



第十届五大洲会议 (中国深圳)

10<sup>th</sup> 5-Continent-Congress (Shenzhen, China)

2019年1月11-13日 (11<sup>th</sup> - 13<sup>th</sup> January, 2019)

承办单位：  
Co-organizer:



香港大学深圳医院  
The University of Hong Kong-Shenzhen Hospital

医 疗 美 容 及 医 疗 皮 肤 科  
COSMETIC AND MEDICAL DERMATOLOGY

# Programme Book







# FemTouch



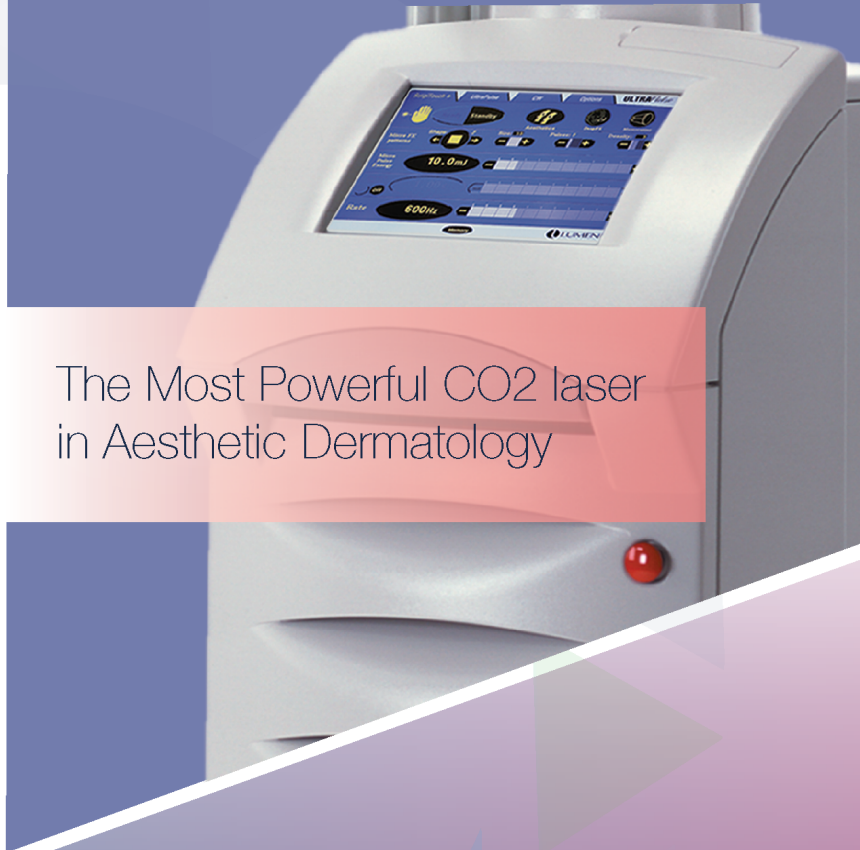
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# Welcome Message

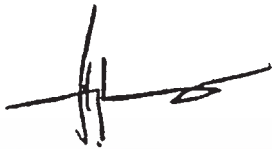
Dear friends and colleagues,

Welcome to the 10<sup>th</sup> 5-Continent-Congress! I would like to express my sincere appreciation and extend my warmest welcome to you all in Shenzhen, China.

This is the first of this kind of international congress to be held in Shenzhen. The 3-day Congress covers a very comprehensive programme which includes symposia on various aspects of emerging therapies in Eczema and Psoriasis, new treatments on Acne and Rosacea, aesthetic medicine and emerging technologies.

The 5-Continent-Congress is comprised of an international group of highly acclaimed dermatologists and plastic surgeons who are key opinion leaders in their fields. On behalf of the board members of the 5-Continent-Congress, I would like to express our gratitude to all local and overseas distinguished speakers and chairmen for their contributions. Most importantly, your active participation and continued support makes the Congress successful.

We hope all of you have a very meaningful and fruitful three-day 5-Continent-Congress.



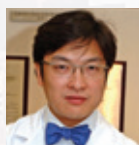
**Professor Henry H.L. Chan**

Congress President

10<sup>th</sup> 5-Continent-Congress

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# Programme

11 <sup>th</sup> January, 2019 (Friday)					
Time	Venue	Jasmine Hall (Level 6)	Sweet Osmanthus Hall (Level 6)	Tulip Hall (Level 6)	Narcissus Hall (Level 6)
10:00–11:15		<p><b>Course 1: Body Contouring</b> 课程1: 身体塑形</p> <p>Chair: Walter King and Zhenying Zhang</p> <p><b>Cryolipolysis and Thermolipolysis</b> 冷冻和热解塑形 Christine Dierickx (Luxembourg)</p> <p><b>New Generation of Monopolar Radiofrequency (Thermage FLX) for Skin Tightening</b> 新型热玛吉 (FLX) 在皮肤紧致中的应用 Walter King (Hong Kong, China)</p> <p><b>Non-invasive Body Shaping with Lasers and Energy-based Devices</b> 依赖光电设备的非侵入性身体塑形 Maurice Adatto (Switzerland)</p> <p><b>Radial Shockwave Therapy for Male Erectile Rejuvenation in a Medical Aesthetic Practice Setting</b> 医美机构应用无线电冲击波治疗男性勃起功能 David Goldberg (USA)</p>	<p><b>Course 2: Botulinum Toxin and Fillers</b> 课程2: 肉毒素及填充剂</p> <p>Chair: Suchun Hou and Rungsima Wanitphakdeedecha</p> <p><b>Introduction of Botulinum Toxin</b> 保妥适的介绍 Klaus Fritz (Germany)</p> <p><b>How to Choose Botulinum Toxin</b> 怎样选择保妥适 Michael Gold (USA)</p> <p><b>Upper Face Treatment</b> 上面部治疗 Christophe Leys (Belgium)</p> <p><b>Complications of the Botulinum Toxin: Why, How &amp; What</b> 保妥适并发症: 是什么? 为什么? 怎么办? Amit Luthra (India)</p>	<p><b>Course 3: Acne and Rosacea, Eczema and Psoriasis</b> 课程3: 痤疮与玫瑰型痤疮、湿疹与银屑病</p> <p>Chair: Francis Ip and Xiaoming Liu</p> <p><b>Treatment of Rosacea with Botulinum Toxin Injection</b> 肉毒素注射治疗玫瑰型痤疮 Weimin Song (Mainland China)</p> <p><b>Cosmetic Treatment of Acne</b> 痤疮的化妆品治疗 Zhenying Zhang (Mainland China)</p> <p><b>Prevention and Treatment of Acne According to the Phenotype</b> 按临床表型防治痤疮 Qiang Ju (Mainland China)</p> <p><b>Comprehensive Therapy for Corticosteroid — Related Rosacea</b> 激素依赖性皮炎之玫瑰痤疮的综合治疗措施 Yuanhong Li (Mainland China)</p>	<p><b>Course 4: Fundamental of Lasers in Health Care</b> 课程4: 医疗激光基础</p> <p>Chair: William Fung and Leihong Xiang</p> <p><b>Biophysics Principles of Lasers and Related Technologies</b> 激光及相关技术的生物物理学原则 Chi-keung Yeung (Hong Kong, China)</p> <p><b>Lasers and Energy-based Devices in Dermatological Application: An Overall Overview</b> 光电设备在皮肤科中的应用 Leihong Xiang (Mainland China)</p> <p><b>Fractionated Technologies</b> 点阵设备 Joyce Lim (Singapore)</p> <p><b>Laser Treatment of Vascular Lesions</b> 血管性皮损的激光治疗激光学 Stuart Nelson (USA)</p>
11:15–11:45		<b>Coffee Break</b>			
11:45–13:00		<p><b>Course 1: Body Contouring</b> 课程1: 身体塑形</p> <p>Chair: Walter King and Zhenying Zhang</p> <p><b>RF Skin Tightening Update – 2019</b> 射频皮肤紧致新进展 – 2019 Michael Gold (USA)</p> <p><b>Sculpture</b> 塑形 Walter King (Hong Kong, China)</p> <p><b>Liposuction Vaser and Laser Compare</b> 威塑和激光吸脂的比较 Johnny De La Riva Salinas (Bolivia)</p> <p><b>Liposuction</b> 吸脂 Brian Kinney (USA)</p>	<p><b>Course 2: Botulinum Toxin and Fillers</b> 课程2: 肉毒素及填充剂</p> <p>Chair: Suchun Hou and Rungsima Wanitphakdeedecha</p> <p><b>Botulinum Toxin Antibody: Myth or Fact</b> 肉毒素抗体: 传说还是事实? Rungsima Wanitphakdeedecha (Thailand)</p> <p><b>Nonsurgical Rhinoplasty from a Surgeon's Perspective</b> 整形外科医生眼中的非手术性鼻塑形 Michael Somenek (USA)</p> <p><b>How to Treat Lines and Folds</b> 怎样处理线条和皱纹 Chytra Anand (India)</p> <p><b>Recognizing Complications from Dermal Fillers</b> 认识皮肤填充物的并发症 Michael Gold (USA)</p>	<p><b>Course 3: Acne and Rosacea, Eczema and Psoriasis</b> 课程3: 痤疮与玫瑰型痤疮、湿疹与银屑病</p> <p>Chair: Francis Ip and Xiaoming Liu</p> <p><b>Etiology of Eczema</b> 湿疹流行病学 Francis Ip (Hong Kong, China)</p> <p><b>The Subgroups of Atopic Dermatitis — A Preliminary Study</b> 特应性皮炎的亚类研究及意义 Linfeng Li (Mainland China)</p> <p><b>Psoriasis-like Rash Related Diseases and their Differential Diagnosis</b> 银屑病样疹的相关疾病病例分享 Xiaoming Liu (Mainland China)</p> <p><b>The Treatment Strategy of Atopic Dermatitis Depends on the Pathogenesis</b> 从发病机制看特应性皮炎的治疗策略 Zhiqiang Song (Mainland China)</p>	<p><b>Course 4: Fundamental of Lasers in Health Care</b> 课程4: 医疗激光基础</p> <p>Chair: William Fung and Leihong Xiang</p> <p><b>Approach to Laser Treatment for Pigmented Lesions</b> 激光治疗色素性疾病 Moshe Lapidot (Israel)</p> <p><b>Laser Hair Removal</b> 激光脱毛 Christine Dierickx (Luxembourg)</p> <p><b>The Dark Side of Light Treatment: Complications of Laser &amp; Energy-based Devices</b> 光电治疗并发症: 光治疗副作用 Nancy Garcia-tan (Philippines)</p> <p><b>Practical Approach for Melasma</b> 黄褐斑的治疗路径 Zhanhao Zhou (Mainland China)</p>



