

# Latent tuberculosis infection and tuberculosis in psoriasis patients: a 10-year retrospective study at the dermatology clinic Sarawak General Hospital, Malaysia

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## ABSTRACT

**Introduction:** The incidence of tuberculosis (TB) in Malaysia was 97/100,000 in 2021. We aim to describe the rate of latent TB infection (LBTI) in patients with psoriasis who were screened with tuberculin skin test (TST) and/or interferon-gamma releasing assay (IGRA) and the rate of TB while receiving systemic/biological agents. **Methods:** We retrospectively studied all Malaysians with psoriasis who had TST and/or IGRA at the dermatology clinic at Sarawak General Hospital between February 2013 and January 2023. TST was considered positive if the longest diameter of the induration was larger than 5mm and 10mm in immunosuppressed and immunocompetent patients respectively at 72-hour, following intradermal injection of 0.1ml purified-protein derivatives. **Results:** A total of 208 patients with BCG scars underwent TST/IGRA. The mean age was 42 years (range:11-86). Thirty-eight(18.3%) patients had positive TST and/or IGRA. Of these, 13(34.2%) received treatment for LTBI. Following TST screening, 121(58.2%) patients eventually received methotrexate, 30(14.4%) biological agents, 16(7.7%) cyclosporin, 12(5.8%) acitretin, 4(1.9%) combine biologics and systemic treatment. Two patients developed pulmonary TB while receiving adalimumab. The rate of TB developed in those who received systemic/biologics was 4.2% in those with untreated LTBI, 0.6% in those with no LTBI and zero in treated LTBI. **Conclusion:** The rate of LBTI was 18.3% in our psoriasis patients. The rate of TB development was the highest in untreated LBTI and those who received TNF- $\alpha$  inhibitors.