface | surface du corps | Körperoberfläche | lichaamsoppervlak | legemsoverflade |
| BSA | body surface area: m ² | surface corporelle: m ² | Körperoberfläche: m ² | lichaamsoppervlak: m ² | legemsoverflade: m ² |
| BTPS | body temperature, barometric pressure and satu- rated with water vapour under these conditions | température du corps, pression barométrique, du gaz saturé en vapeur d'eau dans ces conditions | Körper-Temperatur, Barometerdruck und 100% Wasserdampf Sättigung | lichaamstempera- tuur en druk, ver- zadigd met water- damp bij deze om- standigheden | legemstemperatur, rådende barometer- tryk og mættet vanddamp |
| C | compliance: L·kPa ⁻¹ | compliance: L·kPa ⁻¹ | Compliance: L·kPa ⁻¹ | compliantie: L·kPa ⁻¹ | compliance ("efter- givelighed"): L·kPa ⁻¹ |
| CL/VL (sCL) | volumic (specific) compliance of the lung: kPa ⁻¹ | compliance spéci- fique du poumon: kPa ⁻¹ | Volums bezogene (spezifische) Compliance: kPa ⁻¹ | volumieke (speci- fieke) compliantie van de long: kPa ⁻¹ | volumetrisk (spe- cifisk) compliance: kPa ⁻¹ |
| CL _{dyn} | dynamic compliance of the lung: L·kPa ⁻¹ | compliance pulmonaire dynamique: L·kPa ⁻¹ | dynamische Lungencompliance: L·kPa ⁻¹ | dynamische compliantie van de long: L·kPa ⁻¹ | lungernes dyna- miske compliance: L·kPa ⁻¹ |
| ca | convective acceleration: L·s ⁻² | accélération convective: L·s ⁻² | konvektive Be- schleunigung: L·s ⁻² | convectieve acceleratie: L·s ⁻² | konvektiv acceleration: L·s ⁻² |
| C.O. | cardiac output: L·min ⁻¹ (see also <i>Q'</i>) | débit cardiaque: L·min ⁻¹ (voyez aussi <i>Q'</i>) | Herzzeitvolumen: L·min ⁻¹ (siehe auch <i>Q'</i>) | hartdebit: L·min ⁻¹ (zie ook <i>Q'</i>) | hjerterets minut- volumen: L·min ⁻¹ <i>Q'</i>) |
| d, ds | dead space | espace mort | Totraum | dode ruimte | det skadelige rum |
| di | diaphragm | diaphragme | Zwerchfell | diafragma | diafragma |

| Abbreviation Symbol | Description - Quantity - Unit | | | | |
|--|---|--|---|--|--|
| Italiano | Español | Português | Ελληνικά | Swedish | Japanese |
| alveolare età: anni area: m ² arterioso assoluto anatomico apertura delle vie aeree | alveolar edad: años aérea: m ² arterial absoluto anatômico abertura de la vía aérea | alveolar idade: anos área: m ² arterial absoluto anatômico abertura da(s) via(s) aérea(s) | κυψελιδικός ηλικία: έτη αρτηριακός απόλυτος ανατομικός στόμιο των αεραγωγών | alveolär ålder: år yta: m ² arteriell absolut anatomisk luftvägsmynning | 肺胞 年齢 (歳) 面積 : m ² 動脈 絶対 解剖学的 気道解放 |
| apparato sonno attivo (REM) | aparato sueño en fase REM | aparelho sono activo | συσκευή ενεργός ύπνος (REM) | apparat aktiv sömn | 装置 レム睡眠 |
| temperatura e pres- sione barometrica ambientali temperatura e pres- sione barometrica ambientali, secco | temperatura y presión barométrica ambientales temperatura y presión barométrica ambientales, sin humedad | temperatura e pressão barométrica ambientes temperatura e pressão barométrica ambientes, seco | θερμοκρασία και βαρομετρική πίεση περιβάλλοντος θερμοκρασία και βαρομετρική πίεση | omgivningens temperatur och lufttryck omgivningens temperatur och lufttryck utan vattenånga | ATP の状態 ATPD の状態 |
| temperatura e pres- sione barometrica ambientali in condi- zioni di saturazione di vapore acqueo | temperatura y presión ambientales con saturación de vapor de agua en estas condiciones | temperatura e pressão barométrica ambientes em condições de saturação de vapor de água | θερμοκρασία και βαρομετρική πίεση περιβάλλοντος και κορεσμός με υδρατμούς για τις παραπάνω συνθήκες αεραγωγός | omgivningens temperatur och lufttryck, mättad med vattenånga under dessa betingelser luftväg | ATPS の状態 |
| via aeree | vía aérea | via(s) aérea(s) | αεραγωγός | luftväg | 気道 |
| barometrico peso corporeo: kg (vedere anche W) indice di massa corporea: massa corporea/statura ² metabolismo basale: kJ·min ⁻¹ bronchiale superficie corporea area dalla superficie corporea: m ² temperatura corporea pressione barome- trica ambientale in condizioni di satura- zione di vapore acqueo | barométrico masa corporal: kg (ver también W) índice de masa corporal: masa corporal/talla ² metabolismo basal: kJ·min ⁻¹ bronquial superficie del cuerpo áera corporal: m ² temperatura corporal, presión barométrica y saturación de vapor de agua en estas condiciones | barométrico peso, massa corporal: kg (ver também W) índice de massa corporal: massa cor- poral/altura ² metabolismo basal: kJ·min ⁻¹ brônquico superficie corporal área de superficie corporal: m ² temperatura corporal, pressão barométrica, em condições de saturação de vapor de água | βαρομετρικός μάζα σώματος : kg (βλέπε επίσης W) δείκτης σωματικής μάζας (σωματική μάζα/υψος ²) βασικός μεταβολι- σμός: kJ·min ⁻¹ βρογχικός επιφάνεια σώματος εμβαδόν επιφάνειας σώματος: m ² θερμοκρασία σώματος βαρομετρική πίεση και κορεσμός με υδρα- τμούς στις παραπάνω συνθήκες | barometrisk kroppsmassa: kg (se även W) kroppsmasseindex: kroppsmassa/längd ² basalmetabolism: kJ·min ⁻¹ bronkiell kroppsyta kroppsyta: m ² kroppstemperatur, lufttryck och mät- tad med vattenånga under dessa betingelser | 気圧 基礎代謝率: kJ·min ⁻¹ 気管支の 体表面 体表面積 : m ² BTPS の状態 |
| compliance: L·kPa ⁻¹ | compliance: L·kPa ⁻¹ | compliance: L·kPa ⁻¹ | ενδοτικότητα: L·kPa ⁻¹ | compliance: L·kPa ⁻¹ | コンプライアンス: L·kPa ⁻¹ |
| compliance polmonare specifica: kPa ⁻¹ | compliance específica del pulmón: kPa ⁻¹ | compliance específica do pulmão: kPa ⁻¹ | δική ενδοτικότητα του πνεύμονα ως προς τον όγκο: kPa ⁻¹ | volymrelaterad (specifik) lung- compliance: kPa ⁻¹ | (特異的) 肺コンプライアンス: kPa ⁻¹ |
| compliance dinamica del polmone: L·kPa ⁻¹ | compliance dinámica del pulmón: L·kPa ⁻¹ | compliance dinâmica do pulmão: L·kPa ⁻¹ | δυναμική ενδοτικότητα του πνεύμονα | dynamisk lung- compliance | 動的肺コ ンプライアンス |
| accelerazione convettiva: L·s ⁻² portata cardiaca: L·min ⁻¹ (vedere anche Q') | aceleración convectiva: L·s ⁻² débito cardíaco: L·min ⁻¹ (ver también Q') | aceleração convectiva: L·s ⁻² débito cardíaco: L·min ⁻¹ (ver também Q') | επαγωγική επιτάχυνση: L·s ⁻² παροχή L·min ⁻¹ (βλέπε επίσης Q') | konvektiv acceleration: L·s ⁻² hjärtminutvolym: L·min ⁻¹ (se även Q') | 心拍出量: L·min ⁻¹ |
| spazio morto diaframma | espacio muerto diafragma | espaço morto diafragma | νεκρός χώρος διάφραγμα | skadligt rum diafragma | 死腔 横隔膜 |

