**Supplementary materials**

*Laboratory assessments*

The concentrations of interleukin (IL)-1β, IL-6, IL-8 and tumor necrosis factor (TNF)-α were measured using high-sensitivity multiplex map human immunoassays (Millipore® corporation,  Cat. #HSTCMAG-28SK, Billerica, MA, USA) through the Luminex-200 System and the XY platform (Luminex® Corporation, Oosterhout, Netherlands). Microspheres for classification and reporter readings, as well as sheath fluid, were obtained from Luminex® Corporation for proper calibration of the technique. Sensitivities were 0.49 pg/mL, 0.18 pg/mL, 0.31 mg/mL and 0.43 pg/mL for IL-1β, IL-6, IL-8 and TNF-α, respectively. The obtained results were analysed with xPonent® software and were expressed as picograms per mL.

Microbiological samples were homogenized by vortexing for 30 seconds and serially diluted in phosphate buffer saline (PBS). Aliquots of 0.1 mL were plated in different culture media: Dentaid-1 (Alsina et al. 2011) for the detection of *A. actinomycetemcomitans* and a non-selective blood agar medium (Blood Agar Base II®, Oxoid, Basingstoke, England), supplemented with haemine (5 mg/L), menadione (1 mg/L) and 5% of sterile horse blood, for detection of different anaerobic periodontal pathogens. Dentaid-1 plates were incubated for 2-5 days in 5% CO2. Blood agar plates were anaerobically incubated (80%N2, 10% CO2 and 10% H2) for 14 days. Total anaerobic counts and counts of representative colonies were calculated in the most suitable plates (those harbouring 30-300 colonies). Suspected colonies were further identified by microscopy, studying gram-staining and enzyme activity (including N-acetyl-β-D-glucosaminidase, α-glucosidase, α-galactosidase, α-fucosidase, esculin, indole and trypsin-like activity). Counts were transformed in log of colony-forming units (CFU) per mL of the original sample, with an arbitrary value of 1 to the counts with a 0 value. Total anaerobic counts were calculated, as well as counts of selected periodontal pathogens (*A. actinomycetemcomitans, T. forsythia*, *P. gingivalis*, *P. intermedia*, *P. micra*, *C. rectus* and *F. nucleatum*). Frequency of detection and proportions of total anaerobic microbiota, for each bacterial species, were also determined.