Effect of shape on cellular internalization and anti-cancer efficacy of Hydroxyapatite Nanoparticles in the osteosarcoma cell line

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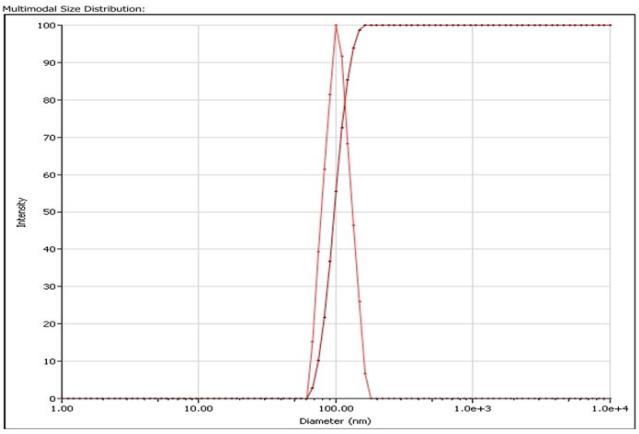
Fig. S1 A. Representative image of Dynamic Light Scattering (DLS), **B**. Phase Analysis Light Scattering (PALS), **C**. Electrophoretic light scattering (ELS) of Spherical NPs.

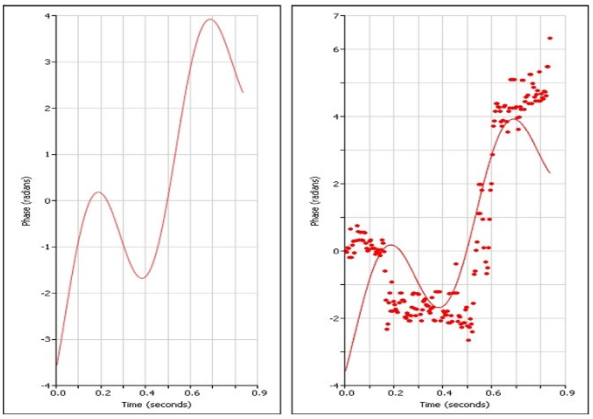
Fig. S2. XRD Spectra of HAP NPs i) Needle_pH8, ii) Rod_pH9, iii) Spherical_pH12.

Fig. S3. FTIR spectra of HAP NPs A) Needle_pH8, B) Rod_pH9, C) Spherical_pH12.

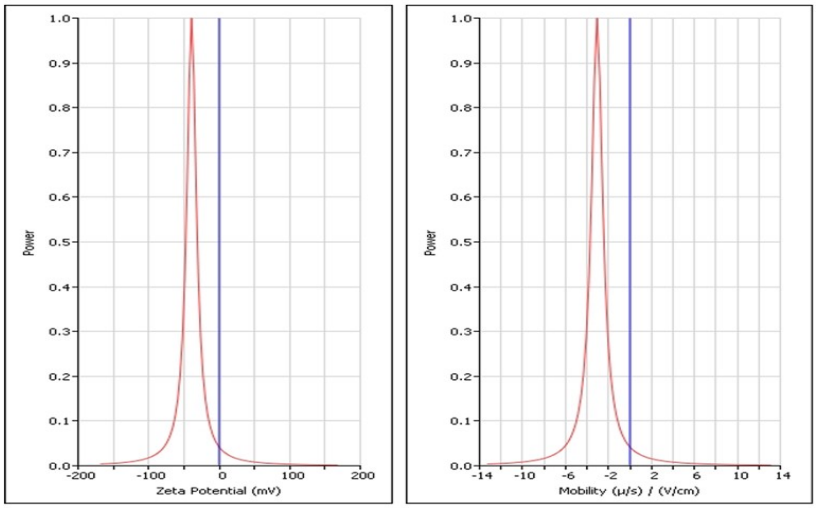
Fig. S4. Laser Scanning Confocal Microscopy of Coumarin loaded HAP NPs (green colour) (n = 3, Mean ± SE).