Abbreviation
Symbol

Description - Quantity - Unit

| | English | Français | Deutsch | Nederlands | Dansk |
|--|---|---|---|--|--|
| ds | downstream | aval | strömabwärts | stroomafwaarts | nedstrøms |
| dyn | dynamic | dynamique | dynamisch | dynamisch | dynamisk |
| <i>E</i> | elastance: kPa·L ⁻¹ | élastance: kPa·L ⁻¹ | Elastizität kPa·L ⁻¹ | elastantie: kPa·L ⁻¹ | elastans: kPa·L ⁻¹ |
| E, exp | expiratory | expiratoire | exspiratorisch | expiratoir | eksspiratorisk |
| EEL | end expiratory level: L | position de fin d'expiration: L | endexpiratorisches Niveau: L | eind-expiratoir niveau: L | slut expiratorisk niveau: L |
| ΔEEL | difference between EEL and EEV: L | différence de volume EEL et EEV: L | Differenz zwischen EER und EEV: L | verschil tussen EEL en EEV: L | forskel mellem EEL og EEV: L |
| EEV | elastic equilibrium volume: L | volume d'équilibre élastique: L | Volumen am elasti- schen Equilibrium: L | volume bij elastisch evenwicht: L | volumen ved elas- tisk ligevægt: L |
| el | elastic | élastique | elastisch | elastisch | elastisk |
| es, oes | oesophageal | oesophagien | oesophageal | oesofagus | oesofague |
| F | female | féminin | weiblich | vrouw | kvindelig |
| f | functional, frequency | fonctionnel, fréquence | funktionell, Frequenz | functioneel, frequentie | funktionel, frekvens |
| <i>F</i> | force: N | force: N | Kraft: N | kracht: N | kraft: N |
| <i>f</i> | frequency: s ⁻¹ , min ⁻¹ | fréquence: s ⁻¹ , min ⁻¹ | Frequenz: s ⁻¹ , min ⁻¹ | frequentie: s ⁻¹ , min ⁻¹ | frekvens: s ⁻¹ , min ⁻¹ |
| <i>f</i> _c | cardiac frequency: min ⁻¹ , s ⁻¹ | fréquence cardiaque: min ⁻¹ , s ⁻¹ | Herzfrequenz: min ⁻¹ , s ⁻¹ | hartfrequentie: min ⁻¹ , s ⁻¹ | puls, hjertefrekvens: min ⁻¹ , s ⁻¹ |
| <i>F</i> _i | fractional concen- tration of compo- nent i | fraction d'un composant i | fraktionelle Kon- zentration der Komponente i | fractionele concen- tratie van substan- tie i | koncentration af komponent i: fraktion |
| <i>f</i> _R | respiratory frequen- cy: min ⁻¹ , s ⁻¹ (see also RR) | fréquence respira- toire: min ⁻¹ , s ⁻¹ (voyez aussi RR) | Atemfrequenz: min ⁻¹ , s ⁻¹ (siehe auch RR) | ademhalingsfre- quentie: min ⁻¹ , s ⁻¹ (zie ook RR) | respirationsfre- kvens: min ⁻¹ , s ⁻¹ (se også RR) |
| FEF _{25-75%} | forced mid-expiratory flow: L·s ⁻¹ | débit expiratoire maximal médian: L·s ⁻¹ | maximaler mittlerer exspiratorischer Fluß: L·s ⁻¹ | geforceerde mid- expiratoire stroom: L·s ⁻¹ | forceret midteksspi- ratorisk volumen- strøm: L·s ⁻¹ |
| FEV _t | forced expiratory volume in <i>t</i> seconds: L | volume expiratoire forcé en <i>t</i> secondes: L | forciertes expira- torisches Volumen in <i>t</i> Sekunden: L | geforceerd expira- toir volume in <i>t</i> seconden: L | forceret eksspirato- risk volumen i <i>t</i> sekunder: L |
| FEV _t %VC | FEV _t as a percen- tage of the vital capacity (to be specified) | FEV _t en pourcen- tage de la capacité vitale (à spécifier) | FEV _t als Prozent der Vitalkapazität (VC muss spezifi- ziert werden) | FEV _t als percentage van de vitale capa- citeit (te specificeren) | FEV _t angivet i pro- cent af VC (speci- ficeres) |
| fr | frictional, flow resistive | résistance à l'écoulement | reibungsbefindet, flußbehindernd | wrijving | friktions-, flowmodstands- |
| FRC | functional residual capacity: L (method of measurement to be specified) | capacité résiduelle fonctionnelle: L (méthode de mesure à préciser) | funktionelle Resi- dualkapazität: L (Meßmethode zu definieren) | functionele resi- duele capaciteit: L (specificeer bepa- lingsmethode) | funktionel residual- kapacitet: L (malemetode skal specificeres) |
| FV-curve | flow-volume curve | courbe débit-volume | Fluß-Volumen- Kurve | stroom-volume curve | flow-volumen kurve |
| FVC | forced expiratory vital capacity: L | capacité vitale expiratoire forcée: L | forcierte expirato- rische Vitalkapazi- tät: L | geforceerde expira- toire vitale capaci- teit: L | forceret eksspirato- risk VC: L |
| g | gas | gaz | Gas | gas | gas, luft |
| <i>G</i> | conductance: L·s ⁻¹ ·kPa ⁻¹ | conductance: L·s ⁻¹ ·kPa ⁻¹ | Leitfähigkeit: L·s ⁻¹ ·kPa ⁻¹ | conductantie: L·s ⁻¹ ·kPa ⁻¹ | konduktans: L·s ⁻¹ ·kPa ⁻¹ |
| <i>G</i> _{aw} / <i>V</i> _L (<i>sG</i> _{aw}) | specific (volumic) airway conductance: s ⁻¹ ·kPa ⁻¹ | <i>sG</i> _{va} : conductance spécifique des voies aériennes: s ⁻¹ ·kPa ⁻¹ | spezifische (volums bezogene) Atemwegs-Leit- fähigkeit: s ⁻¹ ·kPa ⁻¹ | specifieke (volu- mieke) conductan- tie van de lucht- wegen: s ⁻¹ ·kPa ⁻¹ | specifik (volumetrisk) luftvejskonduk- tans: s ⁻¹ ·kPa ⁻¹ |
| ga | gastric | gastrique | gastrisch | maag | gastrisk |

| Abbreviation Symbol | Description - Quantity - Unit | | | | |
|--|---|---|--|---|--|
| Italiano | Español | Português | Ελληνικά | Swedish | Japanese |
| a valle dinamico | abajo dinámico | a juzante dinâmico | η προς τα κάτω ροπή δυναμικός | nedströms dynamisk | 下流 動的 |
| elastanza: kPa·L ⁻¹ espiratorio livello di fine espira- zione: L differenza tra EEL e EEV: L volume di equilibrio elastico: L | elastancia: kPa·L ⁻¹ espiratorio nivel de final de espiración: L diferencia entre EEL y EEV: L volumen de equilibrio elástico: L | elastância: kPa·L ⁻¹ expiratório nível de fim de expiração: L diferença entre EEL e EEV: L volume de equilíbrio elástico: L | ελαστικότητα: kPa·L ⁻¹ εκπνευστικός τελοεκπνευστικό επιπεδο: L διάφορα μεταξύ EEL και EEV: L όγκος ελαστικής ισορροπίας | elastans: kPa·L ⁻¹ expiratorisk slutexpiratorisk nivå: L skillnaden mellan EEL och EEV: L elastisk jämvikts- volym: L | エラストانس: kPa·L ⁻¹ 呼気 |
| elastico esofageo | elástico esófago | elástico esofágico | ελαστικός οισοφάγος | elastisk esophageal | 彈性 食道 |
| femmina funzionale, frequenza forza: N frequenza: s ⁻¹ , min ⁻¹ frequenza cardiaca: min ⁻¹ , s ⁻¹ | mujer funcional, frecuencia fuerza: N frecuencia: s ⁻¹ , min ⁻¹ frecuencia cardíaca: min ⁻¹ , s ⁻¹ | feminino funcional, frequência força: N frequência: s ⁻¹ , min ⁻¹ frequência cardíaca: min ⁻¹ , s ⁻¹ | γυναίκα λειτουργικός συχνότητα δύναμη: N συχνότητα: min ⁻¹ , s ⁻¹ καρδιακή συχνότητα: min ⁻¹ , s ⁻¹ | kvinnlig funktionell, frekvens kraft: N frekvens: s ⁻¹ , min ⁻¹ hjärtfrekvens: min ⁻¹ , s ⁻¹ | 女性 機能的 力: N 振動数: s ⁻¹ , min ⁻¹ 心拍数: min ⁻¹ , s ⁻¹ |
| frazione percentuale del componente i | concentración fraccio- nal del componente i | concentração percentual do componente i | κλασματική συγké ντρωση της ουσίας i | fraktionell koncentration av komponenten i | iの濃度 |
| frequenza respira- toria: min ⁻¹ , s ⁻¹ (vedere anche RR) flusso medio espira- torio forzato nel tratto 25–75% della capacità vitale forzata: L·s ⁻¹ volume espiratorio forzato in t secondi: L FEV _t espresso in percentuale della capacità vitale (da specificare) frizionale, di resis- tenza al flusso capacità funzionale residua: L (specifi- care metodo di misura) curva flusso-volume | frecuencia respiratoria: min ⁻¹ , s ⁻¹ (ver también RR) flujo mesoespiratorio forzado: L·s ⁻¹ volumen espiratorio forzado en t segundos: L FEV _t expresado como porcentaje de la capaci- dad vital (debe espifi- carse) rozamiento, resistencia al flujo capacidad residual funcional: L (con indicación del método de medición) curva de flujo- volumen | frequência respiratória: min ⁻¹ , s ⁻¹ (ver também RR) fluxo expiratório forçado, entre os percentis 25 e 75 da curva de capacidade vital forçada: L·s ⁻¹ volume expiratório for- çado em t segundos: L FEV _t em percentagem da capacidade vital (a especificar) friccional, resistente ao fluxo, débito resistivo capacidade residual funcional: L (método de medida a ser especificado) curva fluxo-volume | αυαπνευστική συχ- νότητα: min ⁻¹ , s ⁻¹ (βλέπε επίσης RR) δυναμική μεσο- εκπνευστική ροή: L·s ⁻¹ δυναμικά εκπνεό- μενος όγκος σε t δευτερόλεπτα: L FEV _t εκφραζόμενος επί τοις εκατό της ζωτικής χωρητικότη- τας (να ορίζεται) τριβόδης, αντίσταση ροής λειτουργική υπολειπό- μενη χωρητικότητα: L (μέθοδος μέτρησης να διευκρινίζεται) καμπύλη ροής-όγκου | andningsfrekvens: min ⁻¹ , s ⁻¹ (se även RR) forcerat mittexpi- ratoriskt flöde: L·s ⁻¹ forcerad expiratorisk volym under t sekunder: L FEV _t som procent av vitalkapaciteten (specificeras) friktionsbetingad, flödesresistiv funktionell residual- kapacitet: L (mät- metoden specificeras) flöde-volymkurva | 呼吸数: min ⁻¹ , s ⁻¹ t秒量 t秒率 粘性抵抗 機能的残気量 |
| capacità vitale espira- toria forzata (CVF): L | capacidad vital espira- toria forzada: L | capacidade vital expira- tória forçada: L | δυναμική εκπνευ- στική ζωτική χωρητικότητα: L | forcerad expira- torisk vitalkapacitet: L | 努力肺活量: L |
| gas conduttanza: L·s ⁻¹ ·kPa ⁻¹ conduttanza specifica della vie aeree: s ⁻¹ ·kPa ⁻¹ | gas conductancia: L·s ⁻¹ ·kPa ⁻¹ conductancia específica de la vía aérea: s ⁻¹ ·kPa ⁻¹ | gás condutância: L·s ⁻¹ ·kPa ⁻¹ condutância específica das vias aéreas (em função do volume): s ⁻¹ ·kPa ⁻¹ | αέριο αγωγιμότητα: L·s ⁻¹ ·kPa ⁻¹ ειδική (ως προς τον όγκο) αγωγιμότητα των εαραγωγών: s ⁻¹ ·kPa ⁻¹ | gas konduktans: L·s ⁻¹ ·kPa ⁻¹ specifik (volym- relaterad) luftvägs- konduktans: s ⁻¹ ·kPa ⁻¹ | 気体、ガス コンダクタンス: L·s ⁻¹ ·kPa ⁻¹ 特異的気道 コンダクタンス: s ⁻¹ ·kPa ⁻¹ |
| gastrico | gástrico | gástrico | γαστρική | gastrisk | 胃 |

