Supplementary information

Title

Unveiling the Cytotoxic and Anti-Proliferative Potential of Green-Synthesized Silver Nanoparticles Mediated by *Colletotrichum gloeosporioides*

Authors

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Table S1. List of forward and reverse primers, and their sequences used in qRT-PCR analysis

Genes	Forward primers (FP) and Reverse primers (RP)
BAX	FP- CCAAGAAGCTGAGCGAGTGT RP- CCGGAGGAAGTCCAATGTC
P21	FP- ATGAGTTGGGAGGAGGCAG RP- GGCGTTTGGAGTGGTAGAA
P53	FP- CCATCTACAAGCAGTCACAG RP- TCATCCAAATACTCCACACG
FADD	FP-CCCACCAAGATCCCAGTGAT RP-CCAGGAACTTGGTCTTGTCCA
BCL-2	FP- GGGTATGAAGGACCTGTATTGG RP- CATGCTGATGTCTCTGGAATCT

Table S2. FTIR analysis of CgAgNPs

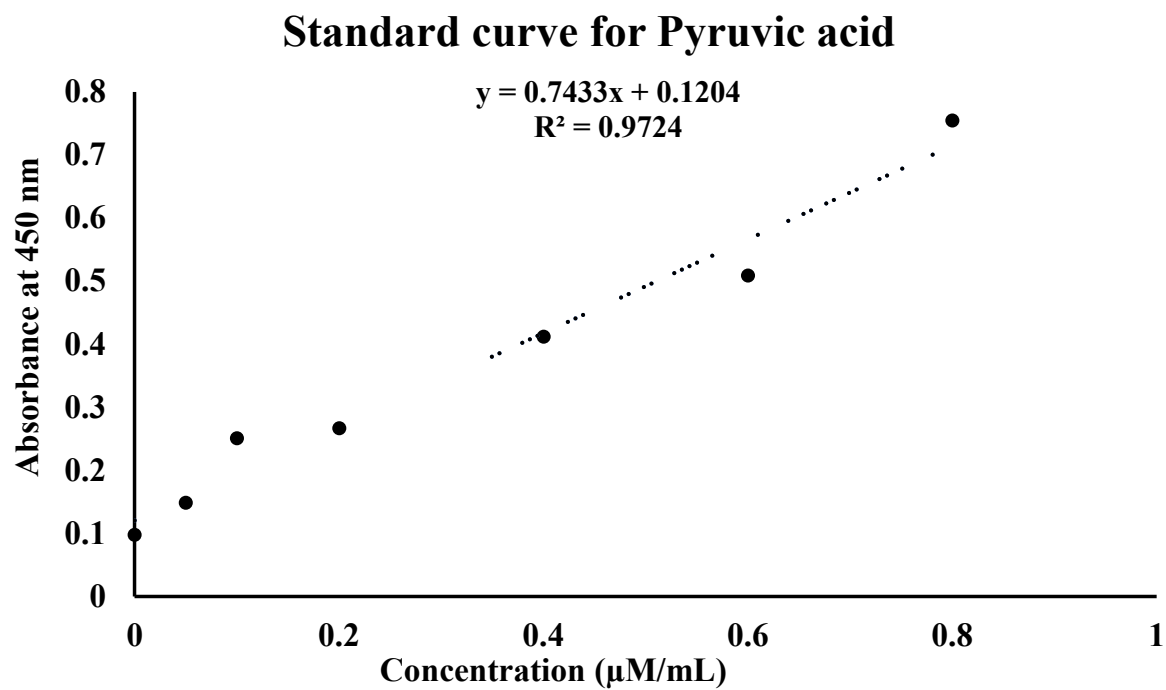| Wavenumber (cm^{-1})	Functional Group	Types of Vibration
3276.38	Hydroxyl group	OH stretch
1726.16	Aldehyde	C-H stretch
1634.68	Primary amine	NH stretch
1544.13	Aliphatic nitro compounds or Aromatic nitro compounds	NO$_2$ stretch
1380.60	Methyl group	C-H stretch
1229.57	Aromatic phosphates	P-O-C stretch
1057.79	Alkyl-substituted ether	C-O stretch
467.05	Aryl disulphides	S-S stretch

