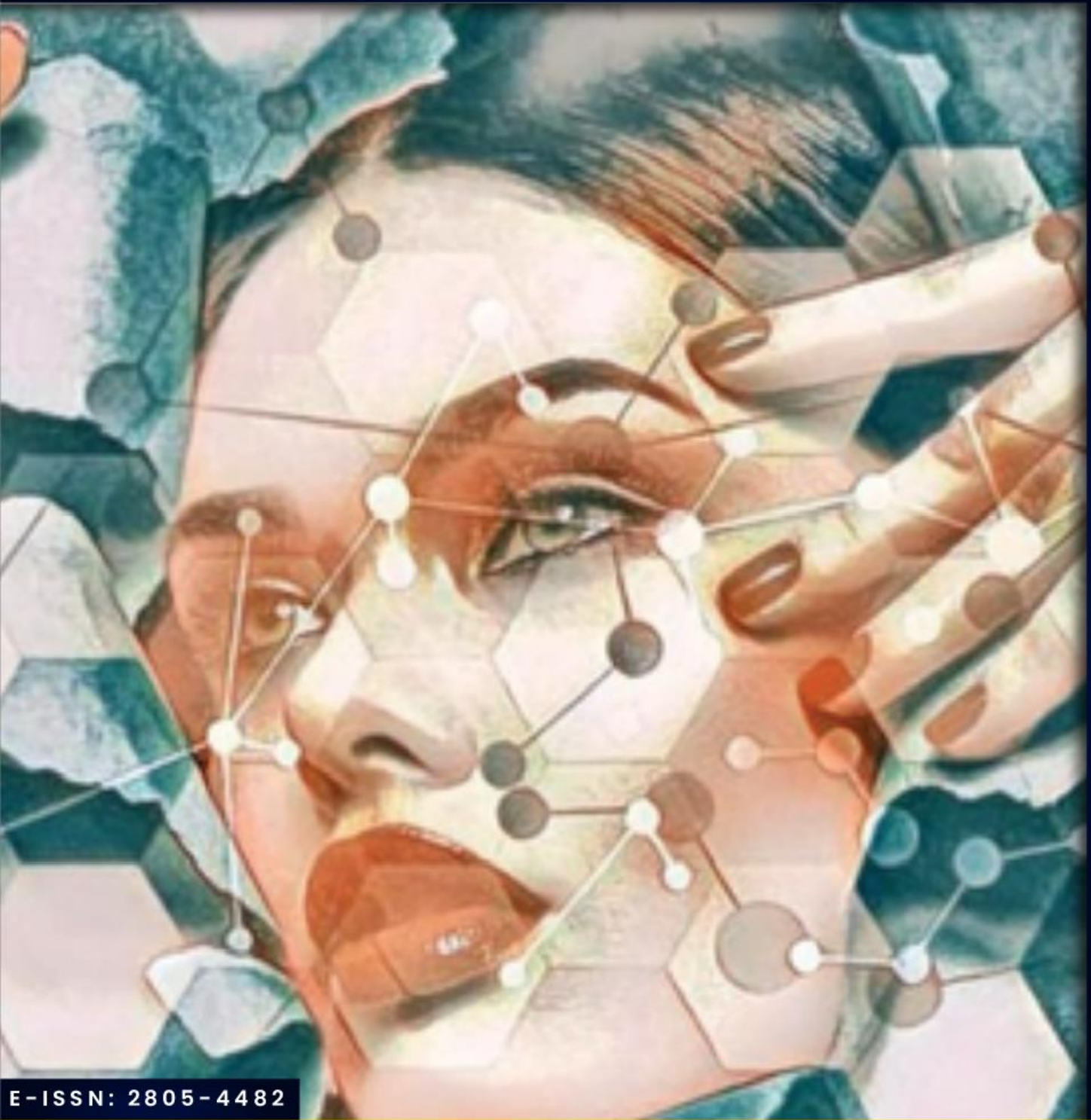




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AESTHETIC & COSMETIC SYMPOSIUM (ACOS) 2023

Aesthetic & Cosmetic Symposium (ACOS) 2023 aims to promote new and current treatments or procedures in wellness, cosmetic, dermatology, regenerative medicine and pharmaceuticals. Furthermore, ACOS 2023 emphasizes the importance of understanding scientific evidence-based knowledge as the foundation for achieving optimal outcomes in aesthetic procedures and ensuring that all aesthetic procedures are conducted ethically, effectively, and, most importantly, prioritize the safety of the public.

