

Supporting Information

Field-actuated Antineoplastic Potential of Smart and Versatile PEO-bPEI Electrospun

**Scaffold by Multi-staged Targeted Co-delivery of Magnetite Nanoparticles and
Niclosamide-bPEI Complexes**

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Primers name	Forward strand (5' -3')	Reverse strand (5' -3')
β-actin	CTGTCTGGCGGCACCACCAT	GCAACTAAGTCATA GTCCGC
c-myc	CCAGGACTGTATGTGGAGCG	CTTGAGGACCAGTGGGCTGT
p53	TGGCCCCTCCTCAGCATCTTAT	GTTGGCAGTGCTCGCTTAGTG
bax	AAGCTGAGCGAGTGTCTCAAGCGC	TCCCGCCACAAAGATGGTCACG
bad	CCTTAAGAACGGACTCCTCGCC	ACTTCCGATGGACCAAGCCTTCC
caspase-3	TTTGTGTGTGCTCTGAGCC	ATTCTGTTGCCACCTTCGG
bcl-xL	ATGGCAGCAGTAAAGCAAGCGC	TTCTCCTGGTGGCAATGGCG
bcl2	AGATGTCCAGCCAGCTGCACCTGAC	AGATAGGCACCCAGGGTATGCA AGCT
GADPH	CCACCCATGGCAAATTCCATGGCA	TCTAGACGGCAGGT CAGGTCCACC
catalase	AAGACCAGTTACCAACTGGG	CAGATGGACATGCCACATG
MnSOD	TCCACCACCGTTAGGGCTGAGG	CACCAGCAGGCAGCTGGCTCC
Cu/ZnSOD1	CAATAGACACATCGGCCACAC	AAGGCCGTGTGCGTGCTGAA
HO 1	CTGCAGGAACTGAGGATGCTG	CCAGCAACAAAGT GCAAGATT
NADPH	CTGGAGGAGCTGGCTGCCAACGAA G	GTGATCATGAGGAATAGCAC CACCATGCAG
GPx	CCACCAGGAACCTCTCAAAG	TGGCTTCTGGACAATTGCG

Table S1: List of gene specific primers used for gene expression studies.

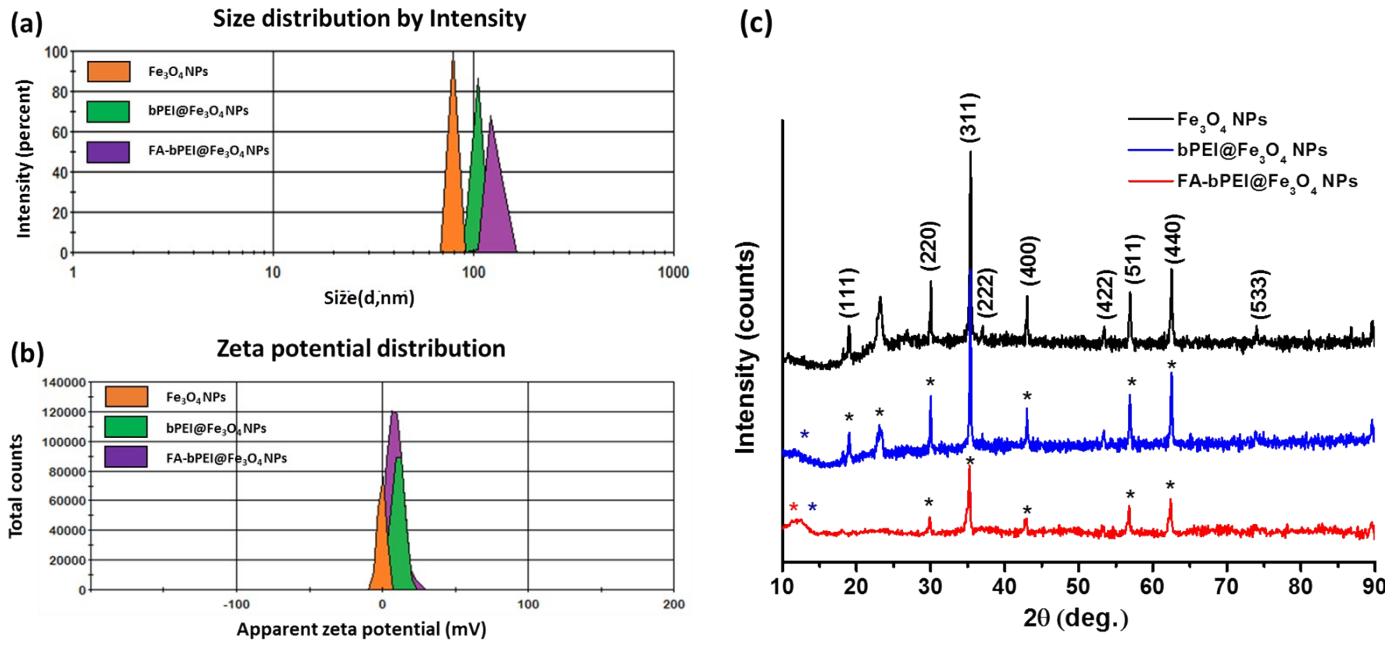


Fig. S1 (a) Size distribution (by DLS), (b) Zeta potential distribution and (c) XRD analysis of Fe_3O_4 NPs, bPEI@ Fe_3O_4 NPs and FA-bPEI@ Fe_3O_4 NPs.

