## Supporting data

## The "Nano to Micro" transition of hvdrophobic curcumin crvstals leading to in situ adjuvant depots for Au-liposome nanoparticles mediated enhanced photothermal therapy

Syed Baseeruddin Alvi<sup>a</sup><sup>+</sup>, Appidi Tejaswini<sup>a,b</sup><sup>+</sup>, Deepak B. Pemmaraju<sup>a</sup><sup>+</sup>, Rajlakshmi P S<sup>a</sup>, Minhas Gillipsie<sup>a,d</sup>, Surya Prakash Singh<sup>a</sup>, Afreen Begum<sup>c</sup>, Bantal Veeresh<sup>c</sup>, Rohit Srivastava<sup>b</sup>, Nooruddin Khan<sup>d\*</sup>, Aravind Kumar Rengan<sup>a\*</sup>



Figure S 1: TEM imaging if curcumin microcrystals (CMC's) from Lipos Cur NPs



Figure S2: Cytotoxicity of Free Curcumin and Lipos Cur NPs assessed by MTT. (\*P<0.05,

\*\*P<0.01, \*\*\*P<0.001)



**Figure S3:** Effect of temperature (37, 40, 42, 44 °C) with & without curcumin on cell migration.



**Figure S4:** A Modified scratch assay for the assessment of photothermal therapy on cell migration. **(a)** Schematic representation shows concentric scratches at 5, 10 & 15 mm designated as level 1,2 & 3 respectively from the center. **(b & c)** Representative image of cell migration (wound closure at level 3). **(d, e & f)** wound closure of Control, Au Lipos NPs+L, Au Lipos Cur NPs + L at level 1,2 & 3 respectively.



**Figure S5:** Alcian blue binding assay of cancer cells treated with nanoparticles (Au Lipos NPs, Lipos Cur NPs & Au Lipos Cur NPs) without laser irradiation.



**Figure S6**: Endpoint estimation of serum parameters showing a significant rise in ALP, LDH, AST, ALT among disease control when compared to normal and treated groups. (\*P<0.05, \*\*P<0.01, \*\*\*P<0.001)