CLINICAL SCIENCE

Guidance for Authors

CONTENTS

1. Policy of the Journal

1.1. Scope . . . . . . . . . . . . . . i
1.2. The Editorial Board . . . . . . . . i
1.3. The editorial process . . . . . . . . i
1.4. Ethics of investigations on human subjects . . . . . . . . ii
1.5. Originality of papers . . . . . . . . ii

2. Submission of Manuscripts: General Information and Format

2.1. General . . . . . . . . . . . . . . ii
2.2. Full papers . . . . . . . . . . . . . . ii
2.3. Short Communications . . . . . . . . iii
2.4. Correspondence . . . . . . . . . . . . . . iii
2.5. Arrangements for large amounts of information . . . . . . . . iii
2.6. Proof corrections . . . . . . . . . . . . . . iii
2.7. Offprints . . . . . . . . . . . . . . iii
2.8. Availability on MEDLINE . . . . . . . . iii

3. Miscellaneous Notes

3.1. Abbreviations . . . . . . . . . . . . . . iv
3.2. Anatomical nomenclature . . . . . . . . iv
3.3. Animals, plants and microorganisms . . . . . . . . . iv
3.4. Buffers and salts . . . . . . . . . . . . . . iv
3.5. Computer modelling . . . . . . . . . . . . vi
3.6. Doses . . . . . . . . . . . . . . iv
3.7. Enzymes . . . . . . . . . . . . . . iv
3.8. Evaluation of measurement procedures . . . . . . . . . iv
3.9. Figures and Tables . . . . . . . . . . . . . . iv
3.10. Footnotes . . . . . . . . . . . . . . v
3.11. Isotope measurements . . . . . . . . . . . . v
3.12. Radionuclide applications in man . . . . . . . . . v
3.13. Methods . . . . . . . . . . . . . . iv
3.14. Nomenclature of disease . . . . . . . . . v
3.15. Powers in Tables and Figures . . . . . . . . v
3.16. References . . . . . . . . . . . . . . v
3.17. Solutions . . . . . . . . . . . . . . vi
3.18. Spectrophotometric data . . . . . . . . . . vi
3.19. Spelling . . . . . . . . . . . . . . vi
3.20. Statistics . . . . . . . . . . . . . . vi
3.21. Trade names . . . . . . . . . . . . . . vi

4. Units: The SI System . . . . . . . . . . . . . . vii
5. Abbreviations, Conventions etc. . . . . . . . . vii

1. POLICY OF THE JOURNAL

1.1. Scope

Clinical Science publishes papers in the field of clinical investigation, provided they are of a suitable standard and contribute to the advancement of knowledge in this field. The term ‘clinical investigation’ is used in its broad sense to include studies in animals and the whole range of biochemical, physiological, immunological and other approaches that may have relevance to disease in man. Studies which are confined to normal subjects, or animals, or are purely methodological in nature may be acceptable. The material presented should permit conclusions to be drawn and should not be only of a preliminary nature. The journal publishes four types of manuscript, namely invited Editorial Reviews, Full Papers, Short Communications and Correspondence. In addition, Clinical Science publishes abstracts of the proceedings of the Medical Research Society and also that Society’s Annual Guest Lecture.

1.2. The Editorial Board

The Board comprises Editors for the Medical Research Society and the Biochemical Society and a Chairman and Deputy Chairman who are drawn alternately from the two Societies. Members of the Board retire after a maximum of 5 years; the Chairman serves in his capacity for 2 years. The membership of the Board is designed to cover as wide a range of interests as possible.

The main function of the Board is to decide on the acceptability of submitted papers, but it also deals with general matters of editorial policy. Financial policy is dealt with separately by the Committee of Management.

1.3. The editorial process

A submitted paper is first read by the Chairman of the Editorial Board who then sends it to an Editor. The latter considers the paper in detail and sends it to one or more referees (who remain anonymous) from outside the membership of the Board. The Editor returns it with his recommendation to the Chairman who then writes formally to the authors. The ultimate responsibility of acceptance for publication lies with the Chairman. If the
Chairman is for any reason unavailable, the Deputy Chairman assumes this function.

1.4. Ethics of investigations on human subjects

Authors must state in the text of their paper the manner in which they have complied, where necessary, with the recommendations on human investigations published in the Medical Research Council report of 1962/63 (British Medical Journal (1964) ii, 178–180). Consent must be obtained from each patient or subject after full explanation of the purpose, nature and risks of all procedures used and the fact that such consent has been given should be recorded in the paper. Papers should also state that the Ethical Committee of the Institution in which the work was performed has given approval to the protocol. The Editorial Board will not accept papers the ethical aspects of which are, in the Board’s opinion, open to doubt.

1.5. Originality of papers

Submission of a paper to the Editorial Board is taken to imply that it reports work that has not been published in either the same or a substantially similar form, that it is not under consideration for publication elsewhere and that, if accepted for publication by Clinical Science, it will not be published elsewhere in the same form, either in English or in any other language, without the consent of the Editorial Board. This does not usually apply to previous publication of oral communications in brief abstract form. In such cases authors should enclose copies of the abstracts. The author, or in the case of multiple authorship the authors, will be asked to sign a statement vesting the copyright in the publishers. Requests for consent for reproduction of material published in Clinical Science should be addressed to the Editorial Manager.

2. SUBMISSION OF MANUSCRIPTS:

GENERAL INFORMATION

AND FORMAT

2.1. General

Papers submitted for publication should be sent to the Editorial Manager, Clinical Science, 7 Warwick Court, London WC1R 5DP.

The submission should contain four copies (of which three may be photocopies) of the typescript, Tables, Figures etc. The authors should retain one copy of the paper. The Editorial Board does not accept responsibility for damage or loss of papers submitted, although great care is taken to ensure safety and confidentiality of the typescript during the editorial process. In the case of multiple authorship, the covering letter should indicate that the approval of all co-authors has been obtained.

Papers should be presented so that they are intelligible to the non-specialist reader of the journal. This is particularly important in highly specialized fields and a very brief résumé of the current state of knowledge is usually helpful. Certain types of material, e.g. mathematical formulations requiring more than trivial derivations, should be given in a separate Appendix.

Where the reader is referred to previous works by the same author(s) for important details relevant to the present work, copies or reprints of the publication should be sent with the typescript. This is of particular importance in relation to methodology.

The dates of receipt and acceptance of the paper will be published. If the paper has to be returned to the authors for revision and is not resubmitted within 1 month, the date of receipt will be revised accordingly. Papers returned by authors later than 12 months after the original submission date will be treated as new papers. For Short Communications the published date will always be that of receipt of the final version. It is emphasized that badly presented or unduly long papers will be returned for revision and delays in publication will be inevitable. Similar delays will be incurred if the typescript is not prepared strictly in accordance with the instructions detailed below.

2.2. Full papers

The authors should refer to a current issue of Clinical Science to make themselves familiar with the general layout. Concise presentation is very important for rising costs are a severe constraint on space. The length of manuscript and the number of Figures and Tables must be kept to a minimum. Extensive Tables of data can be deposited with the Royal Society of Medicine (see 2.5). Guidance for Authors is usually published in the January issue of the journal, and revised periodically.

Typescripts should be, in general, arranged as follows:

(a) Title page. Title: this should be as informative as possible, since titles of papers are being increasingly used in indexing and coding for information storage and retrieval. The title should indicate the species in which the observations reported have been made. The numbering of parts in a series of papers is not permitted.

List of authors’ names (degrees and appointments are not required).
Laboratory or Institute of origin.

Key words: for indexing the subject of the paper; they should, if possible, be selected from the current issues of 'Medical Subject Headings' (MeSH), produced by the Index Medicus.

Short title: for use as a running heading in the printed text; it should not exceed forty-five characters and spaces.

Author for correspondence: the name and address of the author to whom queries and requests for reprints should be sent.

(b) Summary. This should be a brief statement arranged in numbered paragraphs of what was done, what was found and what was concluded and should rarely exceed 250 words. Contributors from non-English speaking countries are invited to include a translation of the summary in their own language. Abbreviations should be avoided as far as possible and must be defined. Statistical and methodological details including exact doses should also be avoided unless they are essential to the understanding of the summary.

(c) Introduction. This should contain a clear statement of the reason for doing the work, but should not include either the findings or the conclusions.

(d) Methods. The aim should be to give sufficient information in the text or by reference to permit the work to be repeated without the need to communicate with the author.

(e) Results. This section should not include material appropriate to the Discussion section.

(f) Discussion. This should not contain results and should be pertinent to the data presented.

(g) Acknowledgments. These should be as brief as possible.

(h) References. See p. v for the correct format.

(i) Figures and Tables. See p. iv.

2.3. Short Communications

The Short Communication should describe completed work, and should not be merely a preliminary communication. The format of Short Communications should be similar to that of Full Papers, but should not exceed 1200 words of text. One Figure or Table is allowed, but if neither is included the text may be expanded to 1400 words. The passage of Short Communications through the editorial process can frequently be expedited and contributors are encouraged to take advantage of these facilities when rapid publication is of importance and the material can be presented concisely.

