

SUPPLEMENTARY INFORMATION

Nanoengineering the surface of corneal implants: Towards functional anti-microbial and biofilm materials

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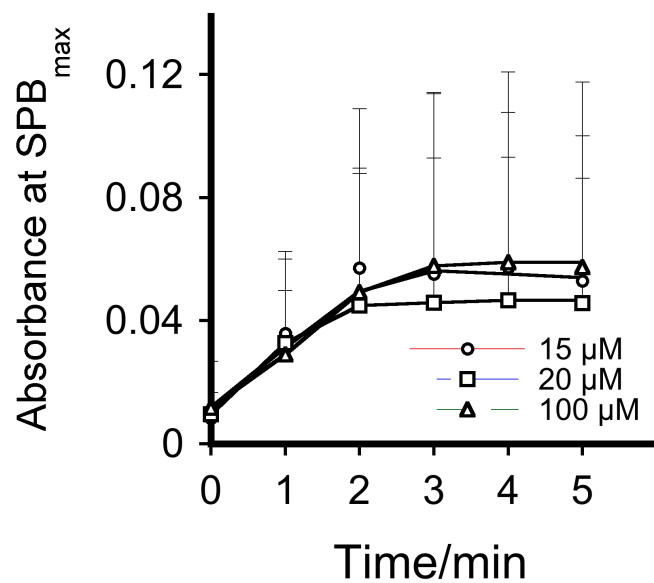


Figure S1. Changes in the surface plasmon band (SPB) absorption as a function of the irradiation time for nanoparticles prepared at different peptide concentrations prepared onto the corneal implants. Samples were measured at their respective SPB maximum. Error bars correspond to standard deviation from the mean (n=4), measured at room temperature.

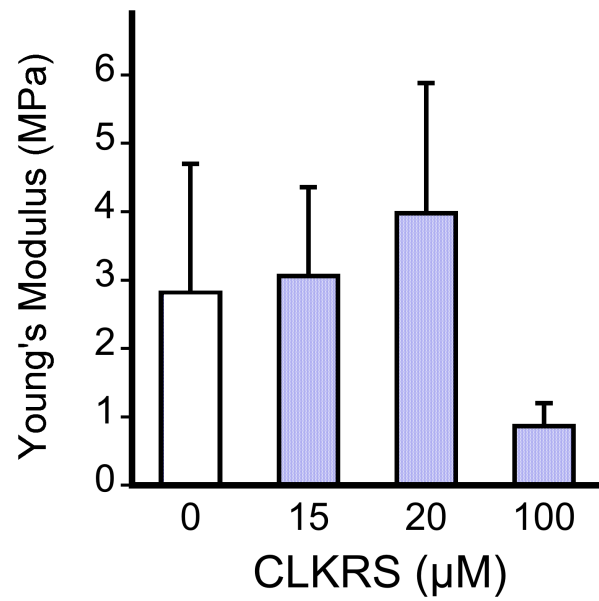


Figure S2. Young modulus for corneal implants before and after nanosilver-peptide grafting. Error bars correspond to standard deviation from the mean ($n=5-7$), measured at room temperature.

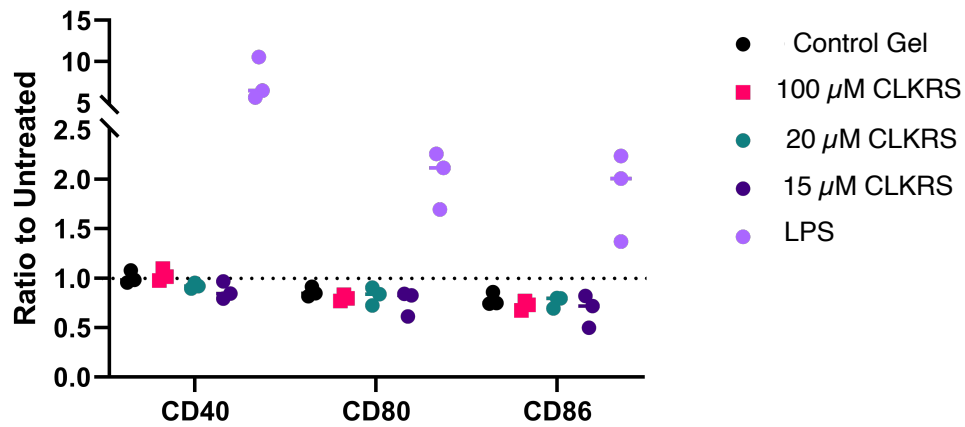


Figure S3. Expression of CD40, CD80, or CD86 relative to untreated BMDCs for the different experimental groups. Cells were precultured on the corneal implants with and without the peptide-nanosilver prepared at different peptide concentration.

