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Ciclopirox Olamine: A Comprehensive Pharmacological, Clinical and Commercial Monograph

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Abstract: *Dermatophytosis is a common superficial fungal infection involving keratinized tissues such as the skin, hair and nails. Over the past two decades, it has become an increasingly significant public health concern, particularly in tropical and subtropical regions like India, where warm climates and overcrowded living conditions promote fungal spread. The growing incidence of chronic, recurrent, and recalcitrant dermatophytosis has been strongly associated with the irrational use of topical corticosteroid–antifungal combinations and the rising resistance to conventional antifungal agents.*

CiclopiroxOlamine (CPO), a synthetic hydroxypyridone derivative, offers a unique pharmacological profile compared to traditional antifungal classes. Unlike azoles and allylamines—which primarily act by inhibiting ergosterol synthesis—CPO exerts a multi-targeted mechanism by chelating metal ions essential for fungal cellular metabolism. This action disrupts multiple biochemical pathways simultaneously, ultimately inhibiting fungal growth and survival.

Clinical studies, retrospective analyses and published reports consistently demonstrate the effectiveness and safety of topical CiclopiroxOlamine 1% in treating dermatophytosis and other superficial mycoses. High rates of mycological and clinical cure have been documented, even among patients who previously showed poor response or intolerance to other antifungal medications. Additionally, CPO is associated with minimal irritation, low systemic absorption, and antibacterial and anti-inflammatory benefits, making it a versatile and well-tolerated therapeutic option. Overall, CiclopiroxOlamine represents a valuable, broad-spectrum, and patient-friendly topical agent for managing superficial fungal infections.

Keywords: Alcohol metabolism, alcoholic liver disease, alcoholic fatty liver, alcoholic steatohepatitis, alcoholic hepatitis, alcoholic cirrhosis, hepatocellular carcinoma, intestinal microbiome, MEOS, microsomal ethanol-oxidizing system, alcohol dehydrogenase.

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