

# ANESTHESIOLOGY

## Standard Abbreviations

—Updated September 17, 2020—

|                   |  |
|-------------------|--|
| ABG               | arterial blood gas   |
| ACLS              | Advanced Cardiac Life Support  |
| ADP               | adenosine diphosphate  |
| Afterdrop         | OK to use, but define at first mention (rapid increase in core temperature after discontinuation of cardiopulmonary bypass)      |
| AIDS              | acquired immunodeficiency syndrome (spell out first time only, abbreviation OK in titles, heads)                                 |
| AKI               | acute kidney injury  |
| AM*               | ante meridian (morning; small caps, same for PM)   |
| AMP               | adenosine monophosphate  |
| ANH               | autologous normovolemic hemodilution   |
| ANOVA*            | analysis of variance   |
| APACHE            | Acute Physiology and Chronic Health Evaluation Score   |
| ARDS              | “adult respiratory distress syndrome” and “ <b>acute</b> respiratory distress syndrome”  |
| ASA               | American Society of Anesthesiologists (spell out first time only in ASA physical status I, II, abbreviation OK in titles, heads) |
| AT                | antithrombin III or antithrombin   |
| ATIII             | antithrombin III or antithrombin   |
| ATP               | adenosine triphosphate   |
| ATPase            | adenosine triphosphatase   |
| AUC               | area under the receiver operating characteristics curve  |
|                   |  |
| bid               | two times per day or two times daily (spell out)   |
| BIS               | Bispectral Index (important: see “Trademarks and Registered Marks” section)  |
| bpm               | breaths/min or beats/min depending on context; do not use bpm  |
| BP                | spell out to “blood pressure” (do not abbreviate)  |
|                   |  |
| Ca <sup>2+</sup>  | calcium (do not need to spell out)   |
| CaO <sub>2</sub>  | arterial oxygen content (small cap O)  |
| CABG              | coronary artery bypass graft   |
| cAMP              | cyclic adenosine monophosphate   |
| CcO <sub>2</sub>  | capillary oxygen content (small cap O)   |
| CCSO <sub>2</sub> | coronary sinus oxygen content (small cap CSO)  |
| CCT               | central conduction time  |

|                      |  |
|----------------------|--|
| cDNA*                | Ok as is, do not spell out   |
| C <sub>dyn</sub>     | dynamic compliance   |
| CHCT                 | caffeine–halothane contracture test  |
| CI*                  | confidence interval  |
| cm H <sub>2</sub> O* | centimeters water (with space)   |
| CNS                  | central nervous system   |
| CO                   | carbon monoxide or cardiac output  |
| CO <sub>2</sub>      | carbon dioxide (always spell out, unless used with amount, then always abbreviate; same for O <sub>2</sub> , NO, N <sub>2</sub> O, <i>etc.</i> ) |
| COPD                 | chronic obstructive pulmonary disease  |
| CPB                  | cardiopulmonary bypass   |
| CPP                  | coronary perfusion pressure  |
| CPR                  | cardiopulmonary resuscitation  |
| CSF                  | cerebrospinal fluid  |
| CvO <sub>2</sub>     | mixed venous oxygen content (small cap o)  |
| CVP                  | central venous pressure  |
| CVR                  | coronary vascular resistance   |
| CVS                  | cardiovascular system  |
| Da                   | dalton (Da [cap D], but kd [lowercase d])  |
| DBP                  | diastolic blood pressure   |
| DIC                  | disseminated intravascular coagulation   |
| DNA*                 | OK as is, do not spell out   |
| DNR                  | do not resuscitate [n]; do-not-resuscitate [adj]   |
| DOAC                 | direct oral anticoagulant  |
| DREADDs              | Designer Receptors Exclusively Activated by Designer Drugs   |
| DTI                  | direct thrombin inhibitor  |
| EC50*                | effective concentration, 50% of subjects (OK abbreviated) (no subscript)   |
| EC <sub>50</sub> *   | effective concentration producing 50% of maximal effect (subscript)  |
| EC95*                | effective concentration, 95% of subjects (OK abbreviated) (no subscript)   |
| ED50*                | effective dose, 50% of subjects (OK abbreviated) (no subscript)  |
| ED <sub>50</sub> *   | effective dose producing 50% of maximal effect (subscript)   |
| ED95*                | effective dose, 95% of subjects (OK abbreviated) (no subscript)  |
| ECG                  | electrocardiogram, -graph, -graphy, -graphic (never abbreviate)  |
| EEG                  | electroencephalogram or electroencephalography (spell out at first mention)  |
| EENT                 | eyes, ears, nose, throat (can be reworded to “otolaryngologic” [query if changed during editing])  |