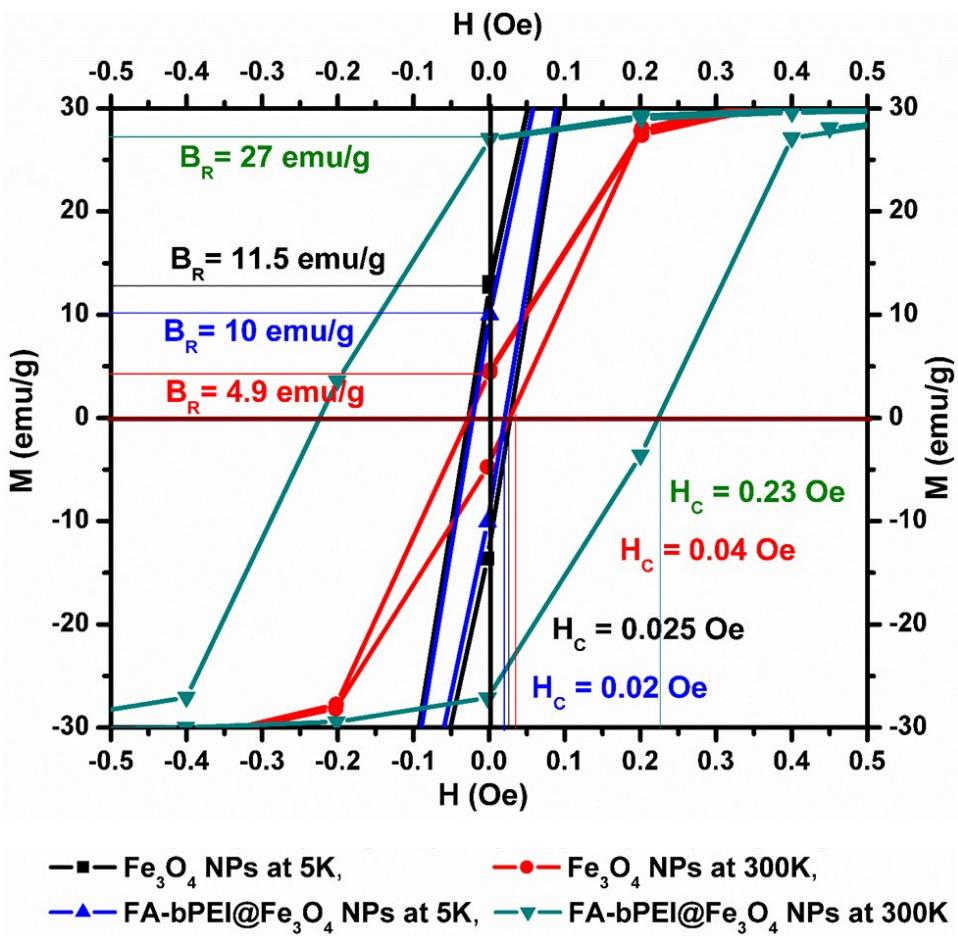
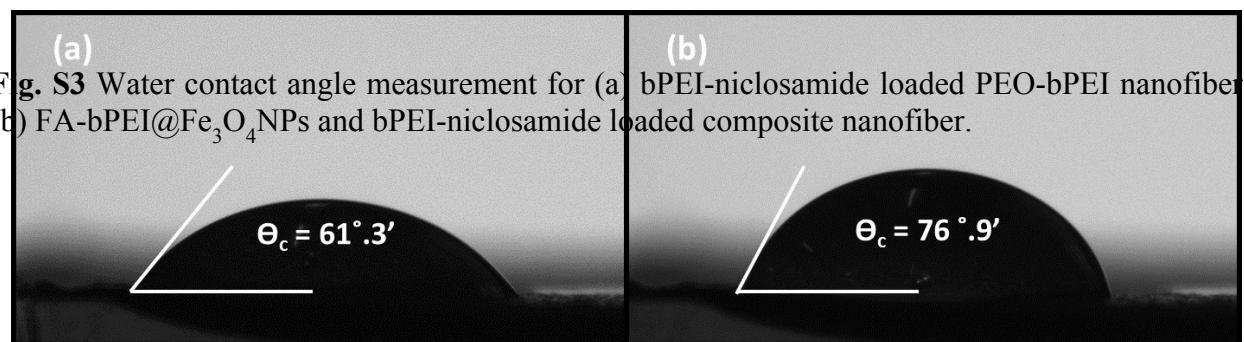


