

Pharmacological Review on *Curcuma longa*

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Abstract: Cancer is that the second leading reason for death within the world and one in every of the most important public health problems. Despite the good advances in cancer therapy, the incidence and mortality rates of cancer remain high. Therefore, the hunt for more efficient and fewer toxic cancer treatment strategies remains at the forefront of current research. Curcumin, the active ingredient of the herbaceous plant, has received great attention over the past twenty years as an antioxidant, anti-inflammatory, and anticancer agent. During this review, a summary of the medicinal chemistry and pharmacology of curcumin and its derivatives in relevancy anticancer activity, their main mechanisms of action, and cellular targets has been provided supported the literature data from the experimental and clinical evaluation of curcumin in neoplastic cell lines, animal models, and human subjects. Additionally, the recent advances within the drug delivery systems for curcumin delivery to cancer cells are highlighted. In this review also presents work is to formulate and evaluate the gel of Turmeric extract. The extracts was prepared by maceration method the medicinal property of haridra effectively and simply. The gel formulations was designed by using aqueous extract in varied concentration and also evaluated by various physicochemical parameter. The physicochemical parameter of the formulation are dole out by different parameter I, e PH, viscosity, spreadability, etc.

Keywords: Curcumin; anticancer; structure activity relationship; cellular pathway; mechanism of action; delivery system, Maceration

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