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Prof. Wan Azman Wan Sulaiman,
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Kubang Kerian, Kelantan*

It is with great pleasure and anticipation that I welcome you to the Aesthetic & Cosmetic Symposium (ACOS 2023), organized by the USMARI Research & Innovation Centre and co-organized by International Medical Aesthetic Conference and Exhibition (IMACE). This event stands as a testament to the rapid advancement and innovation that characterizes the field of Aesthetic Medicine, Cosmeceuticals and Regenerative Medicine.

ACOS 2023 aims to promote the importance of education and knowledge to all beauticians, medical practitioners, industry players and participants who have an interest in the field of aesthetic medicine. ACOS 2023 will be discussing and sharing the latest development in the fields of Aesthetic Medicine, Cosmeceuticals and Regenerative Medicine. Besides, the symposium will also advocate the understanding of scientific evidence-based knowledge as the basis of all aesthetic procedure's outcomes and ensuring all aesthetic procedures are carried out ethically, effectively, and most importantly the safety of the public is well guarded.

Our esteemed speakers from various background have gathered here to share their knowledge, expertise, and insights. This symposium provides a unique platform for interdisciplinary exchange, where we can collectively delve into the latest developments in Aesthetic, Pharmaceutical and Regenerative Medicine. As we navigate through the extensive program, I encourage you to engage in discussions, ask questions, and forge connections. It is through this collaborative spirit that we continue to push the boundaries of Aesthetic Medicine, Cosmeceuticals and Regenerative Medicine.

I would like to extend my heartfelt gratitude to USMARI Research & Innovation Centre (organizer), IMACE (co-organizer), Ministry of Health (MOH), Ministry of Science, Technology & Innovative (MOSTI), Ministry of Tourism, Arts and Culture, Malaysia (MOTAC), speakers, sponsors, scientific committee and secretariat who have contributed to the success of this event. Your dedication and commitment are what make this symposium truly exceptional.

I wish you all a fruitful and inspiring experience at the ACOS 2023. May your time here be filled with enriching discussions, valuable networking, and new discoveries that will further elevate the field of Aesthetic Medicine, Cosmeceuticals and Regenerative Medicine.

Aesthetic Discoveries: Paradigm Shift Towards Evidence-Based

Yours sincerely,

Assoc. Prof. Dr Ungku Mohd Shahrin Mohd Zaman, MD
Organizing Chairman of ACOS 2023

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ORAL PRESENTATION ABSTRACT

ACOS23O-001: Using Autologous Human Hair Follicular Stem Cells for Male Pattern Hair Loss (MPHL) & Female Pattern Hair Loss (FPHL) in Asian Populations

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The utilization of human stem cells in treating Androgenetic Alopecia holds considerable promise. Several sources of autologous human stem cells have been employed in the treatment of Male Pattern Hair Loss (MPHL) and Female Pattern Hair Loss (FPHL). One of the recent discoveries involves the extraction of autologous human stem cells from human hair follicles. Human hair follicles serve as a well-established niche for adult stem cells, housing Mesenchymal stem cells in the dermal sheath and the bulge, which include epithelial and melanocytic stem cells. Stem cells located in the hair bulge, a distinct structure within the lower permanent part of hair follicles, have the capability to generate the interfollicular epidermis, hair follicle structures, and sebaceous glands. A novel method has been developed for isolating human adult stem cells via mechanical centrifugation of punch biopsy samples taken from human hair follicles, without the need for culture conditions. The punch biopsy area typically encompasses the mastoid process along the bilateral hairline demarcation. Human follicle stem cells (HFSCs) derived from this method have shown promise in enhancing hair density in patients affected by MPHL in Norwood-Hamilton classification stages 2-5, FPHL in Ludwig classification stages 1-3, and in certain cases of Alopecia Areata. Studies indicate that these isolated cells are capable of improving hair density in patients affected by Androgenetic Alopecia (AGA) and, in some cases of Alopecia Areata.