Abbreviation
Symbol

Description - Quantity - Unit

| | English | Français | Deutsch | Nederlands | Dansk |
|-----------------------|---|---|---|---|---|
| H, ht | standing height (stature): m (see also L) | taille debout: m (voyez aussi L) | Grösse (stehend): m (siehe auch L) | lengte (staand): m (zie ook L) | (stående) højde: m (se også L) |
| HBIR | Hering-Breuer inflation reflex | réflexe inhibito-inspiratoire de Hering-Breuer | Hering-Breuer Inflationsreflex | Hering-Breuer inflatie reflex | Hering-Breuer reflex |
| I, insp | inspiratory | inspiratoire | inspiratorische | inspiratoir | inspiratorisk |
| <i>I</i> | inertance: kPa·L ⁻¹ ·s ² | inertance: kPa·L ⁻¹ ·s ² | Trägheit (Inertance): kPa·L ⁻¹ ·s ² | inertantie: kPa·L ⁻¹ ·s ² | inertans (træghed): kPa·L ⁻¹ ·s ² |
| int | interruptor | interrupteur | Unterbrecher | interruptor | interrupter |
| it | intrathoracic | intrathoracique | intrathorakal | intrathoracaal | intrathorakal |
| i.v. | intravenous | intraveineux | intravenös | intraveneus | intravenøs |
| j | jacket | veste | Weste | opblaasvest | vest |
| <i>K</i> | transfer coefficient: mmol·min ⁻¹ ·kPa ⁻¹ ·L ⁻¹ (see also <i>TL/VA</i>) | coefficient de transfert: mmol·min ⁻¹ ·kPa ⁻¹ ·L ⁻¹ (voyez aussi <i>TL/VA</i>) | Transfer-Koeffizient: mmol·min ⁻¹ ·kPa ⁻¹ ·L ⁻¹ (siehe auch <i>TL/VA</i>) | transfer coëfficiënt: mmol·min ⁻¹ ·kPa ⁻¹ ·L ⁻¹ (zie ook <i>TL/VA</i>) | transferkoefficient: mmol·min ⁻¹ ·kPa ⁻¹ ·L ⁻¹ (se også <i>TL/VA</i>) |
| L | litre | litre | Liter | liter | liter |
| L | length (crown-heel): m | longueur: m | Länge (Scheitel-Sohle): m | (kruin-hiel) lengte: m | længde: m |
| L, l | lung | poumon | Lunge | long | lunge |
| lat | lateral | latéral | lateral | lateraal | lateral |
| lam | laminar | laminaire | laminar | laminair | laminær |
| M | male | masculin | männlich | man | mandlig |
| <i>m</i> | mass: kg | masse: kg | Masse: kg | massa: kg | masse: kg |
| m | membrane | membrane | Membran | membraan | membran |
| MAP | mean airway pressure: kPa | pression moyenne dans les voies aériennes: kPa | mittlerer Atemwegsdruck: kPa | gemiddelde luchtwegdruk: kPa | middel luftvejstryk: kPa |
| max | maximal | maximal | maximal | maximaal | maksimal, maksimums- |
| mb | multiple breath | cycles respiratoires multiples | mehrere Atemzüge | multiple breath, meerdere ademhalingen | multiple breath, (fleråndedræts-) |
| MEF | maximal expiratory flow: L·s ⁻¹ (see also <i>V_{max}</i>) | débit expiratoire maximal: L·s ⁻¹ (voyez aussi <i>V_{max}</i>) | maximaler expiratorischer Fluß: L·s ⁻¹ (siehe auch <i>V_{max}</i>) | maximale expiratoire volumestroom: L·s ⁻¹ (zie ook <i>V_{max}</i>) | maksimal ekspiratorisk volumenstrøm (flow): L·s ⁻¹ (se også <i>V_{max}</i>) |
| MEF _{x%} FVC | MEF when x% of the FVC remains to be exhaled: L·s ⁻¹ (see also <i>V_{max}</i>) | débit expiratoire maximal lorsque x% de la FVC reste à expirer: L·s ⁻¹ (voyez aussi <i>V_{max}</i>) | MEF wenn x% der FVC noch auszuatmen sind: L·s ⁻¹ (siehe auch <i>V_{max}</i>) | MEF wanneer nog x% van de FVC moet worden uitgeademd: L·s ⁻¹ (zie ook <i>V_{max}</i>) | MEF i det øjeblik x% of FVC endnu ikke er udåndet: L·s ⁻¹ (se også <i>V_{max}</i>) |
| MEFV-curve | maximal expiratory flow-volume curve | courbe DEMV: courbe débit expiratoire maximal-volume | maximale expiratorische Fluß-Volumen-Kurve | maximale expiratoire stroom-volume curve | maksimal ekspiratorisk flow volumen kurve |
| min | minimal | minimal | minimal | minimal | minimaal, minimums- |
| mo | mouth, buccal | buc; bouche, buccal | Mund, Öffnung | mond, buccaal | mund, mundhule |
| MOT | multiple occlusion technique | technique des occlusions multiples | multiple Okklusionstechnik | multiple occlusie techniek | multipel okklusions teknik |
| occ | occlusion | occlusion | Verschuß | afsluiting, occlusie | okklusion |
| oes, es | oesophageal | oesophagien | oesophageal | oesofagus | oesofagus |

| Abbreviation Symbol | | Description - Quantity - Unit | | | |
|---|--|---|---|--|--|
| Italiano | Español | Português | Ελληνικά | Swedish | Japanese |
| altezza in piedi (statura): m (vedere anche L) | talla en posición de pie (estatura): m (ver también L) | altura (em pé), estatura: m (ver também L) | ύψος (σωματική διάπλαση): (βλέπε επίσης L) | kroppslängd (stående): m (se även L) | 身長: m |
| riflesso di Hering-Breuer | reflejo de insuflación de Hering-Breuer | reflexo de inflação de Hering-Breuer | αντανακλαστικό διάτασης Hering-Breuer | Hering-Breuers inflationsreflex | Hering-Breuer 反射 |
| inspiratorio inerzia: $\text{kPa}\cdot\text{L}^{-1}\cdot\text{s}^2$ | inspiratorio inertancia: $\text{kPa}\cdot\text{L}^{-1}\cdot\text{s}^2$ | inspiratório inércia: $\text{kPa}\cdot\text{L}^{-1}\cdot\text{s}^2$ | εισπνευστικός αδράνεια: $\text{kPa}\cdot\text{L}^{-1}\cdot\text{s}^2$ | inspiratorisk inertans: $\text{kPa}\cdot\text{L}^{-1}\cdot\text{s}^2$ | 及気 イナータンス、 慣性抵抗: $\text{kPa}\cdot\text{L}^{-1}\cdot\text{s}^2$ |
| di interruzione intratoracico intravenoso | interrupción intratorácico intravenoso | interruptor intratorácico intravenoso | διακόπτης ενδοθωρακικός ενδοφλέβιος | avbrytare intrathoracic intravenös | 胸腔内 静脈内 |
| giacchetta, corpetto | chaleco | colete | μανδιάς | jacka | ジャケツト |
| coefficiente di transfer: $\text{mmol}\cdot\text{min}^{-1}\cdot\text{kPa}^{-1}\cdot\text{L}^{-1}$ (vedere anche T_L/V_A) | coeficiente de transferencia: $\text{mmol}\cdot\text{min}^{-1}\cdot\text{kPa}^{-1}\cdot\text{L}^{-1}$ (ver también T_L/V_A) | coeficiente de difusão (ou de transferência): $\text{mmol}\cdot\text{min}^{-1}\cdot\text{kPa}^{-1}\cdot\text{L}^{-1}$ (ver também T_L/V_A) | συντελεστής διάχυσης: $\text{mmol}\cdot\text{min}^{-1}\cdot\text{kPa}^{-1}\cdot\text{L}^{-1}$ (βλέπε επίσης T_L/V_A) | transfer coefficient: $\text{mmol}\cdot\text{min}^{-1}\cdot\text{kPa}^{-1}\cdot\text{L}^{-1}$ (se även T_L/V_A) | |
| litro lunghezza (testa-tallone): m | litro longitud: m | litro comprimento: m | λίτρο μήκος (κεφαλής-ποδιών) | liter längd (hjässa-häl): m | リットル 長さ: m |
| polmone laterale laminare | pulmón lateral laminar | pulmão lateral laminar | πνεύμονας πλάγιος γραμμικός | lunga lateral laminär | 肺 外側の 層 (流) |
| maschio, maschile massa: kg membrana pressione media delle vie aeree: kPa | hombre masa: kg membrana presión media de la vía aérea: kPa | masculino massa; peso: kg membrana pressão média da(s) via(s) aérea(s): kPa | άνδρας μάζα: κγ μεμβράνη μέση πίεση αεραγωγών | manlig massa: kg membran genomsnittligt luftvägstryck: kPa | 男性 質量: kg 膜 平均気道圧: kPa |
| massimo | máximo | máximo | μέγιστος | maximal | 最大 |
| respiro multiplo | respiración múltiple | respirações múltiplas | πολλαπλές αναονοές | multipla andetag | |
| flusso espiratorio massimo: $\text{L}\cdot\text{s}^{-1}$ (vedere anche V'_{max}) | flujo espiratorio máximo: $\text{L}\cdot\text{s}^{-1}$ (ver también V'_{max}) | débito expiratório máximo: $\text{L}\cdot\text{s}^{-1}$ (ver também V'_{max}) | μέγιστη εκπνευστική ροή: $\text{L}\cdot\text{s}^{-1}$ (βλέπε επίσης V'_{max}) | maximal expiratorisk flöde: $\text{L}\cdot\text{s}^{-1}$ (se även V'_{max}) | 最大呼気流量: $\text{L}\cdot\text{s}^{-1}$ |
| flusso espiratorio medio ad un determinato livello percentuale di capacità vitale forzata da espirare: $\text{L}\cdot\text{s}^{-1}$ (vedere anche V'_{max}) | MEF cuando el x% de la FVC aún debe ser espirada: $\text{L}\cdot\text{s}^{-1}$ (ver también V'_{max}) | MEF quando falta expirar x% de FVC: $\text{L}\cdot\text{s}^{-1}$ (ver também V'_{max}) | MEF όταν x% της δυναμικής ζωτικής χωρητικότητας απομένει να εκπνυσθεί (βλένε επίσης V'_{max}) | MEF när x% av FVC återstår att utandas: $\text{L}\cdot\text{s}^{-1}$ (se också V'_{max}) | |
| curva flusso volume espiratoria massima | curva de flujo volumen espiratoria máxima | curva débito-volume expiratória máxima | μέγιστη εκπνευστική καμπύλη ροής-όγκου | maximal expiratorisk flöde-volymkurva | 最大呼気フローボリューム(流量・容積)曲線 |
| minimo | mínimo | mínimo | ελάχιστος | minimal | 最小 |
| bocca, orale tecnica delle occlusioni multiple | boca, bucal técnica múltiple | boca, bucal técnica de oclusões multiplas | στόμα, στοματικός τεχνική πολλαπλών αποφράξεων | mun, buccal multipel ocklusions-teknik | 口 |
| occlusione esofageo | oclusión esófago | occlusão esofágico | απόφραξη οισοφαγικός | ocklusion oesophageal | 閉塞 食道 |