The paper should appear in print within 3 months of acceptance. When submitting Short Communications, authors should make it quite clear that the work is intended to be treated as a Short Communication.

2.4. Correspondence

Letters containing critical assessments of material published in Clinical Science, including Editorial Reviews, will be considered for the Correspondence section of the journal. Letters should be no longer than 750 words, with one Figure or Table and up to six references, or 1000 words maximum without a Figure or Table. Such letters should be sent to the Editorial Manager, Clinical Science, within 6 months of the appearance of the article concerned. They will be sent to the authors for comment and both the letter and any reply by the author will be published together. Further correspondence arising therefrom will also be considered for publication. Consideration will also be given to publication of letters on ethical matters.

Work submitted as a full paper or Short Communication that is assessed by the Editorial Board as unacceptable in that form might be acceptable for publication as a letter.

2.5. Arrangements for large amounts of information

It is impracticable to publish very large sets of individual values or very large numbers of diagrams, and under these circumstances a summary of the information only should be included in the paper. The information from which the summary was derived should be submitted with the typescript and, if the latter is accepted, the Editors may ask for a copy of the full information and diagrams to be deposited with the Librarian, the Royal Society of Medicine, 1 Wimpole Street, London W1M 8AE, who will issue copies on request. Experience has shown that such requests are frequently received.

2.6. Proof corrections

These are expensive and corrections of other than printers' errors may have to be charged to the author.

2.7. Offprints

Fifty offprints are supplied free and additional copies may be obtained at terms, based upon the cost of production, that will be given with the proofs. All offprints should be ordered when the proofs are returned.

2.8. Availability on MEDLINE

Summaries of papers in Clinical Science are available on-line on teleprinters participating in the
3. MISCELLANEOUS NOTES

3.1. Abbreviations

Abbreviations should be avoided; if used they must be defined at the first mention; new abbreviations should be coined only for unwieldy names which occur frequently. Abbreviations should not appear in the title nor, if possible, in the Summary. A list of accepted abbreviations is on p. vi. Numbers, not initials, should be used for patients and subjects.

3.2. Anatomical nomenclature

This should follow the recommendations of the International Anatomical Nomenclature Committee (1966) Nomina Anatomica, 3rd edn, Excerpta Medica Foundation, Amsterdam.

3.3. Animals, plants and micro-organisms

The full binomial specific names should be given at first mention for all experimental animals other than common laboratory animals. The strain and, if possible, the source of laboratory animals should be stated. Thereafter in the text, single letter abbreviations may be given for the genus; if two genera with the same initial letter are studied, abbreviations such as Staph. and Strep. should be used.

3.4. Buffers and salts

The acidic and basic components should be given, together with the pH. Alternatively, a reference to the composition of the buffer should be given. Further details are provided in the Biochemical Journal (1978) 169, 9.

When describing solutions containing organic anions and their parent acids, the salt designator (e.g. lactate, urate, oxalate) should be used in reference to the name of the acid (lactic, uric, oxalic) unless it is certain that virtually all of the acid is in the undisassociated form.

The composition of incubation media should be described, or a reference to the composition should be given.

3.5. Computer modelling

Papers concerned primarily with computer modelling techniques are acceptable provided that use of such techniques leads to a clear choice between two or more alternative hypotheses, or to the formulation of a new hypothesis amenable to experimental challenge or verification, or provides some new insight into the behaviour of a particular physiological system. Extensive technical details of hardware and software should not be given.

3.6. Doses

Doses of drugs should be expressed in mass terms, e.g. milligrams (mg) or grams (g), and also (in parentheses) in molar terms, e.g. mmol, mol, where this appears to be relevant. Molecular weights of many drugs may be found in The Merck Index, 8th edn, Merck and Co. Inc., N.J., U.S.A.

3.7. Enzymes

Nomenclature should follow that given in Enzyme Nomenclature (1978), Academic Press, London and New York, and Enzyme Commission (EC) number should be quoted at the first mention. Where an enzyme has a commonly used informal name, this may be employed after the first formal identification. A unit of enzyme activity should preferably be expressed as that amount of material which will catalyse transformation of 1μmol of the substrate/min under defined conditions, including temperature and pH. Alternatively, or when the natural substrate has not been fully defined, activity should be expressed in terms of units of activity relative to that of a recognized reference preparation, assayed under identical conditions. Activities of enzymes should normally be expressed as units/ml or units/mg of protein.

3.8. Evaluation of measurement procedures

When a new measuring procedure has been used, or when an established procedure has been applied in a novel fashion, an estimate of the precision of the procedure should be given. This should, as far as possible, indicate what sources of variation have been included in this estimate, e.g. variation of immediate replication, variation within different times of day, or from day to day etc.

If the precision of measurement varies in proportion to the magnitude of the values obtained, it can best be expressed as the coefficient of variation; otherwise it should be expressed by an estimate of the (constant) standard error of a single observation, or by estimates at several points within the range of observed values.

When recovery experiments are described the approximate ratio of the amount added to the amount already present and the stage of the procedure at which the addition was made should be stated.

3.9. Figures and Tables

These are expensive to print and their number should be kept to a minimum. Their appropriate...
position in the paper should be indicated in the margin of the text. References to Figures and Tables should be in Arabic numerals, e.g. Fig. 3, and they should be numbered in order of appearance. In general, the same data should not be presented in both a Figure and a Table.

Figures, with captions attached, should be supplied as original drawings or matt photographs together with photocopies. All Figures should have their number and the authors' names written in pencil on the back; the top of the Figure should be indicated with a pencilled arrow. Acceptable symbols for experimental points are $\bullet$, $\triangle$, $\blacksquare$, $\circ$, $\square$, $\bigtriangleup$, $\bigcirc$, $\square$. The symbols $\times$ or $+$ must be avoided. The same symbols must not be used for two curves where the points might be confused. For scatter diagrams, solid symbols are preferred. When a particular variable appears in more than one Figure, the same symbol should be used for it throughout, if possible.

Curves should not be drawn beyond the experimental points, nor should axes extend appreciably beyond the data. Only essential information that cannot readily be included in the legend should be written within the Figure.

Figures for half-tone reproduction should be submitted as glossy prints. They are particularly expensive to print and their use should be avoided as far as possible.

Tables should be typed separately from the text. They should have an underlined title followed by any legend.

Captions for the Figures, and titles and legends for the Tables, should make them readily understandable without reference to the text. Adequate statistical information, including that on regression lines, should be included in Figure captions where appropriate.

3.10. Footnotes
These should be avoided as far as possible but where they are used in Tables they should be identified by the symbols *†‡§‖¶, in that order.

3.11. Isotope measurements
The information given should include (a) conditions of radioactivity counting, e.g. infinitely thick, infinitely thin; (b) the nature of the phosphor used in liquid-scintillation counting; (c) details of corrections made to the observed count rate, e.g. for 'quenching' or 'cross-over'; (d) standard deviation of the results or a statement of the minimum total counts above background collected and the background value.

In general the specific radioactivity of the starting materials should be given, preferably in terms of radioactivity per unit weight or, for stable isotopes, as atoms % excess.

Pending the general introduction of SI units radioactivity should continue to be expressed in terms of the curie (Ci) followed by the corresponding figure in terms of the becquerel (Bq: disintegrations/s), in parentheses, and suitably rounded.

3.12. Radionuclide applications in man
If new or modified radionuclide applications in man are described, an estimate of the maximal possible radiation dose to the body and critical organs should be given.

For the time being this can continue to be expressed in rems, but with the corresponding figure in sieverts (Sv) given in parentheses after it.

3.13. Methods
In describing certain techniques, namely centrifugation (when the conditions are critical), chromatography and electrophoresis, authors should follow the recommendations published by the Biochemical Society (currently, Biochemical Journal (1981) 193, 1–21).

This should follow the International Classification of Disease (8th revision, World Health Organization, Geneva, 1969) as far as possible.

3.15. Powers in Tables and Figures
Care is needed where powers are used in Table headings and in Figures to avoid numbers with an inconvenient number of digits. For example: (i) an entry '2' under the heading $10^k$ means that the value of $k$ is 0-002; an entry '2' under the heading $10^{-k}$ means that the value of $k$ is 2000. (ii) A concentration 0-00015 mol/l may be expressed as 0-15 under the heading 'concn. (mmol/l)' or as 150 under the heading 'concn. (µmol/l)' or as 15 under the heading 'concn. (mol/l)' but not as 15 under the heading 'concn. (mol/l) x 10^{-4}'.

3.16. References
The numerical citation system is now used: references in the text are numbered consecutively in the order in which they are first mentioned, the numerals being given in brackets, e.g. [22]. References cited in Figure legends or Tables only should be numbered in a sequence determined by the position of the first mention in the text of the Figure or Table. References should be listed in
numerical order and the names of all authors of a paper should be given, with the full title of the paper and the source details in full including the first and last page numbers, e.g.


