

Special Issue on **Oral and Maxillofacial Pathologies: Common Points and Future** Development

Oral and maxillofacial pathologies encompass a diverse array of disorders and conditions that affect the oral cavity, jaws, and associated facial structures. From tumors to traumatology, from pharmacological aspects to digital medicine, significant challenges for both patients and healthcare providers must be faced. Understanding the common points among these conditions is crucial for accurate diagnosis, effective treatment, and improved patient outcomes.

The intricate interplay between oral and maxillofacial structures highlights the need for a multidisciplinary approach, involving dentists, maxillofacial surgeons, pathologists, radiologists, oncologists, and other specialists. With advancements in technology and diagnostic tools, the field is poised for future developments that promise to revolutionize our understanding and management of these pathologies.

The aim of this Special Issue is to collect data and evidence related to oral and maxillofacial pathologies, possible and innovative treatment plans, especially the one involving digital techniques. It is also related to the medical aspect of this anatomical area, including new surgical or diagnostical approaches. The pharmacological area could also be investigated evaluating the use of available or new drugs to solve or improve medical conditions related to the oro-maxillofacial region. This Special Issue especially welcomes reviews and original research.

Potential topics include but are not limited to the following:

- ▶ Epidemiological Trends: Explore current epidemiological patterns and prevalence rates of oral and maxillofacial pathologies worldwide, identifying commonalities in geographic distribution, age groups affected, and potential contributing factors.
- Diagnostic Modalities: Discuss the evolving landscape of diagnostic tools, including advanced imaging techniques, molecular diagnostics, and artificial intelligence applications, highlighting how these technologies contribute to early and accurate detection of pathologies.
- Multidisciplinary Collaborations: Examine the importance of collaborative approaches that involve oral surgeons, maxillo-facial surgeon pathologists, radiologists, oncologists, and other specialists to ensure comprehensive patient care and effective treatment plans for complex oral and maxillofacial conditions.
- Innovative digital approach: Virtual Reality (VR) and Augmented Reality (AR): Application of VR and AR technologies in medical education, surgical planning, and patient rehabilitation, providing immersive and interactive experiences for both healthcare professionals and patients.
- Genetic and Environmental Factors: Investigate the interplay between genetic predisposition and environmental factors in the development of oral and maxillofacial pathologies, shedding light on potential preventive strategies and personalized medicine approaches.
- Treatment Innovations: Explore emerging treatment modalities, including minimally invasive surgical techniques, targeted therapies, immunotherapies, and the role of precision medicine in tailoring interventions for specific oral and maxillofacial conditions.
- Quality of Life Implications: Assess the impact of oral and maxillofacial pathologies on the quality of life of patients, discussing psychosocial aspects, functional limitations, and the importance of incorporating patient-reported outcomes in treatment planning.
- Global Health Disparities: Investigate disparities in access to oral healthcare and treatment outcomes, considering socioeconomic, cultural, and geographic factors, and propose strategies to address these inequalities on a global scale.

Lead Editor Roberto Lo Giudice, University of Messina, Messina, Italy roberto.logiudice@unime.it

Guest Editors Giorgio Lo Giudice, University of Messina, Messina, Italy giorgio.logiudice@studenti.unime.it

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- ▶ Patient Education and Awareness: Emphasize the role of patient education and public awareness campaigns in promoting early detection, prevention, and adherence to treatment regimens for oral and maxillofacial pathologies.
- ▶ Regenerative Medicine: Explore the potential of regenerative medicine in oral and maxillofacial surgery, including tissue engineering, stem cell therapies, and biocompatible materials, with a focus on improving reconstruction and functional outcomes for patients undergoing treatment.
- Artificial Intelligence (AI) in Healthcare: Harnessing AI algorithms for data analysis, pattern recognition, and predictive modeling to assist in diagnostics, treatment planning, and personalized medicine, ultimately improving clinical decision-making processes.
- ▶ Digital Diagnostics: Utilization of digital tools for non-invasive diagnostic purposes, including medical imaging (MRI, CT scans), digital pathology, and advanced wearable devices that collect and analyze physiological data in real-time.

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Papers are published upon acceptance, regardless of the Special Issue publication date.