

Fabrication of water-soluble polymer encapsulated-As₄S₄ to increase the oral bioavailability and chemotherapeutic efficacy in AML mice

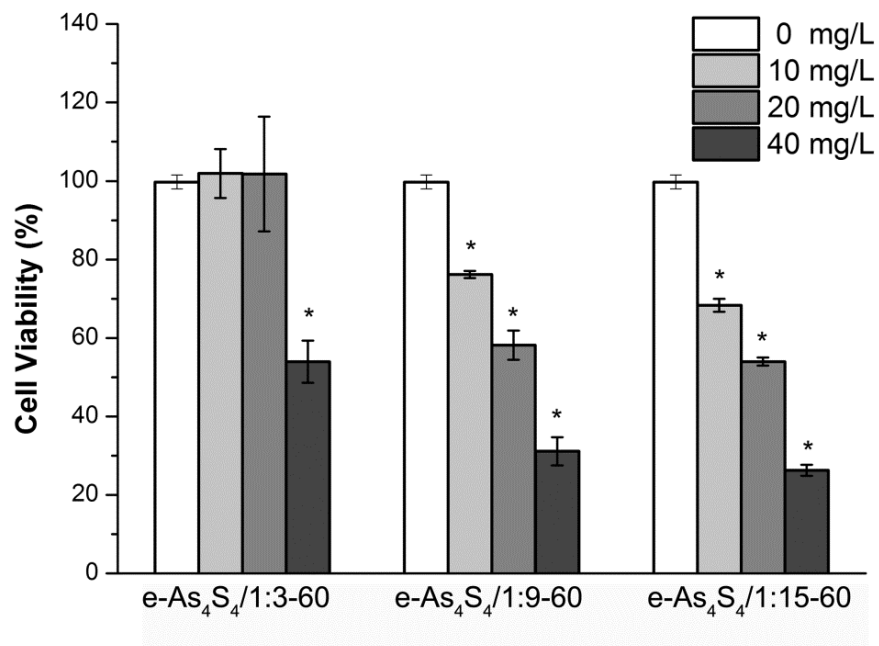
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Supplementary Figure S1.



Supplementary Figure S1. Cytotoxicity of e-As₄S₄ on HL60 cells. HL60 cells were treated with saline, e-As₄S₄/1:3-60, e-As₄S₄/1:9-60 and e-As₄S₄/1:15-60 (n=4) for 48 h. Student's *t*-test (two-tailed) was performed to assess statistical significance of experimental results vs saline (* *P*<0.05).

Supplementary Figure S2.

