

Supporting Information

The Transdermal Drug Delivery System Based on Dissolving Microneedles for Boron Neutron Capture Therapy of Melanoma

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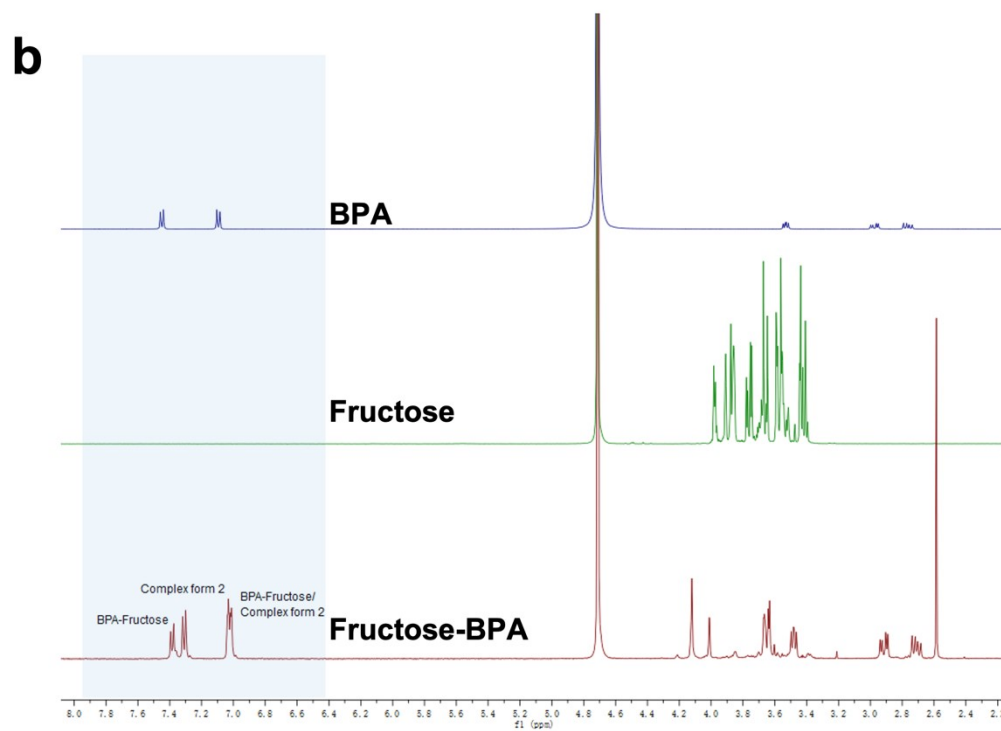
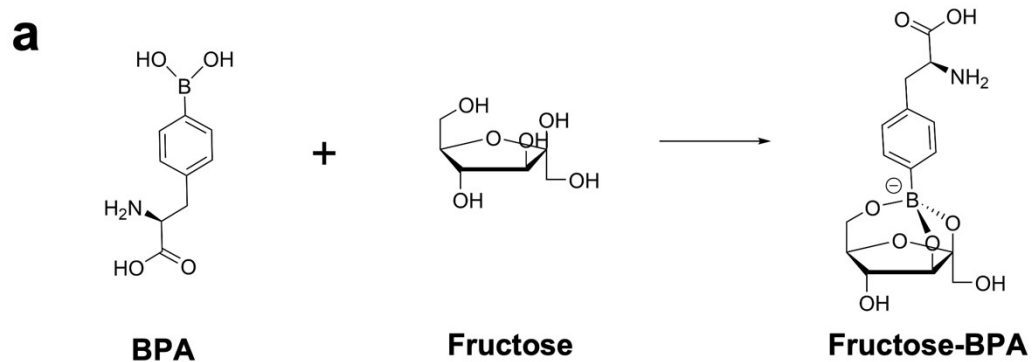


Figure S1. (a) The synthesis route of fructose-BPA. (b) ^1H NMR spectra (D_2O) comparison of BPA, fructose and fructose-BPA.

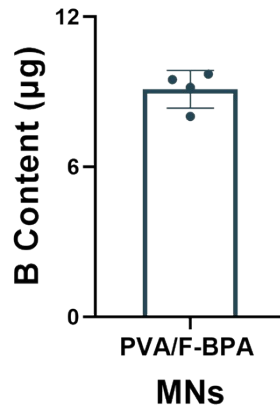


Figure S2. The ^{10}B content in microneedle tips of one patch of PVA/F-BPA MNs.

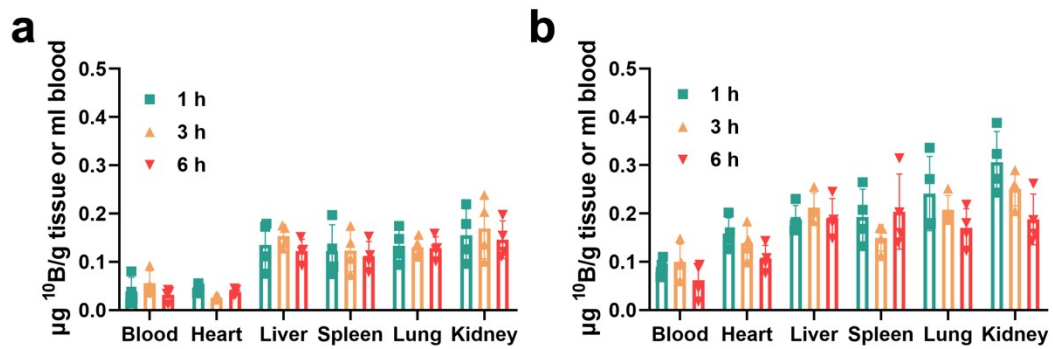


Figure S3. (a) The ^{10}B concentration ($n = 4$) in blood and organs measured by ICP-OES at different time after the penetration of one single patch of PVA/F-BPA MNs. (b) The ^{10}B concentration ($n = 4$) in blood and organs measured by ICP-OES at different time after the penetration of two patches of PVA/F-BPA MNs. (* $P < 0.05$)

