

# **The Role of LncRNA MALAT-1 and MiRNA-9 in Psoriasis, 2021**

## **ABSTRACT**

Background: Psoriasis is a chronic skin disorder manifested by recurrent episodes of scaly, red, itchy skin patches that occur within apparently normal skin. Objectives: This study was performed to detect the expression of serum and tissue (lesion and non-lesion) LncRNA MALAT-1 and MiRNA-9 that might be used as biomarkers for psoriasis. Methods: Blood samples were obtained from 60 psoriasis patients and 40 controls, as well as 4 mm punch biopsy from lesional and non-lesional skin of psoriatic patient and normal skin of healthy controls. Expression of LncRNA MALAT-1 and miRNA-9 in serum and tissues was detected by real time qRT-PCR. Results: a statistically significant increase in the expression of MALAT-1 in lesional and non-lesional skin and serum of psoriatic patients in comparison to controls were detected. Moreover, there was statistically significant increase in serum MiRNA-9 in patients in comparison to controls, while its tissue level was significantly lower in patients. Conclusion: This study highlights the dysregulation of LncRNA MALAT-1 and miRNA-9 in psoriasis. Elevated expression of MALAT-1 in lesional skin of psoriatic patients compared to non-lesional skin may possibly contribute to the development of psoriatic plaques.