

## Special Issue

# Autoimmune Disease and Malignancy of the Thyroid Gland in the COVID-19 Pandemic Era

### Message from the Guest Editor

The SARS-CoV-2 virus utilizes the ACE2 receptor in conjunction with the transmembrane protease serine 2 (TMPRSS2) as the primary molecular complex that allows it to infect host cells and enter cells. It is interesting to note that the levels of ACE2 and TMPRSS2 expression in the thyroid gland are much higher than in the lungs because of this. When dealing with COVID-19, it is essential to keep in mind that there is a possibility of the thyroid being damaged. Following on from the previous two points, COVID-19 may be responsible for inflammation of the thyroid gland by inducing aberrant immune responses and a cytokine storm. Furthermore, there is accumulating evidence that the incidence and severity of thyroid disorders induced by COVID-19, such as thyrotoxicosis, hypothyroidism, and the transformation of pre-existing benign thyroid nodules into thyroid cancer, rose dramatically throughout the course of the pandemic. In light of this, research into the mechanisms through which COVID-19 increases vulnerability to thyroid autoimmune diseases and modifies thyroid cancer outcomes should receive great importance.

### Guest Editor

Dr. Iyad Hassan

HoD of Surgery at Burjeel Hospital, Abu Dhabi, United Arab Emirates

### Deadline for manuscript submissions

closed (31 August 2023)



## Biomedicines

an Open Access Journal  
by MDPI

Impact Factor 3.9  
CiteScore 6.8  
Indexed in PubMed



[mdpi.com/si/163386](https://mdpi.com/si/163386)

*Biomedicines*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[biomedicines@mdpi.com](mailto:biomedicines@mdpi.com)

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





# Biomedicines

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.9  
CiteScore 6.8  
Indexed in PubMed



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



## About the Journal

### Message from the Editor-in-Chief

*Biomedicines* (ISSN 2227-9059) is an open access journal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to *Biomedicines*, be it original research, review articles, or developing Special Issues of current key topics.

---

### Editor-in-Chief

Prof. Dr. Felipe Fregni

1. Neuromodulation Center and Center for Clinical Research Learning, Spaulding Rehabilitation Hospital and Massachusetts General Hospital, Harvard Medical School, Boston, MA 02114, USA
2. Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA 02115, USA

---

### Author Benefits

#### High Visibility:

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

#### Journal Rank:

JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q1 (Medicine (miscellaneous))

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).