| Abbreviation Symbol | Description - Quantity - Unit | | | | |
|---|---|--|--|---|--|
| | English | Français | Deutsch | Nederlands | Dansk |
| <i>P</i> | pressure, stress: kPa | pression, contrainte: kPa | Druck: kPa | druk, spanning: kPa | tryk, spænding: kPa |
| <i>P_{x,i}</i> | partial pressure of component <i>i</i> in medium <i>x</i> : kPa | pression partielle du composant <i>i</i> dans le milieu <i>x</i> : kPa | Partialdruck der Komponente <i>i</i> in <i>x</i> : kPa | partiële druk van stof <i>i</i> in medium <i>x</i> : kPa | partialtryk af kom- ponent <i>i</i> i medium <i>x</i> : kPa |
| <i>pa</i> <i>pc</i> | pulmonary artery pulmonary capillary | artériel pulmonaire capillaire pulmonaire | Pulmonalarterie Lungenkapillaren | arteria pulmonalis pulmonaal capillair | arteria pulmonalis lungekapillær |
| <i>pc'</i> | pulmonary end-capillary | à la fin du capillaire pulmonaire | Lungenend- kapillaren | eind-capillair in de longcirculatie | distale ende af lungekapillær |
| <i>PC_x</i> | provocative con- centration of bron- choconstrictor caus- ing FEV ₁ to fall <i>x</i> % from baseline: mg·L ⁻¹ , mmol·L ⁻¹ | concentration d'agent bronchocon- stricteur provoquant une chute du VEMS de <i>x</i> % de la valeur de base: mg·L ⁻¹ , mmol·L ⁻¹ | Konzentration einer bronchokonstriktori- schen Substanz, die einen <i>x</i> %-igen Abfall des FEV ₁ verursacht: mg·L ⁻¹ , mmol·L ⁻¹ | concentratie van bronchusvernauwer die het FEV ₁ met <i>x</i> % doet dalen t.o.v. uitgangswaarde: mg·L ⁻¹ , mmol·L ⁻¹ | koncentratie af bronkokonstriktor, der bevirker et fald i FEV ₁ på <i>x</i> % af udgangsværdien: mg·L ⁻¹ , mmol·L ⁻¹ |
| <i>PD_x</i> | provocative dose of bronchocon- strictor causing FEV ₁ to fall <i>x</i> % from baseline: mg, µmol | dose d'agent bron- chonconstricteur provoquant une chute de VEMS de <i>x</i> % de la valeur base: mg, µmol | Dosis einer broncho- konstriktorisches Substanz, die einen <i>x</i> %-igen Abfall des FEV ₁ verursacht: mg, µmol | dosis van bron- chusvernauwer die FEV ₁ met <i>x</i> % doet dalen t.o.v. uitgangswaarde: mg, µmol | bronkokonstriktiv dosis, der bevirker et fald i FEV ₁ på <i>x</i> % af udgangs- værdien: mg, µmol |
| <i>PEEP</i> | positive end expira- tory pressure: kPa | pression positif de fin d'expiration: kPa | positiver endexpira- torischer Druck: kPa | positieve eind- expiratoire druk: kPa | positivt slutkespi- ratorisk tryk: kPa |
| <i>PEF</i> | peak expiratory flow: L·s ⁻¹ , L·min ⁻¹ (see also PTEF) | débit expiratoire de pointe: L·s ⁻¹ , L·min ⁻¹ (voyez aussi PTEF) | expiratorischer Spitzenfluß: L·s ⁻¹ , L·min ⁻¹ (siehe auch PTEF) | expiratoire piek- stroom: L·s ⁻¹ , L·min ⁻¹ (zie ook PTEF) | peak ekspiratorisk flow (spidsvolu- menstrøm): L·s ⁻¹ , L·min ⁻¹ (se også PTEF) |
| <i>PEFV curve</i> | partial expiratory flow-volume curve | courbe débit expiré-volume partielle | partielle expirato- rische Fluß- Volumen Kurve | partiële expiratoire stroom-volume curve | forceret ekspirato- risk flow-volumen kurve met start ved mindre end maximal indåndning |
| <i>phys</i> <i>PIF</i> | physiological peak inspiratory flow: L·s ⁻¹ , L·min ⁻¹ (see also PTIF) | physiologique débit inspiratoire de pointe: L·s ⁻¹ , L·min ⁻¹ (voyez aussi PTIF) | physiologischer inspiratorischer Spitzenfluß: L·s ⁻¹ , L·min ⁻¹ (siehe auch PTIF) | fysiologisk inspiratoire piek- stroom: L·s ⁻¹ , L·min ⁻¹ (zie ook PTIF) | fysiologisk peak-inspiratorisk flow (spidsvolumen- strøm): L·s ⁻¹ , L·min ⁻¹ (se også PTIF) |
| <i>PIP</i> | peak inspiratory pressure: kPa | pic de pression inspiratoire: kPa | inspiratorischer Spitzendruck: kPa | piek-inspiratoire druk: kPa | maksimal inspirato- riske tryk: kPa |
| <i>pl</i> <i>pleth</i> <i>P_{m,0.1}</i> | pleural plethysmographic mouth occlusion pressure 0.1 s after onset of inspiration: kPa | pleural plethysmographique pression buccale mesuré 0,1 s après l'occlusion des voies aériennes en fin d'expiration: kPa | pleural plethysmographischer Verschlußdruck am Mund, 0.1 s nach Beginn der Inspira- tion: kPa | pleuraal plethysmografisch mondruk tijdens occlusie 0,1 s na begin inademing: kPa | pleura plethysmografisk mund okklusjons- tryk 0.1 s efter start af inspiration: kPa |
| <i>PL_{ti,vis}</i> | frictional pressure in the lung tissue: kPa | pression friction- nelle du tissu pulmonaire: kPa | visköser Lungen- gewebedruck: kPa | visceuze druk in het longweefsel: kPa | friktionsbetinget tryk i lungevævet: kPa |
| <i>P_{(A-a), CO₂}</i> <i>pred</i> | alveolar-arterial pressure difference for CO ₂ : kPa predicted | différence de pression alvéolo- capillaire pour CO ₂ : kPa préd; prédit | alveolär-arterielle Druckdifferenz für CO ₂ : kPa vorhergesagt, bezogen auf Referenzwerte | alveolair-arterieel drukverschil voor CO ₂ : kPa voorspeld | alveole-arteriel tryk-differens for CO ₂ : kPa forventet (reference-) |

