1. **Rationale for conducting the systematic review**

Leprosy is known for its complex immunological manifestations. Investigating the relationship between MCP-1 and leprosy may shed light on the molecular and cellular mechanisms involved in the pathogenesis of leprosy.1 This can help predict prognosis therefore develop strategies for disease management. A systematic review on MCP-1 and leprosy can aid in evaluating the consistency of findings across various studies and populations, establishing the reliability of MCP-1 as a biomarker for leprosy diagnosis. MCP-1 was found to be utilized to distinguish between different kinds of leprosy. 2–4 Systematic reviews on MCP-1 and leprosy have not been conducted; hence, this systematic review aims to fill the gap, especially regarding various findings in previous experimental studies.

1. **The contribution that the systematic review makes to knowledge in light of previously published related reports**

The current systematic review is the first to systematically synthesis the available experimental work on MCP-1 and leprosy. Findings from previous studies, indicate that MCP-1 showed potential upon diagnosing, differentiating types of leprosy, and predicting reversal reactions’ occurrence. 2–4, 5 However, more studies with larger population are recommended for future studies to ensure MCP-1’ ability to diagnose leprosy and its clinical staging.

**References**

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