Fig. S5. Hoechst/PI Double staining assay images representing MG-63 apoptotic cells (Hoechst-Blue) and necrotic cells (PI-Red) (n = 3, Mean ± SE).


Multimodal Size Distribution:
Intensity
Diameter (nm)


Phase (radians)
Time (seconds)
Phase (radians)
Time (seconds)

A **B**


Power
Zeta Potential (mV)
Power
Mobility (µ/s) / (V/cm)

C

Fig. S1

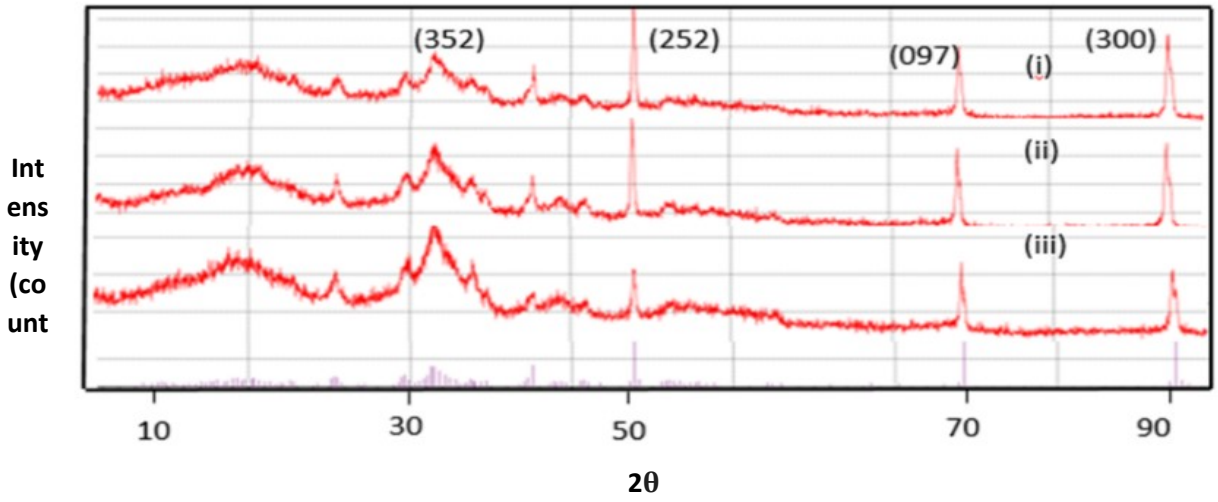
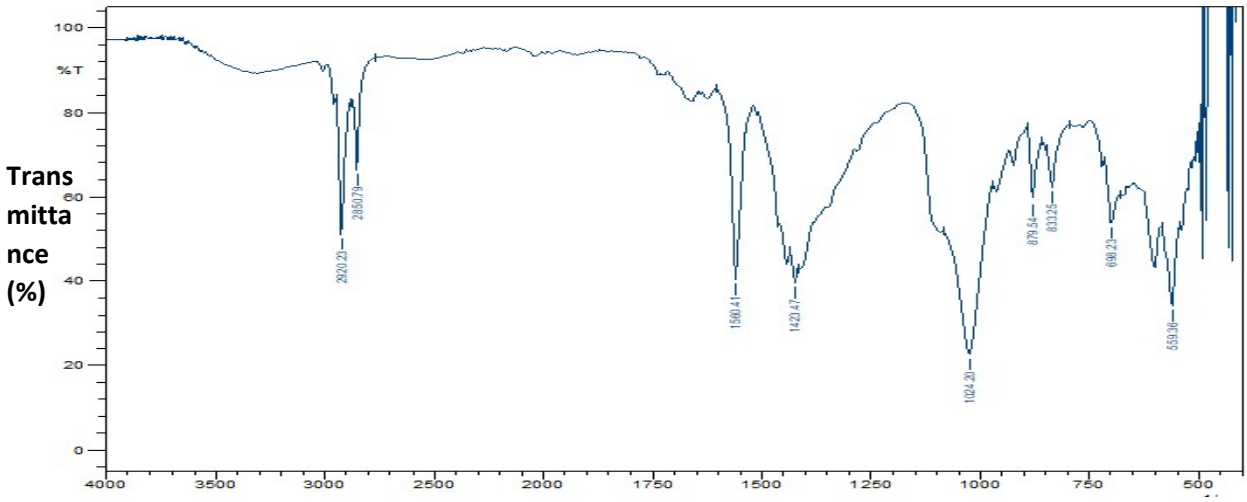
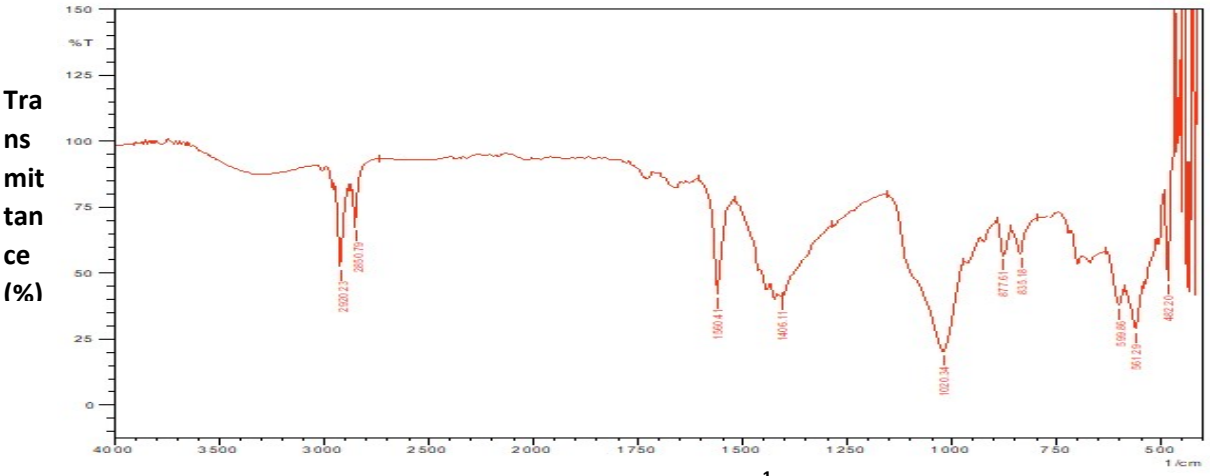