When the quotation is from a book, the following format should be used, giving the relevant page or chapter number:


References to 'personal communications' and 'unpublished work' should appear in the text only and not in the list of references. The name and initials of the source of information should be given. When the reference is to material that has been accepted for publication but has not yet been published, this should be indicated in the list of references by 'In press' together with the name of the relevant journal and, if possible, the expected date of publication. If such a citation is of major relevance to the manuscript submitted for publication authors are advised that the editorial process might be expedited by the inclusion of a copy of such work. In the case of quotations from personal communications the authors should state in the covering letter that permission for quotation has been obtained.

3.17. Solutions

Concentration of solutions should be described where possible in molar terms (mol/l and subunits thereof), stating the molecular particle weight if necessary. Values should not be expressed in terms of normality or equivalents. Mass concentration should be expressed as g/l or subunits thereof, for example mg/l or µg/l. For solutions of salts, molar concentration is always preferred to avoid ambiguity as to whether anhydrous or hydrated compounds are used. Concentrations of aqueous solutions should be given as mol/l or mol/kg (g/l or g/kg if not expressed in molar terms) rather than % (w/v) or % (w/w). It should always be made clear whether concentrations of components in a reaction mixture are final concentrations or the concentrations in solutions added.

3.18. Spectrophotometric data

The term 'absorbance' [log (I/0)] should be used rather than 'optical density' or 'extinction'. The solvent, if other than water, should be specified. Symbols used are: A, absorbance; a, specific absorption coefficient (litre g⁻¹ cm⁻¹) (alternatively use A₁%cm); ε, molar absorption coefficient (the absorbance of a molar solution in a 1 cm light-path) (litre mol⁻¹ cm⁻¹, not cm² mol⁻¹).

3.19. Spelling


3.20. Statistics

Papers are frequently returned for revision (and their publication consequently delayed) because the authors use inappropriate statistical methods. Two common errors are the use of means, standard deviations and standard errors in the description and interpretation of grossly non-normally distributed data and the application of t-tests for the significance of difference between means in similar circumstances, or when the variances of the two groups are non-homogeneous. In some circumstances it may be more appropriate to provide a 'scattergram' than a statistical summary.

A reference should be given for all methods used to assess the probability of a result being due to chance. The format for expressing mean values and standard deviations or standard errors of the mean is, for example: mean cardiac output 10.4 l/min (SD 1.2; n = 11). Degrees of freedom should be indicated where appropriate. Levels of significance are expressed in the form P < 0.01.

3.21. Trade names

The name and address of the supplier of special apparatus and of biochemicals should be given. In the case of drugs, approved names should always be given with trade names and manufacturers in parentheses.

4. UNITS: THE SI SYSTEM

The recommended Système International (SI) units [see Quantities, Units and Symbols, 2nd edn (1975) The Royal Society, London] are used by Clinical Science. All papers submitted should use these units except for blood pressure values, which should be expressed in mmHg, or gas tensions, where values at the author’s discretion may be given as mmHg (with kPa in parentheses) or as kPa (with mmHg in parentheses) in the text and either as mmHg or as kPa in Figures, which (if practicable) should have scales in both units. Airways pressure should be expressed in kPa. Where molecular weight is known, the amount of a chemical or drug should be expressed in mol or in
Guidance for Authors

an appropriate subunit, e.g. mmol. Energy should be expressed in joules (J).

The basic SI units and their symbols are as follows:

<table>
<thead>
<tr>
<th>Physical quantity</th>
<th>Name</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>length</td>
<td>metre</td>
<td>m</td>
</tr>
<tr>
<td>mass</td>
<td>kilogram</td>
<td>kg</td>
</tr>
<tr>
<td>time</td>
<td>second</td>
<td>s</td>
</tr>
<tr>
<td>electric current</td>
<td>ampere</td>
<td>A</td>
</tr>
<tr>
<td>thermodynamic temperature</td>
<td>kelvin</td>
<td>K</td>
</tr>
<tr>
<td>luminous intensity</td>
<td>candela</td>
<td>cd</td>
</tr>
<tr>
<td>amounts of substance</td>
<td>mole</td>
<td>mol</td>
</tr>
</tbody>
</table>

The following are examples of derived SI units:

<table>
<thead>
<tr>
<th>Physical quantity</th>
<th>Name</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>energy</td>
<td>joule</td>
<td>J</td>
</tr>
<tr>
<td>force</td>
<td>newton</td>
<td>N</td>
</tr>
<tr>
<td>power</td>
<td>watt</td>
<td>W</td>
</tr>
<tr>
<td>pressure</td>
<td>pascal</td>
<td>Pa</td>
</tr>
<tr>
<td>electric charge</td>
<td>coulomb</td>
<td>C</td>
</tr>
<tr>
<td>electric potential</td>
<td>volt</td>
<td>V</td>
</tr>
<tr>
<td>difference</td>
<td>volt</td>
<td>V</td>
</tr>
<tr>
<td>electric resistance</td>
<td>ohm</td>
<td>Ω</td>
</tr>
<tr>
<td>conductance</td>
<td>siemens</td>
<td>S</td>
</tr>
<tr>
<td>capacitance</td>
<td>farad</td>
<td>F</td>
</tr>
<tr>
<td>frequency</td>
<td>hertz</td>
<td>Hz</td>
</tr>
<tr>
<td>volume</td>
<td>litre</td>
<td>l</td>
</tr>
</tbody>
</table>

The word ‘litre’ has been accepted as a special name for cubic decimetre (1 litre = 1 dm³).

Both the basic and derived SI units, including the symbols of derived units that have special names, may be preceded by prefixes to indicate multiples and submultiples. The prefixes should be as follows:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Symbol</th>
<th>Multiple</th>
<th>Prefix</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>10⁴</td>
<td>mega</td>
<td>M</td>
<td>10⁻³</td>
<td>milli</td>
</tr>
<tr>
<td>10³</td>
<td>kilo</td>
<td>k</td>
<td>10⁻⁶</td>
<td>micro</td>
</tr>
<tr>
<td>10²</td>
<td>hecto</td>
<td>h</td>
<td>10⁻⁹</td>
<td>nano</td>
</tr>
<tr>
<td>10¹</td>
<td>deka</td>
<td>da</td>
<td>10⁻¹²</td>
<td>pico</td>
</tr>
<tr>
<td>10⁻¹</td>
<td>deci</td>
<td>d</td>
<td>10⁻¹⁵</td>
<td>femto</td>
</tr>
<tr>
<td>10⁻²</td>
<td>centi</td>
<td>c</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* *To be avoided where possible (except for cm).

Compound prefixes should not be used, e.g. 10⁻² m should be represented by 1 nm, not 1 μm.

Notes:

(i) Full stops are not used after symbols.
(ii) Minutes (min), hours (h), days and years will continue to be used in addition to the SI unit of time (the second (s)).
(iii) The solidus may be used in a unit as long as it does not have to be employed more than once, e.g. mmol/l is acceptable, but ml/min/kg is not, and should be replaced by ml min⁻¹ kg⁻¹.

5. ABBREVIATIONS, CONVENTIONS, DEFINITIONS, SYMBOLS AND SPECIAL COMMENTS

As well as standard symbols and abbreviations that have been accepted by international bodies, and which can be used without definition, this list shows selected abbreviations in the form of groups of capital letters (e.g. ALA, ECF, MCHC) which when used must be defined in the text as indicated on p. iv. The standard abbreviations for amino acids are only for use in Figures and Tables or for peptide sequences.

<table>
<thead>
<tr>
<th>Name</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>absorbance</td>
<td>A</td>
</tr>
<tr>
<td>acceleration due to gravity</td>
<td>g</td>
</tr>
<tr>
<td>adenosine 3': 5': cyclic monophosphate</td>
<td>AMP</td>
</tr>
<tr>
<td>adenosine 5'-phosphate</td>
<td>ADP</td>
</tr>
<tr>
<td>adenosine 5'-triphosphate</td>
<td>ATP</td>
</tr>
<tr>
<td>adrenocorticotropic hormone</td>
<td>ACTH</td>
</tr>
<tr>
<td>alanine</td>
<td>Ala</td>
</tr>
<tr>
<td>alternating current</td>
<td>a.c.</td>
</tr>
<tr>
<td>alveolar minute ventilation</td>
<td>V A</td>
</tr>
<tr>
<td>alveolar to arterial oxygen tension</td>
<td></td>
</tr>
<tr>
<td>ampere</td>
<td>A</td>
</tr>
<tr>
<td>amidolineal vicinal acid</td>
<td>ALA</td>
</tr>
<tr>
<td>Angstrom (Å)</td>
<td>Å</td>
</tr>
<tr>
<td>antidiuretic hormone</td>
<td>ADH</td>
</tr>
<tr>
<td>arginine</td>
<td>Arg</td>
</tr>
<tr>
<td>arteriovenous</td>
<td>a-v: permitted in Figures and Tables</td>
</tr>
<tr>
<td>asparagine</td>
<td>Asn</td>
</tr>
<tr>
<td>aspartic acid</td>
<td>Asp</td>
</tr>
<tr>
<td>atmosphere (unit of pressure)</td>
<td>atm</td>
</tr>
<tr>
<td>atomic weight</td>
<td>Bq (1 d.p.a.)</td>
</tr>
<tr>
<td>becquerel</td>
<td></td>
</tr>
<tr>
<td>blocking agents</td>
<td>e.g. β-adrenoceptor antagonists preferred</td>
</tr>
<tr>
<td>blood pressure</td>
<td></td>
</tr>
<tr>
<td>blood urea nitrogen</td>
<td></td>
</tr>
<tr>
<td>circulation</td>
<td></td>
</tr>
<tr>
<td>body temperature and pressure, saturated</td>
<td></td>
</tr>
<tr>
<td>blood volume</td>
<td>BV</td>
</tr>
<tr>
<td>BTPS</td>
<td></td>
</tr>
</tbody>
</table>
### Guidance for Authors