|                   |   |
|-------------------|---|
| ECMO              | extracorporeal membrane oxygenation   |
| EDTA*             | Do not query, OK to leave abbreviated   |
| EGTA*             | Do not query, OK to leave abbreviated   |
| ELISA             | enzyme-linked immunosorbent assay   |
| EMG               | electromyography (spell out at first mention)   |
| <i>et al.</i> *   | never spell out ( <i>italic with period</i> ); change “and coworkers” or “and colleagues” to <i>et al.</i>  |
| ETCO <sub>2</sub> | end-tidal carbon dioxide (small cap CO)   |
| ETO <sub>2</sub>  | end-tidal oxygen (small cap O)  |
| ETT               | endotracheal tube   |
|                   |   |
| FAER              | Foundation for Anesthesia Education and Research  |
| FEO <sub>2</sub>  | mixed expired oxygen fraction; fraction of expired oxygen (small cap EO)  |
| FIO <sub>2</sub>  | fractional inspired oxygen tension; inspired oxygen fraction; fraction of inspired oxygen; inspiratory oxygen fraction (small cap IO; no unit of measure)   |
| FEV <sub>1</sub>  | forced expiratory volume in 1 s   |
| FFP               | fresh frozen plasma   |
| Fr <i>or</i> F    | French (always spell out: an 18-French catheter); OK abbreviate in tables   |
| FRC               | functional residual capacity  |
|                   |   |
| G or g            | gauge (always spell out; hyphenate when used as a needle size: 18-gauge Tuohy needle)   |
| GABA              | γ-aminobutyric acid   |
| GABA <sub>A</sub> | γ-aminobutyric acid type A  |
| GABAergic         | γ-aminobutyric acid–mediated (abbreviation OK in title; abbreviation OK in text, abstract, etc., <b>always</b> expand at first mention; print as GABAergic with capital first 4 letters, lowercase last 5 letters). |
| Gq                | Galpha(q)   |
|                   |   |
| h†                | Hour  |
| Hb                | hemoglobin (spell out unless in list of values or equation)   |
| Hct               | hematocrit (spell out unless in list of values or equation)   |
| HEPES*            | (Do not query, Do not spell out) <b>N-2-Hydroxyethylpiperazine-N'-2-ethanesulfonic acid</b>   |
| HIT               | heparin-induced thrombocytopenia  |
| HIV               | human immunodeficiency virus (spell out first time only)  |
| HPLC              | high-pressure liquid chromatography   |
| HR                | heart rate  |

|                                 |   |
|---------------------------------|---|
| ICH                             | intracranial hemorrhage   |
| ICP                             | intracranial pressure   |
| ICU                             | intensive care unit   |
| ID*                             | inner diameter (do not spell out)   |
| im, IM                          | intramuscular (always spell out in text; must define if used for space considerations in tables/figures)  |
| INR                             | international normalized ratio  |
| ip, IP                          | intraperitoneal (always spell out in text; must define if used for space considerations in tables/figures)  |
| IRB                             | institutional review board  |
| it, IT                          | intrathecal (always spell out in text; must define if used for space considerations in tables/figures)  |
| IU                              | international units; change to U (don't need to define U)   |
| iv, IV*                         | intravenous (always define in tables/figures)   |
| KH <sub>2</sub> PO <sub>4</sub> | potassium phosphate   |
| kPa*                            | (pressure unit; query author to convert kPa to mmHg)  |
|                                 |   |
| LAD                             | left anterior descending [adj]; left anterior descending artery; left anterior descending coronary artery   |
| L-NAME                          | <i>N</i> -nitro-L-arginine methylester or <i>N</i> <sup>G</sup> -nitro-L-arginine methylester (L always small cap)                                      |
| L-NMMA*                         | (small cap L; OK not spelled out)   |
| LPS                             | lipopolysaccharide  |
| L-type*                         | long-lasting, high-threshold (channel)  |
| LVEDP                           | left ventricular end-diastolic pressure   |
|                                 |   |
| MAC                             | minimum alveolar concentration (spell out on 1st mention, regardless of times used).<br><u>Note:</u> This is a unit of measure ( <i>e.g.</i> , 0.4 MAC) |
| MAC <sub>awake</sub>            | (subscript lowercase “awake”)   |
| MAP                             | mean arterial pressure  |
| MH                              | malignant hyperthermia  |
| MI                              | myocardial infarction; myocardial ischemia  |
| mmHg*                           | millimeters mercury (pressure unit; query author to convert kPa to mmHg)  |
| MPAP                            | mean pulmonary arterial pressure  |
| mRNA                            | messenger RNA (okay to use abbreviation in title but it must be spelled out at first use in the text)   |

