



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكرو فيلم

بسم الله الرحمن الرحيم



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شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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Assessment of the Role of Dermoscope for Monitoring Patients with Chronic Plaque Psoriasis Before and After Narrowband Ultraviolet B Phototherapy

Thesis

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قَالَ

سَبِّحْكَ لَا إِلَهَ إِلَّا مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ
الْعَلِيمُ الْعَظِيمُ

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List of Abbreviations

Abb.	Full term
<i>BB-UVB</i>	<i>Broadband ultraviolet B</i>
<i>CAMP</i>	<i>Cyclic adenosine monophosphate</i>
<i>CD</i>	<i>Cluster of differentiation</i>
<i>DLQI</i>	<i>Dermatology Life Quality Index</i>
<i>DNA</i>	<i>Deoxyribonucleic acid</i>
<i>EGF</i>	<i>Epidermal growth factor</i>
<i>FAEs</i>	<i>Fumaric acid esters</i>
<i>FDA</i>	<i>Food and drug administration</i>
<i>FOXP3</i>	<i>Forkhead box P3</i>
<i>HIV</i>	<i>Human immunodeficiency virus</i>
<i>HLA</i>	<i>Human leukocyte antigen</i>
<i>IFNs</i>	<i>Interferons</i>
<i>IFNγ</i>	<i>Interferon gamma</i>
<i>Ig</i>	<i>Immunoglobulin</i>
<i>IGFBP7</i>	<i>Insulin-like growth factor-binding protein 7</i>
<i>IL</i>	<i>Interleukin</i>
<i>LCs</i>	<i>Langerhans cells</i>
<i>MED</i>	<i>Minimal erythema dose</i>
<i>MHC</i>	<i>Major histocompatibility complex</i>
<i>NB-UVB</i>	<i>Narrowband ultraviolet B</i>
<i>NFκB</i>	<i>Nuclear factor kappa B</i>
<i>NPD'</i>	<i>Non-polarized dermoscope</i>
<i>O₂</i>	<i>Superoxide anion</i>
<i>PASI</i>	<i>Psoriasis area and severity index</i>
<i>PD</i>	<i>Polarized dermoscope</i>
<i>PEG</i>	<i>Polyethylene glycol</i>
<i>PGA</i>	<i>Physician global assessment</i>
<i>PSORS1</i>	<i>Psoriasis susceptibility gene1</i>
<i>PUVA</i>	<i>Psoralen plus ultraviolet A</i>
<i>RNA</i>	<i>Ribonucleic acid</i>

List of Abbreviations (Cont....)

Abb.	Full term
<i>ROS</i>	<i>Reactive oxygen species</i>
<i>S.C.</i>	<i>Subcutaneously</i>
<i>Th</i>	<i>T-helper</i>
<i>TNF-α</i>	<i>Tumour necrosis factor-alpha</i>
<i>UV</i>	<i>Ultraviolet</i>
<i>UVA</i>	<i>Ultraviolet A</i>
<i>UVB</i>	<i>Ultraviolet B</i>
<i>UVC</i>	<i>Ultraviolet C</i>
<i>VD</i>	<i>Videodermatoscopy</i>

INTRODUCTION

Psoriasis is a chronic inflammatory skin disease with a prevalence of about 2% worldwide. The classical clinical manifestations are sharply demarcated, erythematous, pruritic plaques covered in silvery scales. The plaques can coalesce and cover large areas of skin. Common locations include the trunk, the extensor surfaces of the limbs, and the scalp (**Rendon & Schäkel, 2019**). On microscopic examination, psoriasis has a distinctive histological representation (**Level & Schaumburg-Lever, 1983**). However, diagnosis is mainly made clinically as clinical presentation is usually highly characteristic. Therefore a skin biopsy to confirm diagnosis is frequently omitted (**Wolberink et al., 2012**).

Established treatment options for psoriasis include topical application of corticosteroids and vitamin D₃ analogues, psoralen plus ultraviolet (UV) phototherapy (PUVA), UVB phototherapy and systemic therapy. Choice of treatment is affected by body surface area, severity of lesions, efficacy and side-effects of therapeutic options, comorbidities and convenience for the patient (**Lebwohl & Ali, 2001; Murphy et al., 2011**). Until now, studies evaluating the histological effects of treatments required a biopsy. Currently, studies are performed to test safety and efficacy of new treatment options for psoriasis, e.g. innovative biologic therapies. For monitoring the histological effects of these new treatment options a biopsy