- **British Pharmacopoeia**
  - calculated
  - "Calorie" (= 1000 cal)
  - carbon dioxide output (in respiratory physiology)
  - cardiac frequency
  - cardiac output
  - centimetre
  - clearance of x
  - coenzyme A and its acyl derivatives
  - compare
  - complement fractions
  - compliance (respiratory physiology)
  - concentrated
  - concentration
  - conductance (respiratory physiology)
  - correlation coefficient
  - counts/min, counts/s
  - cubic centimetres
  - curie
  - cycle/s
  - cysteine
  - dates
  - dead-space minute ventilation
  - dead-space volume
  - degrees, Celsius or centigrade
  - deoxy (prefix)
  - deoxycorticosterone
  - deoxycorticosterone acetate
  - deoxyribonucleic acid
  - dialysate
  - diethylaminoethylcellulose
  - differential of x with respect to time
  - 1,25-dihydroxycholecalciferol dilute
  - 2,3-diphosphoglycerate
  - direct current
  - disintegrations/min
  - disintegrations/s
  - dissociation constant
  - acidic
  - basic
  - apparent
  - minus log of
doses
  - dyne
  - elastance
  - electrocardiogram
  - electroencephalogram
  - write in full and give
    - calc. (in Tables only)
    - not used; recalculate as
      - kilojoules (1 'Calorie' = 4.184 kJ)
    - in ml
    - in beats/min
    - express in l/min
    - cm
    - CoA and acyl-CoA
    - cf.
    - C1–C9
    - C; express in 1 kPa⁻¹
    - conc.
    - conc.; may be denoted [ ] e.g. plasma [HCO₃]⁻
    - G; express in 1 s⁻¹ kPa⁻¹
    - r: may be used without
      - definition
    - c.p.m., c.p.s.
    - use ml
    - Ci (1 Ci = 3.7 × 10¹⁰ d.p.s.)
  - Hz
  - Cys
  - e.g. 11 August 1970
  - Vₚ
  - φ twitch
  - not deoxy
  - DOC
  - DOCA
  - DNA
  - diffuse preferred;
    - 'dialysate' should be clearly defined
  - DEAE-cellulose
  - x (dx/dt)
  - 1,25-(OH)₂D₃
  - dil.
  - 2,3-DPG
  - d.c.
  - d.m.
  - d.p.s.
  - Kₐ
  - K₈
  - e.g. K₈
  - pK
  - avoid Latin designations such as b.d. and t.i.d.
  - dyn; used for vascular
    - resistance
    - E; express in Pa m⁻³
  - electron spin resonance
  - electronvolt
  - equation
  - equivalents (amount of a chemical)
  - erythrocyte count
  - erythrocyte sedimentation rate
  - ethanol, ethanolic
  - ethylenediaminetetra-acetate exchangeable
  - Experiment (with reference numeral)
  - expired minute ventilation
  - extracellular fluid
  - extracellular fluid volume
  - extraction ratio of x (renal)
  - Figure (with reference numeral)
  - filtered load of x (renal)
  - follicle-stimulating hormone
  - forced expiratory volume in 1.0 s
  - fractional concentration in dry gas
  - fractional disappearance rate frequency of respiration
  - functional residual capacity gas–liquid chromatography
  - gas transfer factor
  - glomerular filtration rate
  - glutamic acid
  - glutathione
  - glycine
  - gram(me)
  - gravitational field, unit of
    - (9.81 m s⁻²)
  - growth hormone
  - guery
  - haematocrit
  - haemoglobin
  - half-life
  - histidine
  - hour
  - human chorionic gonadotropin
  - human placental lactogen
  - hydrocortisone
  - hydrocortisone acetate
  - hydroxyproline
  - immunoglobulins
  - electromotive force
  - electron spin resonance
  - electronvolt
  - equation
  - equivalents (amount of a chemical)
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    - (9.81 m s⁻²)
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  - guery
  - haematocrit
  - haemoglobin
  - half-life
  - histidine
  - hour
  - human chorionic gonadotropin
  - human placental lactogen
  - hydrocortisone
  - hydrocortisone acetate
  - hydroxyproline
  - immunoglobulins
  - e.m.f.
  - e.s.r.
  - eV (for radiation energies)
  - eqn.
  - not used; recalculate in molar terms
  - express as 10¹² cells/l
  - ESR
  - not ethyl alcohol or alcoholic
  - EDTA
  - Na⁺, K⁺ etc., for total exchangeable sodium, potassium etc.
  - Expt.; plural, Expts.
  - Vₚ
  - use absorbance
  - ECF
  - ECFV
  - Eₙ
  - Fig.; plural, Figs.
  - Fₚ
  - FSH
  - FEV₁-₀
  - F
  - k (as in A = A₀e⁻kt)
  - fᵣ in breaths/min
  - FRC
  - g.l.c.
  - T; in mmol min⁻¹ kPa⁻¹
  - GFR
  - Glu
  - Gln
  - GSH (reduced); GSSG (oxidized)
  - Gty
  - g
  - G
  - GH; if human, HGH
  - Gy (100 rads)
  - not allowed; use packed cell volume (PCV)
  - Hb; express in g/dl
  - lᵣ
  - Hz
  - His
  - h
  - HCG
  - HPL
  - use cortisol
  - aH; express in nmol/l
  - pH
  - 25-(OH)D₃
  - Hyp
  - IgA, IgD, IgE, IgG, IgM
injection routes:
- intra-arterial
- intramuscular
- intrapertoneal
- intravenous
- subcutaneous
- international unit

Guidance for Authors

---

millimetre of mercury

---

millimolar (concentration)
- millimole
- minimum
- minute (60 s)
- molar
- molar (concentration)
- molar absorption coefficient

---

mole

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molecular weight

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nicotinamide-adenine dinucleotide

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normal

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normal temperature and pressure

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nuclear magnetic resonance

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number (in enumerations)

---

observed

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ohm

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ornithine

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orthophosphate (inorganic)

