Supplementary Information

AMINO FUNCTIONALIZED POLY(2-ETHYL-2-OXAZOLINE)-RAN-POLY[2-(3-BUTENYL)-2-OXAZOLINE] COPOLYMERS USED AS NON-VIRAL VECTORS FOR NUCLEIC ACID DELIVERY: IMPACT OF POLYMER STRUCTURE AND COMPOSITION

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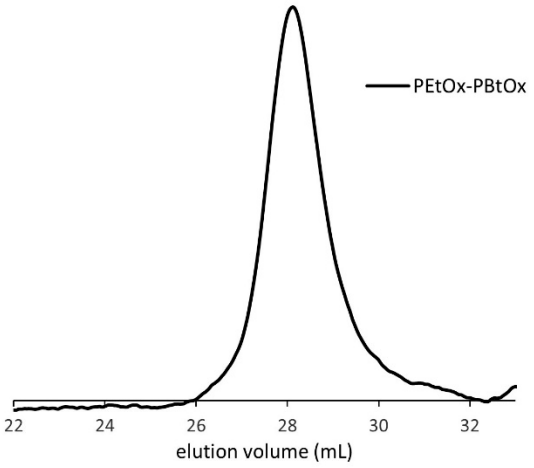
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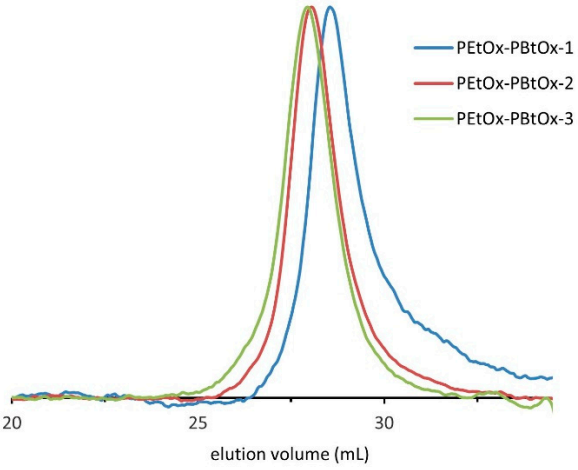
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a)



b)

Figure S1. SEC traces of the polymeric precursor composed of EtOx and BtOx (a) and EtOx-PBtOx copolymers functionalized with amino groups (b).

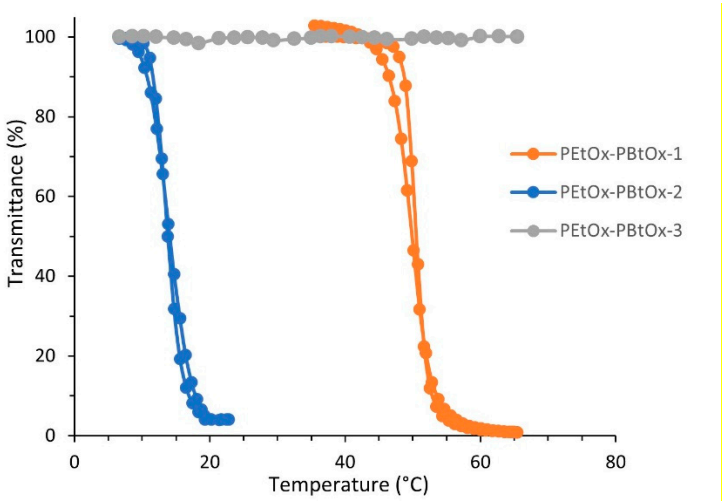


Figure S2. Transmittance vs. temperature curves of amino functionalized PEtOx-PBtOx copolymers.