Fig. S2 (a) VSM analysis of Fe_3O_4 NPs and FA-bPEI@ Fe_3O_4 NPs at 5K and 300K



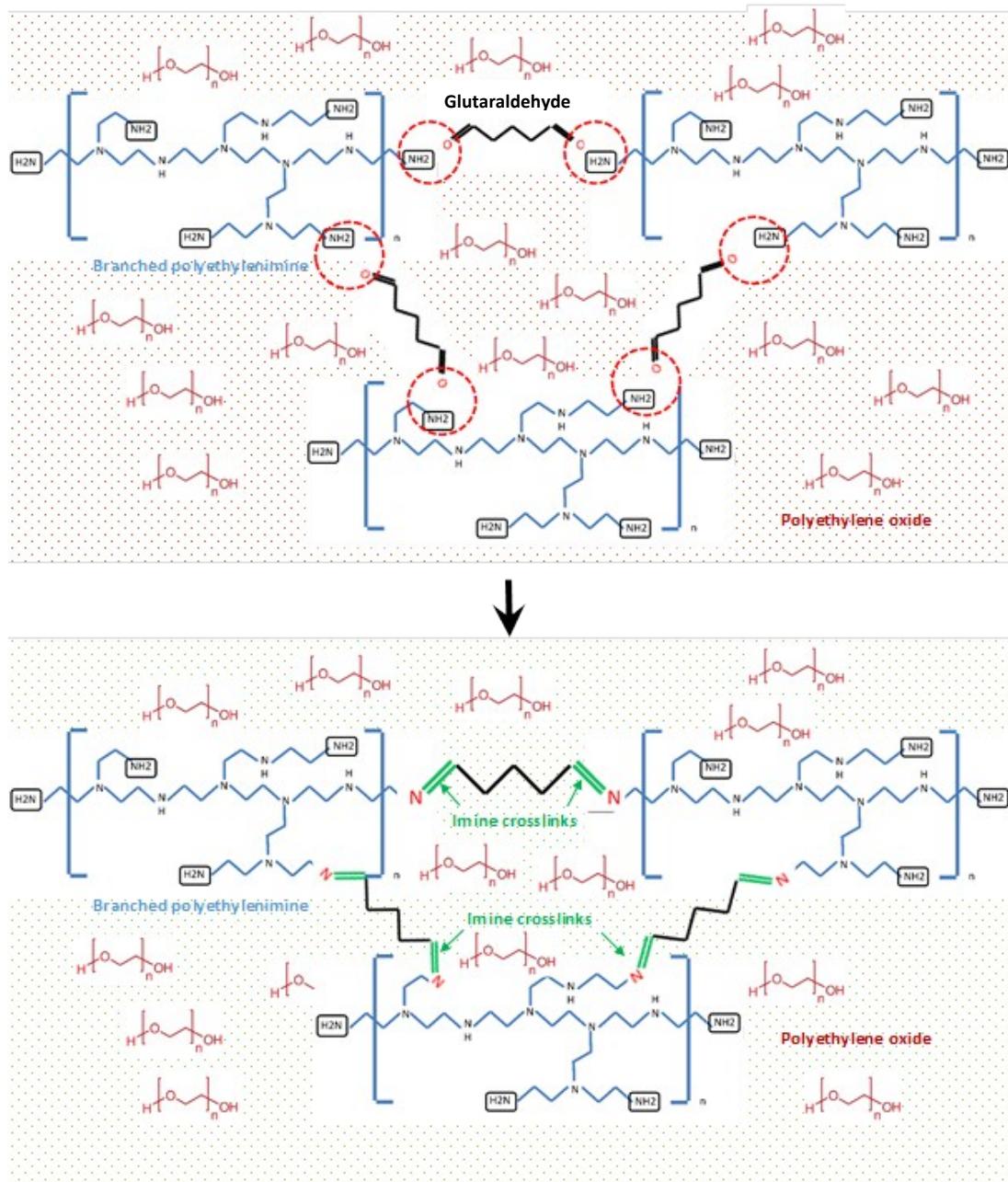


Fig. S4 Schematic representation of glutaraldehyde mediated crosslinking of bPEI-PEO nanofibers.

