

Special Issue

Diffusion-Weighted Magnetic Resonance Imaging (DWI): Clinical Potential and Applications

Message from the Guest Editor

Diffusion-weighted magnetic resonance imaging (DWI) is a non-invasive method sensitive to local water motion in the tissue. DWI signal can be interpreted using a variety of models, which attempt to capture not only simple diffusion effects, but also perfusion and anisotropy. As a tool to probe the microstructure, including the presence and potentially the degree of fibrosis, DWI has the potential to become an effective imaging biomarker. Since its introduction in the 1980s, DWI has been increasingly used, first in the brain, then in oncology and, in the recent years, also to investigate whole-body pathophysiology, including but not limited to the kidney, liver, pancreas, and prostate. Moreover, thanks to its non-invasiveness, DWI has been widely adopted in the pediatric population. The present Special Issue aims to highlight DWI's clinical potential and provide an overview of possible applications in different clinical contexts, raising awareness among clinicians of a promising non-invasive functional MRI tool that, after long being used for research, is now ready to enter the clinics.

Guest Editor

Dr. Anna Caroli

Istituto di Ricerche Farmacologiche Mario Negri IRCCS, Bergamo, Italy

Deadline for manuscript submissions

closed (28 February 2022)



Journal of Clinical Medicine

an Open Access Journal
by MDPI

Impact Factor 2.9
CiteScore 5.2
Indexed in PubMed



mdpi.com/si/70076

Journal of Clinical Medicine
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
jcm@mdpi.com

mdpi.com/journal/

jcm





Journal of Clinical Medicine

an Open Access Journal
by MDPI

Impact Factor 2.9
CiteScore 5.2
Indexed in PubMed



[mdpi.com/journal/
jcm](https://mdpi.com/journal/jcm)



About the Journal

Message from the Editorial Board

There has been an explosion of gene and target based research and therapeutics in the multitude of fields that compose clinical medicine. The *Journal of Clinical Medicine's* (JCM) staff and editorial board are dedicated to providing cutting edge, timely, and peer-reviewed articles covering the diverse subspecialties of clinical medicine. The journal publishes concise, innovative, and exciting research articles as well as clinically significant articles and reviews that are pertinent to the myriad of disciplines within medicine. The articles published are relevant to both primary care physicians and specialists. The journal's full-texts are archived in PubMed Central and indexed in PubMed. Please consider submitting your manuscripts for publication to our journal and check us out on-line!

Editors-in-Chief

Prof. Dr. Emmanuel Andr  s

Internal Medicine Department, University Hospital Strasbourg, 67000
Strasbourg, France

Prof. Dr. Kent Doi

Department of Acute Care Medicine, University of Tokyo, Tokyo, Japan

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Medicine, General and Internal) / CiteScore - Q1 (General Medicine)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.7 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).