|                     |   |
|---------------------|---|
| MRT                 | mean residence time   |
| MTP                 | massive transfusion protocol  |
| MVO <sub>2</sub>    | myocardial uptake of oxygen (small cap O)   |
| N <sub>2</sub>      | nitrogen (abbreviate only when used with amount)  |
| N <sub>3</sub>      | nitrate (abbreviate only when used with amount)   |
| NADH*               | OK as is, do not spell out  |
| NADPH*              | OK as is, do not spell out  |
| NMDA                | <i>N</i> -methyl-D-aspartate (small cap D in full expansion, not in abbreviation)                 |
| NO*                 | nitric oxide  |
| NOAC                | non-vitamin K oral anticoagulant  |
| N <sub>2</sub> O*   | nitrous oxide (spell out unless used with an amount)  |
| NO <sub>insp</sub>  | inspiratory concentration of nitric oxide   |
| NPO                 | <i>non per os</i> (nothing by mouth)  |
| NSAID               | nonsteroidal anti-inflammatory drug   |
| O <sub>2</sub>      | oxygen (spell out unless used with amount)  |
| OD*                 | outer diameter  |
| OSA                 | obstructive sleep apnea   |
| OTF                 | Oral Transmucosal Fentanyl Citrate (OTFC is the trademarked abbreviation)                         |
| P <sub>50</sub>     | 50% saturation  |
| PAO <sub>2</sub> *  | partial pressure of alveolar oxygen (small cap AO)  |
| PACO <sub>2</sub> * | partial pressure of alveolar carbon dioxide (small cap ACO)                                       |
| PaCO <sub>2</sub> * | arterial carbon dioxide tension (small cap CO)  |
| PACU                | postanesthesia care unit  |
| PaO <sub>2</sub> *  | arterial oxygen tension (small cap O)   |
| PAOP                | pulmonary artery occlusion pressure   |
| PAP; Ppa            | pulmonary artery (or arterial) pressure   |
| P <sub>aw</sub>     | airway pressure   |
| PCA                 | patient-controlled analgesia  |
| PCC                 | prothrombin complex concentrate   |
| PCI                 | percutaneous coronary intervention(s) [should be defined at first use, and not used in abstracts] |
| PCP                 | pulmonary capillary pressure  |
| PCSO <sub>2</sub>   | coronary sinus pressure of oxygen (small cap CSO)   |
| PCWP                | pulmonary capillary wedge pressure  |
| PECO <sub>2</sub>   | mixed expired carbon dioxide pressure (small cap ECO)   |

