

Supplementary data

Microneedle-Based Nanomotor Cancer Vaccine Combined with Chemotherapy for Synergistic Melanoma Therapy

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Supplementary figure

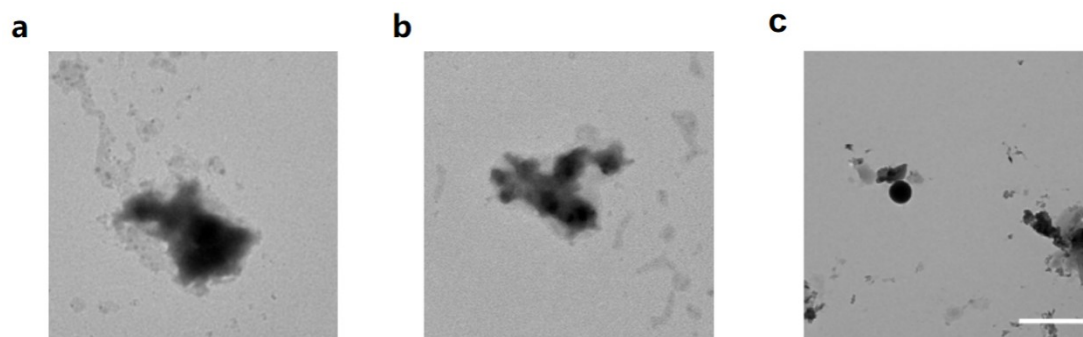


Fig. S1 TEM images of OVA/BSA cancer vaccine (The ratio of OVA to BSA is (a) 0.5:1; (b) 1.5:1 and (c) 2:1, scale bar: 500 nm).

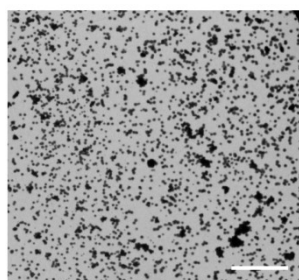


Fig. S2 TEM image of OVA/BSA cancer vaccine (OVA to BSA ratio 1:1; scale bar: 5 μm).

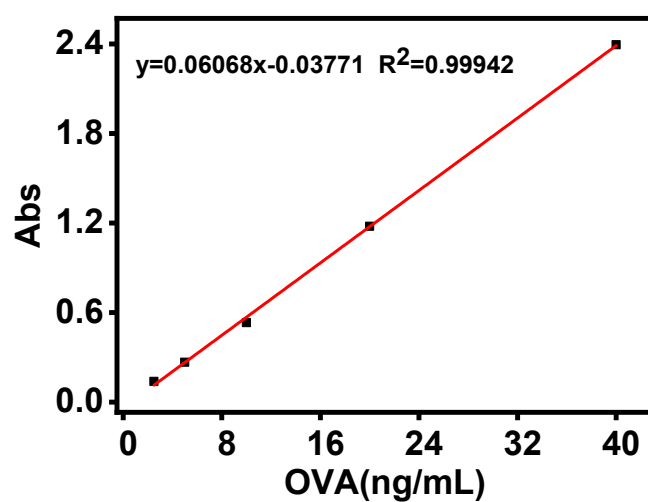


Fig. S3 Standard curve of OVA concentration and absorbance.

