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Dendroflorin inhibits lung cancer cell migration

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Lung cancer patients have high mortality rate due to the high incidence rate of metastasis. To achieve metastasize, cancer cells require an ability to migrate from initial to secondary site. Therefore, the promising compound with antimigrating effect might be a benefit for cancer metastasis [1]. Dendroflorin, a potential active polyphenol compound, is extracted from *Dendrobium brymerianum* found in Thailand, Burma, Laos, and China. Previous studies showed that some *Dendrobium* species exhibit the potential sources of cytotoxic compounds [2,3]. Dendroflorin has been identified from this plant and investigated for cytotoxic and antimigratory activities in this study. The results showed that dendroflorin has significant cytotoxic effect against human lung cancer H460 cells, showing 80% inhibition at a concentration

of 15 $\mu\text{g}/\text{mL}$ ($\text{IC}_{50} = 124.77 \pm 3.63 \mu\text{g}/\text{mL}$). Additionally, wound healing assay reveals that dendroflorin is able to suppress lung cancer migration. This study suggests that dendroflorin might be a potential compound for attenuation of lung cancer metastasis.

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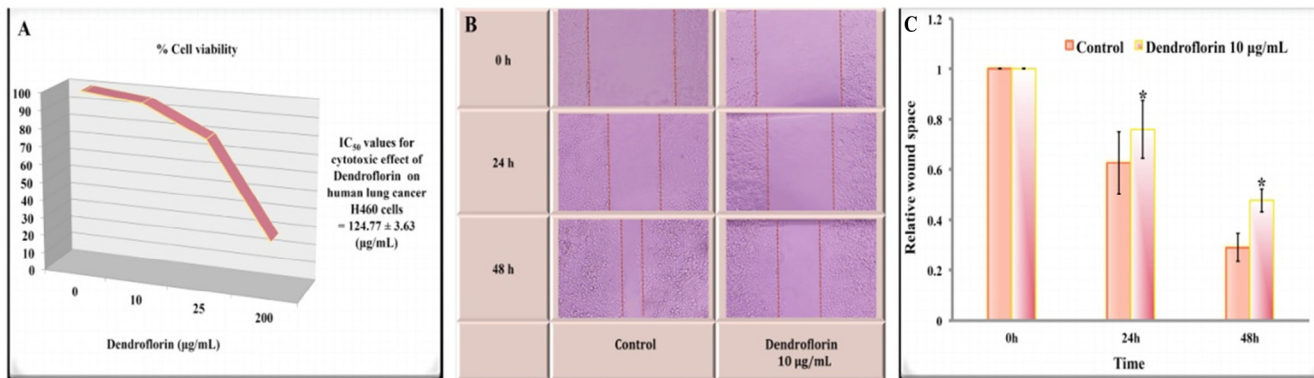
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Fig. 1 Effects of Dendroflorin on (A) H460 cell viability, (B) H460 cell migration, and (C) relative wound space.



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