

Development of an Ontology for Periodontitis

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Periodontitis is a multifactor inflammation disease which increases risks for many systemic diseases such as diabetes and cardiovascular disorders. Despite accumulation of biomedical literatures on periodontitis pathology, there has been no ontology for the biomedical concepts on the process of pathological progression and clinical treatments of periodontitis

We build an ontology for periodontitis by extracting conceptual terms from the articles retrieved from PubMed database with the keywords specific to molecular pathology of periodontitis. The ontology includes pathological processes in periodontitis specified by their activators, suppressors, locations and participants. In particular osteo-immune processes were specified in terms of relationships to systemic diseases.

We believe this ontology promotes bioinformatics analyses of data obtained from periodontal lesions

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