| Abbreviation Symbol | | Description - Quantity - Unit | | | |
|--|---|--|---|--|--|
| Italiano | Español | Português | Ελληνικά | Swedish | Japanese |
| pressione, stress: kPa | presión, stress: kPa | pressão: kPa | πίεση (stress): kPa | tryck: kPa | 圧、圧力: kPa |
| pressione parziale del componente i nel mezzo x: kPa | presión parcial del componente i en el medio x: kPa | pressão parcial do componente i no meio x: kPa | μερική πίεση της ουσίας i στο μίγμα x: kPa | partialtryck av komponent i i medium x: kPa | iの分圧: kPa |
| arteria polmonare capillare polmonare | arteria pulmonar capilar pulmonar | aréria pulmonal capilar pulmonar | πνευμονική αρτηρία πνευμονικό τριχοειδές | lungartär lungkapillär | 肺動脈 肺毛細(血)管 |
| alla fine del capillare polmonare | final del capilar pulmonar | no extremo do capilar pulmonar | πνευμονικά τελο-τριχειδίη | pulmonellt end-kapillär | |
| concentrazione di agente broncostruttore in grado di provocare una variazione x dell'indice di misura della riposta broncostruttiva: mg·L ⁻¹ , mmol·L ⁻¹ | concentración de agente broncoconstrictor causante de una caída del FEV ₁ basal del x%: mg·L ⁻¹ , mmol·L ⁻¹ | concentração de agente broncoconstritor que causa decréscimo de x% a partir do valor basal de FEV ₁ : mg·L ⁻¹ , mmol·L ⁻¹ | συγκέντρωση πρόκλησης βρογχοσυσπαστικής ουσίας που προκαλεί μείωση της FEV ₁ κατά x% από τη βασική τιμή της: mg·L ⁻¹ , mmol·L ⁻¹ | provokationskoncentration av bronkokonstriktor, some orsakar FEV ₁ att falla x% från baslinjen: mg·L ⁻¹ , mmol·L ⁻¹ | |
| dose di agente broncostruttore in grado di provocare una variazione x dell'indice di misura della broncoostruzione: mg, µmol | dosis del agente broncoconstrictor causante de una caída del FEV ₁ basal del x%: mg, µmol | dose de agente broncoconstritor que causa decréscimo de x% a partir do valor basal de FEV ₁ : mg, µmol | δόση πρόκλησης βρογχοσυσπαστικού που προκαλεί μείωση της FEV ₁ κατά x% από τη βασική τιμή της: mg, µmol | provokationsdos av bronkokonstriktor som orsakar FEV ₁ att falla x% från baslinjen: mg, µmol | |
| pressione positiva di fine espirazione: kPa picco di flusso espiratorio: L·s ⁻¹ , L·min ⁻¹ (vedere anche PTEF) | presión positiva al final de la espiración: kPa ápice de flujo espiratorio: L·s ⁻¹ , L·min ⁻¹ (ver también PTEF) | pressão positiva final ao final da expiração: kPa fluxo expiratório máximo: L·s ⁻¹ , L·min ⁻¹ (ver também PTEF) | θετική τελο-εκπνευστική πίεση κορυφαία εκπνευστική ροή: L·s ⁻¹ , L·min ⁻¹ (βλέπε επίσης PTEF) | positivt slutexpiratoriskt tryck; kPa maximalt expiratoriskt flöde: L·s ⁻¹ , L·min ⁻¹ (se även PTEF) | 呼吸終末陽圧: kPa 最大呼気流量: L·s ⁻¹ , L·min ⁻¹ |
| curva flusso-volume espiratoria parziale | curva de flujo-volumen parcial | curva fluxo-volume expiratória parcial | μερική εκπνευστική καμπύλη ποής-όγκου | partiell expiratorisk flöde-volymkurva | |
| fisiologico picco di flusso inspiratorio: L·s ⁻¹ , L·min ⁻¹ (vedere anche PTIF) | fisiológico ápice de flujo inspiratorio: L·s ⁻¹ , L·min ⁻¹ (ver también PTIF) | fisiológico fluxo inspiratório máximo: L·s ⁻¹ , L·min ⁻¹ (ver também PTIF) | φυσιολογικός κορυφαία εισπνευστική ροή: L·s ⁻¹ , L·min ⁻¹ (βλέπε επίσης PTIF) | fysiologisk maximalt inspirationsflöde: L·s ⁻¹ , L·min ⁻¹ (se även PTIF) | 生理的 最大吸気流量: L·s ⁻¹ , L·min ⁻¹ |
| picco di pressione inspiratorio: kPa pleurico pletismografico pressione di occlusione all bocca 0,1 s dopo l'inizio della inspirazione: kPa | presión pico inspiratoria: kPa pleural pletismográfico presión bucal durante la oclusión a los 0.1 s del inicio de la inspiración: kPa | pressão inspiratória máxima: kPa pleural pletismográfico pressão de oclusão bucal 0.1 s após o início da inspiração: kPa | κορυφαία εισπνευστική πίεση: kPa πλευρικός πληθυσμογραφικός πίεση στόματος μετά από απόφραξη 0.1s από την έναρξη της εισπνοής: kPa | maximalt inspiratoriskt tryck: kPa pleural pletysmografisk mun-ocklusionstryck 0.1 s efter inspirations start: kPa | 最大吸気圧: kPa 胸膜 プレチスモグラフ |
| pressione conseguente alle resistenze viscosse del tessuto polmonare: kPa | presión de fricción en el tejido pulmonar: kPa | pressão friccional do tecido pulmonar: kPa | πίεση τριβής των πνευμονικών ιστών: kPa | friktionstryck i lungvävnad | |
| differenza alveolo-capillare di pressione parziale di CO ₂ : kPa teorico, predetto | diferencia alveolo-arterial de presión parcial de CO ₂ : kPa teórico, de referencia | diferença de pressão alvéolo-arterial, para CO ₂ : kPa previsto | κυελλιδο-αρτηριακή διαφορά πίεσης του CO ₂ προβλεπόμενος | alveolär-arteriell tryckdifferens för CO ₂ : kPa föutsagd, predikerad 予測 | |

Abbreviation
Symbol

Description - Quantity - Unit

| | English | Français | Deutsch | Nederlands | Dansk |
|--------------|--|---|---|--|---|
| PTEF | peak tidal expiratory flow: L·s ⁻¹ | pic de débit en expiration spontanée: L·s ⁻¹ | expiratorischer Spitzenfluß bei Ruheatmung: L·s ⁻¹ | expiratoire piek-stroom tijdens een ademteug: L·s ⁻¹ | peak ekspiratorisk flow under tidal-ånding: L·s ⁻¹ |
| PTIF | peak tidal inspiratory flow: L·s ⁻¹ | pic de débit en inspiration spontanée: L·s ⁻¹ | inspiratorischer Spitzenfluß bei Ruheatmung: L·s ⁻¹ | inspiratoire piek-stroom tijdens een ademteug: L·s ⁻¹ | peak inspiratorisk flow under tidal-ånding: L·s ⁻¹ |
| pulm | pulmonary | pulmonaire | pulmonal | pulmonaal | lunge |
| pv | pulmonary venous | veineux pulmonaire | pulmonal venös | pulmonaal veneus | lungevene |
| Q | blood volume: L | volume sanguin: L | Blutvolumen: L | bloedvolume: L | blodvolumen: L |
| Q' | instantaneous blood flow: L·s ⁻¹ | débit sanguin instantané: L·s ⁻¹ | momentaner Blutstrom: L·s ⁻¹ | momentane bloedstroom: L·s ⁻¹ | øjeblikkelig volumenstrøm (blod): L·s ⁻¹ |
| \bar{Q}' | time-averaged blood flow (perfusion): L·min ⁻¹ (Q' permitted) | débit sanguin moyen (perfusion): L·min ⁻¹ (Q' autorisé) | mittleres Herzzeitvolumen (Perfusion): L·min ⁻¹ (Q' erlaubt) | tijdgemiddelde bloedstroom (perfusie): L·min ⁻¹ (Q' toegestaan) | gennemsnitlig gennemblødnings-hastighed: L·min ⁻¹ (Q' tilladt) |
| \bar{Q} | cardiac output: L·min ⁻¹ (see also C.O.) | débit cardiaque: L·min ⁻¹ (voyez aussi (C.O.)) | Herzminutenvolumen: L·min ⁻¹ (siehe auch C.O.) | hartdebit: L·min ⁻¹ (zie ook C.O.) | hjerterets minutvolumen: L·min ⁻¹ (se også C.O.) |
| QS | quiet sleep | sommeil calme | ruhiger Schlaf | rustige slaap | rolig søvn |
| R | flow resistance: kPa·L ⁻¹ ·s | résistance à l'écoulement: kPa·L ⁻¹ ·s | Strömungswiderstand: kPa·L ⁻¹ ·s | stromingsweerstand: kPa·L ⁻¹ ·s | strømningsmodstand: kPa·L ⁻¹ ·s |
| R, RQ | respiratory quotient: dimensionless | quotient respiratoire: sans dimension | respiratorischer Quotient: Atemgas-austauschverhältnis: dimensionslos | respiratoire quotient: dimensieloos | respiratorisk kvotient; fraktion: dimensionsløs |
| R | respiratory | respiratoire | respiratorisch | respiratoire | respiratorisk |
| $R_{rs,int}$ | resistance of respiratory system to gas flow assessed with interruptor technique: kPa·L ⁻¹ ·s | résistance thoracopulmonaire mesurée par la méthode d'interruption de débit: kPa·L ⁻¹ ·s | mit Unterbrechertechnik gemessener Widerstand gegen Gasströmung: kPa·L ⁻¹ ·s | weerstand respiratoire systeem bepaald met de interruptormethode: kPa·L ⁻¹ ·s | resistans af respiratorisk system mod luftstrøm bedømt ved interruptor teknik: kPa·L ⁻¹ ·s |
| rb | rebreathing | réinspiration | Rückatmung | terugademing | genåndings- |
| rc | rib cage | cage thoracique | Brustkorb | borstwand | thoraxvæg |
| rel | relaxed | relaxé | entspannt | gerelaxeerd, ontspannen | afslappet, relaseret |
| REM | rapid eye movement (see also AS) | mouvements oculaires rapides (voyez aussi AS) | REM (passiv) (siehe auch AS) | snelle oogbewegingen (zie ook AS) | hurtige øjenbevægelser (se også AS) |
| RR | respiratory rate: s ⁻¹ , min ⁻¹ (see also f_R) | fréquence respiratoire: s ⁻¹ , min ⁻¹ (voyez aussi f_R) | Atemfrequenz: s ⁻¹ , min ⁻¹ (siehe auch f_R) | ademfrequentie: s ⁻¹ , min ⁻¹ (zie ook f_R) | respirationsfrekvens: s ⁻¹ , min ⁻¹ (se også f_R) |
| rs | respiratory system | ystème respiratoire | respiratorisches System | respiratoire systeem | respiratoriske system |
| RV | residual volume: L | volume résiduel: L | Residualvolumen: L | residuele volume: L | residualvolumen: L |
| s | second | seconde | Sekunde | seconde | sekund |
| $S_{x,i}$ | saturation of component i in medium x: dimensionless | saturation du composant i dans le milieu x: sans dimension | Sättigung der Komponente i in x: dimensionslos | verzadiging met substantie i in milieu x: dimensieloos | mætningsgrad af komponent i i medium x (fraktion): dimensionsløs |
| sb | single breath | cycle ventilatoire unique | Einzelatemzug | single breath; enkele ademhaling | enkelt åndedræts- |
| SBT | single breath technique | test sur cycle ventilatoire unique | Einzelatemzugstest | single breath teknik | enkelt åndedræts-test |
| sh | shunt | shunt | Shunt | shunt | shunt |

