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## Inhibitors of Hedgehog signaling pathway from *Asclepiadaceae*

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Since activation of the Hedgehog signaling pathway is implicated in several types of human cancers, inhibitors of this pathway could be promising anticancer agents. C-21 steroids from *Asclepiadaceae* have antitumor effect. Studies of cell toxicity, gene chip and dual luciferase report gene found that C21 steroids could inhibit the activity of Hedgehog signaling pathway, suggesting that the inhibitory activity against tumor cell may be associated with inhibitory activity against Hedgehog signaling pathway. In order to establish the relationship between chemical structure of C-21 steroids from *Asclepiadaceae* and the anticancer activities and to elucidate the mechanism of the anticancer activities, chemical studies on the  $\text{CHCl}_3/\text{EtOAc}$  soluble extract from more than ten plants were undertaken, leading to about eighty C-21 steroids, and their activities of inhibition of Hedgehog signaling pathway were tested *in vitro*. This study aims at finding new Hedgehog signaling pathway inhibitors as candidates for targeting antitumor drugs.

### Biography

Xiaoyu Li has completed his PhD from Zhejiang University department of Chemistry. He is the Professor of Institute of Materia Medica, Zhejiang Academy of Medical Sciences. He has published more than 20 papers in reputed journals.

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