Figure legends

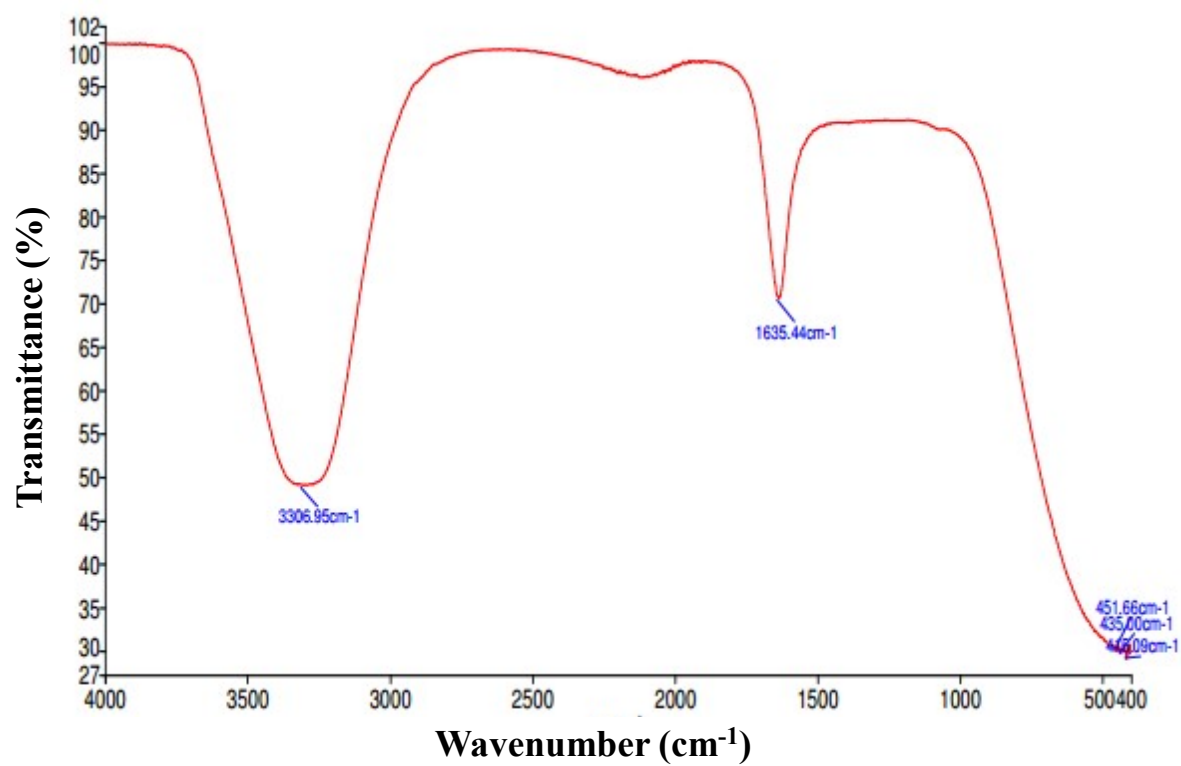**Figure S1**. Calibration curve of pyruvic acid for LDH assay.

