Editorial

Time flies and 2024 is here. I would like to thank all our excellent collaborators in London and Berlin and our colleagues for their great contributions to the development of the journal over the past year.

In the first issue for this year, we have two Chinese Stomatological Association (CSA) position statements. One is entitled “Preserving natural teeth to maintain oral health”, and the other is “Wearing sports mouthguards to prevent oral and maxillofacial trauma”. They both respond to the theme of the 2023 CSA Academic Annual Congress, calling to protect natural teeth and promote oral health.

This is also a special issue on oral and maxillofacial hereditary and rare diseases, with contributions from the Hereditary and Rare Diseases Society of the CSA. There are four reviews and six original articles, all of which provide a comprehensive understanding of many topics in this field.

The review entitled “The role of DSPP in dentine formation and hereditary dentine defects” from Prof Song’s team at Wuhan University focuses on recent findings and viewpoints regarding the relationship between dentine sialophosphoprotein (DSPP) and dentinogenesis as well as mineralisation from multiple perspectives, which provide a complete illustration of DSPP in dental research. “Review on the role of IRF6 in the pathogenesis of non-syndromic orofacial cleft (NSOC)” by Prof Jia’s team at Sichuan University summarises the progress of research into the mechanism of IRF6 in NSOCs from both genetic and functional aspects. “Characteristic and import mechanism of protein nuclear translocation” by Prof Fan’s team at Capital Medical University provides an overview of the proteins involved in nuclear transport and the mechanisms underlying macromolecular protein transport as well as their potential relation to novel therapeutic strategies. “Distinctive craniofacial and oral anomalies in MN1 C-terminal truncation syndrome” by Prof Zhao’s team at China Medical University describes this rare condition with their own cases and a detailed review of the reported cases.

The six original articles examine different hereditary and rare oral diseases using different methods of genetic research. Prof Han’s team from Peking University investigated new FAM20A gene variants and historical features of amelogenesis imperfecta and further explored the functional impact of these variants, and Prof He’s team from Wuhan University found a novel PTCH1 mutation causing Gorlin-Goltz syndrome. Both of these articles broaden the spectrum of variants and offer new information on associated diseases. Prof Pan’s team from Nanjing Medical University provide novel insights into the aetiology of non-syndromic cleft lip with or without cleft palate (NSCL/P) by integrating multi-omics data and exploring susceptibility genes, and their findings contribute to a better understanding of the genetic factors involved in NSCL/P. Using a bibliometric analysis, Prof Wang’s team from Nanjing University offer a comprehensive overview of the current knowledge structure of and research hotspots for Cowden syndrome. Prof Duan’s team from The Fourth Military Medical University explored the genetic background and clinical phenotypes of multiple idiopathic cervical root resorption (MICRR) in a Chinese family and found 35 novel potential pathogenic genes, which might be helpful for the clinical and molecular diagnosis. Prof Chen’s team from Zhengzhou University explored potential pathogenic processes of hereditary gingival fibromatosis (HGF) and possible treatment using unbiased and reliable bioinformatic tools, and the research offers some novel insights into molecular pathways and identifies five hub genes associated with cell adhesion. Based on these hub genes, three potential therapeutic miRNAs and small molecule drugs were predicted, which are expected to provide guidance for the treatment of patients with HGF.

I believe our readers will find these reviews and articles highly informative and extremely interesting.

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