---

osmolarity

---

oxygen uptake per minute

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packed cell volume

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pascal

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per cent

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per cent

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petroleum ether

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phenylalanine

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plasma renin activity

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plasma volume

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posture

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power

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pressure

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pressures

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pH

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PS

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PS

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<table>
<thead>
<tr>
<th>Term</th>
<th>Abbreviation(s)</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential difference</td>
<td>P</td>
<td>Probability of an event being due to chance alone</td>
</tr>
<tr>
<td>Power output</td>
<td>W</td>
<td>$W = 0.1635 \text{kpm/min}$</td>
</tr>
<tr>
<td>Precipitate pressure</td>
<td>P, P_t</td>
<td>$P_t$: express in kPa (except for blood pressures and gas tensions: see p. 6); $1 \text{kPa} = 7.5 \text{mm Hg}$</td>
</tr>
<tr>
<td>Probability of an event being due to chance alone</td>
<td>P</td>
<td>$P$ sulphhydryl</td>
</tr>
<tr>
<td>Proline</td>
<td>Pro</td>
<td>sum</td>
</tr>
<tr>
<td>Protein-bound iodine (plasma)</td>
<td>PBI</td>
<td>Svedberg unit</td>
</tr>
<tr>
<td>Pulmonary capillary blood flow</td>
<td>Q_c</td>
<td>$T$: temperature (absolute)</td>
</tr>
<tr>
<td>Pyrophosphate (inorganic)</td>
<td>PPi</td>
<td>$T$: temperature, thermodynamic</td>
</tr>
<tr>
<td>Rad (radiation dose; $10^{-3} \text{J absorbed/g of material}$)</td>
<td>P</td>
<td>thin-layer chromatography</td>
</tr>
<tr>
<td>Red blood cell</td>
<td>RBC</td>
<td>threonine</td>
</tr>
<tr>
<td>Red cell mass</td>
<td>RCM</td>
<td>thyrotrophin-releasing hormone</td>
</tr>
<tr>
<td>Relative band speed (partition chromatography)</td>
<td>$R_f$</td>
<td>tidal volume</td>
</tr>
<tr>
<td>Residual volume resistance (rheological)</td>
<td>RV</td>
<td>time (symbol)</td>
</tr>
<tr>
<td>Respiratory exchange ratio (pulmonary)</td>
<td>R</td>
<td>time of day</td>
</tr>
<tr>
<td>Respiratory quotient (metabolic)</td>
<td>RQ</td>
<td>torr</td>
</tr>
<tr>
<td>Revolutions</td>
<td>Rev.</td>
<td>total lung capacity</td>
</tr>
<tr>
<td>Rev./min</td>
<td>Use g if possible (see p. viii)</td>
<td></td>
</tr>
<tr>
<td>Ribonucleic acid</td>
<td>RNA</td>
<td>tryptophan</td>
</tr>
<tr>
<td>Röntgen</td>
<td>R</td>
<td>tubular maximal reabsorptive capacity for x</td>
</tr>
<tr>
<td>Saline</td>
<td>Define at first mention (e.g., NaCl solution (154 mmol/l))</td>
<td></td>
</tr>
<tr>
<td>Saturation</td>
<td>$S$, e.g., $S_aO_2$ for arterial oxygen saturation (see partial pressure for other analogous abbreviations)</td>
<td>tyrosine</td>
</tr>
<tr>
<td>Second (time)</td>
<td>s</td>
<td>urinary concentration of x</td>
</tr>
<tr>
<td>Serine</td>
<td>Ser</td>
<td>valine</td>
</tr>
<tr>
<td>Sievert</td>
<td>Sv</td>
<td>variance ratio</td>
</tr>
<tr>
<td>Solvent systems</td>
<td>E.g., butanol/acetic acid/water (4:1:1, by vol.), butanol/acetic acid (4:1, v/v)</td>
<td>viscosity, dynamic</td>
</tr>
<tr>
<td>Species</td>
<td>Sp., plural spp.</td>
<td>viscosity, kinematic</td>
</tr>
<tr>
<td>Specific activity</td>
<td>Sp. act.</td>
<td>vital capacity</td>
</tr>
<tr>
<td>Weight</td>
<td>W</td>
<td>volt</td>
</tr>
<tr>
<td>White blood cell</td>
<td>Use leucocyte: express counts as $10^8$ cells/l</td>
<td></td>
</tr>
<tr>
<td>Specific conductance of airways</td>
<td>$s_{Gaw}$</td>
<td>$s_{Gaw}$: express in $s^{-1} \text{kPa}^{-1}$</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>$SD$</td>
<td>may be used</td>
</tr>
<tr>
<td>Standard error of the mean</td>
<td>$SEM$</td>
<td>without definition</td>
</tr>
<tr>
<td>Steroid nomenclature</td>
<td>See Biochemical Journal (1969) 113, 5-28; (1972) 127, 613-617</td>
<td></td>
</tr>
<tr>
<td>Airways pressure</td>
<td>$p_{\text{aw}}$</td>
<td>Use thiol or SH</td>
</tr>
<tr>
<td>Solute system</td>
<td>Use only for buffer mixtures; otherwise use 5,5'-diethylbarbituric acid</td>
<td></td>
</tr>
<tr>
<td>Second (time) of day</td>
<td>Use $t$ if not used; use kPa (1 torr $= 0.133$ kPa)</td>
<td></td>
</tr>
<tr>
<td>Reversibility</td>
<td>Rev.</td>
<td>$T_{n,m}$</td>
</tr>
<tr>
<td>Respiratory exchange ratio (pulmonary)</td>
<td>$R$</td>
<td>$T_{\text{aw}}$</td>
</tr>
<tr>
<td>Respiratory quotient (metabolic)</td>
<td>$R_Q$</td>
<td>e.g. 18.15 hours</td>
</tr>
<tr>
<td>Renin</td>
<td>See plasma renin activity</td>
<td></td>
</tr>
<tr>
<td>Residual volume resistance (rheological)</td>
<td>$RV$</td>
<td>not used; use kPa (1 torr $= 0.133$ kPa)</td>
</tr>
<tr>
<td>Saturation</td>
<td>$S$, e.g., $S_aO_2$ for arterial oxygen saturation (see partial pressure for other analogous abbreviations)</td>
<td>TLC</td>
</tr>
<tr>
<td>Ribonucleic acid</td>
<td>RNA</td>
<td>Trp</td>
</tr>
<tr>
<td>Röntgen</td>
<td>R</td>
<td>$T_{\text{aw}}$</td>
</tr>
<tr>
<td>Saline</td>
<td>Define at first mention (e.g., NaCl solution (154 mmol/l))</td>
<td></td>
</tr>
<tr>
<td>Saturation</td>
<td>$S$, e.g., $S_aO_2$ for arterial oxygen saturation (see partial pressure for other analogous abbreviations)</td>
<td>Tyr</td>
</tr>
<tr>
<td>Second (time)</td>
<td>S</td>
<td>ur. v.</td>
</tr>
<tr>
<td>Serine</td>
<td>Ser</td>
<td>$U_s$, e.g., Fe$^{2+}$, not Fe$^{2+}$</td>
</tr>
<tr>
<td>Sievert</td>
<td>Sv</td>
<td>Val</td>
</tr>
<tr>
<td>Solvent systems</td>
<td>E.g., butanol/acetic acid/water (4:1:1, by vol.), butanol/acetic acid (4:1, v/v)</td>
<td>$F$, express in kPa $l^{-1}$ s (with value in dyn s cm$^{-1}$ in parentheses); primary values of differential vascular pressure (mmHg) and flow ($l$/min) should always also be given in Tables or text as appropriate</td>
</tr>
<tr>
<td>Specific activity</td>
<td>Sp. act.</td>
<td>$\bar{Q}_m$, used only for buffer mixtures; otherwise use 5,5'-diethylbarbituric acid</td>
</tr>
<tr>
<td>Weight</td>
<td>W</td>
<td>$\eta$</td>
</tr>
<tr>
<td>White blood cell</td>
<td>Use leucocyte: express counts as $10^8$ cells/l</td>
<td></td>
</tr>
</tbody>
</table>
AUTHOR INDEX

ADIGUN, S.A. 51–56
ALON, U. 65–70, 431–433
ANDRÉN, L. 137–141
ARISTIMUNO, G. 307–309
AUG, F. 13–16
BACKMAN, U. 509–514
BANKS, R.A. 169–176
BARANOWSKI, R.L. 667–676
BARNES, P.J. 349–354, 661–665
BARTTER, F.C. 209–213
BAUER, J.H. 43–49
BEEVERS, U. 341–342
BELLINGER, A.J. 479–488
BENHAMOU, J.-P. 273–277
BERANT, M. 431–433
BERNUAU, J. 273–277
BERTRAND, A. 13–16
BETTER, O.S. 65–70, 431–433
BEUERS, U. 341–342
Bianchi, G.P. 683–686
BING, R.F. 361–366
BJÖRNSSON, Ö.G. 651–659
BLOOM, S.R. 651–659
BONJOUR, J.-P. 389–396, 503–508
BORG, K.O. 137–141
BOUHNIK, J. 355–360
BRADLEY, G.W. 311–319
BREWER, D.B. 495–502
BROOKS, C.S. 43–49
Brown, M.J. 661–665
Bryson, E.I. 595–604
Burke, J.F. 553–556
Burston, D. 617–626
CAGLIERO, E. 239–242
CAMPBELL, I.L. 449–455
CATLEY, D.M. 595–604
CHADWICK, V.S. 651–659
CHAIMOVITZ, C. 65–70
CHARLESWORTH, J.A. 561–562
CHONG, C.K. 457–464
CHRISTOFIDES, N.D. 651–659
CLAUSER, E. 355–360
CLEGG, G. 489–494
CLEMENS, T.L. 427–429
CLOUGH, D.P. 51–56
COHEN, R.D. 411–420
CONDORELLI, M. 581–588
CONWAY, J. 51–56
CORTERE, C. 397–401
CORVOL, P. 355–360
CRAWFORD, P.A. 667–676
CREMONINI, C. 643–649
CROCKSON, A.P. 71–76
CRUICKSHANK, J.K. 1–6
CYRJEBONER, M. 389–396
DANDONA, P. 177–181
DANIELSON, B.G. 509–514
DAVIDSON, L. 169–176
DE KEUZER, M.H. 435–437
DE LUCA, N. 581–588
DERKKX, F.H.M. 435–437
DOLLERY, C.T. 349–354
DODI, C. 683–686
DOWLING, R.H. 515–519
DRESLINSKI, G.R. 307–309
EDWARDS, R.H.T. 227–234
ENDRE, Z.H. 561–562
EVENWEL, R.T. 589–594
EWING, D.J. 57–64
FAHR, M. 71–76
FELLSHRÖM, B. 509–514
FEVREY, J. 521–528
FISHER, R. 279–283
FITZGERALD, G.A. 349–354
FLEISCH, H. 389–396, 503–508
FLETCHER, D.R. 651–659
FORBERG, A.M. 479–488
FRAHER, L.J. 427–429
FRASER, R. 373–380
FRASER, T.R. 221–226
FROHILICH, E.D. 307–309
GALTON, D.J. 93–100
GARCIA DEL RIO, C. 143–149
GARDES, J. 355–360
GAUTHIER, C. 403–410
GEOFFREY, S.D. 471–477
GOLDFINGER, A. 183–191
GOLDEN, M.H.N. 299–305
GOLDMAN, M.D. 7–11
GOLDSMITH, H.J. 479–488
GORDON, J.A. 235–238
GOGGI, C. 643–649
GREEN, J.R. 557–560
GRIFFITHS, J.R. 113–115
GÜLLNER, H.-G. 209–213
GUTTERIDGE, D.H. 221–226
HABIG, A.R. 541–547
HAGENFELDT, L. 285–293
HALE, T. 311–319
HALL, P.C. 17–19, 421–425
HAM, J.M. 279–283
HAMBURGER, R.K. 667–676
HANSSON, L. 137–141
HATTON, R. 51–56
HEATH, D.F. 83–91
HEFFI, E. 389–396
HELLQUIST, L.N.B. 449–455
HENDERSON, A.R. 337–339
HENRY, G.N. 381–387
HENDRIKSEN, O. 605–609
HERITTING, G. 341–342
HES, R. 595–604
HEYMA, P. 215–220
HILTON, P.J. 563–564
HIRSCH, F. 611–615
HOLDBROOK, I.B. 83–91
HOLDSWORTH, G. 93–100, 125–129
HOLMGREN, K. 509–514
HODD, B. 151–155
HOPWOOD, J.J. 193–201
HORSFIELD, K. 549–551
HOWARD, P. 255–259
HOWELL, J.B. 367–372
HUANG, W.-C. 573–579
IVANOFF, I. 227–234
IKEMOTO, F. 157–162
ILES, R.A. 411–420
IND, P.W. 661–665
IRVING, M.H. 83–91
Author Index

