

## **Xanthorrhizol: a review of its pharmacological activities and anticancer properties**

### **ABSTRACT**

Xanthorrhizol (XNT) is a bisabolane-type sesquiterpenoid compound extracted from *Curcuma xanthorrhiza* Roxb. It has been well established to possess a variety of biological activities such as anticancer, antimicrobial, anti-inflammatory, antioxidant, antihyperglycemic, antihypertensive, antiplatelet, nephroprotective, hepatoprotective, estrogenic and anti-estrogenic effects. Since many synthetic drugs possess toxic side effects and are unable to support the increasing prevalence of disease, there is significant interest in developing natural product as new therapeutics. XNT is a very potent natural bioactive compound that could fulfil the current need for new drug discovery. Despite its importance, a comprehensive review of XNT's pharmacological activities has not been published in the scientific literature to date. Here, the present review aims to summarize the available information in this area, focus on its anticancer properties and indicate the current status of the research. This helps to facilitate the understanding of XNT's pharmacological role in drug discovery, thus suggesting areas where further research is required.

**Keyword:** Xanthorrhizol, *Curcuma xanthorrhiza* Roxb., Pharmacological, Anticancer