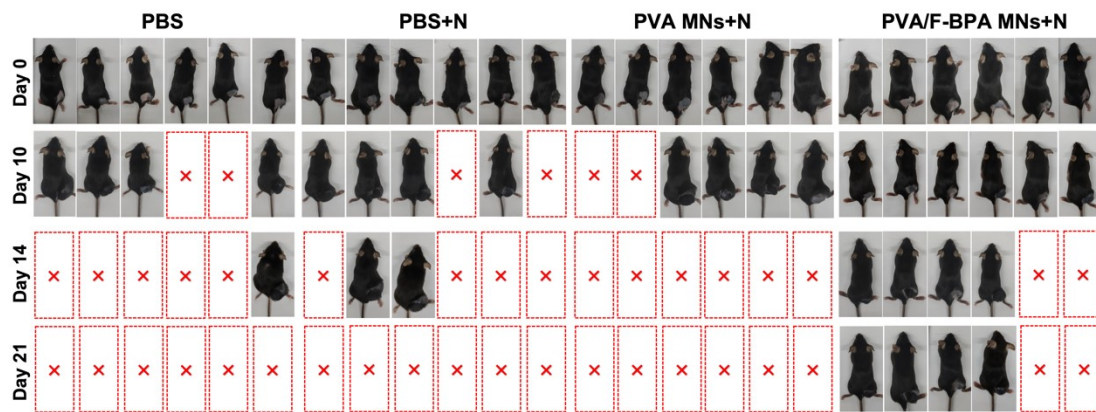


Figure S4. Images of B16-F10 melanoma-bearing mice before and during the treatment process of PVA/F-BPA MNs-BNCT therapy.

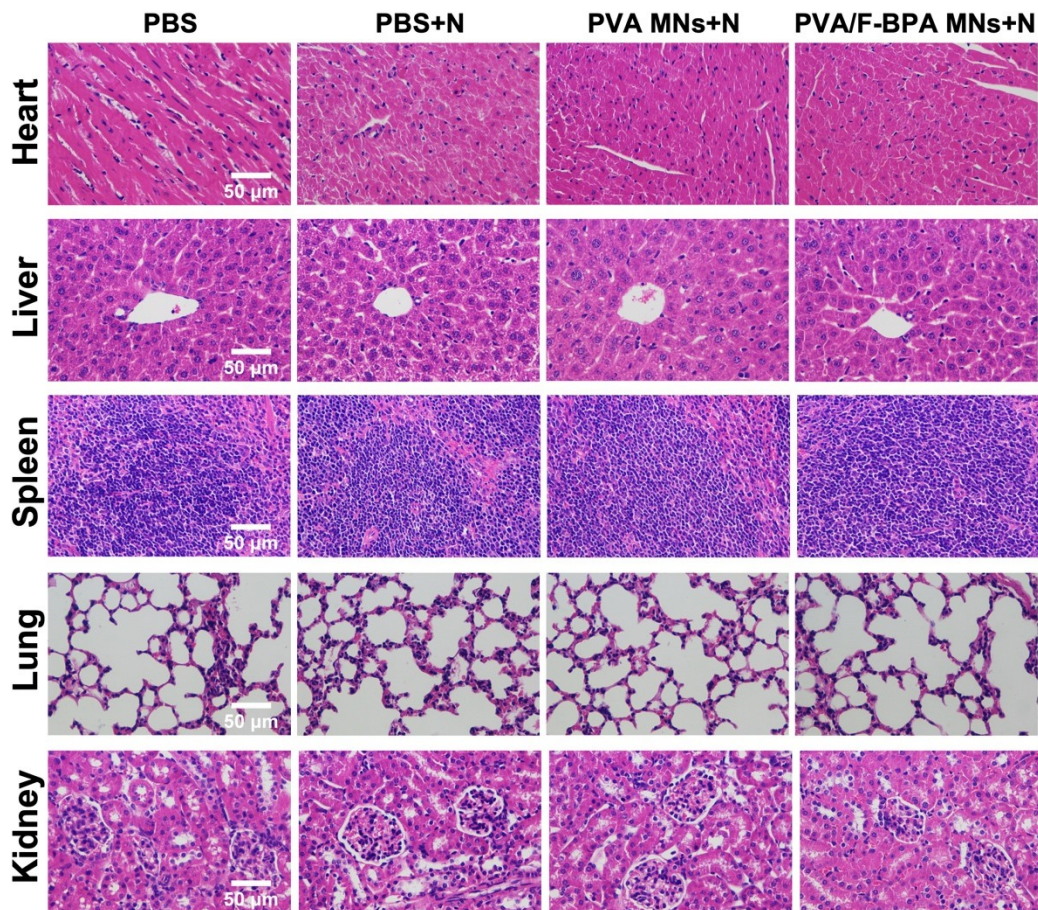


Figure S5. H&E staining of major organs from various treated groups collected 21 days after the indicated treatments.