THALASSINOS, N.C. 221–226
THOM, A. 27–33
THOMPSON, G.G. 183–191
THOMPSON, R.P.H. 109–111
THRELFALL, C.J. 83–91
THURSTON, H. 361–366
TOBE, T. 295–297
TOKI, N. 321–328
TOMLINSON, S. 381–387
TRECHSEL, U. 389–396
TREE, M. 373–380
TRIMARCO, B. 581–588
TURNBERG, L.A. 343–348
UNGAR, A. 27–33
VAN ESSEN, H. 589–594
VAN STEENBERGEN, W. 521–528
VANTOL, R. 279–283

VENTURA, E. 643–649
VENTURA, H.O. 307–309
VERESS, A.T. 457–464
VIGORITO, C. 581–588
VINCENT, C. 403–410
VOLPE, M. 581–588

WAGSTAFF, M. 529–540
WAHREN, J. 285–293
WAKELING, A. 677–682
WALES, J.K. 77–81

WALLACE, A.M. 183–191
WALTON, K.W. 71–76, 93–100

WAPNIR, R.A. 617–626
WARD, M.P. 595–604
WATSON, M.L. 27–33
WEBER, P.C. 611–615
WEIGHT, M. 397–401
WESTENFELDER, C. 667–676

WHITEHEAD, J.S. 203–207
WIKSTRÖM, B. 509–514
WILFORD, K. 83–91
WINER, J. 427–429
WITHEY, W.R. 595–604
WITZGALL, H. 611–615
WOLFE, M.H. 553–556
WOLFE, R.R. 553–556
WOOLLARD, M.L. 177–181
WORWOOD, M. 529–540
YAMAMOTO, K. 157–162
YASUDA, K. 295–297
YOUNG, A. 227–234
ZAHM, J.M. 13–16
ZAREIAN, Z. 489–494
ZENEROLI, M.L. 643–649
ZOLI, M. 683–686
ZUCKER, A. 471–477
Volume 62

SUBJECT INDEX

First and last page numbers of papers to which entries refer are given.
Page numbers marked with an asterisk refer to Editorial Reviews.

Absorption kinetics 617–626
Adenine nucleotides, dystrophic muscle 113–115
Adenosine 3′:5′-cyclic monophosphate, vitamin D deficiency 381–387
Adenosine triphosphatase, Na+,K+-activated, erythrocyte sodium transport 489–494
Adrenectomy, angiotensinogen 355–360
Adrenaline
  airway responses 349–354
  congestive heart failure 465–469
  noise stimulation 137–141
β-Adrenoceptor blockade, diabetic subjects 131–136
β-Adrenoceptors, asthma 349–354
Aerosol deposition, bronchial 13–16
Alanine
  kinetics and glucose 553–556
  obesity 77–81
Albuminuria, experimental 495–502
Alcohol, hypertension 1–6*
Aldosterone
  captopril 611–615
  congestive heart failure 465–469
  exercise 595–604
  potassium 373–380
  salt retention in bile-duct ligation 65–70
  sodium balance 373–380
Alkali secretion, gastric mucosa 343–348*
Alveolar gas, mixing efficiency 541–547, 549–551
Amino acids
  metabolism and α-oxoisocaproate 285–293
  undernutrition and sepsis 83–91
δ-[3,5-3H]Aminolaevulinic acid, bile pigment production 643–649
δ-Aminolaevulinic acid synthase, leucocyte 183–191
Ammonia
  glutamine 299–305
  hepatectomy 273–277
  α-oxoisocaproate 285–293
  urinary excretion 299–305
Ammoniagenesis, glutamine metabolism 299–305
Angina pectoris 119–123*
Angiotensin I
  angiotensinogen 355–360
  captopril and vasopressin release 341–342
Angiotensin II
  aldosterone 373–380
  blood flow regulation 169–176
  captopril 341–342
  congestive heart failure 465–469
  intravascular coagulation 35–41
  kidney 35–41
  sympathetic reflexes 51–56
  vasopressin 143–149, 341–342
Angiotensin antagonist ([Sar1,Ala8]angiotensin II) 51–56
Angiotensinogen, direct radioimmunoassay 355–360
Anorexia nervosa, behavioural thermoregulation 677–682
Antidiuretic hormone, experimental congestive heart failure 465–469
Apnoea, sleep and heart rate 163–167
Apolipoprotein C-II, acquired deficiency 93–100
Apolipoproteins 125–129*
Aprotinin, Goldblatt hypertension 361–366
Aspartate aminotransferase, heart isoenzymes 337–339
Asphyxia, apnoeic, heart rate 163–167
Asthma
  nocturnal 349–354
  plasma histamine and catecholamines 661–665
Atherosclerosis, coronary 119–123*
Atrophy, number of muscle fibres 227–234
Atropine, alveolar gas mixing 549–551
Autonomic nervous system
  blockade 57–64
  hypertension 581–588
  Autonomic neuropathy 561–562
Baroreceptors
  borderline hypertension 307–309
  sensitivity 581–588
Baroreflex sensitivity 581–588, 589–594
Behaviour, thermoregulation 677–682
N-Benzoyl-L-tyrosyl-p-aminobenzoic acid, intestinal non-pancreatic hydrolysis 557–560
Bicarbonate secretion, duodenal taurocholate 651–659
Bicarbonate, tubular absorption 667–676
Bile acids
- duodenal perfusion 651–659
- 3β-hydroxylated 627–642
- kidney function 431–433
- muscular dystrophy 627–642
- secretion 515–519

Bile-duct ligation, salt retention 65–70

Bile, intrarenal infusion 431–433

Bile salts, secretion 515–519

Bilirubin
- conjugation and secretion 521–528
- Gilbert's syndrome 643–649
- duodenal taurocholate 651–659

Blood coagulation factors 239–242

Blood flow
- captopril 169–176
- cerebral 567–572*
- haemorrhage 169–176
- hypervolaemia 457–464
- meclofenamate 169–176
- prostaglandins 169–176
- spleen 169–176
- subcutaneous 605–609

Blood pressure
- captopril 611–615
- indomethacin 611–615
- noise stimulation 137–141
- sympathetic reflexes 51–56
- vasopressin 143–149

Blood vessels
- intravascular coagulation 35–41
- renal vascular resistance 573–579
- veno-arteriolar reflex 605–609

Blood volume
- central 51–56
- expansion 457–464

Body fluid
- composition in hypertension 43–49
- homeostasis in exercise 595–604

Body temperature
- anorexia nervosa 677–682
- hepatectomy 273–277

Bone
- mass, parathyroid hormone 389–396
- mineral content 329–336

Brain
- blood flow and metabolism 567–572*
- Branched-chain amino acids, metabolism and α-oxoisocaproate 285–293

Breathing
- pulmonary inflation reflex 163–167
- resistive load detection 367–372
- thoracoabdominal movements 7–11*

Bronchi, mucociliary clearance 13–16

Bronchodiastatation, nocturnal asthma 349–354

Bronchomotor tone, atropine 549–551

Caerulin, bilirubin secretion 651–659

Calcium
- renal tubular absorption 503–508
- secretion 535–536

Calcium
- neuron activation analysis 389–396
- tubular absorption 503–508

Calcium balance, osteoporosis and sex hormones 221–226

Calcium oxalate, urinary 17–19, 421–425, 509–514

C-atoproteins 125–129*

Captopril
- adrenergic vasoconstriction 565–566
- blood flow regulation 169–176
- vasopressin release 341–342