| Abbreviation Symbol | Description - Quantity - Unit | | | | |
|---|--|---|--|--|--|
| Italiano | Español | Português | Ελληνικά | Swedish | Japanese |
| picco di flusso durante una espirazione tranquilla (a volume corrente): L·s ⁻¹ | pico de flujo espiratorio a volumen corriente: L·s ⁻¹ | fluxo expiratório máximo, a partir do volume corrente: L·s ⁻¹ | κορυφαία αναπνεομένη εκπνευστική ροή: L·s ⁻¹ | maximalt tidalt expirationsflöde: L·s ⁻¹ | |
| picco di flusso durante una ispirazione tranquilla: L·s ⁻¹ | pico de flujo inspiratorio a volumen corriente: L·s ⁻¹ | fluxo inspiratório máximo, a partir do volume corrente: L·s ⁻¹ | κορυφαία αναπνεομένη εισπνευστική ροή | maximalt tidalt inspirationsflöde: L·s ⁻¹ | |
| polmonare | pulmonar | pulmonar | πνευμονικός | pulmonellt | 肺 |
| vena polmonare | venoso pulmonar | venoso pulmonar | πνευμονική φλέβα | lungvenöst | 肺靜脈 |
| volume ematico: L | volumen de sangre: L | volumen sanguíneo: L | όγκος αίματος: L | blodvolym: L | 血液量: L |
| flusso ematico istantaneo: L·s ⁻¹ | flujo sanguíneo instantáneo: L·s ⁻¹ | flux sanguíneo instantáneo: L·s ⁻¹ | στιγμιαία ροή αίματος: L·s ⁻¹ | momentant blodflöde: L·s ⁻¹ | 瞬間血流量: L·s ⁻¹ |
| flusso ematico medio nel tempo (perfusion): L·min ⁻¹ (consentito Q') | flujo sanguíneo medio (perfusion): L·min ⁻¹ (Q' permitido) | fluxo sanguíneo médio (perfusão): L·min ⁻¹ (Q' permitido) | ροή αίματος ως προς το μέσο χρόνο (αιμάτωση): L·min ⁻¹ (Q': επιτρέπεται) | (tids-)genomsnittligt blodflöde (perfusion): L·min ⁻¹ (Q' tillåten) | 平均血流量: L·min ⁻¹ |
| porta cardiaca: L·min ⁻¹ (vedere anche C.O.) | débito cardíaco: L·min ⁻¹ (ver también C.O.) | fluxo cardíaco: L·min ⁻¹ (ver também C.O.) | καρδιακή παροχή: L·min ⁻¹ (βλέπε επίσης C.O.) | hjärtminutvolym: L·min ⁻¹ (se även C.O.) | 心拍出货量: L·min ⁻¹ |
| sonno tranquillo | sueño no REM | sono calmo | ήρεμος ύπνος | lugn sömn | ノンレム睡眠 |
| resistenza al flusso: kPa·L ⁻¹ ·s | resistencia al flujo: kPa·L ⁻¹ ·s | resistência ao fluxo: kPa·L ⁻¹ ·s | αντίσταση ροής: kPa·L ⁻¹ ·s | flödesmotstånd kPa·L ⁻¹ ·s | 抵抗: kPa·L ⁻¹ ·s |
| quoziente respiratorio: privo di dimensione | cociente respiratorio: sin dimensiones | quociente respiratório: sem unidade de medida | αναπνευστικό πηλίκο: (χωρίς μονάδες) | respiratorisk kvot: dimensionlös | 呼吸商 |
| respiratorio | respiratorio | respiratório | αναπνευστικός | respiratorisk | 呼吸 |
| resistenze del sistema respiratorio con la tecnica delle interruzioni: kPa·L ⁻¹ ·s | resistencia del sistema respiratorio medida con la técnica de interrupción: kPa·L ⁻¹ ·s | resistência do sistema respiratório ao fluxo gasoso, avaliada pela técnica de interrupção: kPa·L ⁻¹ ·s | αντίσταση του αναπνευστικού συστήματος στη ροή αερίου εκτιμούμενη με την μέθοδο της διακοπής | respiratoriska systemets resistans mot gasflöde mätt med interruptorteknik: kPa·L ⁻¹ ·s | |
| rirespirazione | reinspiración | reinspiração | εηανεισηνοή του εκπνεόμενου αέρα | återandning | 再呼吸 |
| gabbia toracica di rilassamento | caja torácica relajado | caixa torácica relaxado (a) | πλευρικός κλωβός (τοιχωμν) ήρεμος | bröstkorg relaxerad | 胸郭 |
| movimenti rapidi oculari (vedi anche AS) | movimientos rápidos de los ojos (ver también AS) | movimento(s) ocular(es) (MOR) rápidos (ver também AS) | ταχέων κινήσεων των ματιών | snabba ögonrörelser (se även AS) | レム |
| frequenza respiratoria: s ⁻¹ , min ⁻¹ (vedere anche fr) | frecuencia respiratoria: s ⁻¹ , min ⁻¹ (ver también fr) | frequência respiratória: s ⁻¹ , min ⁻¹ (ver também fr) | αναπνευστική συχνότητα | andningsfrekvens: s ⁻¹ , min ⁻¹ (se även fr) | 呼吸数: s ⁻¹ , min ⁻¹ |
| sistema respiratorio | sistema respiratorio | sistema respiratório | αναπνευστικό σύστημα | respiratoriska systemet | 呼吸系 |
| volume residuo: L | volumen residual: L | volumen residual: L | υπολειπόμενος όγκος: L | residualvolym: L | 残気量: L |
| secondo saturazione del componente i nell'elemento x: privo di dimensione | segundo saturación del componente i en el medio x: sin dimensiones | segundo saturação do componente i no meio x: sem unidade de medida | δευτερόλεπτο κορεσμός της ουσίας i στο μίγμα x (χωρίς μονάδες) | sekund mättad av komponent i i medium x: dimensionslös | 秒 iの飽和度 |
| respiro singolo | respiración única | respiração única | μια αναπνοή | enkelt andetag | 一回呼吸 |
| tecnic de singolo respiro | técnica de respiración única | teste de respiração única | τεχνική μιας αναπνοής | enkelandetagsteknik | 一回呼吸法 |
| shunt | cortocircuito | "shunt", curto-circuito | παράκαμψη (shunt) | shunt | 短絡 |

Abbreviation
Symbol

Description - Quantity - Unit

| | English | Français | Deutsch | Nederlands | Dansk |
|------------------------|---|---|---|--|---|
| sp | spirometric | spirométrique | spirometrisch | spirometrisch | spirometrisk |
| ss | steady state | état stable | Steady State, Gleichgewichtszustand | evenwichtstoestand | "steady state" |
| st | static | statique | statisch | statisch | statisk |
| STPD | standard temperature and pressure, dry | pression et température standard, sec | Standard-Temperatur, Druck, trocken | standaard temperatuur en druk, droog | standard temperatur og tryk, tør |
| <i>t</i> | Celsius temperature: °C | température Celsius: °C | Celsius Temperatur: °C | Celsius temperatuur: °C | temperatur: °C |
| <i>t</i> | time: s (permitted: minute, hour, day year) | temps: s (permis: minute, heure, jour, année) | Zeit: s (erlaubt: Minute, Stunde, Tag, Jahr) | tijd: s (toegestaan: minuut, uur, dag, jaar) | tid: s (tilladt: minut, time, dag, år) |
| <i>T</i> | thermodynamic temperature: K | température thermodynamique: K | thermodynamische Temperatur: K | thermodynamische temperatuur: K | termodynamisk temperatur: K |
| T | tidal | courant | Atemzug (Tidal) | "tidal"; op- en neergaand, teug | tidal (åndedræts-) |
| <i>TL</i> | gas transfer factor for the lung: mmol·min ⁻¹ ·kPa ⁻¹ | facteur de transfert gazeux pour le poumon: mmol·min ⁻¹ ·kPa ⁻¹ | Gastransferfaktor der Lunge: mmol·min ⁻¹ ·kPa ⁻¹ | gastransfer factor voor de long: mmol·min ⁻¹ ·kPa ⁻¹ | transfer faktor for lungerne: mmol·min ⁻¹ ·kPa ⁻¹ |
| <i>TL/VA</i> | transfer coefficient: see <i>K</i> | coefficient de transfert: voyez <i>K</i> | Transfer-Koeffizient: siehe <i>K</i> | transfer coëfficiënt: zie <i>K</i> | transferkoefficient: se <i>K</i> |
| <i>tE</i> | duration of expiration: s | durée de l'expiration: s | expiratorische Atemzeit: s | expiratoire adem-tijd: s | eksspirationslængde: s |
| <i>tI</i> | duration of inspiration: s | durée de l'inspiration: s | inspiratorische Atemzeit: s | inspiratoire adem-tijd: s | inspirationslængde: s |
| <i>t_{tot}</i> | duration of total breathing cycle: s | durée d'un cycle respiratoire: s | Atemzykluszeit: s | totale ademtijd: s | respiratorisk cykluslængde: s |
| <i>tPTEF</i> | time to peak tidal expiratory flow: s | temps jusqu'au pic de débit expiratoire en ventilation calme: s | Zeit bis zum expiratorischen Spitzenfluß bei Ruheatmung: s | tijd tot piek expiratoire stroom tijdens een ademteug: s | tid til peak eksspiratorisk flow under tidalånding: s |
| tc | transcutaneous | transcutané | transkutan | transcutaan | transkutan |
| TGV | thoracic gas volume (level of lung inflation to be specified): L | volume gazeux thoracique (niveau d'inflation pulmonaire à préciser): L | thorakales Gasvolumen (Grad der Lungenentfaltung muß angegeben werden): L | thoracale gasvolume (niveau longinflation aan te geven): L | intrathorakalt luftvolumen: (inflationsgraden skal specificeres): L |
| th | thoracic | thoracique | thorakal | thoracaal | thorax, thorakal |
| ti | tissue | tissu | Gewebe | weefsel | væv, parenkym |
| TLC | total lung capacity: L | capacité pulmonaire totale: L | totale Lungenkapazität: L | totale longcapaciteit: L | total lungekapacitet: L |
| tm | transmural | transmural | transmural | transmuraal | transmural |
| tot | total | total | total | totaal | total |
| tp | transpulmonary | transpulmonaire | transpulmonal | transpulmonaal | transpulmonal |
| tr | trachea | trachée | Trachea | trachea | trachea |
| trs | transrespiratory | transrespiratoire | transrespiratorisch | transrespiratoir | transrespiratorisk |
| tt | transthoracic | transthoracique | transthorakal | transthoracaal | transthorakal |
| tur | turbulent | turbulent | turbulent | turbulent | turbulent |
| us | upstream | amont | stromaufwärts | stroomopwaarts | opstrøms |
| v | venous | veineux | venös | veneus | vene, venøs |
| v | mixed venous | veineux mêlé | gemischt-venös | gemengd veneus | blandet venøs |
| V | gas volume: L | volume gazeux: L | Gasvolumen: L | gasvolume: L | luftrumfang: L |

