

**Topical piroxicam in vitro release and in vivo anti-inflammatory and analgesic effects from palm oil esters-based nanocream.**

ABSTRACT

During recent years, there has been growing interest in use of topical vehicle systems to assist in drug permeation through the skin. Drugs of interest are usually those that are problematic when given orally, such as piroxicam, a highly effective anti-inflammatory, anti-pyretic, and analgesic, but with the adverse effect of causing gastrointestinal ulcers. The present study investigated the in vitro and in vivo pharmacodynamic activity of a newly synthesized palm oil esters (POEs)-based nanocream containing piroxicam for topical delivery.

**Keyword:** Piroxicam; Nanocream; Analgesic; Antiflammatory; Skin permeation.