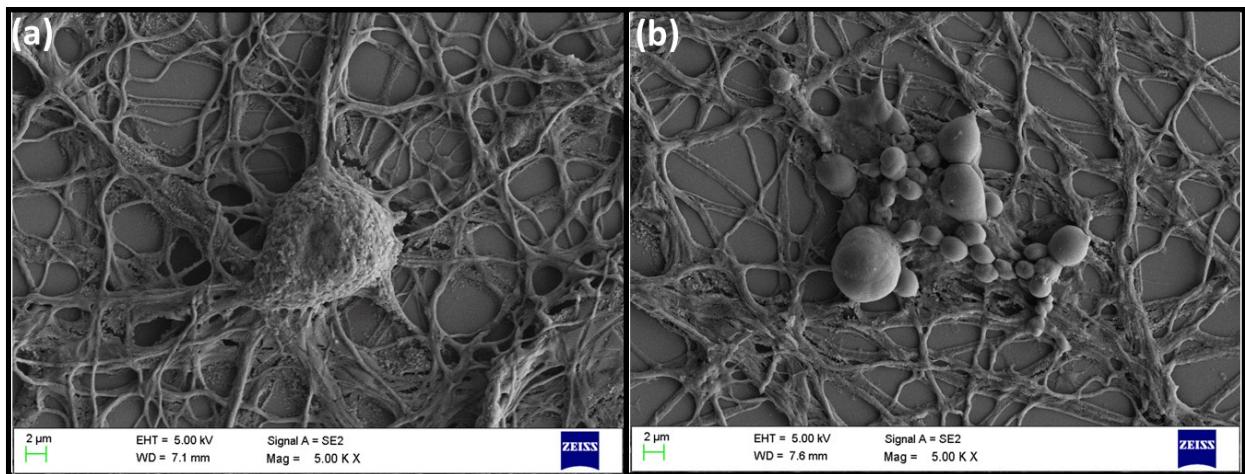


Fig. S5 (a) FE-SEM image of KB cells on composite nanofibers illustrating release and delivery of FA-bPEI@Fe₃O₄ NPs and bPEI-niclosamide polyplexes and (b) subsequent events of KB cell apoptosis.

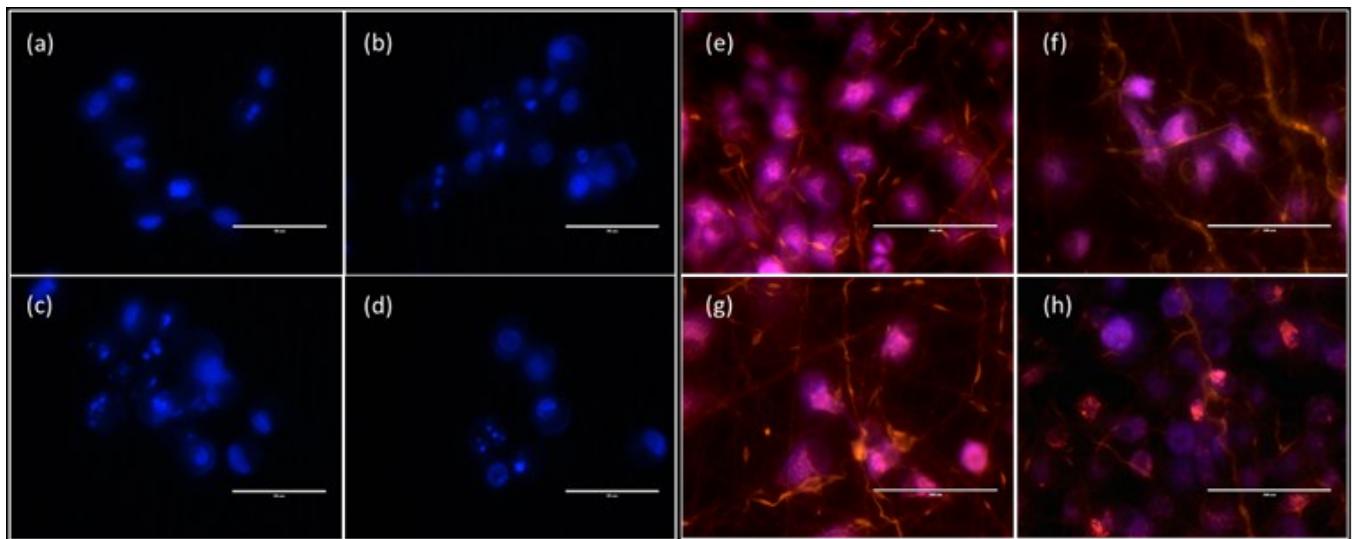


Fig. S6 (a, b, c &d) Hoechst 33342; (e, f, g, &h) MDC and lysotracker red stained KB cells at 72 hours; (a&e) control KB cells, (b&f) KB cells treated with C NF without AMF, (c&g) KB cells treated with CNF with AMF at 48 hours and (d&h) KB cells treated with AMF at 16 hours.