# Programme

11 <sup>th</sup> January, 2019 (Friday)				
Time	Venue	Plum Blossom Hall (Level 5)		
14:00–14:30		Opening Ceremony		
14:30–15:00		Chair: Chi-keung Yeung <b>Plenary Lecture 1: Research and Treatment Advances in the Clinical Management of Port Wine Stains and Hemangiomas</b> <b>专题演讲一: 激光治疗在皮肤病学中的应用</b> Stuart Nelson (USA)		
Time	Venue	Plum Blossom Hall (Level 5)	Bougainvillea Hall (Level 5)	Peony Hall (Level 5)
15:00–16:15		<b>Symposium 1A: Basic Science for Psoriasis and Eczema</b> <b>专题1A: 银屑病湿疹基础科学</b> Chair: Steven Loo and Heng Gu <b>Epidemiology of Psoriasis</b> 银屑病的流行病学 Steven Loo (Hong Kong, China) <b>Pathology of Eczema</b> 湿疹发病机制 Chi-keung Yeung (Hong Kong, China) <b>Epidemiology of Eczema</b> 湿疹流行病学 David Luk (Hong Kong, China) <b>Update on Diagnosis and Treatment of Atopic</b> 特应性皮炎的诊治进展 Heng Gu (Mainland China)	<b>Symposium 1B: Laser Treatment for Pigmentary Condition (1)</b> <b>专题1B: 色素性疾病的激光治疗 (1)</b> Chair: Nancy Garcia-tan and Hang Li <b>Picosecond Pulses — My Experience with Removing Tattoos and Pigmented Lesions</b> 纹身和色素性疾病的皮秒激光治疗 Maurice Adatto (Switzerland) <b>Picosecond QSW versus Nanosecond QSW in Nevus of Ota. Is there a Difference?</b> 太田痣皮秒激光和纳秒激光的治疗区别 Ganesh Pai (India) <b>Advanced Picosecond</b> 皮秒激光的进展 Klaus Fritz (Germany) <b>Treatment Strategy of Pigment Lesions in Asians</b> 亚洲人色素性皮损的治疗 Taro Kono (Japan) <b>Surgical Treatment on Vitiligo</b> 白癜风的外科治疗 Hang Li (Mainland China)	<b>Symposium 1C: Facing the Future of Facial Rejuvenation</b> <b>专题1C: 面对面部年轻化的未来</b> Chair: Zhong Lu and Woraphong Manuskiatti <b>Picotoning for Facial Rejuvenation</b> 皮秒调色用于面部年轻化 Woraphong Manuskiatti (Thailand) <b>How to Prevent Bizzare Filler Face — Principle and Practice to Prevent Overfilling the Face</b> 怎样预防过度填充: 原则和方法 David Goldberg (USA) <b>Chemical Peel: Clinical Practice Based on Basic Research</b> 化学换肤: 基于基础研究的临床应用 Xian Jiang (Mainland China) <b>Photodynamic Therapy for Portwine Stain</b> 光动力疗法治疗黄色斑痣 Zhong Lu (Mainland China)
16:15–16:45		Coffee Break		
16:45–18:00		<b>Symposium 2A: Clinical Aspects and Management of Psoriasis (1)</b> <b>专题2A: 银屑病的临床与治疗 (1)</b> Chair: Neetu Rajdeo and Zhizhong Zheng <b>Treatment of Psoriasis with Acitretin A</b> 阿维A治疗银屑病 Xibao Zhang (Mainland China) <b>Treatment Strategies for the Erythematotelangiectatic Rosacea</b> 长期使用生物制剂疗效下降的原因与对策 Bin Yang (Mainland China) <b>Clinical Variants of Psoriasis</b> 银屑病的临床变异 Mandy Chan (Hong Kong, China) <b>Optimising Protocols for Topical Therapy on Psoriasis</b> 银屑病外用药物的优化方案 Jun Gu (Mainland China)	<b>Symposium 2B: Laser Treatment for Pigmentary Condition (2)</b> <b>专题2B: 色素性疾病的激光治疗 (2)</b> Chair: Xiangdong Chen and Taro Kono <b>Causes of Dark Circles and Treatment Strategies with Optoelectronic Machine</b> 黑眼圈的成因和光电治疗对策 Yan Wu (Mainland China) <b>Bleaching and Regeneration of External Intimate Area</b> 外部私密部位的美白和再生 Abrahan Benzaquen (Spain) <b>The Role of Lasers and Light Devices in the Management of Melasma</b> 黄褐斑激光治疗的应用 Chee-leok Goh (Singapore) <b>Application of Tranexamic Acid in the Treatment of Melasma</b> 氨甲环酸(传明酸)在黄褐斑治疗中的应用 Leihong Xiang (Mainland China) <b>Treatment for Mesoderm</b> 中胚层疗法 Xiangdong Chen (Mainland China)	<b>Symposium 2C: State of the Art on Wound Healing and Scar Prevention</b> <b>专题2C: 创伤修复及疤痕防治的艺术</b> Chair: Ping Chen and Joyce Lim <b>Combined Treatment for Scar with Laser and Intense Pulsed Light</b> 激光联合强脉冲光在疤痕治疗中的双剑合璧 Ping Chen (Mainland China) <b>Lasers and Energy-based Devices for Management of Scars</b> 疤痕的光电治疗 Maurice Adatto (Switzerland) <b>Fractional Radio Frequency for Wrinkles &amp; Scars — What's New in 2019</b> 点阵射频在皱纹和疤痕治疗中的进展 Michael Gold (USA) <b>Treatment of Atrophic Acne Scar with a Fractional 1064nm Picosecond Laser</b> 1064点阵皮秒治疗萎缩性疤痕 Woraphong Manuskiatti (Thailand) <b>Phototherapeutic Techniques for Rosacea</b> 玫瑰型痤疮的光电治疗技巧 Huilan Yang (Mainland China)

# Programme

12 <sup>th</sup> January, 2019 (Saturday)					
Time	Venue	Plum Blossom Hall (Level 5)			
09:00–09:30	Chair: Henry Chan <b>Plenary Lecture 2: New and Innovative Applications for Laser and Light Sources</b> 专题演讲二:激光和光源的新的创新应用 Rox Anderson (USA)				
Time	Venue	Plum Blossom Hall (Level 5)	Bougainvillea Hall (Level 5)	Peony Hall (Level 5)	Chrysanthemum Hall (Level 5)
09:30–10:45		<b>Symposium 3A: Clinical Aspects and Management of Psoriasis (2)</b> 专题3A:银屑病的临床与治疗 (2) Chair: Klaus Fritz and Yuling Shi <b>Advances in Omics Study of Psoriasis</b> 银屑病组学研究进展 Xiang Chen (Mainland China) <b>Laser for Treatment of Psoriasis</b> 银屑病激光治疗 Klaus Fritz (Germany) <b>Maintenance Treatment of Psoriasis</b> 银屑病的维持治疗 Hongxiang Chen (Mainland China) <b>Pediatric Psoriasis-Clinical Feature and Treatment</b> 儿童银屑病临床特征与治疗 Hua Wang (Mainland China)	<b>Symposium 3B: Fractional Technology</b> 专题3B:点阵技术 Chair: Michael Somenek and Baoxi Wang <b>Fractional Picosecond Lasers — Is This the Next Craze for Picosecond Lasers?</b> 点阵皮秒激光—皮秒激光的下一个奇迹 Michael Gold (USA) <b>Fractional Resurfacing (TBC)</b> 点阵技术 Dieter Manstein (USA) <b>Combination Approach for Acne and Acne Scar Management by Using Non-ablative Fractional 1565nm and Blood-pricking Method</b> 非剥脱点阵激光1565nm联合中医刺络放血在痤疮及瘢痕中的应用 Lin Gao (Mainland China) <b>Nonsurgical Skin Tightening Using Combination Radiofrequency with Microneedling Fractional Radio Frequency (RF)</b> 射频和微针点阵射频在皮肤紧致治疗中的联合应用 Michael Somenek (USA)	<b>Satellite Symposium 1</b> 卫星会1 (Sponsored by Novartis) Chair: Tsen-fang Tsai <b>Update on Latest Psoriasis Management</b> 银屑病治疗最新进展 Thomas Luger (Germany)	<b>Satellite Symposium 2: How to Optimise Vascular Treatment Outcome?</b> 卫星会2:如何优化治疗血管性疾病? (Sponsored by Syneron Candela) Chair: Henry Chan and Peter Peng <b>The History of Pulse Dye Laser Invention</b> 脉冲染料激光的研发历史 Rox Anderson (USA) <b>Treating Large Calibre and Resistant Facial and Nasal Telangiectasia</b> 面部鼻部粗大及顽固性毛细血管扩张的治疗 Philip Bekhor (Australia) <b>Optimise Vascular Abnormalities Outcome for Chinese Patients</b> 中国血管异常性疾病优化治疗 Guoyu Zhou (Mainland China)
10:45–11:15	Coffee Break				



# Programme

12 <sup>th</sup> January, 2019 (Saturday)						
Time	Venue	Plum Blossom Hall (Level 5)	Bougainvillea Hall (Level 5)	Peony Hall (Level 5)	Chrysanthemum Hall (Level 5)	Rose Hall – 3 (Level 5)
11:15–12:30		<p><b>Symposium 4A: Clinical Aspects and Management of Eczema (1)</b> 专题4A: 湿疹的临床与治疗 (1)</p> <p>Chair: Ellis Hon and Lin Ma</p> <p><b>Dealing with Childhood Eczema in Hong Kong</b> 香港儿童湿疹的治疗 Ellis Hon (Hong Kong, China)</p> <p><b>Differential Diagnosis of Common Rashes in Children</b> 儿童常见皮疹的鉴别诊断 Lin Ma (Mainland China)</p> <p><b>Talking Atopy and Speaking Dermatitis, You and I Consensus</b> 谈特应皮, 你我共识 Juan Tao (Mainland China)</p> <p><b>Application of Ultraviolet Phototherapy in the Treatment of Eczema and Dermatitis</b> 紫外线光疗在湿疹皮炎类疾病治疗中的应用 Suchun Hou (Mainland China)</p>	<p><b>Symposium 4B: Combination Therapy for Rejuvenation</b> 专题4B: 年轻化的联合治疗</p> <p>Chair: Nathalie Fournier and Zhizhong Zheng</p> <p><b>The Broad Spectrum of Combined Procedures in Dermatology and Antiaging, or Advanced Procedures in Dermatology and Laser Medicine</b> 皮肤激光领域抗衰老的联合治疗方案 Dirk-harald Gröne (Germany)</p> <p><b>Combination Therapy for Rejuvenation</b> 年轻化的联合治疗 Moshe Lapidoth (Israel)</p> <p><b>5 Years of Aesthetic Practice with a Thermo-Mechanical Fractional Device</b> 热-机械点阵设备5年的医美经验 Nathalie Fournier (France)</p> <p><b>Comprehensive Management of Facial Rejuvenation</b> 面部“情绪美学”解读 Maggie Wang (Mainland China)</p>	<p><b>Satellite Symposium 3 卫星会3</b> (Sponsored by Novartis) Chair: Thomas Luger</p> <p><b>Psoriasis Treatment: Real World Data</b> 银屑病的治疗: 真实的全球数据 Hazel Oon (Singapore)</p> <p><b>Practical Approach and Challenges in Management of Psoriasis in Asian Population</b> 亚洲人群银屑病治疗的实践方法和挑战 Tsen-fang Tsai</p>	<p><b>Satellite Symposium 4 卫星会4</b> (Sponsored by Allergan) Chair: Christophe Leys</p> <p><b>Review of Facial Anatomy</b> 面部解剖回顾 Chris Li (Mainland China)</p> <p><b>Emotional Attributes; A New Way of Looking at Faces</b> 情绪美学 — 面部评估新方法 Chytra Anand (India)</p> <p><b>Emotional Attribute in Action; Live Facial Assessment</b> 情绪美学实践 — 现场面部评估 Christophe Leys (Belgium) Chytra Anand (India)</p> <p><b>Consultation Skills</b> 咨询沟通技巧 Chytra Anand (India)</p>	<p><b>Free Paper Presentation 1</b></p>
	Venue	Bougainvillea Hall (Level 5)				
12:30–13:30		<p><b>Lunch Symposium 1 (Sponsored by Lumenis)</b> Chair: Henry Chan</p> <p><b>From Bench to Clinical: Things We Didn't Know about the CO<sub>2</sub> Laser — with Focus on Acne Scar Treatment in Asians</b> 聚焦CO<sub>2</sub>激光在亚洲人痤疮疤痕的临床进展 Peter Peng</p> <p><b>Various Dermatologic Application of Lumenis PiQo4: Experience in Korea</b> 来自韩国的经验分享: PiQo4皮秒激光的多种皮肤临床适应症 Hae-woong Lee (Korea)</p> <p><b>The Trends of Vaginal Rejuvenation Treatments and the Design of Grading Treatment</b> 阴道年轻化的治疗趋势和分级治疗方案 Lin Gao (Mainland China)</p>				
13:30–14:30		Lunch (sponsored by Lumenis)				