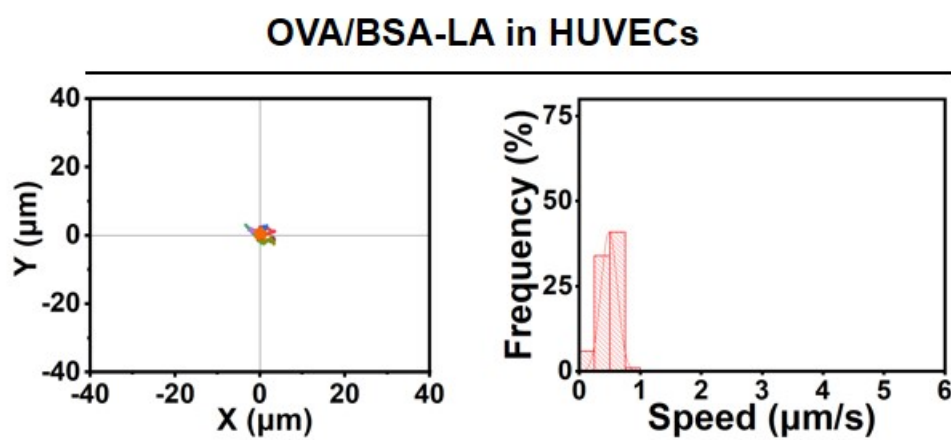


Fig. S4 Trajectory and speed distribution of OVA/BSA-LA nanomotor cancer vaccine after incubation with HUVECs endothelial cells for 24 h.

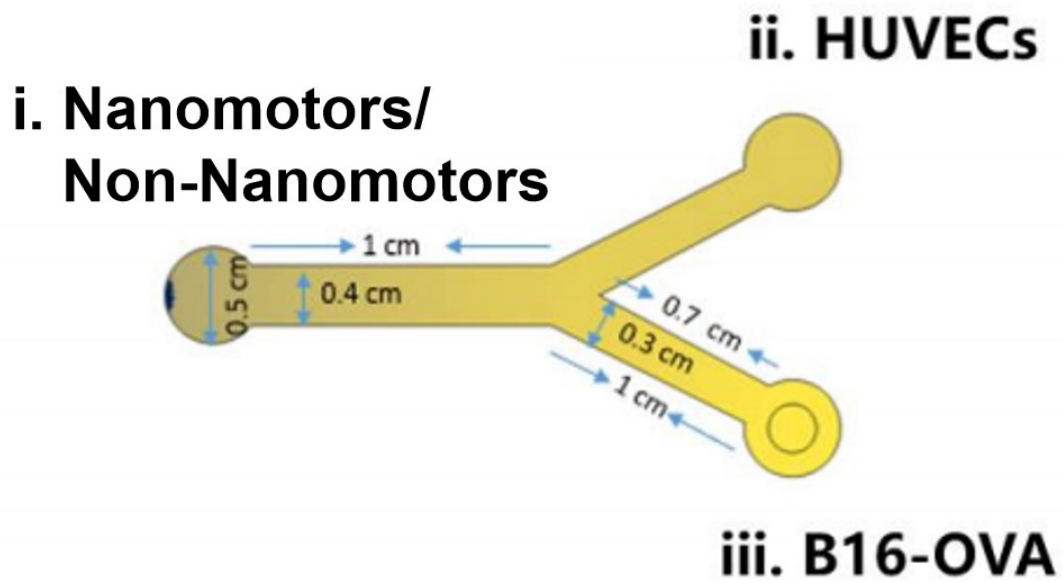


Fig. S5 Schematic diagram of Y-shaped channel.

