

## ABSTRACT

**Background:** Vitiligo is a common acquired depigmentary disease characterized by white patches of the skin, hair and mucous membranes due to selective destruction of melanocytes. Little is known about the mechanisms involved in the dysfunction of melanocytes in vitiligo epidermis. Previous researches showed that Microphthalmia-associated transcription factor (MITF) may be affected, resulting in dysfunction and/or loss of melanocytes.

**Purpose:** To evaluate MITF expression and melanocyte count in vitiligo compared to non vitiligo.

**Method:** This is an analitic observational cross sectional research, with vitiligo in dermatovenereology outpatient departement Dr.Soetomo hospital as subjects. Subjects have been collected through consecutive sampling with sample size 18 patients with vitiligo and 10 non-vitiligo subjects, then data were analyzed analytically;

**Results:** Decreased expression of MITF and S100 antibody of the melanocyte in vitiligo patients compared to non - vitiligo skin differs significantly  $p < 0.001$  statistically and clinically.

**Conclusions:** MITF seems to have role in vitiligo pathogenesis. Immunohistochemistry MITF and S100 examination can be benefits to therapy success indicator.

**Keywords:** MITF, S100, Vitiligo