Fig. S2



Wavenumber (cm^{-1})

A



Wavenumber (cm^{-1})

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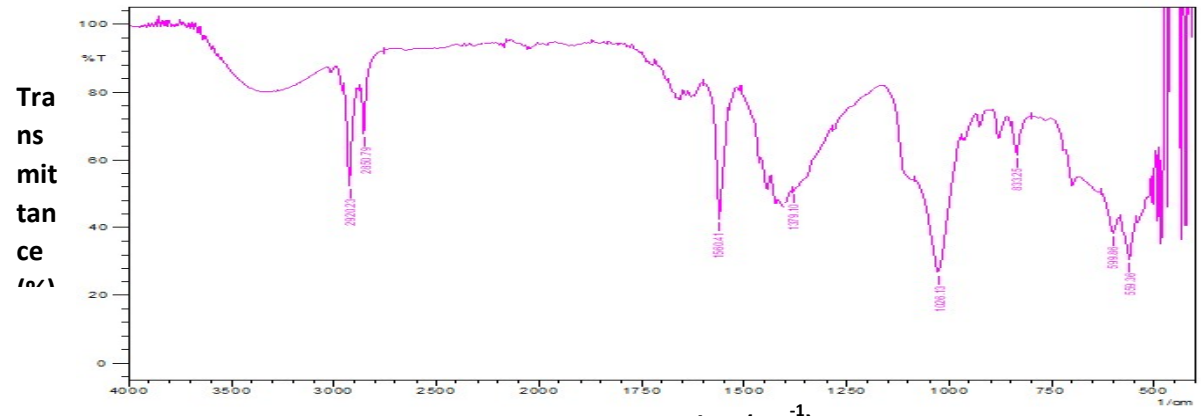
B



Wavenumber (cm^{-1})

C

Fig. S3.