# Programme

12 <sup>th</sup> January, 2019 (Saturday)						
Time	Venue	Plum Blossom Hall (Level 5)				
14:30–15:00	Chair: Yan Wu <b>Plenary Lecture 3: Superficial Radiation Therapy of Keloids</b> 专题演讲三: 疤痕的浅表放射治疗 David Goldberg (USA)					
Time	Venue	Plum Blossom Hall (Level 5)	Bougainvillea Hall (Level 5)	Peony Hall (Level 5)	Chrysanthemum Hall (Level 5)	Rose Hall – 3 (Level 5)
15:00–16:15	<p><b>Symposium 5A: Clinical Aspects and Management of Eczema (2)</b> 专题5A: 湿疹的临床与治疗 (2) Chair: Jianzhong Zhang</p> <p><b>Recent advances in the Treatment of Atopic Dermatitis</b> 异位性皮炎的治疗进展 Thomas Luger (Germany)</p> <p><b>Treatment Strategies for AD Based on its Pathogenesis</b> 特应性皮炎的本质及其治疗策略 Jianzhong Zhang (Mainland China)</p> <p><b>Topical Therapy in Atopic Eczema</b> 异位性皮炎的局部治疗 Christina Cheung (Hong Kong, China)</p>	<p><b>Symposium 5B: Vaginal Rejuvenation</b> 专题5B: 阴道的年轻化 Chair: Sebastian Pop and Baoxi Wang</p> <p><b>Update on Rejuvenation of Vaginal Tissue and Developing Proposals for Comprehensive Cases</b> 女性阴道年轻化(私密)治疗趋势及综合治疗方案设计 — 实例展示 Lin Gao (Mainland China)</p> <p><b>Labia Minora Reduction: Surgical Approaches</b> 小阴唇缩小: 外科方法 Sebastian Pop (Romania)</p> <p><b>Interaction Points in Female Intimate Treatments</b> 女性私密治疗 Dirk-harald Gröne (Germany)</p> <p><b>Topic (TBC)</b> Andy Goren (USA)</p>	<p><b>Satellite Symposium 5: New Game Changing Technologies in Aesthetics</b> 卫星会5 (Sponsored by Cutera)</p> <p><b>Skin Restoration and Skin Revitalization Approaches with Excel V</b> 皮肤修复 David Goldberg (USA)</p> <p><b>A New Dimension in Body Sculpting with truSculpt</b> Michael Somenek (USA)</p>	<p><b>Satellite Symposium 6: Solta Medical - New Trend of Skin Rejuvenation by Laser and Radiofrequency Technology</b> 卫星会6: Solta Medical — 全面光电年轻化新趋势 (Sponsored by Solta Medical)</p> <p>Chair: Henry Chan</p> <p><b>Thermage — New Trend of Skin Rejuvenation by Energy-based Technology</b> Thermage 无创紧肤除皱 金标准的国际临床新发展 Henry Chan (Hong Kong, China)</p> <p><b>Thermage FLX — The NEW Technology and Clinical Application on Chinese Patients</b> Thermage FLX — 新技术及中国患者应用解读 Leihong Xiang (Mainland China)</p> <p><b>Combination therapy of Solta Medical solution</b> Solta光电项目联合治疗的效果管理 Kai Li (Mainland China)</p>	Free Paper Presentation 2	
16:15–16:45	Coffee Break					
Time	Venue	Plum Blossom Hall (Level 5)				
16:45–17:15	Chair: Leihong Xiang <b>Plenary Lecture 4: Future Direction of Fractional Photothermolysis and Medical Application</b> 专题演讲四: 点阵光热理论的未来方向和医学应用 Dieter Manstein (USA)					



# Programme

13 <sup>th</sup> January, 2019 (Sunday)						
Time	Venue	Plum Blossom Hall (Level 5)				
09:00–09:30		Chair: Qianjin Lu <b>Plenary Lecture 5: Treatment of Psoriasis in China: An Overview</b> <b>主题会议 5: 中国银屑病治疗现状</b> Gang Wang (Mainland China)				
Time	Venue	Plum Blossom Hall (Level 5)	Bougainvillea Hall (Level 5)	Peony Hall (Level 5)	Chrysanthemum Hall (Level 5)	Rose Hall–3 (Level 5)
09:30–10:45		<b>Symposium 6A: Biologic for Psoriasis</b> <b>专题6A: 银屑病生物制剂</b> Chair: Johnny Chan and Hongzhong Jin <b>Research of Clinical and DNA Methylation in Patients with Generalized Pustular Psoriasis</b> <b>脓疱型银屑病的研究进展和治疗选择</b> Hongzhong Jin (Mainland China) <b>Advances in the Biological Therapy of Psoriasis: Clinical Aspects and Safety</b> <b>银屑病生物制剂治疗进展: 临床及安全性</b> Johnny Chan (Hong Kong, China) <b>Management of Chronic Psoriasis from Intestinal Flora</b> <b>从肠道菌群入手管理银屑病慢性病程</b> Zhu Shen (Mainland China) <b>Cases Sharing of Severe Psoriasis Treatment</b> <b>重症银屑病治疗病例分享</b> Furen Zhang (Mainland China)	<b>Symposium 6B: Skin Care &amp; Drug Delivery</b> <b>专题6B: 皮肤护理及药物传输</b> Chair: Jimmy Chan and Xinghua Gao <b>Drug Delivery</b> <b>药物传输</b> Sidharth Sonthalia (India) <b>Emerging Technologies, Microneedling with Topical Dermaceuticals</b> <b>新技术: 微针及皮肤局部外用</b> Michael Gold (USA) <b>Update on Transdermal Drug Delivery with Energy-based Device</b> <b>光电设备辅助药物透皮吸收</b> Nathalie Fournier (France) <b>The Effect of Daily Aspirin Use on Topical Minoxidil Treatment for Pattern Hair Loss</b> <b>阿司匹林米诺地尔治疗脱发</b> Andy Goren (USA) <b>Lasers and Lights for Dermal Pigmentation</b> <b>真皮色素性疾病的光电治疗</b> Tong Lin (Mainland China)	<b>Satellite Symposium 7</b> <b>卫星会7</b> <b>(Sponsored by Leo Pharma)</b> Chair: Xiaoming Liu and Jianzhong Zhang <b>The Latest Clinical Study of Calcipotriol Betamethasone Gel</b> <b>卡泊三醇倍他米松凝胶安全性的最新临床研究</b> Min Zhen (Mainland China) <b>Management of Pruritus in Atopic Dermatitis</b> <b>特应性皮炎瘙痒管理</b> Fei Hao (Mainland China) <b>Apply of Tacrolimus Ointment on Facial/Sensitive Skin</b> <b>他克莫司软膏在面部/敏感肌肤的应用体会</b> Zuotao Zhao (Mainland China)	<b>Satellite Symposium 8</b> <b>卫星会8</b> <b>(Sponsored by Janssen)</b> <b>Advantage Analysis and Prospects of Stelara in the Treatment of Psoriasis</b> <b>乌司奴单抗(喜达诺)治疗银屑病的优势分析和前景展望</b> Xiaoming Liu (Mainland China) <b>Long-term Maintenance Therapy is Recommended for Psoriasis Treated with Biological</b> <b>银屑病生物制剂治疗建议长期维持治疗</b> Bin Yang (Mainland China)	<b>Free Paper Presentation 3</b>
10:45–11:15		<b>Coffee Break</b>				
11:15–12:30		<b>Symposium 7A: Biologic for Eczema</b> <b>专题7A: 湿疹生物制剂</b> Chair: Chee-leok Goh and Zhirong Yao <b>Misunderstanding in the Treatment of Atopic Dermatitis</b> <b>异位性皮炎的治疗误区</b> Zhirong Yao (Mainland China) <b>Various Clinical Manifestations of Atopic Dermatitis</b> <b>特应性皮炎临床表现的多样性</b> Fei Hao (Mainland China) <b>Dupilumab for Eczema: The Hong Kong Experience</b> <b>Dupilumab的香港经验</b> Christina Wong (Hong Kong, China) <b>Food Allergy and Eczema</b> <b>食物过敏与湿疹</b> Marco Ho (Hong Kong, China)	<b>Symposium 7B: Treatment of Acne and Rosacea</b> <b>专题7B: 痤疮和玫瑰痤疮的治疗</b> Chair: Ganesh Pai and Kang Zeng <b>Update on Management of Rosacea</b> <b>玫瑰痤疮的诊疗进展</b> Wei Lai (Mainland China) <b>Reasons and Strategies for the Decline Efficacy during Long-term Use of Biologic</b> <b>红斑毛扩型玫瑰痤疮的治疗策略</b> Bo Yu (Mainland China) <b>Combination Approach for Acne and Acne Scar Management</b> <b>痤疮痤疮疤痕联合治疗</b> Ganesh Pai (India) <b>Rosacea and Laser - A Practical Approach</b> <b>酒糟鼻激光治疗</b> Victor Gabriel Clatici (Romania)		<b>Satellite Symposium 10</b> <b>卫星会10</b> <b>(Sponsored by Topix Pharmaceuticals Inc.)</b> <b>Topic (TBC)</b> Michael Gold (USA)	<b>Free Paper Presentation 4</b>

# Programme

13 <sup>th</sup> January, 2019 (Sunday)					
Time	Venue				
12:30–13:30	Bougainvillea Hall (Level 5)				
	<b>Lunch Symposium 2 (Sponsored by sanofi-aventis)</b> <b>Cutting Edge Advances in the Management of Atopic Dermatitis</b> Mark Tang (Singapore)				
13:30–14:30	Lunch (Sponsored by sanofi-aventis)				
Time	Plum Blossom Hall (Level 5)	Bougainvillea Hall (Level 5)	Peony Hall (Level 5)	Chrysanthemum Hall (Level 5)	Rose Hall–3 (Level 5)
14:30–15:45	<b>Symposium 8A: Update on the Treatment of Psoriasis and Eczema</b> <b>专题8A: 湿疹银屑病治疗进展</b> Chair: George Li and Qing Sun <b>Current Issues in Contact Dermatitis — An Asian Perspective</b> <b>接触性皮炎亚洲观点</b> Chee-leok Goh (Singapore) <b>Applications of Conventional Systemic Medicines in Psoriasis</b> <b>传统药物在银屑病治疗中的应用</b> Qing Sun (Mainland China) <b>The Application of New Small Molecule Drugs on the Management of Psoriasis</b> <b>新型小分子药物在银屑病治疗中的应用</b> Min Zhen (Mainland China) <b>Diagnostic Criteria and Management of Psoriasis Arthritis</b> <b>关节病性银屑病的诊断标准和治疗</b> Yuling Shi (Mainland China)	<b>Symposium 8B: Botulinum Toxin and Fillers</b> <b>(Sponsored by Allergan)</b> <b>专题8B: 肉毒素与填充剂</b> Chair: Michael Gold and Atchima Suwanchinda <b>Vascular Complication with Fillers</b> <b>填充剂的血管性并发症</b> Zhongsheng Sun (Mainland China) <b>New Botulinum Toxin in USA</b> <b>美国新型肉毒素</b> Michael Gold (USA) <b>How to Combine Botulinumtoxin with Lasers and EBD</b> <b>如何联合使用肉毒素和激光, 能量设备</b> Klaus Fritz (Germany)	<b>Satellite Symposium 11</b> <b>卫星会11</b> <b>(Sponsored by 3S Pharmaceutical)</b> Chair: Xiaoming Liu <b>Biologics in the Treatment of Psoriasis Nowadays</b> <b>生物制剂治疗银屑病应用现状</b> Gang Wang (Mainland China) <b>Etanercept is a Good Choice in the Treatment of Psoriasis</b> <b>依纳西普是银屑病治疗的优选方案</b> Min Zheng (Mainland China)	<b>Satellite Symposium 12</b> <b>卫星会12</b>	<b>Free Paper Presentation 5</b>
15:45–16:15	Coffee Break				
Time	Venue				
16:15–16:45	Plum Blossom Hall (Level 5)				
	Chair: Baoxi Wang <b>Plenary Lecture 6: Lasers and EBDs for Inflammatory Acne Management</b> <b>专题演讲六: 激光治疗在炎症性痤疮管理应用</b> Maurice Adatto (Switzerland)				
16:45–17:00	Closing Remarks				