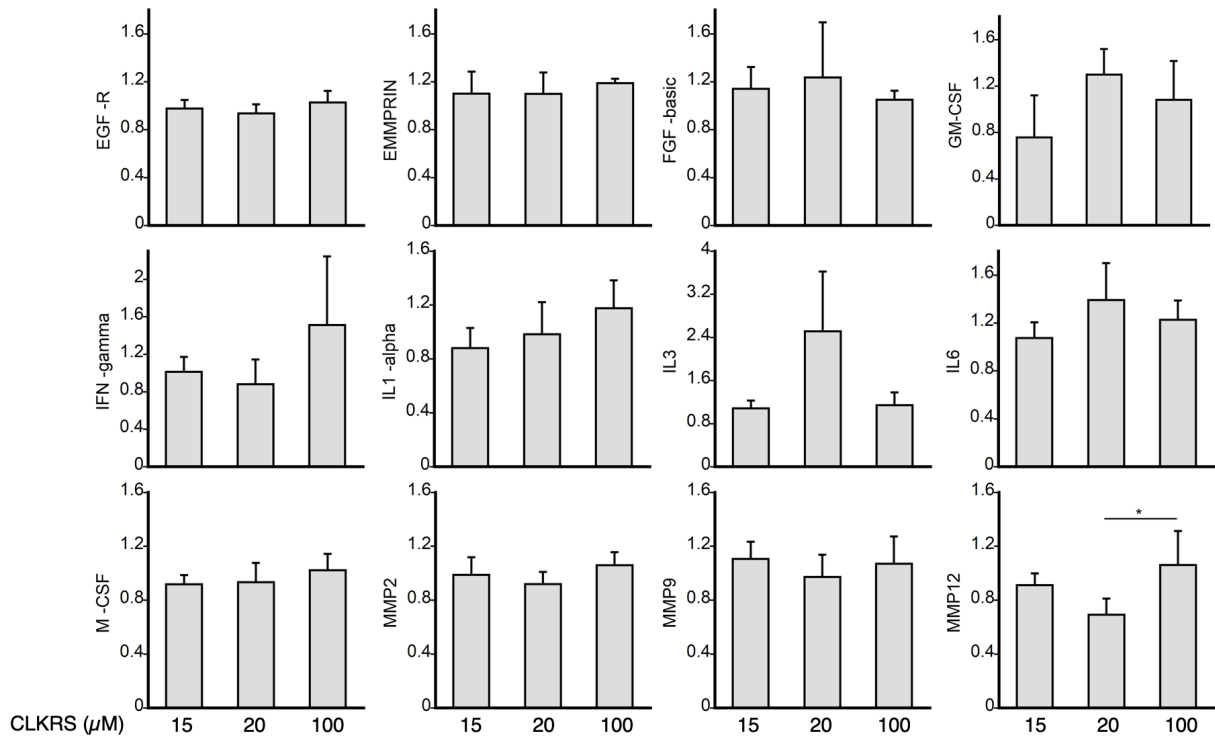


Figure S4. Relative to control cytokine levels measured by multiplex sample analysis (n=3). Samples were measured after 72h post-subcutaneous implantation (see experimental). In all cases, but for MMP12 (20 vs 100 μM CLKRS) there were no significant differences.

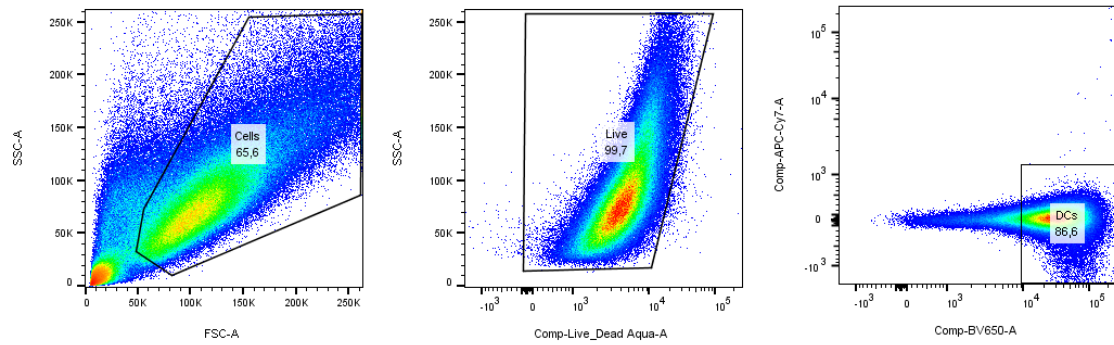


Figure S5. A representative example of the gating strategy used in the dendritic cell experiments.

Table S1. Antibodies for BMDC Flow Cytometry (see main text experimental for further details).

Target	Antibody	Dilution Factor
<i>CD11c</i>	Brilliant Violet 650™ anti-mouse CD11c,(Clone: N418),(IsoType: Armenian Hamster IgG),(Reactivity: Mouse),(Format: BV650),(APP: FC),(Species: Hamster), Biolegend, 117339	1/1600
<i>IA-IE (MHC Class II)</i>	PerCP/Cy5.5 anti-mouse I-A/I-E,(Clone: M5/114.15.2),(IsoType: Rat IgG2b, κ),(Reactivity: Mouse),(Format: PerCP/Cy5.5),(APP: FC),(Species: Rat), Biolegend, 107626	1/3200
<i>CD40</i>	CD40, APC, clone: 1C10, eBioscience™, 501129392	1/400
<i>CD80</i>	PE anti-mouse CD80,(Clone: 16-10A1),(IsoType: Armenian Hamster IgG),(Reactivity: Mouse, Cross-Reactivity: Dog (Canine)),(Format: PE),(APP: FC),(Species: Hamster), Biolegend, 104708	1/100
<i>CD86</i>	FITC anti-mouse CD86,(Clone: GL-1),(IsoType: Rat IgG2a, κ),(Reactivity: Mouse),(Format: FITC),(APP: FC),(Species: Rat), Biolegend, 105006	1/50