Supplementary Information

Dual Keratinocyte-Attachment and Anti-inflammatory Coatings for Soft Tissue Sealing Around Transmucosal Oral Implants

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Fig. S1: Charge (z) vs pH titration curves of R3G3LamLG3 and Net-1 obtained using the BACHEM peptide calculator tool (<u>https://www.bachem.com/service-support/peptide-calculator/</u>).



Fig. S2: XPS wide survey scans (A, C) and high resolution C1s (B, D) spectra of linoleic acid adsorbed on pTi without and with prior oxygen plasma treatment.



Fig. S3: XPS wide survey scans spectra of Net-1 (A,B) and R3G3LamLG3 (C,D) peptide adsorbed on linoleic acid (LA) coated pTi without and with prior 5 min oxygen plasma treatment.



Fig. S4: Dynamic water contact angles on titanium, with and without prior oxygen plasma (5% O_2 , 95% Ar) treatment, and with and without coatings of linoleic acid (LA) ± cationic celladhesive peptides (L3G3LamLG3 or Net-1).



Fig. S5: Representative fluorescence microscopy images of HOK expressing Integrin β -4, a hemidesmosomal marker protein, on linoleic acid (LA) and/ or Net-1 coated pTi, without and with 5 min plasma pre-treatment. Red = Integrin β -4, Blue = DAPI



Fig. S6: Representative fluorescence microscopy images of HOK expressing Col XVII, a hemidesmosomal marker protein, on linoleic acid (LA) and/ or Net-1 coated pTi, without and with 5 min plasma pre-treatment. Green = Col XVII, Blue = DAPI