Keywords: Androgenetic Alopecia, Autologous Human Stem Cells, Male Pattern Hair Loss, Female Pattern Hair Loss

ACOS23O-002: The Use of Bone Marrow Mesenchymal Stem Cell Derived Cytokines and Growth Factors in The Management of Androgenetic Alopecia

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Hair loss is a common condition observed in both men and women. Androgenetic alopecia, also known as pattern hair loss, stands as the most prevalent form of hair loss. While androgenetic alopecia doesn't significantly impact physical health, it can significantly affect the mental health and overall quality of life for the patient. Presently, only two medications, minoxidil and finasteride, are FDA-approved for treatment, but their effects often prove unsatisfactory. Stem cell-based regenerative medicine represents a promising frontier in hair regrowth and follicle repair. Stem cells exert therapeutic effects primarily through their secretions, known as the secretome, which involves paracrine and trophic actions. Stem cell-based therapy modalities encompass stem cell transplants, stem cell-derived conditioned medium, and stem cell-derived exosomes. This review focuses on discussing the application of cytokines and growth factors derived from bone marrow mesenchymal stem cells in managing Androgenetic alopecia. Considering their favourable outcomes, bone marrow mesenchymal stem cell-derived cytokines and growth factors should be considered more prominently as an alternative to conventional therapies in managing Androgenetic alopecia.

Keywords: Hair Loss, Androgenetic Alopecia, Stem Cell Secretome, Regenerative Medicine

**ACOS23O-003: Factors Influencing Cosmetic Product Purchases Among Malaysian Consumers:
A Systematic Review**

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The Malaysian cosmetics industry has witnessed substantial growth, yet the determinants impacting consumer purchasing behavior in this sector remain largely unexplored. This study aims to systematically assess these influential factors affecting the purchasing of cosmetic products among Malaysian consumers. A systematic review was conducted, searching for relevant articles across three electronic databases, namely Web of Science, Scopus, and Science Direct, spanning from 2013 to 2023. The inclusion criteria include all study designs that investigated or reported factors influencing the purchase of cosmetic products and were available as full-text articles. Exclusions criteria comprised conference proceedings, books, encyclopedias, protocols, or articles published in languages other than English. Predetermined search strings were utilized to identify articles, resulting in a total of 2,823 research articles found, of which 38 were included. The majority of the studies (n=18) employed the Theory of Reasoned Action and Theory of Planned Behavior to elucidate and predict consumer purchasing behavior concerning cosmetic products. The Stimulus-Organism-Response (SOR) Model was used as a conceptual framework to categorize the factors influencing consumer purchasing behavior for cosmetic products. The identified factors related to cosmetics were classified into stimuli, organism, and response. These stimuli encompassed social and marketing stimuli. Among these, marketing stimuli, consisting of extrinsic and intrinsic factors, were predominantly studied (n=74) compared to social stimuli (n=16). These stimuli trigger consumer evaluation, termed as organism, leading to their response. The organisms identified included theoretical adaptation (n=65) and psychological evaluation (n=3), ultimately determining consumer purchasing behavior and actual product purchase. This study has shed light on the multifaceted factors that influence consumer behavior, encompassing both marketing and social stimuli. Recognizing and adapting to these drivers enables companies to effectively tailor their strategies to meet the evolving needs and preferences of Malaysian consumers regarding cosmetic products.

Keywords: Cosmetic, Purchase Behavior, Malaysia, Marketing, Factors

POSTER PRESENTATION ABSTRACT

ACOS23P-001: Lip Matte Containing Shea Butter and Titanium Dioxide Improves Lips Wrinkles and Roughness

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Dryness and chapping of the lip skin are significant concerns in lip care for various populations. The histology of the vermilion region of the lips is characterized by thin stratified squamous epithelium, providing protection but lacking sweat and sebaceous glands to maintain moisture. This deficiency in water content and barrier function often leads to dry, rough, and darkened lips. Cosmetic products like lip matte, lipstick, and lip balm are commonly used to enhance lips. The formulation containing shea butter and titanium dioxide has exhibited natural moisturizing capabilities and has shown promise in improving dry lips. Thus, this study aimed to evaluate the safety and effectiveness of a lip matte containing shea butter and titanium dioxide. Twenty-six female participants with dry lips (aged 27-31 years) were enrolled. Clinical images of the lips were taken before and after 30 days of lip matte application to assess lip wrinkle and roughness. Significant differences were observed in lip wrinkle and roughness parameters ($p < 0.05$). Over the 30-day period, there was a notable 58% reduction in lip wrinkles and a 23% decrease in lip roughness. The application of lip matte containing shea butter and titanium dioxide for 30 days led to visible improvement in lip wrinkles and roughness. This study suggests that a lip matte product containing shea butter and titanium dioxide holds potential for improving lip wrinkles and roughness among the Malaysian population.