Carbohydrate, insulin biosynthesis 449–455*

Catecholamines, asthma 661–665

Cell membrane permeability 101–107

Cerebral blood flow 567–572*

Chemoreceptors, sleep apnoea and heart rate 163–167

Chlorothiazide, urine osmolality in oedema 235–238

Cholelithiasis 515–519

Cholestasis, erythrocyte membrane permeability 101–107

Cholesterol
- biliary secretion 515–519
- liver 515–519
- plasma transport 261–271*

Cirrhosis of liver
- alcoholic 109–111
- myofibrillar protein 683–686
- α-oxoisocaproate infusion 285–293

Cold, anorexia nervosa 677–682

Converting-enzyme inhibitor 51–56

Cor pulmonale, oedema 255–259*

Cortisol, noise stimulation 137–141

Creatinine, liver cirrhosis 683–686

Crystals, urinary 17–19, 421–425, 509–514

Cyclic AMP see Adenosine 3':5'-cyclic monophosphate

Cytoprotection, gastric mucosa 343–348*

Dark adaptation, chronic liver disease 109–111

Dead space, atropine 549–551

Deoxycholic acid, myotonic muscular dystrophy 627–642

Deoxytocasterone acetate–salt hypertension, vasopressin 143–149

Deoxyribonucleic acid
- liver synthesis 295–297
- muscle 83–91

Diabetes mellitus
- β-adrenoceptor blockade 131–136
- insulin biosynthesis 449–455*

Dialysis, peritoneal continuous ambulatory 479–488
Subject Index

1,25-Dihydroxycholecalciferol, renal function 427-429, 503-508
2,3-Diphosphoglycerate, erythrocyte metabolism 479-488

Diuresis
glycoprotein excretion 21-26
saralasin 573-579
Diuretics, urine osmolality in oedema 235-238
DOCA-salt hypertension, vasopressin 143-149

Dopamine
excretion in women 209-213
kidney 439-448*

Dual-photon absorptiometry, bone mineral content 329-336

Dyspnoea, breathing resistance 367-372

Elastase, pancreatic 321-328
Emphysema, vagotomy 311-319

Enzyme induction 521-528

Erythrocyte
membrane cholesterol 101-107
metabolism 479-488
sodium efflux 101-107
sodium transport 489-494

Essential hypertension, inheritance 151-155

Exercise
aldosterone 595-604
electrolyte balance 595-604
fluid homeostasis 595-604
isometric, hypertension 307-309
vagotomy in emphysema 311-319

Extracellular fluid volume 43-49, 595-604

Ferritin, iron overload 529-540
Fibrin, renal blood flow 35-41

Fibroblast, skin, α-L-iduronidase 193-201
Fibronectin, plasma and synovial fluid 71-76

Furosemide
ererythrocyte sodium efflux 101-107
urine osmolality in oedema 235-238

Gastric inhibitory peptide, bile salt 651-659
Gastric mucosa, protection 343-348*
Gastrin, bile salt 651-659

Genetic marker, essential hypertension 151-155

Gilbert's syndrome, bile pigments 643-649
β-Globulins, platelet function 239-242
Glomerular filtration rate, saralasin 573-579

Glucocorticoids, renal conversion of thyroxine 215-220

Glucose
β-adrenoeceptor blockade 131-136
insulin biosynthesis 449-455*
kinetics 553-556
renal tubular absorption 667-676

Glucuronosyltransferase activity, biliary bilirubin 521-528

Glutamine, metabolism 299-305

Glutathione, liver concentration 279-283

Glycerol infusion, β-adrenoeceptor blockade 131-136

[2-14C]Glycine, bile pigment production 643-649

Glycoprotein, urinary excretion 21-26

Goldblatt hypertension 573-579
Goldblatt hypertension, indomethacin and aprotinin 361-366

Growth hormone, noise stimulation 137-141

Guanine nucleotides, dystrophic muscle 113-115

Gunn rats, heterozygous, UDP-glucuronosyltransferase 521-528

Haem biosynthesis, menstrual cycle 183-191

Haemodialysis, erythrocyte metabolism 479-488

Haemodynamics
baroreceptor stimulation 307-309
captopril 611-615
noise stimulation 137-141

Haemoglobin, oxygen affinity 479-488

Haemorrhage, prostaglandins and angiotensin II 169-176

Head-up tilt, subcutaneous blood flow 605-609

Heart
aspartate aminotransferase 337-339
beat-to-beat variation 561-562
experimental congestive failure 465-469

Heart rate
autonomic control 57-64
sleep apnoea 163-167

Hepatocytely, body temperature 273-277

Hepatitis, zinc deficiency and photoreceptor dysfunction 109-111

Hepatocytes, lactate uptake 411-420

Hill walking, electrolyte balance 595-604

Histamine, asthma 661-665

3-Hydroxybutyrate, obesity 77-81

18-Hydroxy cortisol, captopril 611-615

Hypernatraemia, dietary sodium intake 471-477

Hyperparathyroidism (secondary)
vitamin D deficiency 381-387
X-linked hypophosphataemia 503-508

Hypertension
baroreceptors 307-309, 581-588, 589-594
blacks and whites 1-6*
body fluid 43-49
borderline 307-309
DOCA-salt 143-149
dopamine 439-448*
epidemiology 1-6*
Hypertension (continued)

essential 151–155, 307–309
ethnic differences 1–6*
experimental 361–366, 573–579
Goldblatt 361–366, 573–579
isometric exercise 307–309
mortality 1–6*
platelet noradrenaline 151–155
potassium 1–6*, 117
sodium 1–6*, 117
vasopressin 143–149
whites and blacks 1–6*

Hyperthermia, anorexia nervosa 677–682
Hypertriglyceridaemia, C-apoproteins 125–129*
Hypertriglyceridaemia, very-low-density lipoprotein 93–100
Hypoglycaemia, β-adrenoceptor blockade 131–136
Hyponatraemia, frusemide and renal water excretion 235–238
α-L-Iduronidase, leucocytes and fibroblasts 193–201
Indomethacin
captopril 611–615
dopamine excretion 209–213
sodium chloride excretion 27–33, 209–213
Goldblatt hypertension 361–366
Inflation reflex, pulmonary, heart rate 163–167
Inheritance
essential hypertension 151–155
lipoprotein receptor activity 397–401
Insulin
biosynthesis 449–455*
Interstitial fluid volume 43–49
Intestine, small
absorption 617–626
hydrolysis of PABA-peptide 557–560
muscarinic cholinergic receptors 203–207
Intracellular fluid volume 43–49
Iron
overload 529–540
uptake 529–540
Ischaemic heart disease 119–123*
Isoenzyme subforms, aspartate aminotransferase 337–339
Isoferritins, iron overload 529–540
Isometric exercise, hypertension 307–309
Jaundice
erythrocyte membrane permeability 101–107
renal function 431–433
Kallikrein, Goldblatt hypertension 361–366
Ketones, obesity 77–81
6-Keto-prostaglandin E, and F1α, platelet aggregation 177–181
Kidney
acut failure 35–41
albuminuria 495–502
bile acids 431–433
chronic failure 479–488, 489–494, 561–562
denervation 457–464
1,25-dihydroxycholecalciferol 427–429
dopamine 439–448*
haemodynamics 457–464
indomethacin 27–33
β2-microglobulin catabolism 403–410
renin 157–162
thyroxine deiodination 215–220
vascular resistance 573–579
Kidney, parathyroid hormone in vitamin D deficiency 381–387
Kidney, tubular absorption
bicarbonate 667–676
calcium 503–508
glucose 667–676
Kinetics, urea, glucose and alanine 553–556
Lactate, hepatocyte uptake 411–420
Lactate infusion, β-adrenoceptor blockade 131–136
Leucine, metabolism in cirrhosis 285–293
Leucocyte
δ-aminolaevulinic acid synthase 183–191
α-L-iduronidase 193–201
sodium transport 563–564
Lipids, membrane 101–107
Lipoprotein lipase, 93–100
Lipoproteins
cholesterol transport 261–271*
high density 125–129*
hypertriglyceridaemia 93–100
low-density 397–401
receptor activity 397–401
very-low density 93–100, 125–129*
Liver
body temperature and vascular exclusion 273–277
glutathione 279–283
Liver damage
experimental 65–70
regeneration 295–297
Liver disease
alcoholic cirrhosis 109–111
experimental 65–70
photoreceptor dysfunction 109–111
zinc deficiency 109–111
Load detection, breathing 367–372
Lumbar spine, osteoporosis bone mineral 329–336
Lung, alveolar gas mixing efficiency 541–547
Subject Index

