Electronic supplementary information

Application of radially grown ZnO nanowires on poly-Llactide microfibers complexed with a tumor antigen for cancer immunotherapy

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Fig. S1 – S4.



Fig. S1. Morphological and structural analysis of ZnO NPs and NWs. **A.** Transmission electron microscopic (TEM) image presents synthesized ZnO NPs. **B.** Gaussian size distribution of ZnO NPs. **C.** TEM image of a PLLA fiber including electron-dense ZnO NP agglomerates. ZnO NPs potentially exposed on the surface of PLLA fiber (filled triangle) or near the surface of fiber (open triangle) serve as seeds for ZnO NWs and are indicated as red triangles. **D.** TEM image of ZnO NWs grown on PLLA fiber.



Fig. S2. Schematic diagram and representative images of steps for preparation of PLLA-ZnO NW composites. See also Experimental section.



Fig. S3. Phenotypic changes of DC2.4 cells after stimulation with the indicated complexes were examined by staining for cellular surface markers. The relative surface expression levels of the indicated molecules (A, MHC II; B, CD80) in comparison with untreated cells (CNT) are presented (n = 4). *, p < 0.05.



Fig. S4. Relative fraction of hematopoietic immune cells (CD45⁺), CD4⁺, CD8⁺, and regulator T cells (T_{Reg} , CD4⁺/FoxP3⁺) were quantitated in spleens at day 24 after tumor inoculation in the indicated mice groups. CNT: non-immunized mice.