Keywords: Lip Matte, Lip Wrinkle, Lip Roughness, Efficacy, Safety

ACOS23P-002: Wood Lamp Finding of Axillary Erythrasma on 66-year-old Woman: A Case Report

**Stefani Dyah Monisa Asmarani Hernowo^{1*}, Muh Nazir Lathif², Stefina Nathania¹,
Muhammad Fatah Anugerah Akbar¹, Fadhilah Isaac Kartika¹, Hafiidh Ilham Kharisma³**

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Erythrasma is a superficial bacterial skin infection characterized by prominent, irregular reddish-brown patches which appear in intertriginous areas or fissures and white maceration in the toes. It is caused by a group of bacteria known as *Corynebacterium minutissimum*, which produce coproporphyrin III, exhibiting a characteristic coral red fluorescence that can be evaluated using a Wood's lamp. This qualitative research focuses on erythrasma disease, employing observation and documented data evaluation methods. Wood's Lamp examination was also used to diagnose the diseases. In this study, we observed a 66-year-old patient at UNS Hospital presenting with itchy blackish patches in both armpits. The patches, initially coin-sized on the left side, progressively expanded in size. The lesions displayed irregular hyperpigmentation, defined borders, and fine scales in the right and left axilla. Wood's lamp examination revealed coral-red fluorescence, affirming the diagnosis after proper cleansing of the area. Erythrasma can remain asymptomatic for years or display periodic exacerbations. The prognosis is generally favorable, although recurrence may occur if left untreated. There were no sequelae of erythrasma observed in this case. However, in immunocompromised individuals, the infection can spread rapidly, and sometimes relapse may occur after successful antibiotic treatment.

Keywords: Erythrasma, Wood lamp, Bacterial Infection.

ACOS23P-003: Severe Case of Erythroderma with Hypoalbuminemia in a 61-Year-Old Indonesian Female Caused by Drug Hypersensitivity

Muh Nazir Lathif^{1*}, Sri Primawati Indraswari², Moh. Abdurrokhman¹, Emi Ratnawati³, Yeremia Suryo Pratama⁴, Stefani Dyah Monisa Asmarani Hernowo⁵, Fadhilah Isaac Kartika⁵, Rozandra Dewanthy Ayu Kartika Putri¹

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Erythroderma, also known as exfoliative dermatitis, is a skin condition characterized by widespread erythema and scaling affecting over 90 percent of the body's surface area. This condition accounts for approximately 1% of hospital admissions in Indonesia and globally. It tends to affect men and the elderly more and is associated with a significant risk of mortality. Despite adequate therapy using corticosteroids, mortality rates remain high. Drug hypersensitivity is a significant cause of erythroderma. Herein, we present a severe case of erythroderma involving a 61-year-old female patient who presented to the emergency department of PKU Muhammadiyah General Hospital, Tegal, with sudden generalized redness and itching persisting for two days before admission, accompanied by the development of scaly skin over the last 12 hours before admission. The patient, a shopkeeper by occupation, reported a recent fever and ingestion of ibuprofen two days prior. However, there was no history of atopy, chronic skin disease, liver disease, or alcoholism. Upon examination, the patient displayed widespread erythema covering the entire body with varying degrees of scaling. The patient also exhibited hair loss and significant edema in all extremities. Laboratory analysis revealed significant hypoalbuminemia. A diagnosis of erythroderma with complication of hypoalbuminemia was established. The patient received management that included intravenous methylprednisolone injections, oral chlorpheniramine maleate, oral albumin supplementation, and topical application of clobetasol propionate 0.5% ointment and oleum olivarium. After three days of hospitalization, the patient's red scales and itching gradually subsided, and laboratory results showed an improvement in albumin levels. Upon improvement, the patient was discharged. In this case, erythroderma resulted from an unexpected drug hypersensitivity reaction. Hypoalbuminemia may be attributed to continuous skin exfoliation. Supportive therapy involving oral albumin, antihistamines, topical steroids, and oleum olivarium demonstrated efficacy in improving the patient's condition. A favorable prognosis for erythroderma is expected if the underlying disease can be effectively managed.

