DESCRIPTION

Pharmacological Research publishes cutting-edge articles in biomedical sciences to cover a broad range of topics that move the pharmacological field forward. We provide a venue through which specialists across disciplines can rapidly exchange information in health sciences that pertains to modern pharmacological topics. The journal publishes articles on molecular, biochemical, translational, and clinical research (including clinical trials); it is proud of its rapid publication of accepted papers that comprises a dedicated, fast acceptance and publication track for high profile articles.

Invited and unsolicited review articles are welcome.

**Journal Sections**
Specific sections are dedicated to:

**The cardiovascular system:** CV disease therapy; Signal transduction and receptor pharmacology in the CV system; Target organs; Clinical trials.

**Neuroscience, including psychopharmacology, and neuroendocrinology:** Understanding of the central nervous system in physiological and pathological conditions; Neuropharmacological and molecular mechanisms of learning and memory; Therapeutic and diagnostic challenges for mental illness and neurodegenerative diseases; System biology.

**Oncology:** Targeted cancer therapy; Precision medicine and personalized therapy; Signal transduction studies, as related to drug action; Clinical trials.

**Immunology (clinical and basic):** Immune and inflammatory mechanisms including target identification; Immunotherapy and immunotoxicology; Immunopathology; Vaccines and adjuvants; Treatment of infectious diseases.

**Redox regulators and biological gases in pathophysiology:** Oxidative and nitrative stress and cell dysfunction; Redox regulation of signal transduction in various diseases; Pathophysiological roles of NO, CO and H2S; Interaction between oxidants and gaseous mediators in health and disease; Pharmacological modulators of oxidants, free radicals and gaseous transmitters.
Renal Pathophysiology and Pharmacology: Acute and chronic kidney injury disease; Metabolic alkalosis and metabolic acidosis in renal disease; Renal excretion in electrolyte disorders; Diabetes insipidus, Diabetic nephropathy; Pathogenesis of glomerular disease; End stage renal disease; Prevention and treatment of nephrotic diseases.

Pregnancy Related Pharmacology and Perinatal Therapeutics: Drug effects on the mother and foetus before and after birth; Placental barrier and its relationship with drugs (transportation metabolism and so on); Molecular signalling in placenta and identification of mechanisms beyond drug action in pregnancy; Adverse effects of drugs drug/combination in placenta; Drug repurposing/ reprogramming for placenta-related disorders; Regulatory aspects beyond clinical research in pregnant mothers; Placenta remodelling in disease; In vivo models of the diseased placenta; The microbiota; Effects of the environment on pregnancy; Preventive vs therapeutic use of drugs.

Pharmacogenomics, Pharmacogenetics and Precision Medicine: We are especially interested in GWAS studies and studies reporting pharmacogenetic data that are relevant in terms of safety and efficacy of drugs. They must provide insight into novel genomic or therapeutic associations that can help guide therapy selection or suggest new indications for established drugs. Studies can also provide details of exceptional responses in limited numbers of patients. We also publish n=1 studies of exceptional responses, provided they are backed up by compelling genomic or experimental data. Studies must include full clinical description of the case, along with details of the response and supporting molecular information. The molecular information should support the clinical observations and offer a definitive pharmacogenomic insight. Standard clinical sequencing assays (Foundation ONE, Genoptix etc) are only appropriate when the therapeutic or phenotypic response is novel. Ideally, the observational patient studies should be supported by lab based functional data. Bioactive molecules derived from medicinal plants or natural products: New, effective bioactive molecules; Drug target identification; Treatment mechanism; Mechanism investigation with -omics and computational technologies; Combinational therapy with natural products; Multi-targeting and network pharmacology; Herbal bioinformatics; Precision medicine of natural products; Evidenced-based research and clinical trials.

Rare diseases and orphan drugs, and drug repositioning

We also publish articles focusing on: Gastrointestinal and urogenital apparatuses when involving pharmacological issues; Pharmacology of tissue repair/regeneration; Pharmacology of aging; Nutraceuticals (if relevant to human disease); Pharmacoeconomy; Pharmacoepidemiology.

We do not publish: Papers reporting pharmacological activities of novel compounds if no proper controls with known substances are performed; Bioequivalence studies or studies reporting only the pharmacokinetics profile of a compound; Descriptive pharmacovigilance studies; Single dose/concentration studies and those measuring only one endpoint.

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Topics we cover
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and included a conventional standard treatment has been included as positive control of efficacy; three doses (at least) of the tested active constituent/s have been tested. Clinical studies on commercially-available nutraceuticals are also taken into consideration.

