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Supporting Information

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AZD9291 Resistance Reversal Activity of a pH-sensitive nanocarrier dual-loaded with chloroquine and FGFR1 inhibitor in NSCLC

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Figure S1. Quantitative grayscale intensity of protein expression in parental and AZD9291 resistant cells(H1975 and HCC827 cell lines). Values were normalized to β -actin protein levels. *P<0.05, **P<0.01, ***P<0.001.



Figure S2. *In vitro* toxicity of PD173074 and CQ. Cell viability of AZD9291-resistant cells H1975/AR treated with different concentrations of PD173074(A) and CQ(B) in 72h.



Figure S3. The ¹H NMR spectra of the DSPE-PEG_{2k}-COOH (A) and DSPE-PEG_{2k}-cRGD(B) in CDCl₃. The characteristic peaks were pointed out.



Figure S4. Release profile of free CQ(A) and free PD173074(B) in pH 5.5 and 7.4. CQ and PD173074 were released simultaneously from free CQ-PD in pH 5.5(C). Each data was expressed as mean±standard deviation (n=3).



Figure S5. *In vitro* toxicity of cRGD-CaP NPs. Cell viability of H1975/AR(A) and HCC 827/AR(B) treated with different concentrations of cRGD-CaP NPs in 72h.



FigureS6. Western blot analysis showing the expression of integrin protein of different cell lines. Integrin α v- negative A2780 human ovarian tumor cells as a negative control.



Figure S7.Western blot analysis showing the expression of cell cycle-associated proteins after different treatments.



Figure S8. Quantification of cell death (apoptosis and necrosis) of different treatments in H1975/AR cells. All data are from five fields, ***p<0.001, compared with AZD9291 alone group.



Figure S9. Quantitative grayscale intensity of protein expression of different treatments in H1975/AR cells. All data are from three repeats. Values are normalized to β -actin protein levels. ***P<0.001, compared with AZD9291 alone group.



Figure S10. Immunohistochemistry results of proteins pFGFR1 with 200-fold magnification (At scale 100µm).