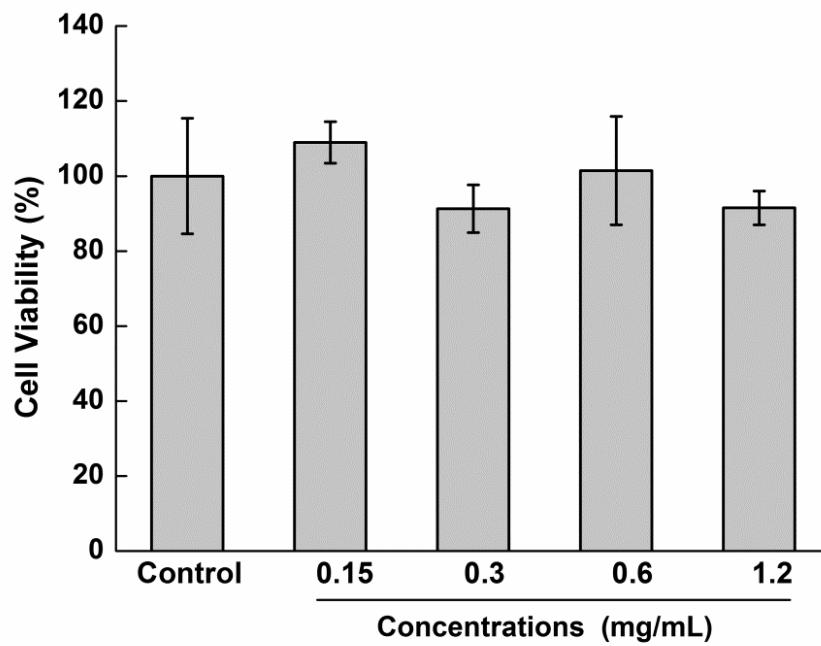
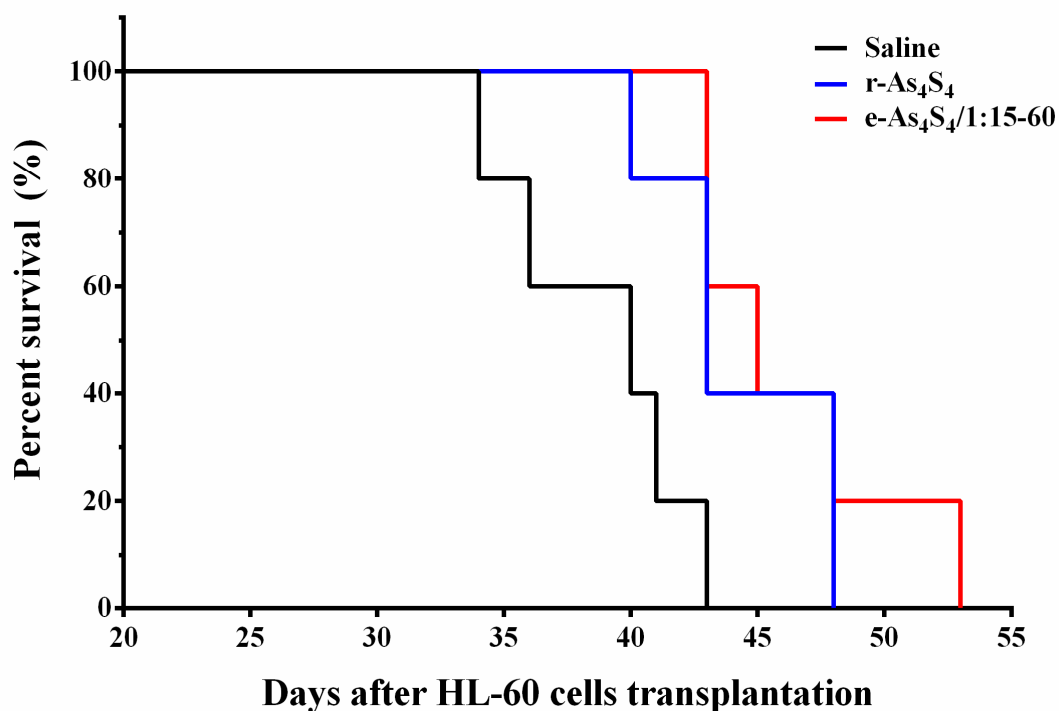


Figure S2. Cytotoxicity of PVCL-PVAc-PEG (Soluplus®) on HL60 cells. HL60 cells were treated with PVCL-PVAc-PEG at different concentration for 72h. Student's *t*-test (two-tailed) was performed to assess statistical significance of experimental results vs saline (* $P < 0.05$).

Supplementary Figure S3.



Supplementary Figure S3. *In vivo* therapeutic efficacies of the half-dose r-As₄S₄, e-As₄S₄ and ATRA. Survival curve of AML mice treated with saline (blue line), r-As₄S₄ (red line) or e-As₄S₄/1:15-60 (green line), n=5, Log-rank test (Mantel-Cox) was used to assess statistical significance: e-As₄S₄ vs saline ($P < 0.0078$), r-As₄S₄ vs saline ($P = 0.042$), e-As₄S₄ vs r-As₄S₄ ($P = 0.4803$). NOD/SCID mice were following intravenously injected with HL-60 cells (1×10^6 cells per mouse) after 250 cGy γ -irradiation. After 20 days, the treatment was started with intragastric administration of saline, r-As₄S₄ (1.8 mg per mouse per day) or e-As₄S₄/1:15-60 (28.8 mg per mouse per day).