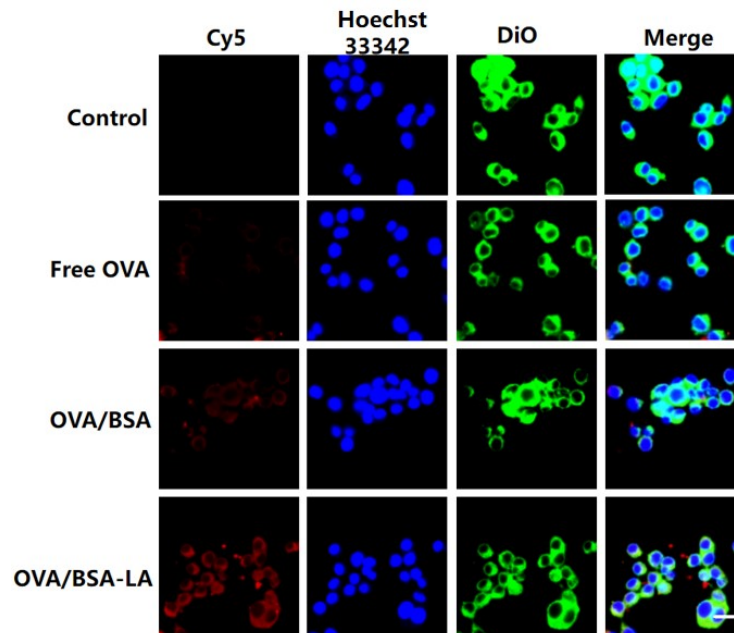


Fig. S6 Fluorescence localization analysis of B16-OVA cells incubated with OVA/BSA and OVA/BSA-LA for 4 h (red: Cy5 labeled samples, blue: Hoechst 33342 labeled nucleus, green: Dio labeled cell membrane, scale bar: 50 μ m).

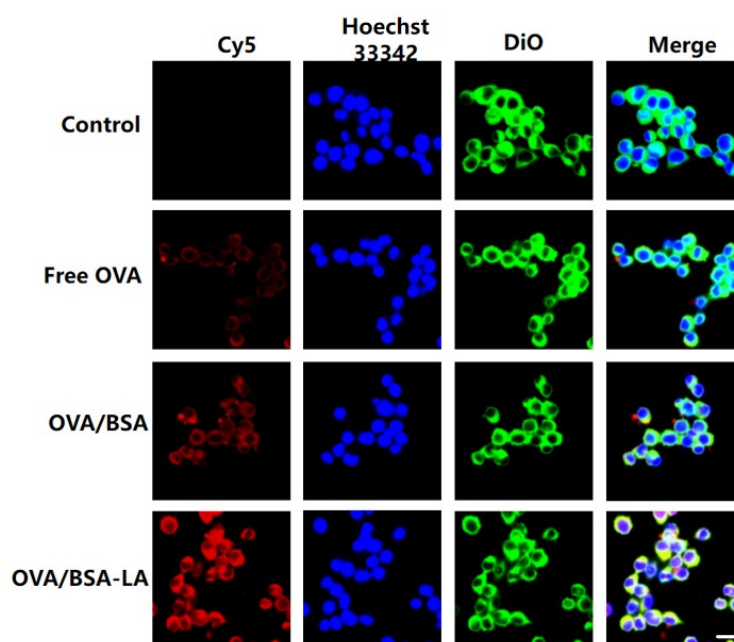


Fig. S7 Fluorescence localization analysis of B16-OVA cells incubated with OVA/BSA cancer vaccine and OVA/BSA-LA nanomotor cancer vaccine for 12 h (red: Cy5 labeled samples, blue: Hoechst 33342 labeled nucleus, green: Dio labeled cell membrane, scale bar: 50 μm).

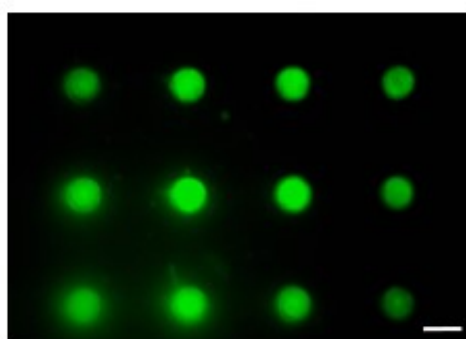


Fig. S8 MN patch fluorescence images loaded with OVA/BSA-LA (green: Fitc labeled OVA/BSA-LA, scale bar: 200 μm).

