

Supplementary data to:

**EXPLOITING *IN VITRO* POTENTIAL AND CHARACTERIZATION
OF SURFACE MODIFIED ZINC OXIDE NANOPARTICLES OF
ISODON RUGOSUS EXTRACT: THEIR CLINICAL POTENTIAL
TOWARDS HEPG2 CELL LINE AND
HUMAN PATHOGENIC BACTERIA**

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Supplementary Table 1: Protocol for SRB Assay

| SRB Assay | | | | |
|--|---|--|---|---|
| Cell seeding | Treatment | Cell fixation | Cell Staining | Dye Solubility |
| 1200 cells/well in 96 well plate (100 ul/well) | Done for 24 hours at 37°C, 200µg/ml of samples (1µl/well) | Addition of 50% TCA (25µl/well) at 4°C for 1 hours followed by washing | Addition of 0.01% SRB dye (50µl/well) for 30min at room temperature followed by washing with 1% acetic acid | Addition of 10mM Tris (pH8) to dissolve SRB dye(100 µl/well) for 5min, reading taken at 565nm |

Abbreviations: TCA: Trichloroacetic acid, Tris: tromethamine; SRB: Sulforhodamine B

Supplementary Table 2: Raw data for cytotoxicity tests. Percentage cell viability and inhibition of HepG2 cell line

| Results | | |
|--------------------|--------------------|---------------------|
| Samples | % viability (mean) | % inhibition (mean) |
| CE | 29.47 ±1.4 | 70.53 ± 1.48 |
| C-ZnO NPs | 23.92 ± 1.5 | 76.08 ±1.44 |
| WPE | 30.98 ± 1.6 | 69.02 ± 1.47 |
| W-ZnO NPs | 35.12 ±1.4 | 65 ± 1.45 |
| DMSO | 88.6 ± 1.7 | 11.4 ± 1.5 |
| Doxorubicin | 20.11± 1.8 | 80 ± 1.46 |

Abbreviations: C-ZnO NPs: Callus derived zinc oxide nanoparticles; W-ZnO NPs: Whole plant derived zinc oxide nanoparticles; HepG2 Cell Line Hepatocellular carcinoma cells; CE: Callus extract; WPE: Whole plant extract; DMSO: Dimethyl sulfoxide (negative control); Doxorubicin: positive control