Supporting Information

A four-in-one pure nanomedicine for synergistic multi-target therapy against breast cancer

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Supporting data

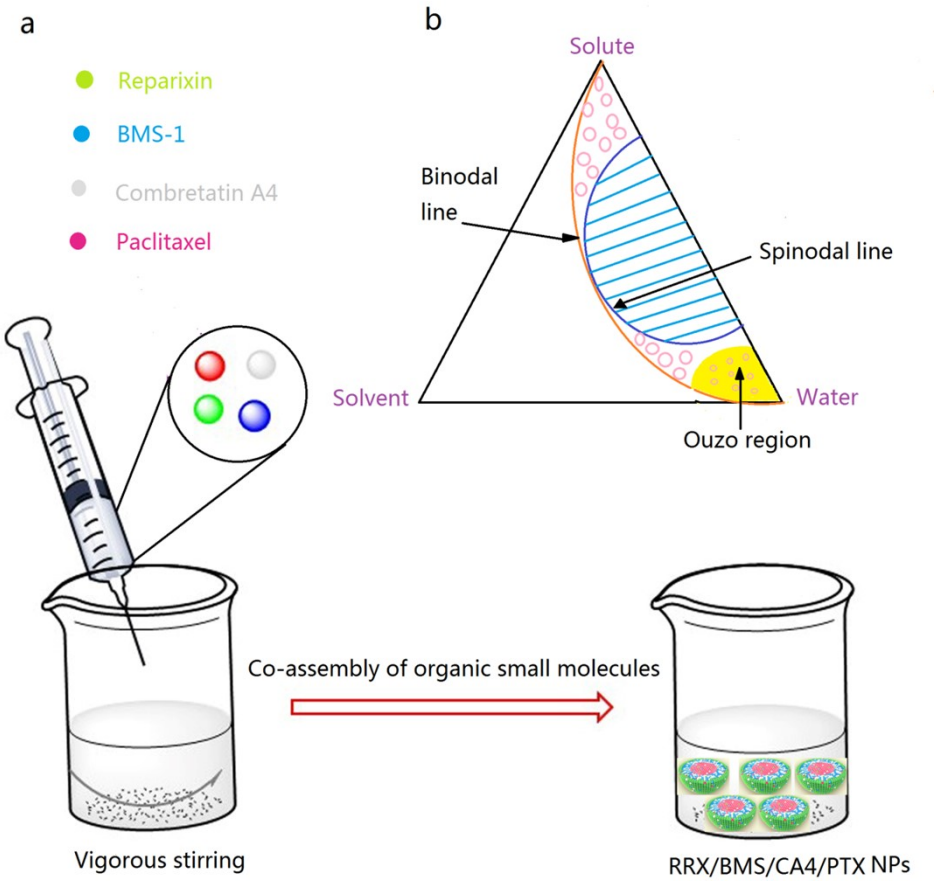

Fig. S1 Schematic illustration of preparation process of RRX/BMS/CA4/PTX NPs (a) and phase diagram of ternary solute/solvent/water (b).

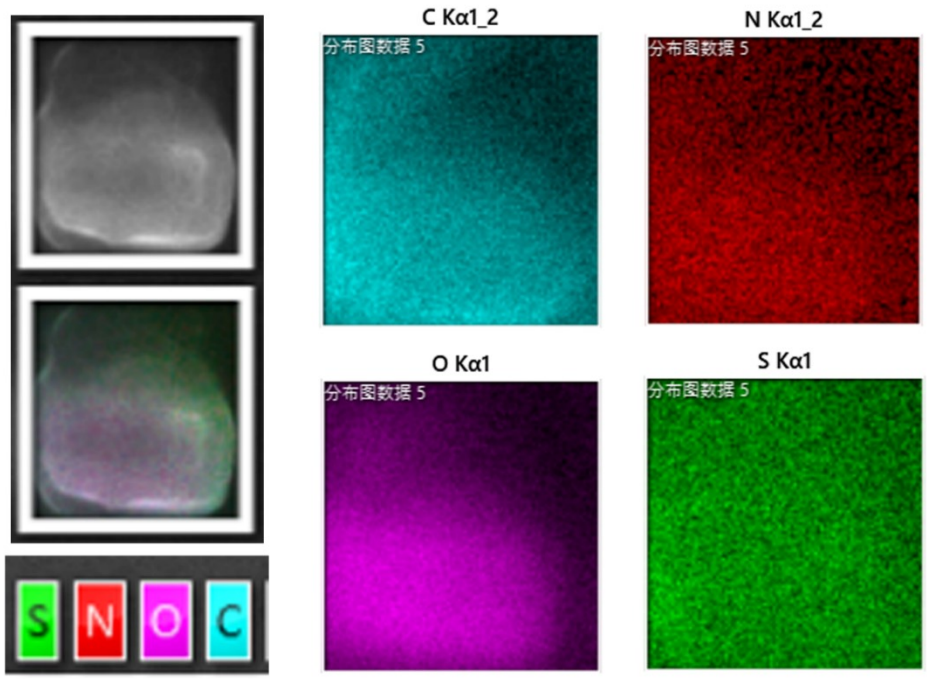

Fig. S2 SEM image and mapping images of RRX/BMS/CA4/PTX NP by SEM.