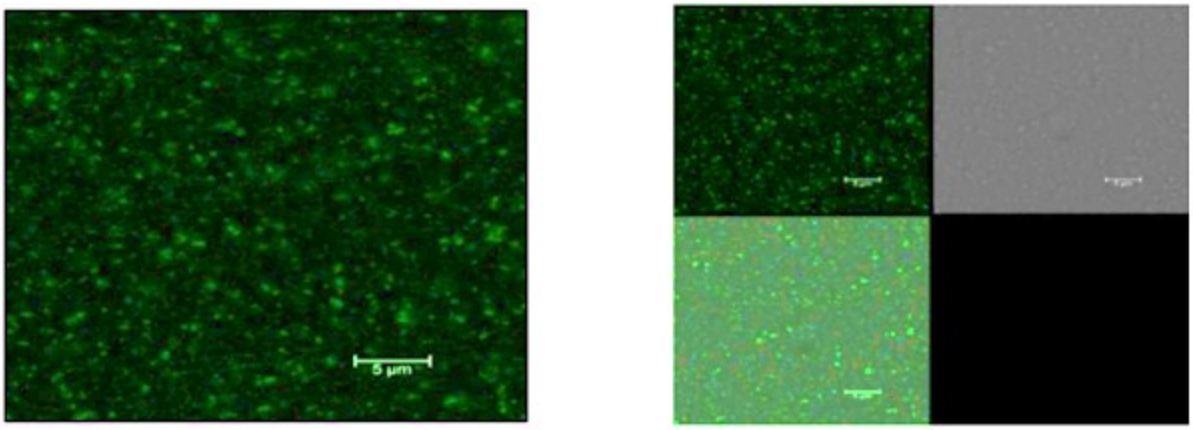


Fig. S4.

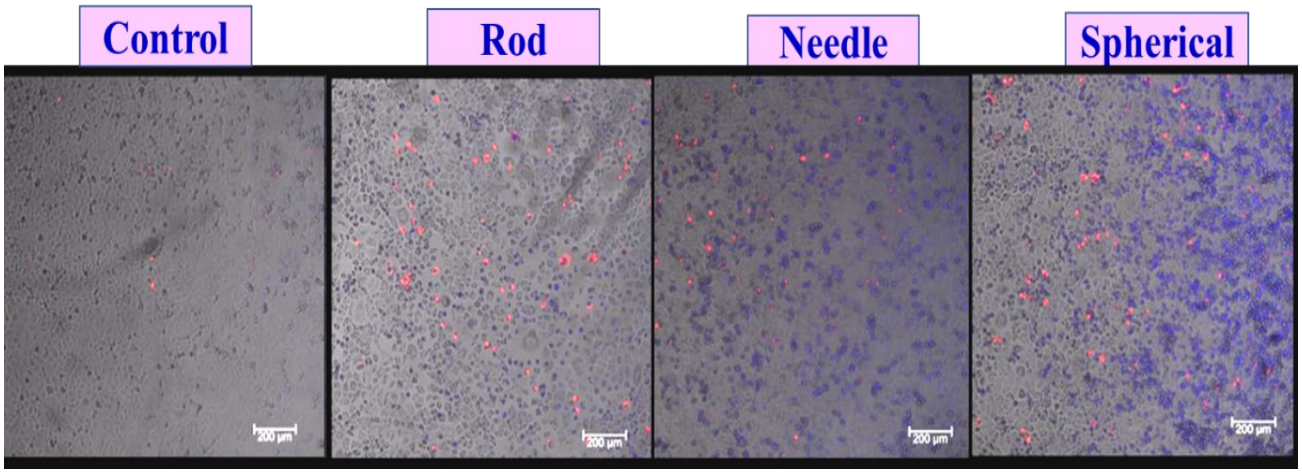


Fig. S5.