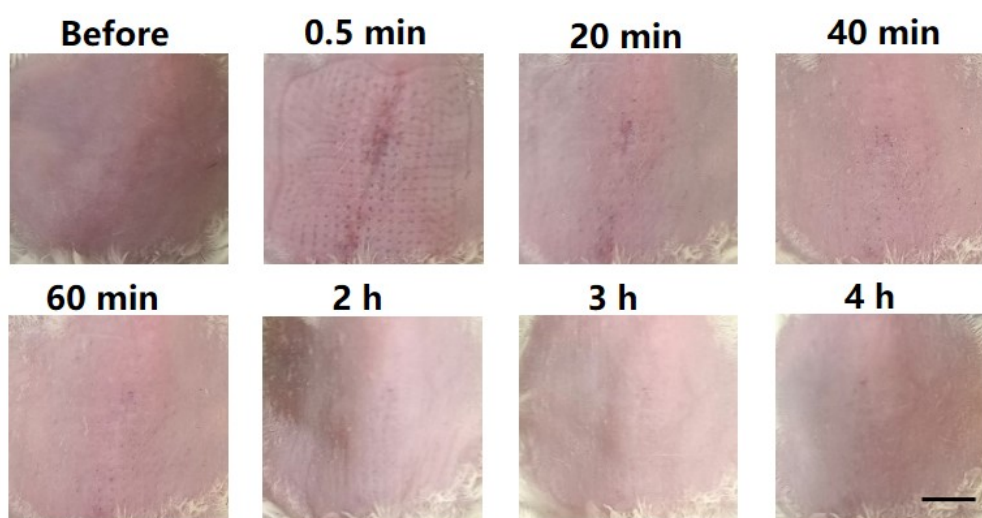


Fig. S9 Observation of microchannels before and after microneedle insertion into the skin of Balb/c mice (scale bar: 5 mm).

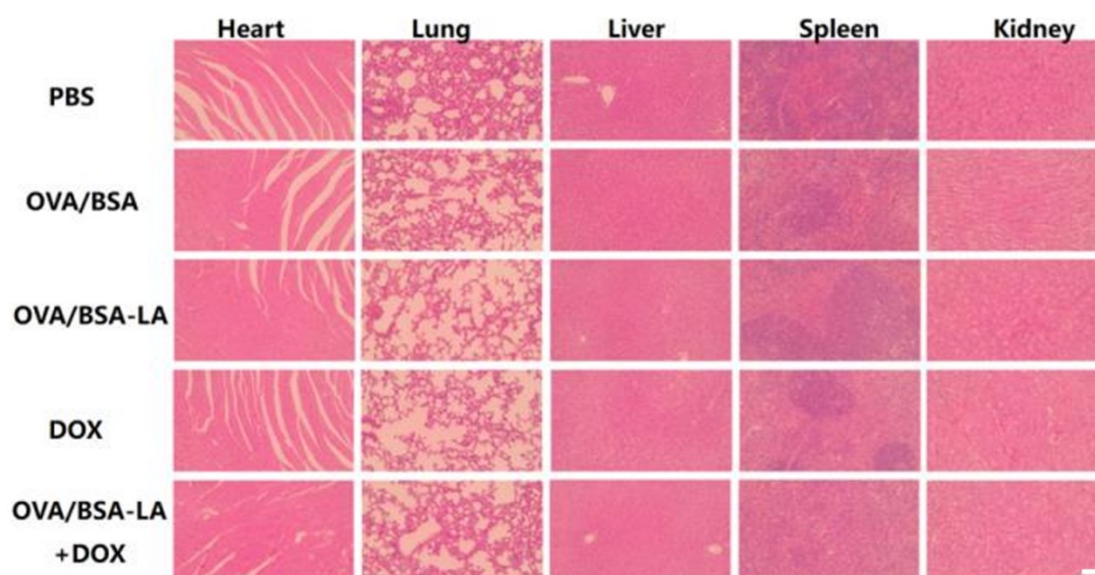


Fig. S10 H&E staining images of major organs (heart, liver, spleen, lung, and kidney) from B16-OVA tumor-bearing mice after treatment with different samples (scale bar: 100 μ m).