



## Original Article

**Formulation development and evaluation of silymarin gel for psoriasis treatment****Pathan Azhar Khan\*<sup>1</sup>, Rahul Thube<sup>1</sup>, Rukhsana A. Rab<sup>1</sup>**<sup>1</sup>Allana College of Pharmacy, Azam Campus, Camp, Pune.**Abstract**

The present work represents topical gel formulation of Silymarin obtained from the seeds of plant *Silybum marianum* (L.) Silymarin is mixture of flavolignan. It consists of silybinin, silydianin, silychristin and isosilybinin. Silymarin is used as Hepatoprotective from ancient time apart from it is used as antioxidant, anti-inflammatory, anti-fibrotic, immunomodulatory and liver regenerating action. It also used clinically in liver disease, viral hepatitis, amanita mushroom poisoning, neuroprotective and neurotropic action. The various formulation of silymarin is available like tablet, capsule, suspension, syrup in market. The present aim of the study was to develop silymarin gel and check antipsoriasis activity. By using methanol as co-solvent and the Carbopol is used as gel forming agent and methyl Paraben and Propyl Paraben as preservative. The glycerin act as humectants and Tween 80 was used as surfactant. Gel are subjected to various physicochemical parameters such as pH, drug content, spreadability, viscosity, in vitro drug release was carried out in phosphate buffer (pH 6), primary skin irritation test and antifungal activity was checked. The stability study was done as per the ICH guidelines. The drug content, pH, spreadability of the formulation was found to be 96.6%, 6.8, 25.45gm.cm/sec respectively. From the rheogram it is concluded that gel shows pseudoplastic flow property. It shows maximum drug release 96.30% over a period of 3h. The formulation did not show acute skin irritancy.

**Keywords:** Silymarin, Gel, Anti-psoriasis , Anti-fungal activity

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