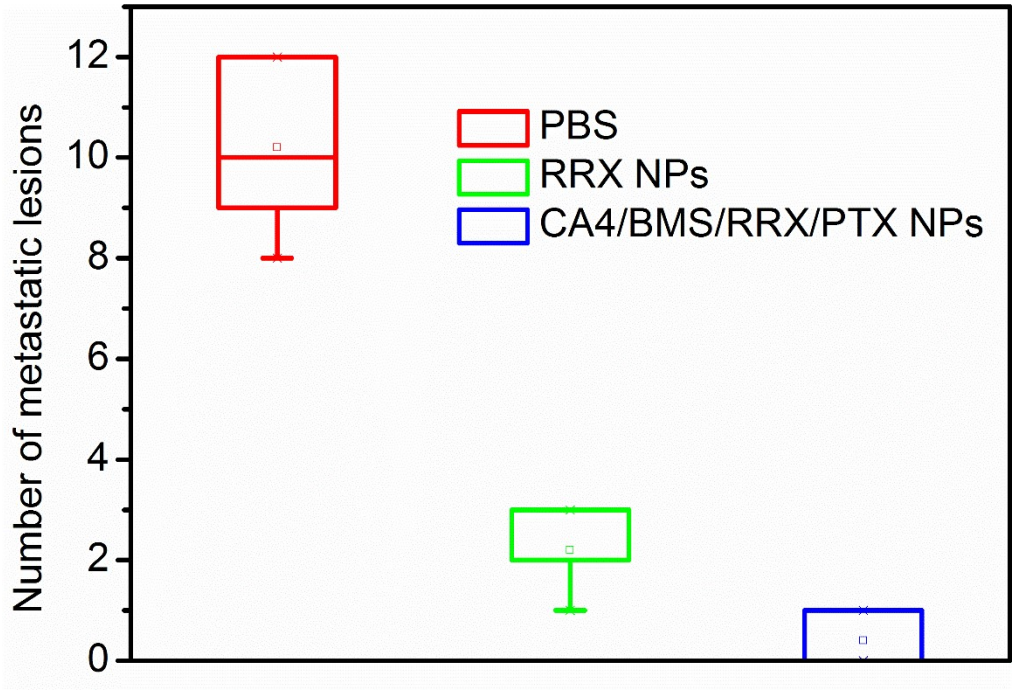

Fig. S3 Number of tumor nodules in the lungs after various treatments with PBS, RRX NPs and RRX/BMS/CA4/PTX NPs.

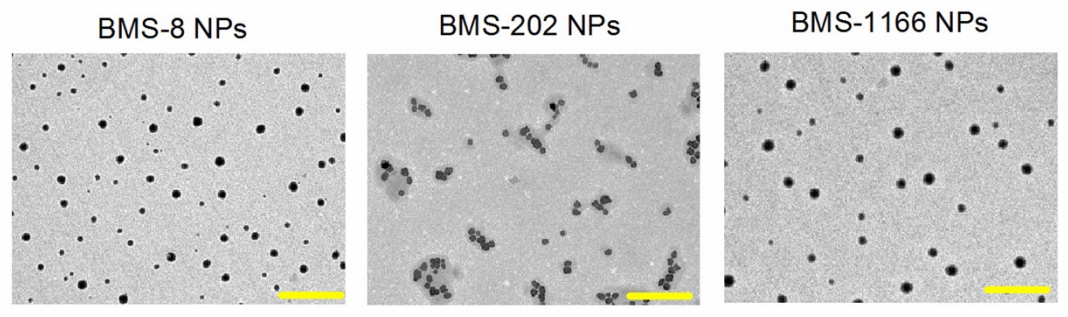

Fig. S4 TEM images of BMS-8, BMS-202 and BMS-1166 NPs (scale bar = 500 nm).