# List of Free Paper Presentations

## Free Paper Presentation 1

**Date:** 12<sup>th</sup> January, 2019 (Saturday)  
**Time:** 11:15-12:35  
**Venue:** Rose Hall - 3  
**Chair:** Michael Gold  
**Theme:** Cosmetic Dermatology

	Time	Topic
1	11:15-11:25	<b>Analysis of Clinical Effect of Erbium Laser Combined with Broad-Spectrum Intense Pulsed Light In Treating Acne Scar (ABS-001)</b> Zhe Jian (Mainland China)
2	11:25-11:35	<b>Microneedling RF In 2019 - What Have We Learned (ABS-008)</b> Michael Gold (USA)
3	11:35-11:45	<b>A Preliminary Study on the Animal Experiment and Immunological Mechanism of Lipoxina4 to Inhibit the Growth of Malignant Melanoma (ABS-029)</b> Xiaotong Zhang (Mainland China)
4	11:45-11:55	<b>New Fillers in the US Making Their Way through the Process (ABS-010)</b> Michael Gold (USA)
5	11:55-12:05	<b>Analysis of Clinical Effect of Local Injection of Autologous Platelet Rich Plasma (Prp) in the Treatment of Orbital Static Wrinkles (ABS-002)</b> Zhe Jian (Mainland China)
6	12:05-12:15	<b>IPL Technology - What We Know From Research From Long-Term Analyses (ABS-011)</b> Michael Gold (USA)
7	12:15-12:25	<b>Market Review of Non-Invasive Fat Reduction &amp; Comparison on Different Focused-Ultrasound Fat-reduction Technology in China (ABS-032)</b> Wenzhi Li (Mainland China)
8	12:25-12:35	<b>Acne Vulgaris Treatments with Lasers &amp; EBD'S (ABS-014)</b> Michael Gold (USA)

# List of Free Paper Presentations

## Free Paper Presentation 2

**Date:** 12<sup>th</sup> January, 2019 (Saturday)  
**Time:** 15:00-16:30  
**Venue:** Rose Hall – 3  
**Chair:** Zhe Jian  
**Theme:** Cosmetic Dermatology / Medical Dermatology

	Time	Topic
1	15:00-15:10	<b>A Preliminary Study of Fractional CO<sub>2</sub> Laser Added to Topical Tacrolimus Combined with 308 nm Excimer Lamp for Refractory Vitiligo (ABS-035)</b> X Wen (Mainland China)
2	15:10-15:20	<b>Analysis of Clinical Effect of Q-switched Ruby Laser Dot Matrix Mode Combined with Needle-Free Injection of TCA in Treating Melasma (ABS-003)</b> Zhe Jian (Mainland China)
3	15:20-15:30	<b>Facial Manifestations of Pachydermoperiostosis Treated with Botulinum Toxin Type-A (Report of 3 Cases) (ABS-039)</b> X Wen (Mainland China)
4	15:30-15:40	<b>A Case of Porphyria Cutanea Tarda (ABS-046)</b> H Xia (Mainland China)
5	15:40-15:50	<b>Enhanced Cyr61 Levels in Patients with Psoriasis Vulgaris (PV) (ABS-048)</b> LX Fu (Mainland China)
6	15:50-16:00	<b>Potassium Iodide Potentiates Antimicrobial Photodynamic Inactivation Mediated by Rose Bengal: In Vitro and in Vivo Studies. (ABS-040)</b> X Wen (Mainland China)
7	16:00-16:10	<b>Clinical Analysis of 70 Seroresistance Syphilis Patients (ABS-047)</b> H Xia (Mainland China)
8	16:10-16:20	<b>HMGB1 Inhibitor Effectively Alleviates Psoriasis-like Lesions and Inflammatory Cytokines in K15-VEGF Transgenic Mouse (ABS-049)</b> LX Fu (Mainland China)
9	16:20-16:30	<b>Clinical Effect of Q Switch 694nm Ruby Laser in the Decolorization of Treating Generalized Vitiligo (ABS-004)</b> Zhe Jian (Mainland China)



# List of Free Paper Presentations

## Free Paper Presentation 3

**Date:** 13<sup>th</sup> January, 2019 (Sunday)  
**Time:** 09:30-10:40  
**Venue:** Rose Hall - 3  
**Chair:** Chi-kong Or  
**Theme:** Cosmetic Dermatology

	Time	Topic
1	09:30-09:40	<b>New Toxins in the US - What is Making its Way Through the Clinical Trial Domain (ABS-012)</b> Michael Gold (USA)
2	09:40-09:50	<b>Successfully Managing Skin Necrosis Following Dermal Filler Injection with Intense Pulsed Light (IPL) (ABS-018)</b> Cheuk-hung Lee (Hong Kong, China)
3	09:50-10:00	<b>Fractional CO<sub>2</sub> Lasers With or Without Pulsed Dye Lasers in the Treatment of Hypertrophic Scars (ABS-013)</b> Michael Gold (USA)
4	10:00-10:10	<b>The Use of Silicone Gel In 2019 - What's New for the Treatment Of Hypertrophic Scars and in Our Post-Procedure World (ABS-015)</b> Michael Gold (USA)
5	10:10-10:20	<b>Non-Invasive Energy-Based Device Combination for Fat Destruction and Body Shaping (ABS-030)</b> Chi-kong Or (Hong Kong, China)
6	10:20-10:30	<b>New Cosmeceuticals Making Waves In The US Market In 2019 (ABS-009)</b> Michael Gold (USA)
7	10:30-10:40	<b>The Use of Absorbable Sutures in Lifting and Volumizing the Skin – The US Consensus Report (ABS-017)</b> Michael Gold (USA)

# List of Free Paper Presentations

## Free Paper Presentation 4

**Date:** 13<sup>th</sup> January, 2019 (Sunday)  
**Time:** 11:15–12:05  
**Venue:** Rose Hall – 3  
**Chair:** Aldous Chan  
**Theme:** Cosmetic Dermatology / Medical Dermatology

	Time	Topic
1	11:15–11:25	<b>Study on Images of Common Facial Inflammatory Skin Diseases and Ai-Assisted Diagnosis (ABS-027)</b> Jialiang Shi (Mainland China)
2	11:25–11:35	<b>The Efficacy and Safety of Using Fusion Mode of CO<sub>2</sub> Fractional Laser for Atrophy Acne Scars: Clinical Evaluation (ABS-031)</b> Zhuanli Bai (Mainland China)
3	11:35–11:45	<b>Dermoscopy Facilitates Laser Dermatological Practice for Patients with Darker Skin Types (ABS-025)</b> Aldous Kwok-keung Chan (Hong Kong, China)
4	11:45–11:55	<b>Beneficial Effects of an Alkaline Topical Treatment in Patients with Atopic Dermatitis (ABS-034)</b> Jürgen Vormann (Germany)
5	11:55–12:05	<b>A Split-Face Assessment of Combined Treatment Using Optimized Pulsed Light Followed by a Non-Ablative 1565 nm Fractional Laser for Facial Rejuvenation (ABS-020)</b> Yan Wu (Mainland China)



# List of Free Paper Presentations

## Free Paper Presentation 5

**Date:** 13<sup>th</sup> January, 2019 (Sunday)  
**Time:** 14:30-15:50  
**Venue:** Rose Hall - 3  
**Chair:** Yan Wu  
**Theme:** Cosmetic Dermatology / Medical Dermatology

	Time	Topic
1	14:30-14:40	<b>Clinical Application of Facial Anatomy in the treatment of skin laxity by Monopolar Radiofrequency (ABS-036)</b> Kai Li (Mainland China)
2	14:40-14:50	<b>Clinical Observation of Intense Pulsed Light Vascular Filter in the Treatment of Facial Telangiectasia in China (ABS-037)</b> Huanhuan Qu (Mainland China)
3	14:50-15:00	<b>Pathology Changes After Polydioxanone Thread Insertion and Monopolar Radiofrequency Combination Therapy: An Animal Study with Pigs (ABS-038)</b> Kai Li (Mainland China)
4	15:00-15:10	<b>Pruritic Vesiculobullous Eruption Associated with Multiple Myeloma: A Case Report (ABS-041)</b> Tong Li (Mainland China)
5	15:10-15:20	<b>Interleukin-33 Alleviates Psoriatic Inflammation by Suppressing Th17 Response (ABS-043)</b> Zeyu Chen (Mainland China)
6	15:20-15:30	<b>Adult Black Dot Tinea Capitis Caused by Trichophyton Tonsurans Complicated With Herpes Zoster: A Case Report (ABS-044)</b> YS Zheng (Mainland China)
7	15:30-15:40	<b>Combined Therapy of Dual Wavelength (595 &amp; 1064nm) and Fractionated CO<sub>2</sub> Laser in Treatment of Port Wine Stain: A Pilot Study (ABS-045)</b> Yaojia Luo (Mainland China)
8	15:40-15:50	<b>Clinical Efficacy of Non-Cross-Linked Hyaluronic Acid-based Compounds on Skin Rejuvenation using Different Transdermal Delivery Methods (ABS-021)</b> Yan Wu (Mainland China)