Figure S2. FTIR spectrum of the aqueous extract of *C. gloeosporioides.*

Figure S3. Two dimensional (2D) AFM image showing the surface topography and dispersity of CgAgNPs.
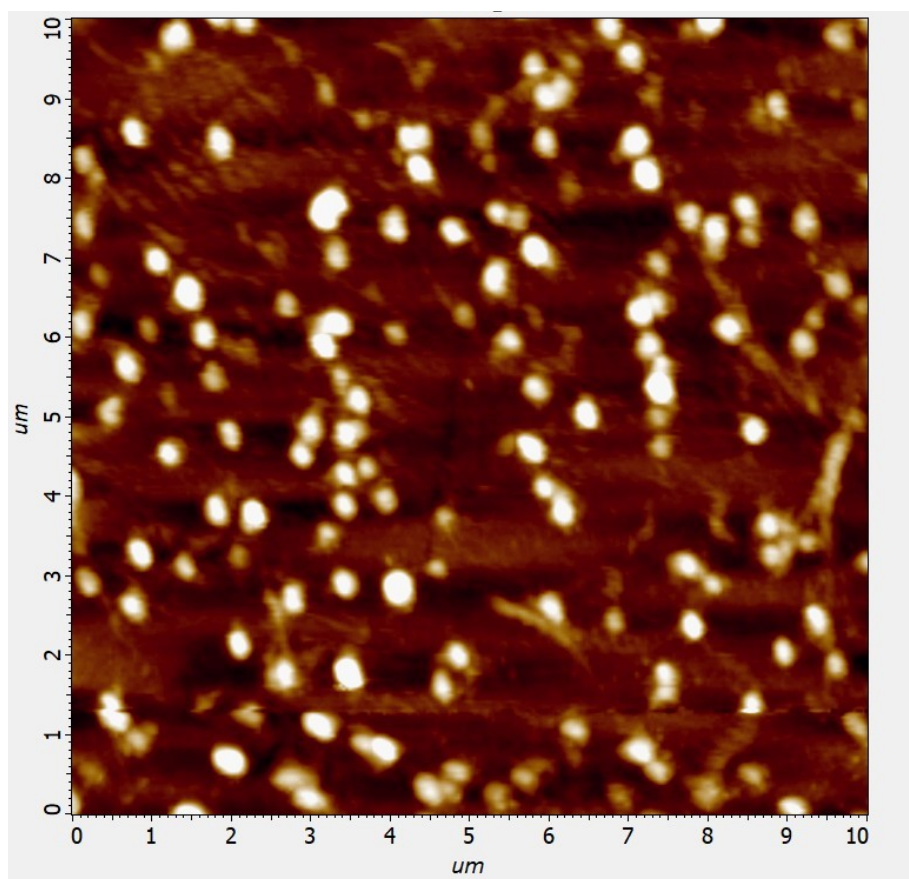
Figure S4: Effect of CgAgNPs on viability of RAW 264.7 cells determined through MTT assay. The data is representative of three independent experiments. The statistical significance was determined through calculation of p-value where means ± SEM of percentage cell viability of the human breast cancer cells were compared using one-way ANOVA followed by Tukey. The statistical significance is represented as: ***$p \leq 0.001$; **$p \leq 0.002$; and *$p \leq 0.033$.

Standard curve for Pyruvic acid
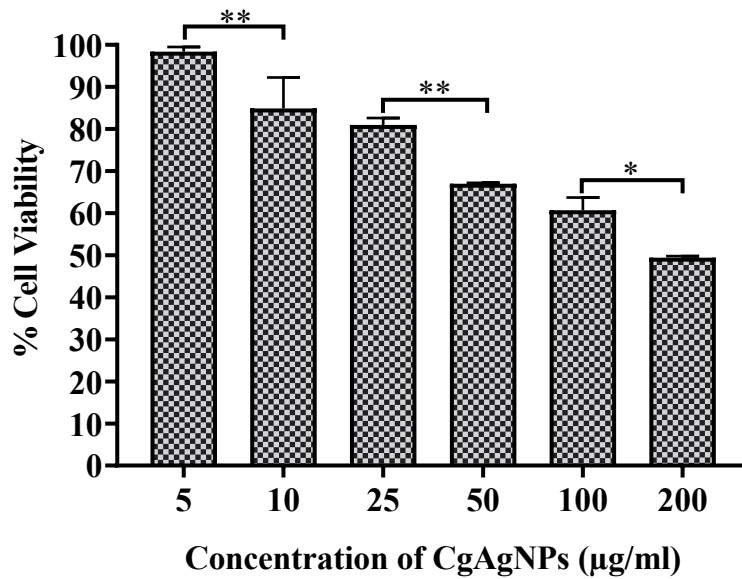
$y = 0.7433x + 0.1204$
$R^2 = 0.9724$

Figure S1. Calibration curve of pyruvic acid for LDH assay.

Figure S2. FTIR spectrum of the aqueous extract of *C. gloeosporioides.*

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Figure S4. Effect of CgAgNPs on viability of RAW 264.7 cells determined through MTT assay. The data is representative of three independent experiments. The statistical significance was determined through calculation of p-value where means ± SEM of percentage cell viability of the human breast cancer cells were compared using one-way ANOVA followed by Tukey. The statistical significance is represented as: ***$p \leq 0.001$; **$p \leq 0.002$; and *$p \leq 0.033$.