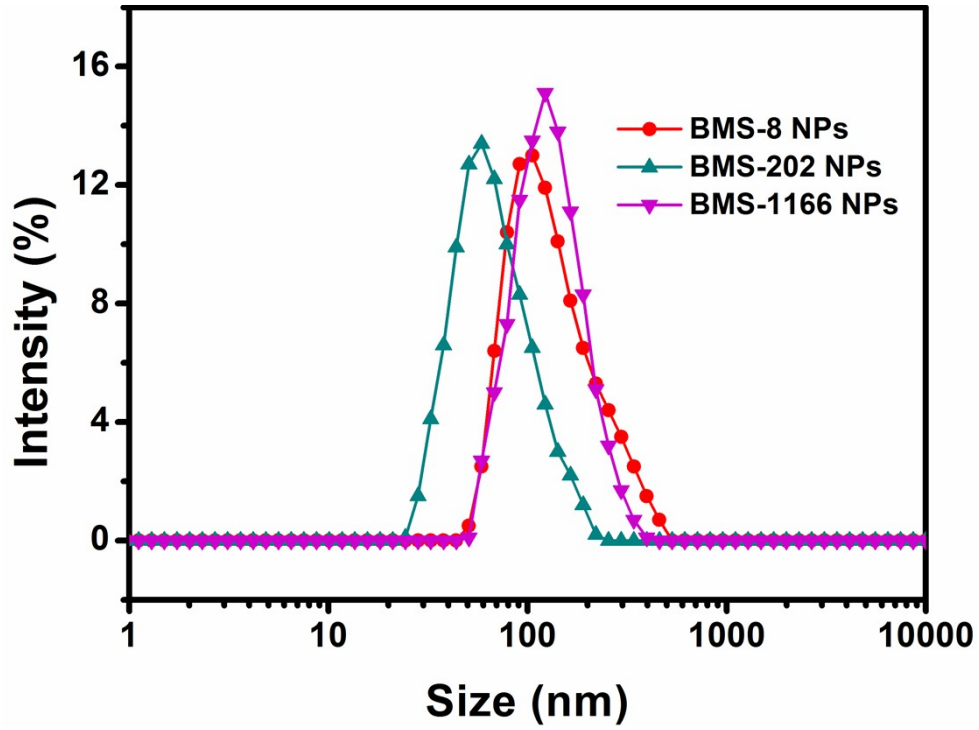

Fig. S5 DLS measurements of size of the BMS-8, BMS-202 and BMS-1166 NPs.

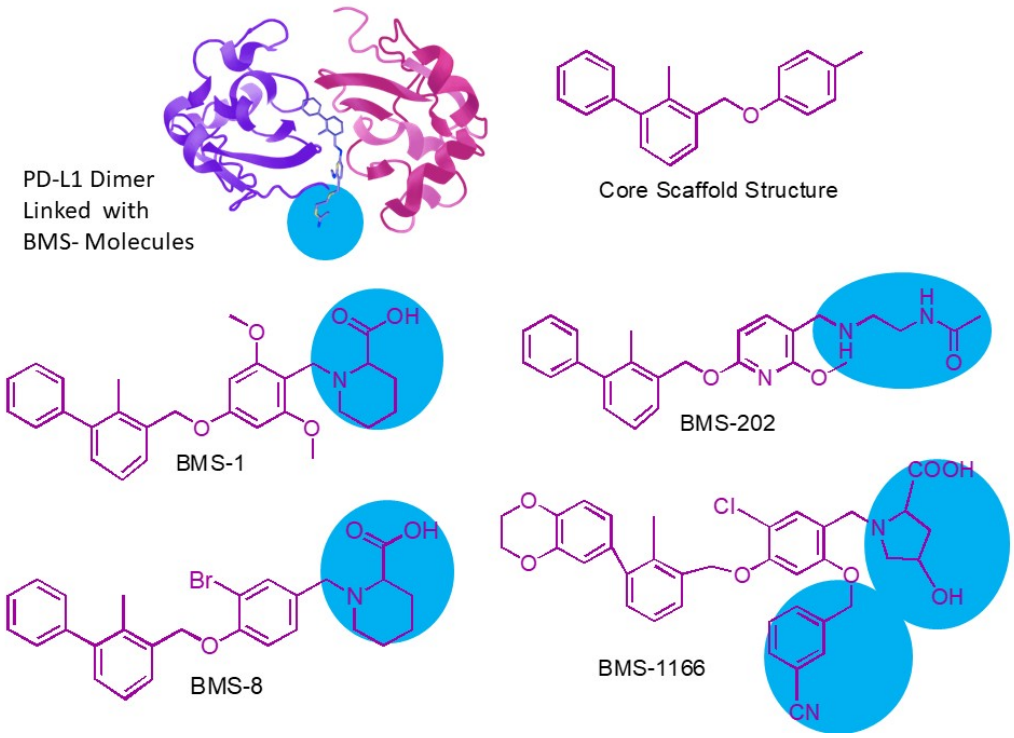

Fig. S6 BMS compounds induce PD-L1 to form dimer due to an identical core scaffold structure [(2-methyl-3-((*p*-tolyloxy)methyl)-1,1′-biphenyl) found in all BMS compounds. The main structural differences between the BMS molecules are highlighted with blue circles. BMS-202 and BMS-1166 are more flexible and the highlighted areas are more easily affected by components of the TME. BMS-1 and BMS-8 have more rigid structures and are therefore better at forming PD-L1 dimer.