### UNIVERSITI TEKNOLOGI MARA

# THE EFFICACY OF SUPER-OXIDISED HYDROGEL VERSUS AQUEOUS CREAM IN TREATMENT OF MILD TO MODERATE ATOPIC DERMATITIS

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MMed

**APRIL 2019** 

#### **AUTHOR'S DECLARATION**

I declare that the work in this disertation was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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### ABSTRACT

**Background and Aims.** Super-oxidised hydrogel incorporated into a formulated moisturiser (EZyma® Hydrogel), is a non-steroidal anti-inflammatory option for treatment of Atopic Dermatitis. This study aimed to evaluate the efficacy of super-oxidised hydrogel as an adjunct treatment in improving symptoms and signs of mild to moderate AD, hence improving patient's quality of life compared to moisturising treatment with aqueous cream.

**Methodology.** This was a single centre, prospective, parallel, investigator-blinded clinical study in adult with mild to moderate Atopic dermatitis. Subjects were given super-oxidised hydrogel or aqueous cream (1:1) three times a day to areas affected by atopic dermatitis for 2 weeks. A change of assessment score (EASI and subjective SCORAD) and quality of life score (DLQI) from baseline was determined at week 1 and week 2.

**Results.** A total of 60 patients with mean  $age\pm SD$  of  $28.60\pm7.770$  were enrolled. Study showed that treated area of AD improved in both treatment arms. Both treatments showed reduction of mean in all efficacy scores and DLQI scores from baseline to week 2. The effect was not statistically significant between the two arms. This suggest that super-oxidised hydrogel was comparable to aqueous cream as a moisturiser. There was no mean significant difference in terms of the hydrocortisone cream usage. Two subjects in aqueous cream group reported mild self-limiting side effects.

**Conclusion.** Super-oxidised hydrogel is beneficial as treatment for atopic dermatitis in improving local signs assessed by EASI score, and its symptom mainly the pruritis. It is safe and should be considered as an alternative moisturiser. A larger study population is required to look at its efficacy after longer period of usage.

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