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(54) Title: METHODS FOR DIFFERENTIATING STEM CELLS AND USE THEREOF IN THE TREATMENT OF DENTAL CONDITIONS

(57) Abstract: The present invention relates to a method for propagating and/or differentiating mammalian cells, the method comprising exposing or co-culturing mammalian cells with one or more of periodontal ligament tissue, periodontal ligament proteins or factors derived from periodontal ligament tissue, to obtain cells having PDL characteristics and fulfilling at least one of the following: i) show periodontal characteristics as evidenced with Von Kossa method in which calcium phosphate deposits are stained brown to black, ii) show increased osteopontin and osteocalcin and at the same time decreased bone sialoprotein (bone sialoprotein II or BSP), iii) are capable of being implanted to repair and/or regenerate periodontal tissue, iv) are capable of repairing disorders such as parodontitis also called parodontosis, or periodontitis by healing of the gum line towards the teeth, and v) are accepted by the host without significant immune reaction or cell rejection.



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