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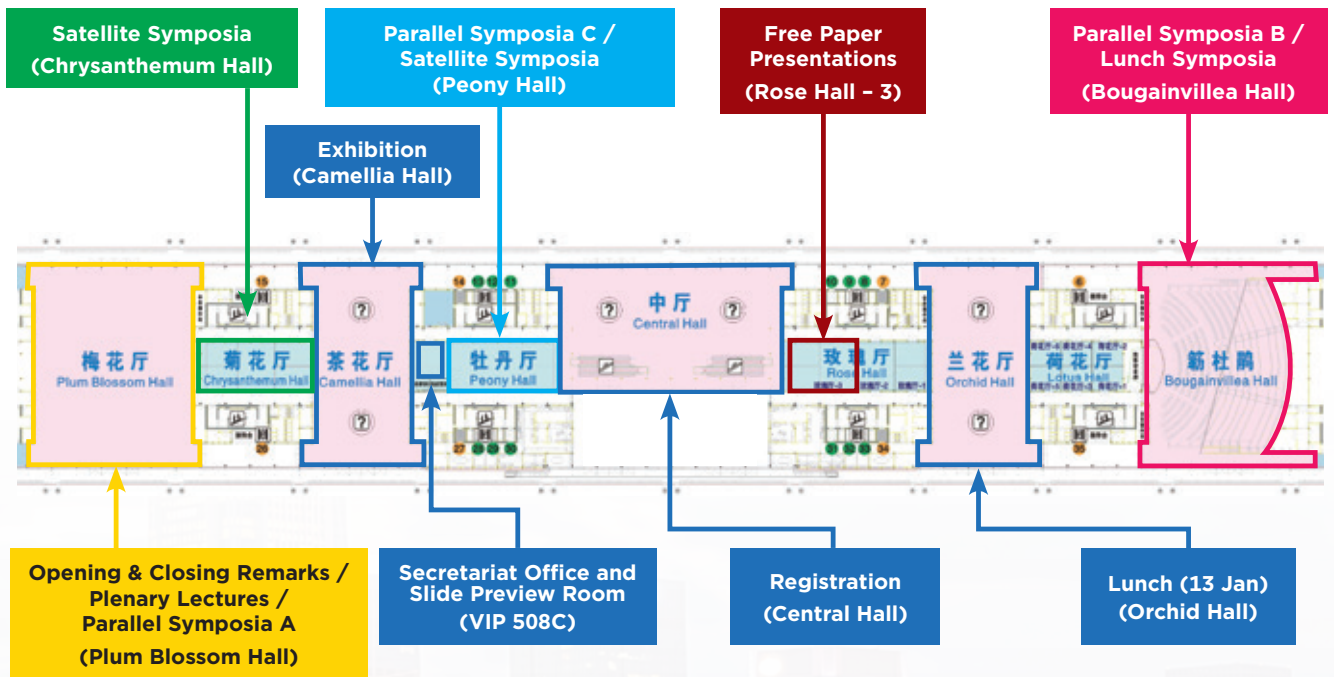
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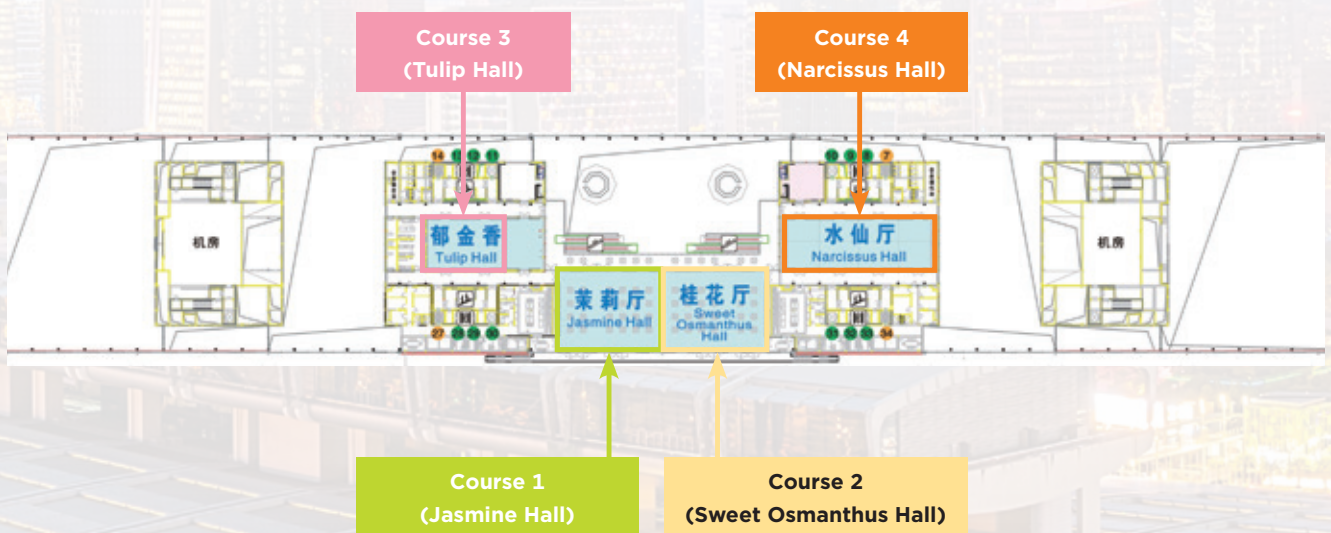


# Floor Plan

## Level 5

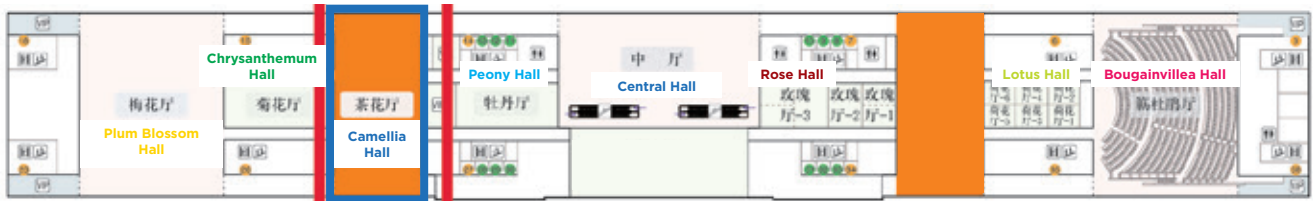


## Level 6



# Exhibition Floor Plan

## Level 5



### Camellia Hall





# List of Exhibitors

Organization	Booth No.
Cutera Inc.	A3
Demandfit Ltd.	D4
HydraFacial Company	D5
L'Oréal (China) Co., Ltd. – SkinCeuticals	D2
Lumenis (Hong Kong) Ltd.	D6, D7
miraDry by Sientra	A5
Neo Derm (Hong Kong) Ltd.	A4
Novartis Pharmaceuticals (HK) Ltd.	C3
Sanofi-Aventis Hong Kong Limited	B5, B6, C5, C6
Shenzhen Yiyuan Intelligence Tech. Co., Ltd.	D3
Solta Medical - Bausch & Lomb (Shanghai) Trading Co., Ltd.	B2, C2
Syneron Medical (HK) Ltd.	A6, A7
Topix pharmaceuticals Inc.	A1
Venus Concept	A2
Young Pharmaceuticals, Inc.	C4
Zero Gravity Skin	B1, C1
Zimmer MedizinSysteme GmbH	B3, B4



## Plenary Lecture 1

# Research and Treatment Advances in the Clinical Management of Port Wine Stains and Hemangiomas

## Stuart Nelson

Professor of Surgery and Biomedical Engineering, Beckman Laser Institute and Medical Clinic, University of California, Irvine, USA

Port Wine Stain (PWS) or capillary vascular malformation occurs in an estimated twenty-six million people worldwide. Since two thirds of these malformations occur on the face, PWS is a clinically significant problem. PWS are initially flat red macules, but lesions tend to darken progressively to purple, and by middle age, often become raised as a result of the development of nodules, which further disfigure the facial features of many patients. Treatment of PWS by pulsed dye laser (PDL) remains the standard of care for infants and young children. Caveats for PDL treatment of PWS: 1) start treatment as soon as possible and treat aggressively every 4 weeks; 2) due to PWS blood vessel heterogeneity in terms of depth and size, multiple pulse durations should be used; 3) use large spot sizes; 4) epidermal cooling is essential; 5) strict sun precautions are essential; and 7) maintenance treatments very helpful to maintain good result.

Treatment of hemangiomas in infants is not in question for those lesions that have the potential to produce functional impairment. The pulsed dye laser (PDL) is effective for treating superficial hemangiomas. Caveats for PDL treatment of hemangiomas include: 1) less than 3 mm thick are ideal; 2) start treatment as soon as possible and repeat every 2-4 weeks; 3) use low energy densities, short pulse durations and large spot sizes; and 5) epidermal cooling is essential. Oral propranolol and topical timolol, both non-selective beta ( $\beta$ )-blockers, have been reported in several hundred articles to be highly effective in treating proliferative hemangiomas of infancy. However, more recent work has demonstrated that a combined approach using PDL and  $\beta$ -blockers together has been demonstrated to be more effective than using either treatment alone.





## Symposium 1A: Basic Science for Psoriasis and Eczema

### Epidemiology of Psoriasis

#### Steven Loo

Honorary Clinical Assistant Professor, Department of Dermatology, The Chinese University of Hong Kong, Hong Kong, China

Psoriasis is a common chronic inflammatory disease that affects approximately 125 million people worldwide. It has significant impacts on both physical and emotional health-related quality of life comparable to other major illnesses. In the last decade, tremendous progress has been made in the understanding of the genetics, pathophysiology, and treatment of psoriatic disease. Estimates of the prevalence of psoriasis have varied across studies. A systematic review of international population-based studies found wide variation in the global prevalence of psoriasis. The prevalence of psoriasis in adults ranged from 0.2 to 8.5 percent, and the prevalence of the disease in children ranged from 0.1 to 2.1 percent. Geographic location influences the likelihood of having psoriasis; disease prevalence tends to increase with increasing distance from the equator. There seem to be two peaks for the age of onset: one between the ages of 30 and 39 years and another between the ages of 50 and 69 years. The incidence of psoriasis may be increasing. A retrospective study of a cohort of adults reported an increased incidence of psoriasis between the years 1970 to 1974 (50.8 cases per 100,000) and 1995 to 1999 (100.5 cases per 100,000).

Epidemiologic and basic scientific evidence contributing to our knowledge of the natural history and biology of psoriasis. They have led to the recognition of psoriasis as a disorder with important health implications that extend beyond the skin.



## Symposium 1A: Basic Science for Psoriasis and Eczema

### Pathology of Eczema

Chi-keung Yeung

Honorary Clinical Associate Professor, Department of Medicine, The University of Hong Kong, Hong Kong, China

Atopic dermatitis (AD) is the most common inflammatory skin disease with increasing prevalence in urbanized countries, characterized by itch, eczematous lesions and fluctuating course. AD is closely associated with asthma and allergic rhinitis with familial tendency. This complex pathophysiology of AD is characterized by immune mediated inflammation and epidermal barrier disruption. Research has focused on elucidating immune pathways responsible for AD, including Th2, Th22, and Th17 pathways, with testing of immune antagonists specific to these axes. There is a paradigm shift in our understanding of the pathogenesis of AD in the past few years from the role of epidermal barrier disruption, such as mutation of filaggrin genes, to cytokine profile favoring T helper-2 (Th2) disease. Understanding the pathophysiology of AD helps to develop new treatments shifting the focus to modulate specific immune pathway such as biological therapy for moderate to severe AD targeting cytokines elevated in Th2-mediated inflammation. Impairment of epidermal barrier function can promote inflammation and T-cell activation. The immune response in AD is skewed towards Th-2 cell-mediated pathways which further aggravate the epidermal barrier dysfunction. By studying clinical and molecular responses following treatment with specific immune antagonists, our understanding of and ability to treat AD will advance.





## Symposium 1A: Basic Science for Psoriasis and Eczema

### Epidemiology of Eczema

David Luk

Consultant Paediatrician, United Christian Hospital, Hong Kong, China

The prevalence of atopic dermatitis has reached 20% in many countries and the global trend is rising. Previously, AD was more prevalent in developed countries, but the developing countries are also much more affected nowadays. AD is now so common that it has become a public health problem affecting both children and adults. This increasing prevalence is multifactorial, with cultural factors, change in environmental allergens and microbial agents, feeding practices and improvement in socioeconomic status being some of them. Our recent understanding of filaggrin also suggested that the differences in genetic mutations in different parts of the world may also contribute, and the resulted skin barrier defect may affect the incidence of eczema related skin infections.



