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## Purification of lovastatin from *Aspergillus terreus* (KM017963) and evaluation of its anticancer and antioxidant activity

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Cervical cancer is the second most common malignancy in women worldwide and thus is one of the leading causes of mortality in women. Lovastatin, a non polar, anti-cholesterol drug has previously been reported to exert antitumor activity *in vitro*. In the present study, lovastatin from *Aspergillus terreus* (KM017963) was purified by adsorption chromatography and evaluated for its anticancer and antioxidant properties in human cervical cancer cell lines (HeLa). The growth inhibitory and pro-apoptotic effects of purified lovastatin on HeLa cell lines were investigated by determining its influence on cytotoxicity, Mitochondrial Membrane Potential (MMP), DNA fragmentation and antioxidant property (Hydroxy radical scavenging effect and the levels of total reduced glutathione). Flow cytometry analysis by propidium iodide staining confirmed the induction of apoptotic cell death and revealed cell cycle arrest at G0/G1 phase. Results of the study give leads for anticancer effects of lovastatin and its potential usefulness in the chemotherapy of cervical cancer.

### Biography

Bhargavi S D has completed her Masters in Microbiology from the Department of Microbiology and Biotechnology, Bangalore University in the year 2011. She is currently pursuing her PhD in the field of Industrial Microbiology in the same department.

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