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***Passiflora incarnata* L. of endophytic fungi rooted flavone chrysin (5,7-dihydroxy flavone) and gold nanoparticles towards anticancer activity****Sivaperumal Sivaramkrishnan**  
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**C**hrysin (5,7-Dihydroxy flavone ChR) a natural anticancer bioflavonoid, emerged as a potential drug therapy for almost all types of cancer. Since, ChR was produced from endophytic fungal *A. alternate* KT380662, isolated from the leaves of *Passiflora incarnata* L. The ChR production measuring approximately 846 mg L<sup>-1</sup> and was confirmed through UV-Vis spectroscopy, FT-IR, LC-ESI-MS, and <sup>1</sup>H NMR analysis. Further, ChR was used as reduction source and capping agent for gold nanoparticles to improve the bioavailability. Nanomaterials are unique size, shape and composition receives much attention on biomedical applications. Herein, a new approach to formulate biofunctionalized metallic gold (ChR-AuNPs) nanoparticles using ChR as a direct bioreductant and capping agent has been used. Particle size and dispersity were controlled through fixing different reaction conditions such as the temperature, pH, concentration of metal ion, stoichiometric proportion of the reaction mixture and incubation time based on their optical properties and SPR effect in UV-visible spectroscopy. The role of hydroxyl and carbonyl groups in functionalizing the metal ions with ChR was confirmed with Fourier transform infrared spectroscopy (FTIR) and X-ray photoelectron spectroscopy (XPS) analysis. It was also substantiated that the oxygen group from ChR donates electrons to metal ion and results in complexation; ionic Au(3+) was reduced to Au(0) nano-forms. The physiochemical state of obtained NPs was characterized through different exclusive instrumentation, which shows the presence of highly-stable, spherical, crystalline ChR-AuNPs with an average size of 6-2 nm, respectively. *In vitro* anticancer results revealed that the formulated ChR-AuNPs exhibit enhanced cytotoxicity over ChR in the treated two different breast carcinoma cell lines (MDA-MB-231 and MDA-MB-468). Further, it was evident that the cell death via the induction of apoptosis. A hemolysis assay with human erythrocytes demonstrates good blood biocompatibility of ChR-AuNPs. Therefore, ChR functionalized metal can be employed as a nano-drug formulation for cancer therapy.

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**The study on serum protein spectrum expression changes for patients with gastrointestinal disease before and after acupuncture****Yanhong Gao**  
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**Objective:** To investigate serum protein spectrum expression changes for patients with gastrointestinal disease before and after acupuncture.

**Methods:** Blood biochemical indexes and serum protein spectrum for 7 patients with gastrointestinal diseases before and after acupuncture were detected by 7600DDP and MALDI-TOF mass spectrometer.

**Results:** Compared with patients with gastrointestinal disease before acupuncture treatment, the triglyceride (TG) level of patients with gastrointestinal diseases after acupuncture treatment decreased. There were 2 differential protein peaks {2625 (m/z), 2742 (m/z)} between patients with gastrointestinal disease before acupuncture treatment group and after acupuncture treatment group. There were 4 differential protein peaks {2767 (m/z), 2742 (m/z), 2754 (m/z) and 2568 (m/z)} between patients with gastrointestinal disease before acupuncture treatment group and the control group; we establish two-dimensional analysis with 2767 (m/z) (x axis) and 2742 (m/z) (Y axis) and found that acupuncture treatment has obvious effect on patients with gastrointestinal disease, it is close to the normal.

**Conclusion:** 2742 (m/z) and 2767 (m/z) play an important role in acupuncture treatment mechanism of patients with gastrointestinal disease.

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