## Symposium 1A: Basic Science for Psoriasis and Eczema

### Update on Diagnosis and Treatment of Atopic

#### Heng Gu

Professor, Institute of Dermatology and Hospital for Skin Diseases, Chinese Academy of Medical Sciences and Peking Union Medical College, Mainland China

Atopic dermatitis (AD) is a chronic, recurrent, inflammatory skin disease, accompanied by severe itching, serious impact on the quality of life. With industrialization, the incidence of this disease has increased, and has become a “common disease and frequently-occurring disease” in some countries. The prevalence of AD in China is also gradually increasing. In order to standardize the diagnosis and treatment of this disease, different countries and academic organizations have formulated corresponding guidelines and proposed different diagnostic criteria. In recent years, two Chinese professors have proposed diagnostic criteria for AD. Since AD is a chronic process, more and more attention has been paid to its long-term management. The treatment methods have been gradually improved.



## Symposium 1B: Laser Treatment for Pigmentary Condition (1) Picosecond Pulses – My Experience with Removing Tattoos and Pigmented Lesions

Maurice Adatto

Founder and Medical Director, Skinpulse Dermatology, Laser & Beauty Centres, Switzerland

**Background & Objectives:** Tattoos have played an important role in human culture for thousands of years, and they remain popular today. The development of quality-switched (QS) lasers in the nanosecond ( $10^{-9}$ ) domain has revolutionized the removal of unwanted tattoos for over 20 years. However, restrictions known with this nanosecond technology, such as resistant colours (blue, green yellow) and multiple sessions (sometimes up to 25) is over. Since 2012 we have a new generation of lasers called picosecond, as their pulse duration ranges between 350 and 500 picosecond ( $10^{-12}$ ). This new generation of lasers offers the possibility to treat various skin conditions such as tattoos and endogenous pigmented lesions.

**Study Design / Material & Methods:** To update the audience with the 4-year personal experience we have in various indications with the 3 main available wavelengths (532, 785 & 1064nm). This ultra-short pulse duration breaks the tattoo pigment in much smaller particles, thus eliminating it more easily and quickly. Regarding pigmented lesions the mechanism is similar and the shortened pulse duration creates less crusting and swelling afterwards.


**Results:** The use of picosecond laser in tattoo removal results in a) less sessions needed, so less time required to clear tattoos<sup>1</sup>. b) better clearance of residual pigment c) possibility of removing previous resistant colours<sup>2</sup>, as well as paradoxical darkening<sup>3</sup>.

**Conclusion:** With this new picosecond technology, a new era is opened not only in the field of laser tattoo removal, allowing better and faster pigment removal, but also in the management of benign pigmented lesions.

Literature:

1. The picosecond laser for tattoo removal. Hsu VM, Aldahan AS, Mlacker S, Shah VV, Nouri K. *Lasers Med Sci.* 2016 Nov;31(8):1733-1737.
2. Clearance of yellow tattoo ink with a novel 532-nm picosecond laser. Alabdulrazzaq H, Brauer JA, Bae YS, Geronemus RG. *Lasers Surg Med.* 2015 Apr;47(4):285-8.
3. Successful treatment of paradoxical darkening. Bae YS, Alabdulrazzaq H, Brauer J, Geronemus R. *Lasers Surg Med.* 2016 Jul;48(5):471-3.





## Symposium 1B: Laser Treatment for Pigmentary Condition (1) Picosecond QSW versus Nanosecond QSW in Nevus of Ota. Is there a Difference?

Ganesh Pai

Dermatologist, DERMA-CARE, Skin and Cosmetology Centre, India

Nano second QSW laser have been the gold standard in the treatment of Nevus of Ota. Pico second laser are high powered laser which need to be used judiciously to prevent burn energies and get good results.

In short pulse lasers, pulse width, pulse length and pulse durations are important. In nanosecond ( $10^{-9}$ ) laser the most important way to shorten laser pulse length is to employ the technique of Q-switching method involving loss modulation for high to low.

Energy must be used at an appropriate level & in the area of anatomical concavity the skin should be stretched. Picosecond QSW 1064 lasers produce better results in lesser Number of sessions as compared to nanosecond QSW 1064 lasers which improvements tend to be static after 6 sessions.

A criterion for using the Picosecond lasers, that excessive energy can be dumped on the skin surface when the hand piece is not in firm contact with types V and VI skin. Pigment - assisted laser Induced Optical Breakdown occur at significantly lower energies and leads to burns the skin.

The high energy up to 1.1GW leads to more light/tissue interaction; more energy also allows for a larger beam diameter of up to 10mm. Two sessions with Pico laser in patients who have completed multiples sessions of Nano lasers show significant additional Improvement. After the initial sessions with Nano QSW laser, the Pico can be used for best results.



## Symposium 1B: Laser Treatment for Pigmentary Condition (1) Treatment Strategy of Pigment Lesions in Asians

Taro Kono

Associate Professor, Department of Plastic Surgery, Tokai University, Japan

Since the introduction of selective photothermolysis, Q-switched lasers have been used for the treatment of pigmented lesions. The Q-switched ruby, alexandrite and YAG lasers are highly effective in the treatment of dermal pigmented lesions, but in dark-skinned patients such as Asians, the risk of complications such as erythema, blistering and post-inflammatory hyperpigmentation are increased. Previous studies that compared the response of lentigines in Asian skin using Q-switched vs. long-pulsed lasers found that post-inflammatory hyperpigmentation was less when using longer pulses. Long-pulsed lasers and IPLs are effective with minimum complications. The lack of down time associated with the use of IPL can be of particular advantage for some patients, but to achieve a satisfactory outcome, several sessions are typically necessary. To balance cost-effectiveness and clinical outcome, one approach is to treat several test areas with different devices. Q switched lasers are the first line treatment of dermal pigmented lesions, such as nevus of Ota, Mongolian spots, ADM and tattoo. The QS Nd:YAG is considered particularly effective in dark skinned patients given its longer wavelength and lower risk of adverse effects. Complications such as post-inflammatory hyperpigmentation can occur and hypopigmentation becomes obvious according to the treatment sessions. Laser toning plays a role in melasma, however, melasma is still not completely curable. Picosecond laser is more effective than Q-switched laser with less complications.



## **Symposium 1C: Facing the Future of Facial Rejuvenation**

### **How to Prevent Bizarre Filler Face – Principle and Practice to Prevent Overfilling the Face**

David Goldberg

Director, UMDNJ-New Jersey Medical School, USA

The ideal treatment with fillers requires looking at the face as an aesthetic whole and understanding the method of action of filler classes. This talk will focus on fillers that mostly fill vs. those that fill plus induce neocollagenesis and even elastin and GAG formation.

The final portion of the talk will describe various complications that lead to either overfilling or even the “bizarre filler face” as well as an approach to try to avoid such complications and/or treat them when they occur.





## Symposium 1C: Facing the Future of Facial Rejuvenation

### Chemical Peel: Clinical Practice Based on Basic Research

Xian Jiang

Director, Department of Dermatology, West China Hospital, Sichuan University, Mainland China

Chemical peel is a common treatment for skin rejuvenation. In this study, we reviewed the basic researches on chemical peel mechanism and evaluated the efficacy and safety of chemical peel in pigmentary disorders and inflammatory dermatosis. Eighteen patients with Fitzpatrick skin types III-IV and suffered from chloasma (2 cases), postinflammatory hyperpigmentation (2 cases), acne vulgaris (5 cases), rosacea (6 cases), biphasic amyloidosis (2 case) and Riehl's melanosis (1 case) were recruited. All the patients received chemical peel. Efficacy was evaluated by image analysis software program VISIA, visual analogue scale (VAS) and dermatology life quality index score (DLQI). Safety was assessed by incidence of adverse reactions including erythema, pruritus, burning sensation and tingling. Chemical peel improved hyperkeratinization by enhancing corneosome degradation and reducing the adhesion of corneum. It also increased collagen synthesis. Glycolic acid reduced melanin pigments in the basal layer, while salicylic acid inhibited melanogenesis. Salicylic acid also inhibited lipogenesis, inflammation and decreased the cell viability of sebocytes. Comparison between before and after the treatment demonstrated that chemical peel had significantly great improvement in chloasma, postinflammatory hyperpigmentation, acne vulgaris, rosacea, biphasic amyloidosis, Riehl's melanosis. Some patients complained about pruritus, burning sensation and tingling, however, all the adverse reactions were tolerated. Therefore, chemical peel is an effective and safe cutaneous resurfacing procedure used in the treatment of pigmentary disorders and inflammatory dermatosis.



## Symposium 1C: Facing the Future of Facial Rejuvenation

### Photodynamic Therapy for Portwine Stain

Zhong Lu

Chief, Department of Dermatology, Hushan Hospital of Fudan University, Mainland China

Portwine Stain (PWS) is a congenital vascular malformation, occurring in 0.3 of newborn babies. PWS not only causes cosmetic problems, but also will give rise to certain complications as glaucoma and epilepsy etc. Pulsed dye laser has been the standard modality for PWS for years, and improvement can be achieved in many patients after multiple sessions of treatment. However, complete clearance can be achieved in less than 20% patients. Therefore, other therapeutic modalities are necessary to further improve the clinical response.

HMME Photodynamic therapy (PDT) has been used for PWS for years, using HMME (Hematoporphin) as the photosensitizer and normally light source at the wavelength of 532nm. According to our investigation, most PWS patients achieved improvement of 50-60% after 2 treatments. Red or violet PWS lesions responded well, while hypertrophic skin lesions responded poorly. The vascular density in the PWS lesion decreased significantly after PDT according confocal microscopy, but no significant change in mean diameter of capillaries was found. Common adverse effects include edema and hyperpigmentation, which are transient. There is no scar formation in our patients.

In conclusion, HMME PDT is both safe and effective for PWS, and can be combined with pulsed dye laser for better treatment outcome.



## Symposium 2A: Clinical Aspects and Management of Psoriasis (1) Treatment of Psoriasis with Acitretin A

Xibao Zhang

Department of Dermatology, Guangdong Provincial Dermatology Hospital, Mainland China

Retinoic acid is one of the first choice drugs for the treatment of psoriasis, regardless of plaque or pustules psoriasis have a good response, and especially for pustules psoriasis has a good efficacy. Retinoic acid for Plaque psoriasis can be combined with other topical medications and UV therapy. Adults in retinoic acid are commonly used in doses of 20-40mg/day and the maximum dose does not exceed 1mg/kg/day. The common side effects of retinoic acid are cheilitis, dry skin, dry eyes, dry mouth, elevated blood lipids, attention to monitoring to case with treatment and use moisturizer and other protective measures, most of those side effects can be reduced. Retinoic acid has obvious teratogenic effect on fetal development, which is used with caution by women of childbearing age and is contraindication to pregnant women. According to many years of observation on retinoic acid treatment in children case, the long-term side effects of retinoic acid on the growth and development of adolescents still require further clinical investigation.





## **Symposium 2A: Clinical Aspects and Management of Psoriasis (1)** **Clinical Variants of Psoriasis**

Mandy Chan

Clinical Assistant Professor, Department of Medicine, The University of Hong Kong, Hong Kong, China

Psoriasis is a chronic papulosquamous inflammatory skin disorder that affect the skin and joints. Chronic plaque psoriasis is the most common variant of psoriasis. In this lecture, we will be discussing the clinical variants of psoriasis including palmoplantar psoriasis, nail psoriasis, intertriginous psoriasis, pustular psoriasis, and erythrodermic psoriasis. Challenging cases and it's management will be discussed.