| Abbreviation Symbol | | Description - Quantity - Unit | | | |
|---|---|--|---|--|---|
| Italiano | Español | Português | Ελληνικά | Swedish | Japanese |
| spirometrico regime stabile | espirométrico estado estacionario | espirométrico regime estável | σπιρομετρικός σταθερή κατάσταση | spirometrisk stabilstillstånd | スパイロメトリー 恒常状態 |
| statico temperatura e pres- sione standard, secco | estático temperatura y presión barométrica estandar sin humedad | estático temperatura e pressão padronizadas, seco | στατικός σταθερή θερμοκρασία και πίεση, ξηρά | statisk standardtemperatur och tryck, utan vattenånga | 静的 STPD の状態 |
| temperatura in gradi centigradi: °C tempo: s (permesso: minuti, ora, giorno, anno) temperatura termodi- namica: K corrente | temperatura en grados Celsius: °C tiempo: s (permitido: minuto, hora, día, año) | temperatura Celsius: °C tempo: s (permitidos: minuto, hora, dia, ano) | θερμοκρασία Κελσίου: °C χρόνος: s (επιτρέπεται: λεπτό ωρα, ημέρα, έτος) θερμοδυναμικός θερμοκρασία: K αναπνεόμενος | Celsius temperatur: °C tid: s (tillåtna: minut, timma, dag, år) | 摂氏温度: °C 熱力学温度: K 一回換気 |
| fattore di transfer gassoso polmonare: mmol·min ⁻¹ ·kPa ⁻¹ | factor de transferencia para el pulmón: mmol·min ⁻¹ ·kPa ⁻¹ | factor de difusão (transferência) gasosa do pulmão: mmol·min ⁻¹ ·kPa ⁻¹ | συντελεστής διαχυσης αερίου στον πνεύμονα: mmol·min ⁻¹ ·kPa ⁻¹ | lungans gastransfer- faktor mmol·min ⁻¹ ·kPa ⁻¹ | 拡散係数: mmol·min ⁻¹ ·kPa ⁻¹ |
| coefficiente di transfer: veder <i>K</i> | coefficiente de transfe- rencia: ver <i>K</i> | coeficiente de difusão (ou de transferência): ver <i>K</i> | συντελεστής διάχυσης βλέπε <i>K</i> | transferkoefficient: se <i>K</i> | |
| tempo espiratorio: s tempo inspiratorio: s tempo totale del ciclo espiratorio: s | duración de la espiración: s duración de la inspiración: s duración total del ciclo respiratorio: s | duração da expiração; tempo expiratório: s duração da inspiração; tempo inspiratório: s duração do ciclo respiratório total; tempo total do ciclo respira- tório: s | διάρκεια εκπνοής: s διάρκεια εισπνοής: s διάρκεια όλου του αναπνευστικού κυκλου: s | expirationstid: s inspirationstid: s totala andnings- cykelns duration: s | 呼気時間: s 吸気時間: s |
| tempo al picco di flusso espiratorio (espirazione tran- quilla): s transcutaneo volume gasoso intra- toracico (specificare il livello di inflazione polmonare): L | tiempo desde el inicio de la espirometría hasta el pico de flujo espiratorio: s transcutáneo volumen del gas torácico (indicar el nivel de insuflación pulmonar): L | duração do fluxo expira- tório máximo, a partir do volume corrente: s transcutâneo volume de gás intratorácico (nível de inflação pulmonar a ser especificado): L | χρόνος μέχρι την κορυφαια αναπνευομένη εκπνευστική ροή διαδερμικός όγκος θωρακικού αέρα (το επίπεδο της διάτασης των πνεύμονα να διευκρινίζεται) | tid till maximalt tidalt expiratoriskt flöde: s transkutan thoracal gasvolym (lungans inflations- grad specificeras): L | 経皮的 胸腔内ガス量: L |
| toracico tessuto capacità polmonare totale (CPT): L transmurale totale transpolmonare trachea transrespiratorio transtoracico turbolento | torácico tejido capacidad pulmonar total: L transmural total transpulmonar tráquea transrespiratorio transtorácico turbulento | torácico tecido capacidade pulmonar total: L transmural, transparietal total transpulmonar traquéia transrespiratório transtorácico turbulento | θωρακικός ιστός ολική πνευμονική χωρητικότητα: L διατοιχωματικός ολικός διαπνευμονικός τραχεία διαναπνευστικός διαθωρακικός στροβιλωδής | thoracal vävnad total lungkapacitet: L transmural total transpulmonell luftstrupe transrespiratorisk transthoracal turbulent | 胸部の、胸郭の 組織 全肺気量: L 全 気管 経胸郭、経胸腔の 乱流 |
| a monte | arriba | a montante | η προς τα επάνω ροή | uppströms | 上流 |
| venoso venoso misto | venoso venoso mezclado | venoso venoso misturado, venoso misto | φλεβικός μικτό φλεβικό | venös blandad venös | 静脈 混合静脈血 |
| volume di gas: L | volumen de gas: L | volume de gás: L | όγκος αερίου: L | gasvolym: L | ガス容量: L |

| Abbreviation Symbol | Description - Quantity - Unit | | | | |
|------------------------|--|--|---|---|---|
| | English | Français | Deutsch | Nederlands | Dansk |
| V_L | lung gas volume, including gas in the airways: L | volume gazeux pulmonaire, y compris le gaz dans les voies aériennes: L | Lungengasvolumen einschl. Gas in den Atemwegen: L | longgasvolume, incl. gas in de luchtwegen: L | luftrumfang i lungerne, inkluderer rumfanget i luftvejene: L |
| V_T | tidal volume: L | volume courant: L | Atemzugsvolumen: L | ademeugvolume: L | respirationsvolumen (tidalvolumen): L |
| V' | instantaneous gas volume flow: L·s ⁻¹ | débit gazeux instantané: L·s ⁻¹ | momentane Gasströmung: L·s ⁻¹ | momentane volumestroom: L·s ⁻¹ | øjeblikkeligt gasflow (volumenstrøm): L·s ⁻¹ |
| V'_{max} | maximal expiratory flow: L·s ⁻¹ (see also PEF) | débit expiratoire maximal: L·s ⁻¹ (voyez aussi MEF) | maximaler expiratorischer Fluß: L·s ⁻¹ (siehe auch MEF) | maximale expiratoire volumestroom: L·s ⁻¹ (zie ook MEF) | maksimal ekspiratorisk volumenstrøm: L·s ⁻¹ (se også MEF) |
| $V'_{max,FRC}$ | maximal expiratory flow at FRC: L·s ⁻¹ | débit expiratoire maximum à la CRF: L·s ⁻¹ | maximaler expiratorischer Fluß bei FRC: L·s ⁻¹ | maximale expiratoire volumestroom op FRC-niveau: L·s ⁻¹ | maksimal ekspiratorisk flow ved FRC: L·s ⁻¹ |
| V'' | gas volume acceleration: L·s ⁻² | accélération du volume gazeux: L·s ⁻² | Gasvolumen-Beschleunigung: L·s ⁻² | volumeversnelling: L·s ⁻² | volumen-acceleration: L·s ⁻² |
| \bar{V}' | time-averaged gas volume flow (ventilation): LBTPS·s ⁻¹ , LBTPS·min ⁻¹ (V' permitted) | volume gazeux par unité de temps (ventilation): LBTPS·s ⁻¹ , LBTPS·min ⁻¹ (V' permis) | mittlerer zeitlicher Gasfluß (Ventilation): LBTPS·s ⁻¹ , LBTPS·min ⁻¹ (V' erlaubt) | tijd-gemiddelde volumestroom (ventilatie): LBTPS·s ⁻¹ , LBTPS·min ⁻¹ (V' toegestaan) | gennemsnitlig volumenstrøm (ventilation): LBTPS·s ⁻¹ , LBTPS·min ⁻¹ (V' tilladt) |
| \bar{V}'/\bar{Q}' | ventilation-perfusion ratio: dimensionless | rapport ventilation-perfusion: sans dimension | Ventilations-Perfusions-Verhältnis: dimensionslos | ventilatie-perfusie verhouding: dimensieloos | ventilation perfusionsratio: dimensionsløs |
| \bar{V}'_E | expiratory minute ventilation: L·min ⁻¹ (V'_E permitted) | ventilation minute expirée: L·min ⁻¹ (V'_E permis) | Expiratorisches Atemminutenvolumen: L·min ⁻¹ (V'_E erlaubt) | expiratoire minuutventilatie: L·min ⁻¹ (V'_E toegestaan) | ekspiratorisk minutventilation: L·min ⁻¹ (V'_E tilladt) |
| V'_i | transport of gas component: i LBTPS·s ⁻¹ (V'_i permitted) | débit gazeux du composant i: LBTPS·s ⁻¹ (V'_i permis) | Transport der Gaskomponente: i LBTPS·s ⁻¹ (V'_i erlaubt) | gastransport van substantie i: LBTPS·s ⁻¹ (V'_i toegestaan) | transporthastighed af gas komponent i: LBTPS·s ⁻¹ (V'_i tilladt) |
| va | vascular | vasculaire | vasculär | vasculair | vaskulær |
| va | venous admixture | admission veineuse | venöse Beimischung | veneuze bijmenging | venøs tilblanding |
| vis | viscous | visqueux | viskös | visceus | viskøs |
| W | weight, body mass: kg (see also BM) | masse corporelle: kg (voyez aussi BM) | Gewicht: kg (siehe auch BM) | (lichaams)gewicht: (zie ook BM) | legemsmasse: kg (se også BM) |
| w | thoracic (chest) wall | paroi thoracique | Thoraxwand | borstwand | thoraxvæg |
| W | work (external): J, kPa·L | travail (externe): J, kPa·L | Arbeit (extern) J, kPa·L | energie (uitwendige) arbeid): J, kPa·L | (ydre) arbejde: J, kPa·L |
| W' | power: J·s ⁻¹ , kPa·L·s ⁻¹ , W | puissance: J·s ⁻¹ , kPa·L·s ⁻¹ , W | Leistung: J·s ⁻¹ , kPa·L·s ⁻¹ , W | vermogen; J·s ⁻¹ , kPa·L·s ⁻¹ , W | effekt: J·s ⁻¹ , kPa·L·s ⁻¹ , W |
| we | wedge | bloqué | endkapillar | wig, wigge- | indkilings- |
| Z | impedance: kPa·L ⁻¹ ·s | impédance: kPa·L ⁻¹ ·s | Impedanz: kPa·L ⁻¹ ·s | impedantie: kPa·L ⁻¹ ·s | impedans: kPa·L ⁻¹ ·s |
| Δ | delta: change in variable | delta: variation d'une variable | Delta: Änderung einer Variablen | delta: verandering van variabele | delta: ændring i variabel |
| τ | time constant: s | constante de temps: s | Zeitkonstante: s | tijdconstante: s | tidskonstant: s |

