Special Issue

Recent Advances in Neurofibromatosis Type 1: From Molecular Insights to Novel Therapies

Message from the Guest Editors

Neurofibromatosis type 1 (NF1) is a complex genetic disorder caused by pathogenic variants in the NF1 gene, leading to a wide spectrum of clinical manifestations, including benign and malignant tumors. While research on genotype-phenotype correlations is still limited, recent studies are increasingly focused on understanding these relationships to enhance patient management. Significant progress has been made in targeted therapies, such as MEK inhibitors, which have demonstrated promising results in reducing plexiform neurofibroma volumes in clinical trials. Furthermore, ongoing investigations are exploring the role of mast cells and fibroblasts in the tumor microenvironment, as well as novel agents targeting the Ras/MAPK pathway. Advanced imaging techniques and emerging biomarkers are also improving early diagnosis and monitoring of malignant transformations, such as in malignant peripheral nerve sheath tumors (MPNSTs). This Special Issue aims to highlight the latest scientific discoveries, from molecular research to innovative clinical interventions, to better understand the disease and improve patient outcomes and quality of life.

Guest Editors

Dr. László Szabó

1. Department of Family Care Methodology, Institute of Health Science, Semmelweis University, 1085 Budapest, Hungary
2. Department of Internal Medicine, Heim Pal National Pediatric Institute, 1089 Budapest, Hungary

Dr. Márta Medvecz

Department of Dermatology, Venereology and Dermatooncology, Faculty of Medicine, Semmelweis University, 1085 Budapest, Hungary

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
ijms@mdpi.com

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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

Editor-in-Chief

Prof. Dr. Maurizio Battino
Department of Odontostomatologic and Specialized Clinical Sciences, Sez-Biochimica, Faculty of Medicine, Università Politecnica delle Marche, Via Ranieri 65, 60100 Ancona, Italy

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