

Electronic Supplementary Information

Nanoparticle Ferritin-bound Erastin and Rapamycin: A Nanodrug Combined Autophagy and Ferroptosis for anticancer therapy

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Table S1: Different drug/protein ratios of NFER nanodrug

NFER nanodrug	Ferritin (mg/mL)	Rapamycin (μM)	Erastin (μM)
A	1	20	0.2
B	1	40	0.4
C	1	40	0.8
D	1	40	1.6
E	1	40	3.2

Fig.S1: Drug encapsulation efficiency of rapamycin and erastin with different drug/protein ratios for preparation of NFER by self-assembly. All the concentration of ferritin in solutions is 5 mg/mL.

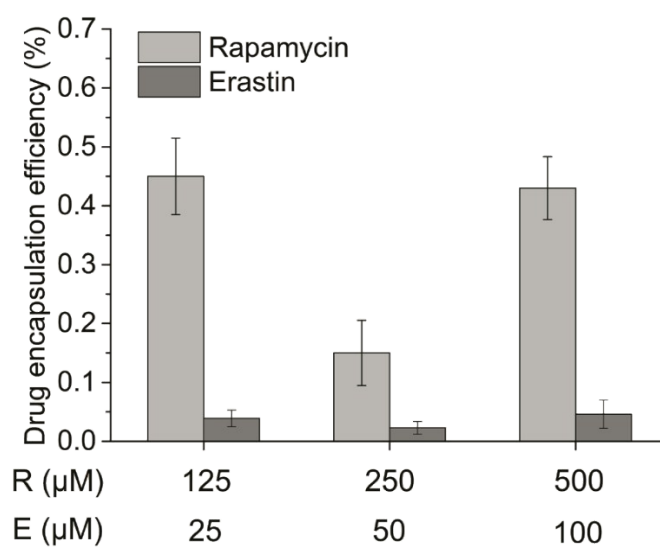


Fig.S2: (A) Quantitation of relative MFI of C11-BODIPY in PC12 cells exposed to

NFER. (B) Quantitation of relative MFI of DCFH-DA in PC12 cells exposed to NFER and 10 μ M H₂O₂. MFI was analyzed by flow cytometry.

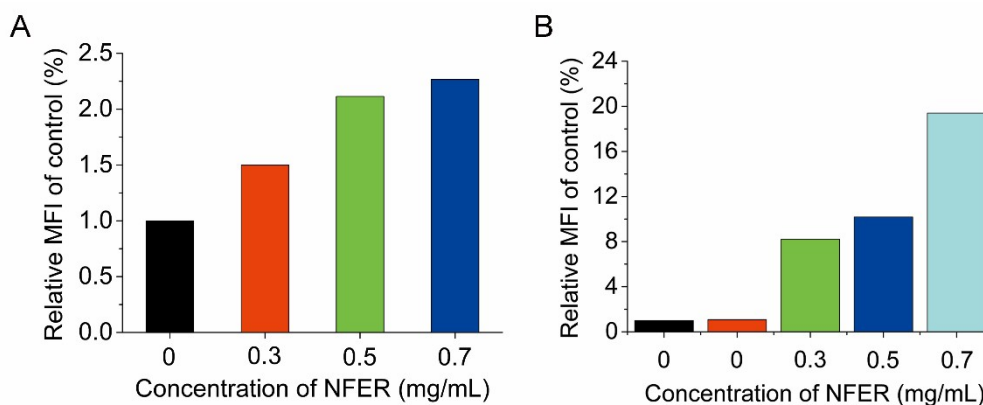


Fig.S3: The expressions of Atg-7 and GPX4 proteins relative to actin after NFER treatment compared with ferritin plus erastin, ferritin plus rapamycin and erastin plus rapamycin. The concentrations of ferritin, erastin and rapamycin are the same as in NFER.

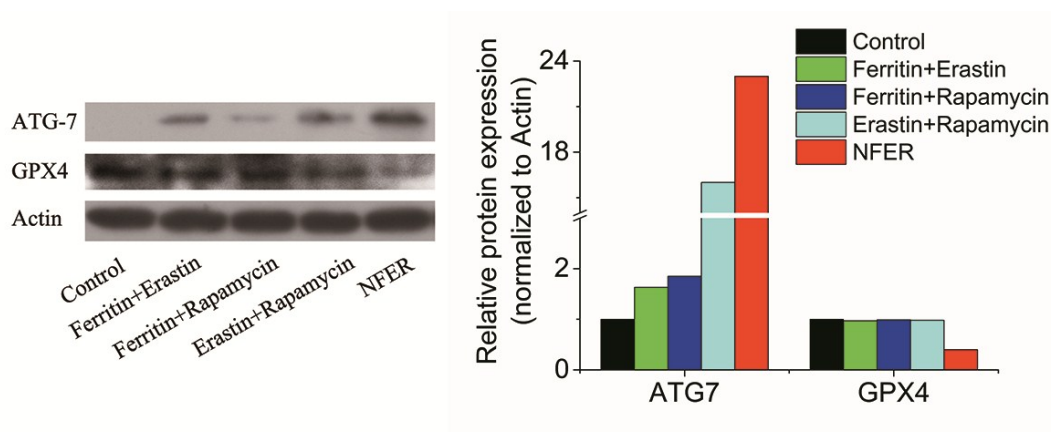


Fig.S4: In vitro cytotoxicity of PC12 cells incubated with different concentration

combination ratios of three drugs (A) and two drugs (B) for 24 h, respectively.

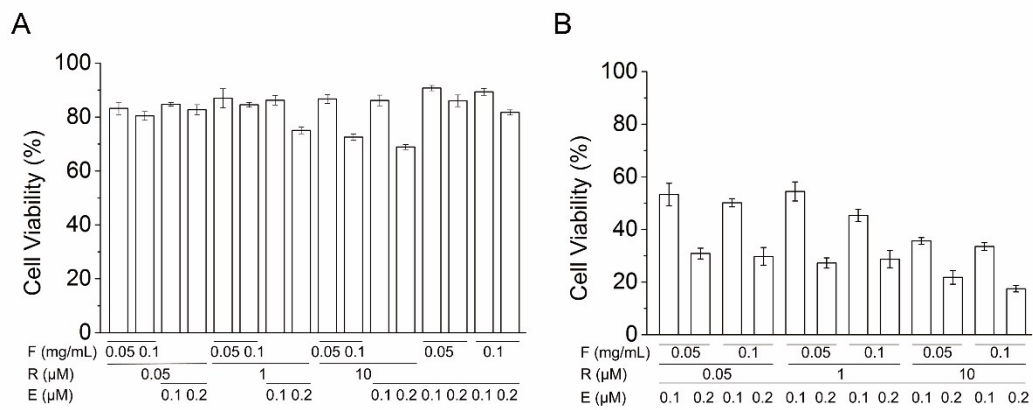


Fig.S5: Picture of tumors in different groups collected post the treatment.