## **Symposium 2A: Clinical Aspects and Management of Psoriasis (1)** **Optimising Protocols for Topical Therapy on Psoriasis**

Jun Gu

Professor, Department of Dermatology, Second Military Medical University, Mainland China

This presentation introduces the status and challenges of topical therapy for psoriasis, the overview of commonly used topical drugs, and the topical drugs recommended by the guide. Topical drug therapy for psoriasis is the bottom of the pyramid of progressive therapy, accounting for 90%. But compliance with chronic diseases is a problem, with only 50% in developed countries and even lower in developing countries. Compliance significantly affected the therapeutic effect of psoriasis. Commonly used topical drugs include glucocorticoids, vitamin D<sub>3</sub> derivatives, retinoids, and calcineurin inhibitors. Psoriasis guidelines in the United States, Germany, France recommended topical drugs. Daivobet and Xamiol compound preparation combined effect is better than the single drug used twice daily.



## Symposium 2B: Laser Treatment for Pigmentary Condition (2) Causes of Dark Circles and Treatment Strategies with Optoelectronic Machine

Yan Wu

Department of Dermatology, Peking University First Hospital, Mainland China

**Objective:** To identify and classify different types of dark circles using VISIA imaging system and Antera 3D analyzer. To evaluate the efficacy and safety of different treatments on pigmented type dark circles and vascular type dark circles.

**Methods:** Using VISIA imaging system and Antera 3D to identify types of dark circles for example, pigmented vascular and mixed types. The coherence of clinical analyzing and instrumental classification was also evaluated. The efficacy and safety of topical 5% tranexamic acid, combination therapy of topical tranexamic acid with Q-switched 1064nm laser or 755nm picosecond laser for treating pigmented type dark circles were analyzed. Long-pulsed 1064nm laser and 755nm picosecond laser for treating vascular type dark circles were analyzed. All subjects received three sessions of laser treatments at four-week intervals and were followed up at baseline, Day14, Day28, Day56 and Day 84 for the assessment of treatment efficacy using VISIA, Antera 3D, MX18, etc. The statistical analyses were performed using SPSS 13.0 software.

**Result:** After performing analyses using VISIA imaging system and Antera 3D analyzer on the 29 patients who were clinically diagnosed with pigmented type of dark circles, 24 were classified as mixed type, 3 as pure pigmented type and 2 as vascular type. Among the 23 patients who were clinically diagnosed with vascular type of dark circles, 14 were classified as mixed type and 9 as pure vascular type. For pigmented type of dark circles, 29 subjects completed the study. Compared with baseline, the changes of melanin index(MI) in the topical 5% tranexamic acid group were -13.0(-156.0,26.8), -11.3(-171.7,33.0), -27.6(-164.8,29.5), -23.7(-171.0,39.83) on day 14, day 28, day 56, day 84, respectively. The product combined with picosecond laser treatment group and the product combined with Q-switched laser group all showed improvements. For vascular type of dark circles, 22 subjects completed the study. Compared with baseline, the erythema index(EI) showed a significant decrease on Day 56 in both treatment groups. Treatment with long-pulsed Nd: YAG laser showed significant changes very quickly on Day 14 compared with baseline.

**Conclusion:** VISIA imaging system and Antera 3D analyzer are more sensitive and accurate in differentiating distinct types of dark circles. Clinically, it is difficult to differentiate pure pigmented type dark circles from mixed types. Therefore, by using VISIA imaging system and Antera 3D analyzer, we can improve the accuracy in classification of dark circles and evaluation of treatment efficacy. For the treatment of pigmented type and mixed type of dark circles, topical application of 5% tranexamic acid is recommended and treatment results may be more significantly improved when treated in combination with Q-switched laser and picosecond laser treatments. For the treatment of vascular and mixed type of dark circles, long-pulsed 1064nm Nd:YAG laser is effective on big vessels and has a quick onset of effect; treatments with 755nm picosecond laser after three sessions also displayed improvements.





## Symposium 2B: Laser Treatment for Pigmentary Condition (2) Bleaching and Regeneration of External Intimate Area


Abrahan Benzaquen

Medical Director, Benzaquen Clinics, Spain

This case report exposes our personal experience with a protocol developed in our clinic with the aim of achieving a bleaching of the perineal area in combination with a regeneration and rejuvenation of the whole surrounding area, published in the book “Cirugía estética genital masculina y femenina” by Dr. Ramon Vila-Rovira.

The results present our particular protocol, which is a combination of different chemical peels at once, together with penetration of several drugs using microneedling and its particular skin stimulation.

We can see how results are much greater with the conjunction of these two techniques, peeling and electric microdermopunction, unlike the results obtained separately, ie chemical peels or skin needling isolated.



## Symposium 2B: Laser Treatment for Pigmentary Condition (2)

### The Role of Lasers and Light Devices in the Management of Melasma

Chee-leok Goh

Senior Consultant Dermatologist, National Skin Centre, Singapore

Melasma is a common pigmentary disorder among Asians. Melasma aetiology is multifactorial and there is no single curative treatment. The first line treatment of melasma is sun avoidance, sun protection, elimination of aggravating factors together with topical skin whitening agents. Oral tranexemic acid and chemical peels are generally second line treatment. Lasers and EMB devices are generally used as second or third line treatment after failed topical treatment.

Generally lasers and light devices must be used with caution in Asian skin as the risk of post inflammatory hyperpigmentation following treatment is high. Patients should be counselled before laser treatment. Recent report has shown that lasers and light devices can target on several pathogenetic pathways including the fragmentation of melanin, suppression of melanin production and transepidermal extrusion of melanin and modifying cytokines pathways. Laser toning using low fluence and large spot size treatment with the pigment lasers e.g. QS and picosec Nd:YAG laser has been shown to be effective for most patients but side effects including melasma rebound and hypopigmentation is a vexing complication. Ablative lasers and fractional lasers are generally associated with PIH in Asian skin and are not used for the treatment of melasma.

IPL can be used to treat superficial pigmentary lesions. Several studies have reported improvements of melasma with IPL with minimal side effects. But patients often require multiple treatments. Overall, IPL appears to marginally effective in the treatment of melasma. IPL can be considered as an adjunct in the treatment of recalcitrant melasma.

Recently the vascular lasers have been reported to be effective in some melasma but more studies are needed to confirm their role. Recent reports continued to support laser toning to be effective for melasma but the procedure should be used with caution to avoid complications.

Given their cost and the need for multiple treatments, laser and light therapies should be considered third-line treatments in Asian patients who are willing to accept the risks of their complications.



## Symposium 2B: Laser Treatment for Pigmentary Condition (2) Treatment for Mesoderm

### Xiangdong Chen

Dermatologist, Department of Dermatology, No. 9 Hospital of Shanghai Jiaotong University, Mainland China

Cosmetic injection has developed rapidly as the most popular non-surgical aesthetic medical treatment in mainland China. Small procedures have become better known and accepted by more people.

Besides the classical injections such as Botox and hyaluronic acid, meso-therapy is thriving as a major therapy to improve skin texture. Not only Meso gun is becoming popularized as a regular treatment, but also new mesotherapy products like Surface MESO, Placentex and stem cell related products are becoming more widely used. Those treatments can increase hyaluronic acid in skin so that the moisture content is also enhanced; They can also stimulate collagen generation and provide nutrients such as essential amino acids to boost collagen proliferation. Through those treatments, cytokines are released to enhance cellular regeneration so that the skin texture is optimally improved. Previously we depended more on electrooptic technology to improve skin texture. But now we not only can use mesotherapy alone, but also we can combine it with electrooptic technology, which has become a fad. Electrooptic treatments can initiate the skin repair mechanism, which leads to collagen regeneration; While mesotherapy could provide nutrients and various cytokines including a variety of growth factors.

Moreover, some of the new technologies in cosmetic injections have revived the industry.

For instance, PRP combined with hyaluronic acid dermal fillers can drastically prolong the effect of hyaluronic acid. Stem cell related technology is also widely anticipated.





## Symposium 2C: State of the Art on Wound Healing and Scar Prevention

### Combined Treatment for Scar with Laser and Intense Pulsed Light

Ping Chen

Chief Physician of Plastic Surgery, Department of Plastic and Cosmetic Surgery, Foshan First People's Hospital, Mainland China

There are various clinical manifestations of scars, Normally they are: Acute traumatic scar, Pigmented scar, Atrophic scar, Acne scar, Hypertrophic scars or keloids, etc. There are single manifestations and mixed manifestations. Laser has monochromaticity, collimation and coherence. There are different laser modes of long wave and short wave for scar treatment. Selection of parameters for different pulse widths and energy densities cause different clinical treatment goals and responses, intense pulsed light is Wide spectrum, It can effectively treat hypertrophic scar, red scar and atrophic scar or erythema after fractional laser operation. At the same time, it stimulates the regeneration of collagen in scar skin. We found that in the clinical observation of about 350 cases of scar treatment in 2016. The combination of laser and intense pulsed light can play a synergistic role in the treatment of scar.

Keyword: Scar, Laser, Intense pulsed light, Combined treatment



## **Symposium 2C: State of the Art on Wound Healing and Scar Prevention**

### **Lasers and Energy-based Devices for Management of Scars**

#### **Maurice Adatto**

Founder and Medical Director, Skinpulse Dermatology, Laser & Beauty Centres, Switzerland

**Background and Objectives:** Scars can occur for many different reasons, like post inflammatory acne, surgery and trauma. Also they can be either atrophic, hypertrophic or even keloid. Many different lasers and energy-based devices can be used to improve scar aspect (vascular, ablative, fractional, etc.). The purpose of this study is to evaluate the safety and efficacy of the newest devices in this field.

**Study Design and Methods:** To share our 15-year experience in treating various types of scars with various devices.

**Results:** The vast majority of patients get a benefit from being treated with this technique rather than left to heal without laser treatment. Sooner the treatment can be started, better the results will be.

**Conclusions:** Our experience shows very promising results in scar improvement. We are still improving our knowledge in this field, for the future benefit of our patients.



## **Symposium 2C: State of the Art on Wound Healing and Scar Prevention**

### **Fractional Radio Frequency for Wrinkles & Scars — What's New in 2019**

**Michael Gold**

Medical Director, Gold Skin Care Center, USA

Fractional RF technology became a go-to treatment for wrinkles and scars several years ago. Clinical trials showed that with fractional RF pin technology, we could treat these concerns faster than most non-ablative fractional lasers with very good results. These clinical trials will be reviewed. Over the past few years, newer technologies have come to the market with enhanced features allowing faster treatments and with more coverage and potential deeper pin penetration. These devices will be reviewed and the evidence-based medicine supporting their claims will be reviewed. Fractional RF is still a modality that has a major play in our clinics and we will continue to see more advances in them over time.

Disclosures — Syneron-Candela, Venus Concepts, Invasix





## Symposium 2C: State of the Art on Wound Healing and Scar Prevention

### Phototherapeutic Techniques for Rosacea

#### Huilan Yang

Director, Department of Dermatology, General Hospital of Southern Theatre Command of PLA, Mainland China

Rosacea is a common chronic relapsing inflammatory skin condition which mostly affects the central face. Symptoms are initially transient and followed by persistent erythema due to repeated vasodilation, then telangiectasia and skin inflammation in the form of papules, pustules, lymphoedema and fibrosis. Rosacea can be classified into four subtypes: erythematotelangiectatic, papulopustular, phymatous and ocular, it can seriously affect a patient's quality of life, this should prompt clinicians to diagnose it early and start treatment. Tailoring therapies to the type of rosacea is an important part of management. Advise on physical therapies including laser treatment if appropriate. Laser therapy, including vascular lasers or intense pulse light, may help to reduce refractory background erythema and clinically significant telangiectases, but will not reduce the frequency of flushing episodes. Different laser therapies that target the vessels have been used such as 595 nm pulsed dye laser, Nd:YAG and other vascular lasers, or intense pulsed light therapy. These should be administered by an experienced and trained laser therapist and the number of sessions and length of treatment varies for each individual. For severe phymatous rosacea with deformity can chose electrosurgery, and CO<sub>2</sub> laser therapy. Futhermore, A combination of clinical therapies such as laser combined with systemic or topical therapies may offer the best possible outcomes for the patients.