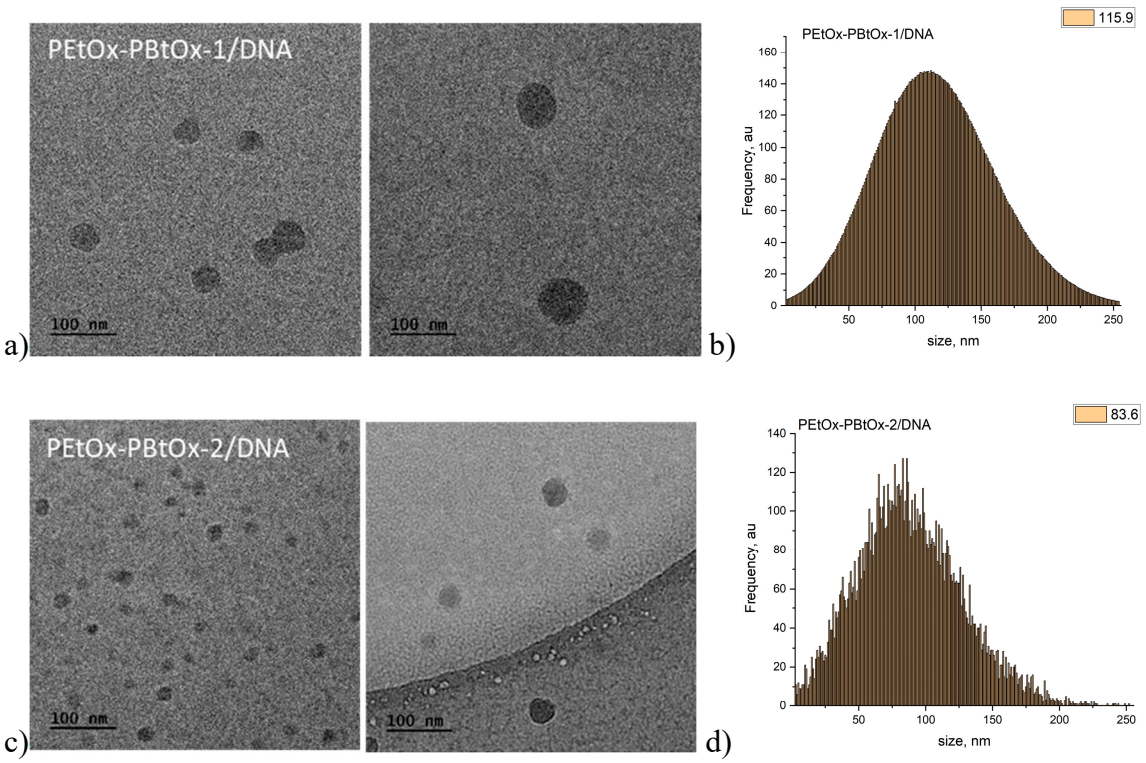


Figure S3. Representative Cryo-TEM micrographs (a and c) and size distributions histograms (b and d) of polyplexes prepared from PEtOx-PBtOx copolymers at N/P ratio of 8. Size distributions histograms were observed using ImageJ software.

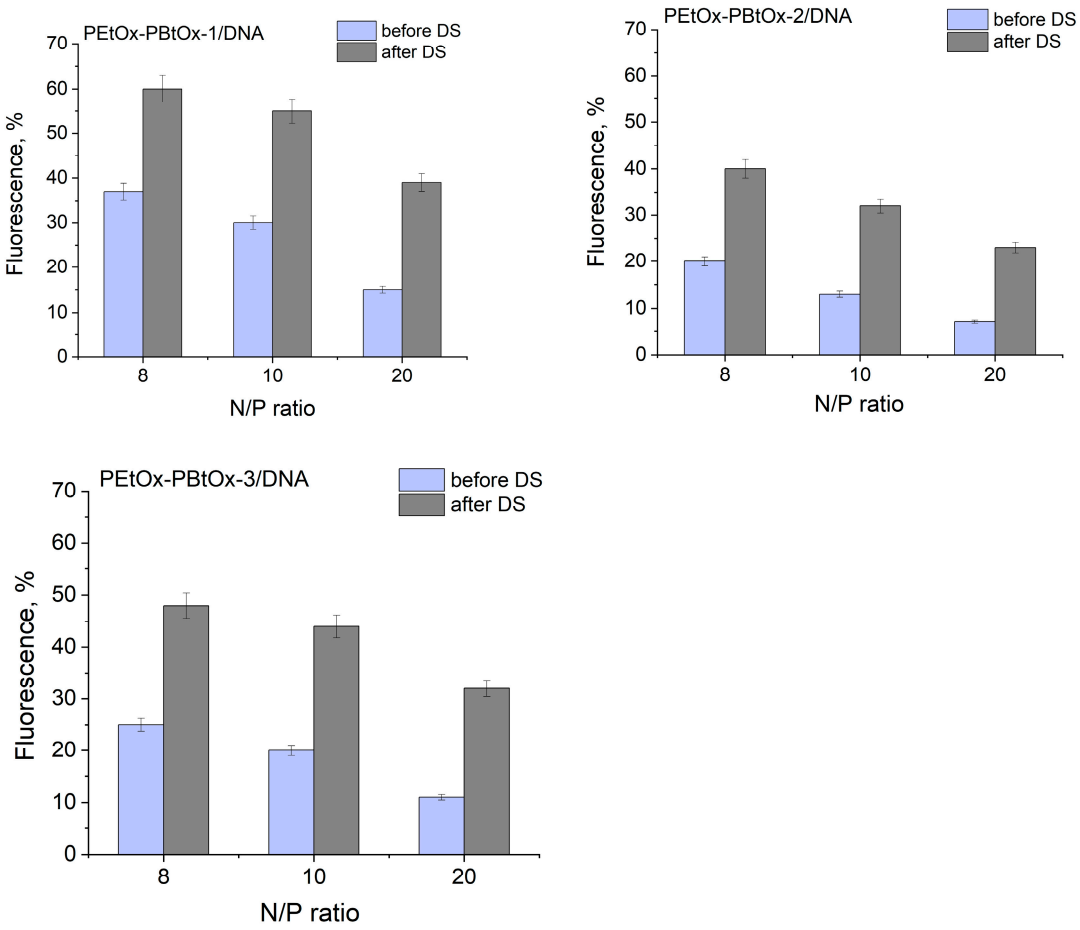
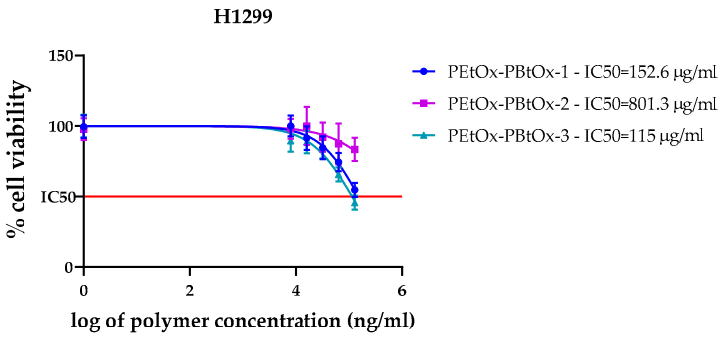
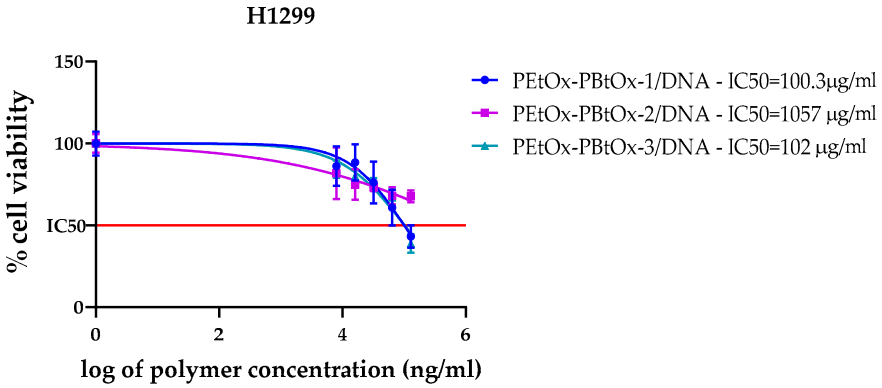


