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# Design Modulation of some Novel Green NanoPd Complexes as Potential Anti-Cancer Agent

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**Abstract :** Prediction of anticancer activity of newly synthesized palladium (II) metal nano complexes from aqueous extract of *Macrotyloma uniflorum*(horse gram) and *Vigna unguiculata* (Lobia) seeds. The newly prepared nano particles were characterized by UV-visible spectrophotometer and FTIR. The reduced Pd nano particles were analysed with SEM analysis. FTIR spectra confirmed the involvement of diverse functional groups participated. The morphology and size of the Pd nanoparticles were examined by SEM analysis, which showed most of the nano particles were nearly spherical with nano range size. The newly synthesized complexes have revealed significant *in vitro* cytotoxic activity against human Cervical, Lung and MCF-7 breast adenocarcinoma cancer cell lines with cell death largely caused by apoptosis. The result concludes that *Macrotyloma uniflorum*(horsegram) and *Vigna unguiculata* (Lobia) seeds aqueous extract bio-reduced Pd micro particle to nanoparticles, possess potential anticancer property. They may have wide applications in medicine and pharmaceutical fields.

**Key Words:** Green Pd nano particles, UV & IR spectra, SEM, *Macrotyloma uniflorum*, Cervical, Lung and MCF-7 breast cancer cell lines.

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