**Pregnancy Related Pharmacology and Perinatal Therapeutics:** Drug effects on the mother and foetus before and after birth; Placental barrier and its relationship with drugs (transportation, metabolism and so on); Molecular signalling in placenta and identification of mechanisms beyond drug action in pregnancy; Adverse effects of drugs drug/combination in placenta; Drug repurposing/reprogramming for placenta-related disorders; Regulatory aspects beyond clinical research in pregnant mothers; Placenta remodelling in disease; In vivo models of the diseased placenta; The microbiota; Effects of the environment on pregnancy; Preventive vs therapeutic use of drugs.

**Dermatology and Skin Immunology:** Mechanisms of skin physiology and pathology; Cutaneous immunology and immunopharmacology; Biomarkers discovery in skin diseases.

**Pharmacology of the respiratory system:** Therapeutic target identification; Biomarkers for disease phenotyping and endotyping; Small molecules, biologics, cell therapy and gene therapy; Pharmacogenomics and pharmacogenetics of Respiratory diseases; Pre-clinical and clinical development of novel therapeutic strategies.

**Redox regulators and biological gases in pathophysiology:** Oxidative and nitrative stress and cell dysfunction; Redox regulation of signal transduction in various diseases; Pathophysiological roles of NO, CO and H2S; Interaction between oxidants and gaseous mediators in health and disease; Pharmacological modulators of oxidants, free radicals and gaseous transmitters.

**Renal Pathophysiology and Pharmacology:**
Acute and chronic kidney injury disease; Metabolic alkalosis and metabolic acidosis in renal disease; Renal excretion in electrolyte disorders; Diabetes insipidus, Diabetic nephropathy; Pathogenesis of glomerular disease; End stage renal disease; Prevention and treatment of nephrotic diseases.

**Gut microbiota in health and disease:** Gut microbiome and gaseous molecules; The Gut-kidney-brain axis; Gut microbiota and cancer therapy; Influence of traditional herbal medicine and bioactive compounds on the intestinal microbiome; Intestinal microflora and bone diseases; The microbiome and ulcerative colitis; Microbiota in aging; Pre- and probiotic interventions in cardio-metabolic disorders.

**Organ-systems interactions in pathophysiology:**
Therapeutic target identification in organs that affect systems physiology and pathophysiology, including small molecules, biologics, cell therapy, gene therapy; Organ biomarkers affecting systems pathophysiology Pre-clinical and clinical development of novel therapeutic strategies.

**Rare diseases and orphan drugs, and drug repositioning**
We also publish articles focusing on:

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**Types of paper**
1. **Original articles.** Original full-length research papers that have not been published previously, except in a preliminary form, may be submitted as regular papers.
2. **Review articles and meta-analyses.** Review articles and meta-analyses are welcome but should be topical and not just an overview of the literature.

3. **Opinion articles and Perspectives.** These articles provide expert views on future research and clinical trends in specific fields. These articles are solicited by the Editors, but suggestions are welcome.

4. **Letters to the Editor** on relevant issues of pharmacology or commenting on the published literature are also welcome.

Note: Pharmacological Research does not accept case reports for publication, nor short communications.

The type of paper has to be specified in the heading of the manuscript.

**Unsolicited review articles are welcome.**

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You can use this list to carry out a final check of your submission before you send it to the journal for review. Please check the relevant section in this Guide for Authors for more details.

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In the checklist there is also a free text area in which we ask for suggestions and advice from the authors. Pharmacological Research is not a top-down journal and we are building a community of scientists that helps enhancing the quality of the Journal; hence we will appreciate comments and feedbacks from the authors on how to improve the checklist in the next months.

The checklist will have to be uploaded at the time of the initial submission of each original article, effective from the 1st of June 2016. It will not be requested for perspectives or reviews.

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another on the grounds of age, gender, race, ethnicity, culture, sexual orientation, disability or health condition; and use inclusive language throughout. Authors should ensure that writing is free from bias, stereotypes, slang, reference to dominant culture and/or cultural assumptions. We advise to seek gender neutrality by using plural nouns ("clinicians, patients/clients") as default/wherever possible to avoid using "he, she," or "he/she." We recommend avoiding the use of descriptors that refer to personal attributes such as age, gender, race, ethnicity, culture, sexual orientation, disability or health condition unless they are relevant and valid. When coding terminology is used, we recommend to avoid offensive or exclusionary terms such as "master", "slave", "blacklist" and "whitelist". We suggest using alternatives that are more appropriate and (self-) explanatory such as "primary", "secondary", "blocklist" and "allowlist". These guidelines are meant as a point of reference to help identify appropriate language but are by no means exhaustive or definitive.

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