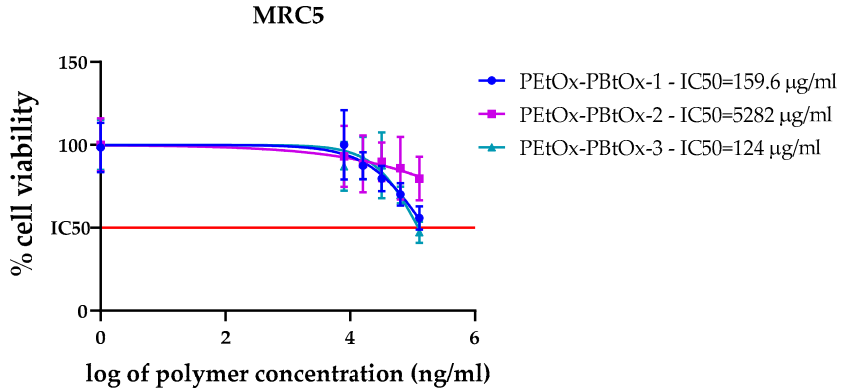
Figure S4. Variations of EtBr fluorescence intensity after a competitive DNA displacement by dextran sulfate (DS).



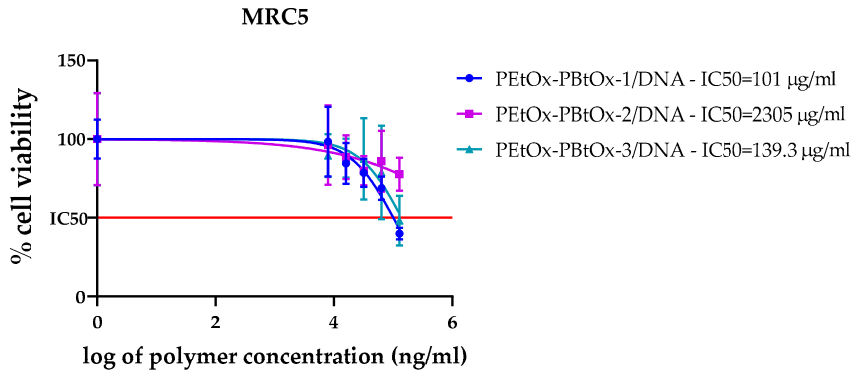
a)



b)



c)



d)

Figure S5. The cytotoxic activity of PEtOx-PBtOx copolymers (a and c) and their corresponding polyplexes (b and d) investigated in cancerous H1299 (a and b) and the non-

cancerous MRC5 (c and d) cell lines. Dose–response relationships were generated and fitted using the “log of concentration vs. normalized response (variable slope)” model in GraphPad Prism (version 8). Cell viability was expressed as a percentage relative to untreated control cells. Data are presented as the mean ± standard deviation (SD) of four technical replicates obtained from two independent experiments. The red line indicates the 50% cell viability threshold (IC_{50}).