|                                 |  |
|---------------------------------|--|
| PEEP                            | positive end-expiratory pressure (cm H <sub>2</sub> O)   |
| P <sub>eso</sub>                | esophageal pressure  |
| PETCO <sub>2</sub>              | end-tidal pressure of carbon dioxide (small cap ETCO)  |
| PF4                             | platelet factor 4  |
| pH*                             | Respiration  |
| pH*                             | hydrogen ion concentration (acidity/base)  |
| PIPES*                          | OK as is, do not query   |
| pKa                             | the negative log of the acid dissociation constant   |
| PM*                             | post meridian (afternoon; small caps, same for AM)   |
| P <sub>MAX</sub>                | peak airway pressure (subscript small cap “MAX”; lowercase “max” when modifier is small cap)   |
| P <sub>MEAN</sub>               | mean airway pressure (subscript small cap “MEAN”; lowercase “mean” when modifier is small cap) |
| PO <sub>2</sub> *               | partial pressure of oxygen (small cap O)   |
| ppm*                            | parts per million  |
| psi*                            | pounds per square inch (OK nonmetric)  |
| PT                              | prothrombin time   |
| PTT                             | partial thromboplastin time  |
| PvCO <sub>2</sub>               | mixed venous carbon dioxide tension (small cap CO)   |
| PvO <sub>2</sub>                | mixed venous oxygen tension (small cap O)  |
| PVR                             | pulmonary vascular resistance  |
| Qid                             | four times per day or four times daily (do not use this abbreviation/always spell out)         |
| QoR                             | Quality of Recovery (used as QoR-12, QoR-15, QoR-40, which is a specific patient test.)        |
| QRS complex*                    | combination of three of the graphical deflections seen on a typical electrocardiogram          |
| Q <sub>VA</sub> /Q <sub>T</sub> | venous admixture   |
| Q <sub>s</sub> /Q <sub>T</sub>  | venous admixture   |
| Q                               | cardiac output value (Q with overdot)  |
| Q <sub>T</sub>                  | cardiac output value (Q with overdot) $\dot{Q}$  |
| R <sub>aw</sub>                 | airway resistance  |
| REM                             | rapid eye movement   |
| RNA*                            | ribonucleic acid (never spell out)   |
| ROTEM                           | rotational thromboelastometry  |
| RR                              | respiratory rate (breaths/min)   |

|                     |  |
|---------------------|--|
| RR interval*        | inter-beat interval  |
| SaO <sub>2</sub>    | arterial oxygen saturation (small cap O)   |
| SBP                 | systolic blood pressure  |
| ScO <sub>2</sub>    | alveolar carbon dioxide slope (small cap O)  |
| SD*                 | standard deviation (never spell out)   |
| SEM*                | standard error of the mean   |
| SIC                 | sepsis-induced coagulopathy  |
| SOFA                | Sequential Organ Failure Assessment  |
| SpO <sub>2</sub>    | oxygen saturation measured by pulse oximetry (small cap O)                                       |
| SSEP                | somatosensory evoked potentials  |
| ST segment*         | DO NOT ABBREVIATE  |
| SV                  | stroke volume  |
| SvO <sub>2</sub>    | mixed venous oxygen saturation (small cap O)   |
| SVR                 | systemic vascular resistance   |
| TD50                | toxic dose, 50% of subjects (OK abbreviated) (no subscript)                                      |
| TD95*               | toxic dose, 95% of subjects (OK abbreviated) (no subscript)                                      |
| TEE                 | transesophageal echocardiography   |
| TEG                 | thromboelastogram  |
| TIC                 | traumatic induced coagulopathy   |
| Tid                 | three times per day or three times daily (do not use this abbreviation/always spell out)         |
| Tpa                 | tissue plasminogen activator   |
| TT                  | thrombin time  |
| U                   | units: always change IU to U, and only spell out when used with blood (hemoglobin, <i>etc.</i> ) |
| V                   | flow; air flow (V with <b>overdot</b> )  |
| $\dot{V}_A/\dot{Q}$ | ventilation/perfusion ratio (V and Q with <b>overdot</b> )                                       |
| VAS                 | visual analogue scale  |
| $\dot{V}_{CO_2}$    | carbon dioxide output (V with <b>overdot</b> ; small cap CO)                                     |
| $V_D/V_T$           | dead space ventilation   |
| $\dot{V}_E$         | minute ventilation (V with <b>overdot</b> )  |
| $\dot{V}_E$         | minute volume (V with <b>overdot</b> )   |

|                   |  |
|-------------------|--|
| VKA               | vitamin K antagonist                                       |
| $\dot{V}O_2$      | oxygen uptake (V with <b>overdot</b> ; small cap O)        |
| $\dot{V}/\dot{Q}$ | ventilation/perfusion ratio (V and Q with <b>overdot</b> ) |
| $V_{ss}$          | volume of distribution at steady state                     |
| VTE               | venous thromboembolism                                     |
| $V_T$             | tidal volume (ml/kg)                                       |
| vWF               | von Willebrand factor                                      |

\*Abbreviation marked by an asterisk may be used without expansion in text, titles, and headings.