| Abbreviation Symbol | | Description - Quantity - Unit | | | |
|--|---|---|---|--|---|
| Italiano | Español | Português | Ελληνικά | Swedish | Japanese |
| volume polmonare del gas incluso il gas nelle via aeree: L | volumen pulmonar de gas, incluyendo el gas en las vías aéreas: L | volume de gás pulmonar, incluindo o gás das vias aéreas: L | πνευμονικός όγκος αέρα συμπεριλαμβανομένου του αέρα στους αεραγωγούς: L αναπνεόμενος όγκος | lunggasvolym, inklusive luftvägs-gas: L | 肺気量: L |
| volume corrente: L | volumen corriente: L | volume corrente: L | | tidalvolym: L | 一回換気量: L |
| flusso istantaneo: L·s ⁻¹ | flujo instantáneo de gas: L·s ⁻¹ | fluxo instantâneo do volume gasoso: L·s ⁻¹ | στιγμιαία ροή όγκου αερίου: L·s ⁻¹ | momentant gas-volymflöde: L·s ⁻¹ | 瞬時ガス流量: L·s ⁻¹ |
| flusso istantaneo massimo: L·s ⁻¹ (vedere anche MEF) | flujo espiratorio máximo: L·s ⁻¹ (ver también MEF) | fluxo expiratório máximo: L·s ⁻¹ (ver também MEF) | μεγίστη εκπνευστική ροή: L·s ⁻¹ (βλέπε επίσης MEF) | maximalt expiratoriskt flöde: L·s ⁻¹ (se också PEF) | 最大吸気流量: L·s ⁻¹ |
| flusso massimo espiratorio al punto di FRC: L·s ⁻¹ | flujo espiratorio máximo a FRC: L·s ⁻¹ | fluxo expiratório máximo a nível de FRC: L·s ⁻¹ | μεγίστη εκπνευστική ροή στην FRC | maximalt expiratoriskt flöde vid FRC: L·s ⁻¹ | |
| accelerazione del volume di gas: L·s ⁻² | aceleración del volumen de gas: L·s ⁻² | aceleração do volume gasoso: L·s ⁻² | επιτάχυνση όγκου αερίου: L·s ⁻² | gasvolymacceleration: L·s ⁻² | |
| flusso medio nel tempo del volume di gas (ventilazione): LBTPS·s ⁻¹ , LBTPS·min ⁻¹ (consentito V') | volumen de gas por unidad de tiempo (ventilación): LBTPS·s ⁻¹ , LBTPS·min ⁻¹ (V' permitido) | fluxo do volume gasoso, por unidade de tempo (ventilação): LBTPS·s ⁻¹ , LBTPS·min ⁻¹ (V' permitido) | ροή όγκου αερίου ως προς το μέσο χρόνο (αερισμός): LBTPS·s ⁻¹ , LBTPS·min ⁻¹ (V' επιτρέπεται) | (tids-)genomsnittligt gasvolymflöde (ventilation): LBTPS·s ⁻¹ , LBTPS·min ⁻¹ (V' tillåten) | |
| rapporto ventilazione-perfusione: privo di dimensione | relaciones ventilación-perfusión: sin dimensiones | relação ventilação-perfusão: sem unidade de medida | σχέση αερισμού/αιμάτωσης (χωρίς μονάδες) | ventilation-perfusionskvot: dimensionslös | 換気血流比 |
| ventilazione espiratoria: L·min ⁻¹ (V'E permesso) | ventilación minuto espiratorio: L·min ⁻¹ (V'E permitido) | ventilação expiratória L·min ⁻¹ (V'E permitido) | κατά λεπτόν εκπνεόμενος αερισμός: L·min ⁻¹ (V'E επιτρέπεται) | expiratorisk minut-ventilation: L·min ⁻¹ (V'E tillåten) | 分時換気量: L·min ⁻¹ |
| trasporto del gas del componente i: LBTPS·s ⁻¹ (permesso V'i) | débito del gas del componente i: LBTPS·s ⁻¹ (V'i permitido) | fluxo gasoso do componente i: LBTPS·s ⁻¹ (V'i permitido) | μεταφορά της αερίου ουσίας i: LBTPS·s ⁻¹ (V'i επιτρέπεται) | transport av gas-komponent i: LBTPS·s ⁻¹ (V'i tillåten) | |
| vascolare miscela venosa | vascular fenómeno de mezcla venosa | vascular mistura venosa | αγγειακός φλεβικό μιγμα | vaskulär venös tillblandning | 血管、脈管 静脈血混合 |
| viscoso | viscoso | viscoso | γλοιότητα | viskös | 粘性 |
| peso corporeo: kg (vedere anche BM) | peso corporal: kg (ver también BM) | peso, massa corporal: kg (ver também BM) | βαρος, σωματική μάζα: kg (βλέπε επίσης BM) | vikt, kroppsmassa: kg (se även BM) | 体重: kg |
| parete toracica | caja torácica | parede torácica | θωρακικό τοίχωμα | thorax- (bröstkorgs-)vägg | 胸壁 |
| lavoro (esterno): J, kPa·L | trabajo (externo): J, kPa·L | trabalho (externo): J, kPa·L | εργο (εξωτερικό): J, kPa·L | arbete (externt) J, kPa·L | 仕事量 (外的): J, kPa·L |
| potenza: J·s ⁻¹ , kPa·L·s ⁻¹ , W cuneo | potencia: J·s ⁻¹ , kPa·L·s ⁻¹ , W cuña | potência: J·s ⁻¹ , kPa·L·s ⁻¹ , W cunha | δύναμη: J·s ⁻¹ , kPa·L·s ⁻¹ , W ενσφήνωση | effekt: J·s ⁻¹ , kPa·L·s ⁻¹ , W inkilning | 仕事率: J·s ⁻¹ , kPa·L·s ⁻¹ , W 楔入 |
| impedenza: kPa·L ⁻¹ ·s | impedancia: kPa·L ⁻¹ ·s | impedância: kPa·L ⁻¹ ·s | αντίσταση kPa·L ⁻¹ ·s | impedans: kPa·L ⁻¹ ·s | インピーダンス: kPa·L ⁻¹ ·s |
| delta: variazione di un variabile | delta: cambio en una variable | delta: variação de um parâmetro, alteração de uma variavel | δέλτα, μεταβολή μιας παραμετρου | delta: förändring av variabel | 差 |
| costante di tempo: s | constante de tiempo: s | constante de tempo: s | χρονική σταθερά | tidskonstant: s | 時定数: s |

compliance would be more appropriate. Specific compliance is also frequently used in neonatal work. Here, however, it is frequently not possible to measure lung volume. Since lung volume and body weight are linearly related, in neonatal work lung compliance is commonly size corrected by taking the ratio of compliance and body weight. As it is misleading to use the term specific compliance for both ratios, it is recommended that use of the term should be avoided, and C_L/V_L or C_L/W for compliance per unit of lung volume and body weight, respectively, should be reported instead.

$MEF_x\%$ and $FEF_x\%$ merit special mention. MEF is the maximal flow obtained during an FVC manoeuvre delivered with maximal effort, when flow is effort independent. Some argue that larger flows can be attained if the manoeuvre does not entail maximal effort, so that it would be more appropriate to speak of forced expiratory flow (FEF) rather than maximal expiratory flow. This tends to obscure the special relationship between the maximum flow and the maximal effort. Also, it should be noted that MEF is determined when $x\%$ of lung volume remains to be exhaled, whilst FEF

is determined when $x\%$ of lung volume has been exhaled. Thus, $FEF_{25\%} = MEF_{75\%}$; the two are complementary. This easily leads to confusion. Finally, $V'_{max,25\%}$ is widely used and corresponds to $MEF_{25\%}$ rather than $FEF_{25\%}$. Hence, the use of $MEF_x\%$ is recommended [1].

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