α₂-Macroglobulin, combination with elastase 321–328
Magnesium, urinary 17–19
Mast cell mediators 661–665
Meclofenamate, blood flow regulation 169–176
Menstrual cycle, haem biosynthesis 183–191
Metabolism, brain 567–572*
3-Methylhistidine, liver cirrhosis 683–686
β₂-Microglobulin, plasma protein binding 403–410
Microspheres, renal blood flow 35–41
Mineralocorticoids, salt retention in bile-duct ligation 65–70
Mononuclear cells, low-density lipoprotein receptor activity 397–401
Motilin, bile salt 651–659
Mucociliary transport 13–16
Mucus–bicarbonate barrier 343–348*
Muscarinic cholinergic receptors, intestinal and pancreatic 203–207
Muscle chemistry, undernutrition and sepsis 83–91
Muscle fibres, knee injury 227–234
Muscular dystrophy, purine nucleotide profile 113–115
Myeloma, apolipoprotein C-II deficiency 93–100
Myocardial infarction 119–123*, 243–245
Myotonic dystrophy, abnormal bile acids 627–642
Nasal mucosa, mucociliary transport 13–16
Natriuresis, saralasin 573–579
Neck chamber 581–588
Needle biopsy, muscle 83–91
Negative pressure, lower body 51–56
Neostigmine, baroreflex responsiveness 581–588
Nephrotoxicity, bile acids 431–433
Neuromuscular disease, thoracoabdominal movements 7–11*
Neutron activation analysis, calcium 389–396
Nitrogen metabolism
  glutamine 299–305
  a-oxoisocaproate 285–293
Nitrogen washout, alveolar gas mixing 541–547, 549–551
Noise, blood pressure and stress hormones 137–141
Noradrenaline
  congestive heart failure 465–469
  noise stimulation 137–141
  plasma kinetics 247–254*
  platelet release 151–155
Nutrition, muscle intracellular amino acids 85–91
Obesity, fasting and alanine and 3-hydroxybutyrate 77–81
(±)-Octanoylcarnitine, hepatic deoxyribonucleic acid synthesis 295–297
Oedema
  congestive heart failure 465–469
  diuretics and renal water excretion 235–238
  exercise 595–604
Osteomalacia, secondary hyperparathyroidism 381–387
Osteoporosis
  bone mineral content 329–336
  calcium balance and sex hormones 221–226
  parathyroid hormone 389–396
  a-Oxoisocaproate, amino acid and nitrogen metabolism 285–293
PABA-peptide, intestinal non-pancreatic hydrolysis 557–560
Pancreas, muscarinic cholinergic receptors 203–207
Pancreatic elastase, acute pancreatitis 321–328
Pancreatic function
  duodenal bile salt 651–659
  PABA-peptide hydrolase 557–560
  Pancreatic polypeptide, bile salt 651–659
  Pancreatitis, plasma elastase 321–328
  Parasympathetic nervous system, small intestine and pancreas 203–207
Parathyroid hormone
  kidney and vitamin D deficiency 381–387
  osteoporosis 389–396
  Peptides, intestinal absorption 617–626
  pH
    distal tubule 667–676
    hepatocyte lactate uptake 411–420
Phenylephrine, baroreceptor sensitivity 581–588
Phosphataemia, renal tubular absorption 503–508
Phosphate, X-linked hypophosphataemia 503–508
Photoreceptor dysfunction, chronic liver disease 109–111
Plasma membrane, lactate uptake 411–420
Plasma renin activity
  active renin 435–437
  hypertension 1–6*, 43–49
  intravascular coagulation 35–41
  renal failure 667–676
Plasma volume 43–49, 595–604
Platelets
  adhesiveness 239–242
  aggregation 177–181, 239–242
  noradrenaline in hypertension 151–155
Subject Index

Porphyria, haem biosynthesis and menstrual cycle 183–191

Posture
  heart rate 57–64
  subcutaneous blood flow 605–609

Potassium
  aldosterone 373–380
  excretion 471–477
  hypertension 1–6*, 117

Prolactin, noise stimulation 137–141

Propranolol
  baroreflex responsiveness 581–588
  diabetic subjects 131–136

Prostacyclin, platelet anti-aggregatory activity 177–181

Prostaglandin E, urinary excretion 27–33

Prostaglandins
  blood flow regulation 169–176
  captopril 611–615
  cytoprotection 343–348*
  dopamine excretion 209–213
  gastric mucosa 343–348*
  Goldblatt hypertension 361–366
  platelet aggregation 239–242

Proteins
  plasma 403–410
  muscle 683–686
  turnover 299–305, 403–410

Proteinuria, experimental 495–502

Pulmonary vascular resistance, cor pulmonale 255–259*

Purine nucleotides, muscular dystrophy 113–115

Radioimmunoassay
  angiotensinogen 355–360
  1,25-dihydroxycholecalciferol 427–429

Receptors, lipoprotein, blood mononuclear cells 397–401

Renal failure
  acute 35–41
  chronic 479–488, 489–494

Renal tubules
  absorption 503–508, 667–676
  deiodination of thyroxine 215–220

Renin
  congestive heart failure 465–469
  dopamine 439–448*
  exercise 595–604
  inactive 435–437
  low-renin hypertension 1–6*
  renal molecular-weight conversion 157–162
  thrombin 35–41

Renin–angiotensin system
  intravascular coagulation 35–41
  sympathetic reflexes 51–56

Renin-binding substance, kidney 157–162

Rheumatoid arthritis, fibronectin 71–76

R–R interval, posture 57–64

Saralasin, renal function 573–579

Secretin, bile salt 651–659

Sepsis, muscle intracellular amino acids 83–91

Sex hormones, calcium balance in osteoporosis 221–226

Signal Detection Theory, breathing 367–372

Single breath test, alveolar gas mixing 541–547

Skin blood flow
  subatmospheric pressure 605–609

Sleep apnoea, heart rate 163–167

Sodium
  aldosterone 373–380
  balance 595–604
  bile-duct ligation 65–70
  dopamine 439–448*
  erythrocyte permeability 101–107
  hypertension 1–6*, 117
  hyponatraemia 235–238
  prostaglandins 27–33
  transport 489–494

Sodium chloride excretion
  blood volume expansion 457–464
  dietary sodium 471–477
  indomethacin 209–213
  prostaglandins 27–33

Sodium chloride loading
  hypernatraemia 471–477
  renal blood flow 35–41
  tubular function 667–676

Sodium taurocholate, duodenal perfusion 651–659

Sodium urate, calcium oxalate crystal growth 509–515

Spine, osteoporosis bone mineral 329–336

Spleen, blood flow 169–176

Stomach, mucosal protection 343–348*

Stress
  hypertension 1–6*
  noise 137–141

Stress hormones, noise stimulation 137–141

Subatmospheric pressure
  lower body 51–56
  skin blood flow 243–245

Substrate specificity, α-Liduronidase 193–201

Sulphydryl groups, molecular-weight conversion of renin 157–162

Sympathetic nervous system
  angiotensin 51–56
  assessment of function 247–254*
  noradrenaline plasma kinetics 247–254*
  vascular reflexes 51–56, 605–609

Synovial fluid, fibronectin 71–76
Subject Index

Tamm–Horsfall glycoprotein, urinary excretion 21–26
Tetraplegia, subcutaneous blood flow 605–609
Thermoregulation, anorexia nervosa 677–682
Thiol groups, molecular-weight conversion of renin 157–162
Thoracoabdominal movements, breathing 7–11*
Thyroxine, glucocorticoids and renal deiodination 215–220
Tidal volume, thoracoabdominal movements 7–11*
Tomography, cerebral blood flow 567–572*
Transport
erythrocyte sodium 489–494
hepatocyte lactate uptake 411–420
plasma cholesterol 261–271*
polymorphonuclear leucocytes 563–564
renal 503–508
sodium 563–564
Transporters, hepatocyte lactate uptake 411–420
Triglyceride-rich lipoproteins, metabolism 125–129*
3,5,3′-Tri-iodothyronine, glucocorticoids and renal formation 215–220
Trypsin, bile salt 651–659
Twins, heritability of lipoprotein receptor activity 397–401
Ultrasonography, quadriceps femoris 227–234
Uraemia, oral 1,25-dihydroxycholecalciferol 427–429
Urate, urinary calcium oxalate 421–425, 509–514
Urea, kinetics and glucose 553–556
Uric acid, calcium oxalate crystal growth 509–514
Urine
albumin 495–502
calcium oxalate 17–19, 421–425, 509–514
crystal formation 17–19, 421–425
glycoprotein 21–26
macromolecules 509–514
oxalate 17–19, 421–425
Ursodeoxycholic acid, myotonic dystrophy 627–642
Vagotomy
breathing and exercise ability 311–319
muscarinic cholinergic receptors of intestine and pancreas 203–207
Vagus nerve, sleep apnoea and heart rate 163–167
Vascular resistance, renal 573–579
Vasoconstriction
captopril inhibition 565–566
posture in tetraplegia 605–609
sympathetic reflex 51–56
Vasopressin, angiotensin 143–149, 341–342
Veno-arteriolar reflex
myocardial infarction 243–245
posture in tetraplegia 605–609
Ventilation, distribution 549–551
Vitamin D deficiency, secondary hyperparathyroidism 381–387
Volume expansion, renal denervation 457–464
von Willebrand factor, physiological inhibition 239–242
Water, total body 43–49
Zinc deficiency, chronic liver disease 109–111