Supplementary Materials

Behaviour of Vascular Smooth Muscle Cells on Amine Plasma-Coated Materials with Various Chemical Structures and Morphologies

Ivana Nemcakova 1*, Lucie Blahova 2 Petr Rysanek 3, Andreu Blanquer 1, Lucie Bacakova 1 and Lenka Zajičková 2.4,5

1 Laboratory of Biomaterials and Tissue Engineering, Institute of Physiology of the Czech Academy of Sciences, v.v.i., Videnska 1083, 142 20 Prague 4, Czech Republic; Andreu.BlanquerJerez@fgu.cas.cz (A.B.); lucie.bacakova@fgu.cas.cz (L.B.)
2 Central European Institute of Technology—CEITEC, Masaryk University, Kamenice 5, 625 00 Brno, Czech Republic; lucie.blahova@ceitec.muni.cz (L.B.); lenkaz@physics.muni.cz (L.Z.)
3 Department of Physics, Faculty of Science, University of J. E. Purkyne in Usti nad Labem, Pasteurova 15, 400 96 Usti nad Labem, Czech Republic; petr.rysanek@ujep.cz
4 Department of Physical Electronics, Faculty of Science, Masaryk University, Kotlarska 2, 61137 Brno, Czech Republic
5 Central European Institute of Technology—CEITEC, Brno University of Technology, Purkynova 123, 612 00 Brno, Czech Republic

* Correspondence: ivana.nemcakova@fgu.cas.cz

Figure S1. Micrographs of pristine and coated PCL NFs. CPA-10, CPA-33, CPA-150: PPs were deposited at the average RF power ($P_{av}$) of 10, 33, and 150 W, respectively.

Figure S2. High-resolution XPS C1s spectra with identified functional groups for uncoated PS (left) and for uncoated PCL NFs (right).
Figure S3. Shape of water droplets on uncoated and PP-coated PS dishes and PCL NFs aged two weeks with measured water contact angles. CPA-10, CPA-33, CPA-150: PPs were deposited at the average RF power ($P_{av}$) of 10, 33, and 150 W, respectively.
Figure S4. Morphology and population density of native VSMCs on CPA-150-coated PS dishes (i.e., PPs deposited at the average RF power ($P_{av}$) of 150 W) cultured (a) for 24 h and (b) for 7 days. (a, b) Images on the left represent major parts of the CPA-150 sample with lower amount of microparticles and higher cell densities with normal cellular morphology. Images on the right show less occurring parts of the CPA-150 sample (a) with mostly dead or unattached cells 24 h after seeding and (b) with cells with enlarged morphology after 7 days of culture. Microphotographs were taken by an epifluorescence Olympus IX-71 microscope. The scale bar depicts 400 µm.