Keywords: Erythroderma, Dermatitis, Hypoalbuminemia, Hypersensitivity.

ACOS23P-004: Safety and Efficacy of Combination 10 Sessions Of Q-Switched Nd: YAG 1064nm and Pulsed Dye Laser 595 Nm on The Chinese Female Patient with A Hyperpigmented Skin Lesion

Nicole Ng I^{*}, Lai Yean Chen¹, Tan Soo Hua¹, Ng Chia Wen¹, Adibah Hanim Ismail², Muhamad Farhan Abdul Rashid³

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Melasma is an acquired disorder of facial symmetrical hyperpigmentation due to multiple photomechanical factors. Evidence suggests that effective treatment for melasma should address both hyperpigmentation and vascular anomalies to overcome therapeutic efficacy and safety issues. This study aimed to evaluate the safety and effectiveness of a combination therapy for treatment of melasma involving Q-switched Nd: YAG 1064 nm and Pulsed Dye Laser 595 nm among Chinese population with Fitzpatrick skin phototypes III-IV. A retrospective study was conducted involving twenty-seven Chinese female patients associated with melasma. They underwent ten sessions of a combination treatment at three-week intervals from January to December 2022. Two groups of credentialed doctors assessed the clinical photography to evaluate the mMASI score at the first (1st), fifth (5th), and tenth (10th) treatment sessions. Result and Discussion: Statistical analysis revealed a significant effect of the combination treatment on mMASI scores across the visits, $F(1.62, 43.60) = 24.24$, $p < 0.001$, partial $\eta^2 = 0.47$. The study demonstrated a reduction in the mean mMASI Score across visits, from the 1st visit (8.74 ± 2.95), 5th visit (6.33 ± 2.60), and 10th visit (6 ± 3.21). There was a significant difference between the 1st and 5th visit ($p < 0.001$) and between the 1st and 10th visit ($p < 0.001$). However, no significant difference was observed between the 5th and 10th visits ($p > 0.05$). The majority of patients did not show any adverse reactions to the treatment ($n=19$, 70.4%), and only the minority of them demonstrated redness ($n=1$, 3.7%) and hyperpigmentation ($n=7$, 25.9%) following the combination treatment. This study concluded that the combination therapy involving 10 sessions of Q-switched Nd: YAG 1064nm and Pulsed Dye Laser 595 nm is effective and safe for treating melasma among Chinese female patients with Fitzpatrick skin phototypes III-IV.

Keywords: Chinese, Female, Melasma, Pulsed Dye Laser 595nm, Q-Switched Nd: YAG 1064nm, Combination Treatment, Ten Sessions

ACOS23P-005: Treatment of Melasma and Solar Lentigo with Picosecond Laser-A Case Report

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Melasma, characterized by bilateral irregular brown or greyish macules and patches on the face, is a common benign pigmentary disorder in the Asian population. The pathophysiology involves hormonal factor, melanin incontinence and structural changes. Solar lentigo comprises well-defined hyperpigmented macules or patches which can be round, oval or irregular in shape with varying sizes. It results from exposure to ultraviolet (UV) radiation, which causes local proliferation of melanocytes and accumulation of melanin within keratinocytes. Picosecond laser technology has shown effectiveness in treating various cutaneous benign pigmentary disorders, including freckles, solar lentigines, melasma, Hori macule, nevus of Ota, post-inflammatory hyperpigmentation, and tattoo. We present a case of a 42-year-old female with a background of hyperthyroidism who presented with solar lentigo on the left cheek and centrofacial melasma. She underwent fractional CO₂ laser on the solar lentigo with hyaluronic acid-based skin booster dermal injection followed by two sessions of picosecond laser. Significant reduction in pigmentation coupled with less defined borders of her melasma and solar lentigo were noted after the first session of a 450-picosecond pulse using a 1064-nm Nd:YAG laser. She subsequently had another session of picosecond laser with commencement of oral tranexamic acid 250mg OD and topical hydroquinone 4% cream. This case demonstrates the role of picosecond laser as a treatment option in combination with fractional CO₂ laser, skin booster injection, oral tranexamic acid and topical therapy for management of melasma and solar lentigo.

Keywords: Melasma, Solar Lentigo, Solar Lentigines, Picosecond Laser