## Symposium 3A: Clinical Aspects and Management of Psoriasis (2) Pediatric Psoriasis-Clinical Feature and Treatment

Hua Wang

Department of Dermatology and Pediatrics, Chongqing Medical University, Mainland China

Psoriasis is a common chronic immune-mediated inflammatory skin disorder and begins in childhood in almost one-third of the cases. Although children present with the same clinical subtypes of psoriasis seen in adults, lesions may differ in distribution and morphology, and their clinical symptoms at presentation may vary from those reported by adult patients. Pediatric psoriasis can have a profound long-term impact on the psychological health of affected children.

As guidelines are lacking and most treatments are not approved for use in children, treatment of pediatric psoriasis remains a challenge. The available evidence for the rational use of available therapeutic agents in combination with the collective clinical experience of knowledgeable practitioners permits some general recommendations. Topical vitamin D analogs (calcipotriene and calcitriol) should be considered the first-line agents for use in the treatment of mild to moderate psoriasis, with the addition of topical corticosteroids as needed. The use of topical calcineurin inhibitors is prudent when long-term continuous therapy is required, and these agents are also useful for the treatment of facial, genital, and inverse psoriasis. NB-UVB phototherapy should be considered for use in older children and adolescents with more diffuse involvement not responding to topical therapies. Methotrexate is the treatment of choice when a systemic therapy is indicated for plaque psoriasis, although systemic retinoids, TNF inhibitors, and cyclosporine may be considered for children with pustular or erythrodermic psoriasis and for those who have not responded to more conservative therapy. There is a great need for the systematic evaluation of promising therapeutic agents in the treatment of psoriasis in children and adolescents.



## **Symposium 3B: Fractional Technology**

# Fractional Picosecond Lasers – Is This the Next Craze for Picosecond Lasers?

Michael Gold

Medical Director, Gold Skin Care Center, USA

Picosecond lasers have become more and more popular as more of these devices are being developed and used by aesthetic clinicians. Originally designed for tattoos, then pigment concerns, we have now begun to use them for rejuvenation and for the treatment of scars with fractional or microarray hand pieces. Several clinical trials have recently been completed which show the benefit of these devices in rejuvenation and in treating scars. These pivotal clinical trials will be reviewed and how they can fit into one's cosmetic practice. Fractional picosecond lasers are making a difference – faster treatments with meaningful results – this will be reviewed in this presentation.

Disclosures – Syneron-Candela, WonTech



## Symposium 3B: Fractional Technology

# Combination Approach for Acne and Acne Scar Management by Using Non-ablative Fractional 1,565nm and Blood-pricking Method

Lin Gao

Associate Professor, Department of Dermatology, Xijing Hospital, The Fourth Military Medical University, Mainland China

**Introduction:** Isotretinoin is one of the first line medications for moderate-to-severe acne vulgaris (AV) but its side effect is a big concern for Asian patients.

**Objective:** To evaluate the efficacy and safety of the 1,565 nm non-ablative fractional laser (NAFL) in combination with isotretinoin and traditional Chinese pricking blood therapy (TCPBT) for treatment of AV.

**Materials and Methods:** A retrospective analysis of 60 patients with moderate-to-severe AV who were treated at our hospital from 2015 to 2017 was performed. Four treatments were evaluated (n=15 subjects per group): 1,565nm NAFL alone, oral isotretinoin alone, double therapy (1,565nm NAFL+isotretinoin) and triple therapy (1,565nm NAFL+isotretinoin+TCPBT).

**Results:** The improvement rates of inflammatory papules and boxcar atrophic scars ranged from 60.0% to 93.3% in four groups, among which the triple therapy showed the highest improvement rates. The patients receiving oral isotretinoin alone, double or triple therapies showed a significant decrease in volume of boxcar atrophic scars as compared to baseline. The 1,565nm NAFL only, double or triple therapy significantly decreased index of hemoglobin as compared to baseline. All four treatments significantly decreased indexes of pore sizes and wrinkles on AV lesions as compared to baseline. Furthermore, the triple therapy significantly decreased indexes of hemoglobin and red areas as compared to the other three treatments.

**Conclusions:** This study showed that the triple therapy with a combination of isotretinoin, 1,565nm NAFL and TCPBT is more effective for treatment of AV as compared to isotretinoin, 1,565nm NAFL alone or two therapies combined. It is recommended for further clinical evaluations.



## **Symposium 3B: Fractional Technology**

# Nonsurgical Skin Tightening Using Combination Radiofrequency with Microneedling Fractional Radio Frequency (RF)

Michael Somenek

Facial Plastic Surgeon, Somenek MD Advanced Facial Plastic Surgery, USA

Various minimally invasive approaches exist for treating aging skin laxity. However, many of these procedures alone may not lead to satisfactory results. Combination treatments to treat the lower face and neck have proven to be superior to any single modality nonsurgical treatment. Radiofrequency has remained an effective procedure for the treatment of skin laxity using heating thresholds that effectively promote collagen remodeling. Using bipolar radiofrequency(RF) assisted lipolysis followed by a microneedling fractional RF device is a unique combination treatment which addresses multiple layers of the aging neck. This treatment protocol has demonstrated optimal results for not only laxity but also skin texture. A review of this technology will be discussed as well as the treatment protocol used.



## Symposium 4A: Clinical Aspects and Management of Eczema (1) Dealing with Childhood Eczema in Hong Kong

Ellis Hon

Professor, Department of Paediatrics, The Chinese University of Hong Kong, Prince of Wales Hospital, Hong Kong, China

Atopic eczema (AE), one of the most common chronic illnesses of childhood, is encountered routinely by all healthcare providers to children. More than 50% of patients will go on to develop asthma and allergic rhinitis. Despite advances claimed in many aspects of AE management, there is still no definite life-long “cure 断尾” for the disease.

Treatment of AE is primarily topical and efficacious for the majority of patients. However, AE is often complicated and difficult to manage in the city of Hong Kong where fallacies (the mind devils 心魔) abound. Effective therapy is impeded by mind devils concerning: (1) skin care versus allergy treatment; (2) ambiguity about optimal bathing and moisturizing, (3) hesitation about the use of adequate topical corticosteroid and immunomodulant therapies, (4) food avoidance and dietary supplementation, and (5) complementary and alternative therapies.

There is no substitute for a good rapport with the patients and their families for optimal effective management to be achieved. The first step in patient care is to accurately assess the patient and the family to evaluate possible concerns, anxiety and phobias that could impede therapeutic efficacy.

Education about the disease should be individualized. Conflicting recommendations of topical steroid use has a detrimental effect on patient outcomes. It is believed that the only chance of success in overcoming the many mind devils is an Integrative Medicine approach with combined Western and Chinese medicine disciplines to this nuisance disease.





## Symposium 4A: Clinical Aspects and Management of Eczema (1)

### Differential Diagnosis of Common Rashes in Children

Lin Ma

Director, Department of Dermatology, Beijing Children's Hospital, Capital Medical University, Mainland China

Skin rash with febrile is a common clinical manifestation of pediatric dermatoses and identifying whether it is caused by infection or drug is one of the difficulties among dermatologists or pediatricians. Therefore, this lecture intends to analyze how to differentiate the common febrile skin rash in children, and to show several special cases in pediatric dermatology.

This lecture mainly involves three aspects:

- a. the differential diagnosis of measles-like rash: Measles-like rash is the most common skin rash in children. Infectious rash such as measles, rubella, exanthema subitum, enterovirus rash, infectious mononucleosis and Kawasaki disease are common. At the same time, eruptive drug eruptions are not uncommon because of the use of antibiotics. We will introduce the differential diagnosis of measles-like rashes from the aspects of history, manifestations, the relationship between rash and fever, rash morphology, mucosal involvement, lymph node involvement, liver and spleen involvement and auxiliary examination.
- b. the differential diagnosis of erythema multiforme-like rash: include erythema multiforme, Stevens-Johnson Syndrome (SJS), toxic epidermal necrolysis (TEN), urticarial vasculitis, Kawasaki disease, lupus erythematosus, pemphigoid, necrotizing lymphadenitis and others. According to the characteristics of rash, erythema multiforme can be divided into mild and severe types, mostly caused by mycoplasma and herpes simplex virus (HSV). SJS, SJS/TEN overlap and TEN are mainly severe drug eruptions. According to the affected area of skin lesions, systemic skin involvement < 10% is SJS, 10% - 30% is SJS/TEN, > 30% is TEN.
- c. special cases.



## Symposium 4A: Clinical Aspects and Management of Eczema (1) Talking Atopy and Speaking Dermatitis, You and I Consensus

Juan Tao

Chairman, Department of Dermatology, Union Hospital, Tongji Medical College, Hiazhong University of Science and Technology, Mainland China

Atopic dermatitis (AD) is a chronically recurrent, pruritic, inflammatory skin disease. It's an extremely heterogenous disease with a wide spectrum of clinical features ranging from minimal flexural eczema to erythroderma. In addition to eczematous lesions, many AD patients have allergic comorbidities and family history of allergic diseases which include allergic rhinitis, allergic asthma, and allergic conjunctivitis. Serological biological indicators such as serum IgE levels and peripheral blood eosinophils are related to severity and activity of AD. Thus history and serological biological indicators can help dermatologists diagnose AD but it's not suggested to rely too much on these. In consequence of the heterogeneity of AD and its lackness of biological indicators, dermatologists are facing big challenge that how to diagnose AD correctly using diagnostic criteria. Topical treatment is the most effective way of controlling mild-to-moderate AD, which includes topical steroids and antibiotics. Though topical steroids are first-line drugs in domestic and international guidelines of AD, patients and their family members with steroids phobia account for a large proportion in the world. There is an urgent need for physicians to ensure that the patients are educated and confident in using medication as prescribed to gain disease control. Up to 90% of AD patients, even the normal looking skin is extensively colonized by *S. aureus* which is a major trigger of AD. Although topical antibiotics have antibacterial effect, it can lead to drug resistance. It's worth thinking for dermatologists that how to use topical antibiotics properly and whether there is a better approach to treat *S. aureus*-mediated flares of AD in an era of increasing antimicrobial resistance.



## **Symposium 4A: Clinical Aspects and Management of Eczema (1)** **Application of Ultraviolet Phototherapy in the Treatment of Eczema and Dermatitis**

Suchun Hou

Associate Consultant, Department of Dermatology, The University of Hong Kong-Shenzhen Hospital,  
Mainland China

Atopic dermatitis (AD) is a chronic inflammatory, relapsing disease of the skin, characterized by intense pruritus, maculopapular or vesicular erythematous lesions and scaling, sometimes accompanied by oozing, crusts and/or lichenification that has a negative impact on patients' quality of life. Sunlight and its wavebands profoundly affect the cellular physiology and dynamics of the skin. Exposure to ultraviolet radiation leads in the short term to sunburn and tanning and in the long term to photoaging and carcinogenesis. However, ultraviolet radiation exposure can also benefit patients with inflammatory pathways or the overgrowth of cells with aberrant phenotype skin diseases such as psoriasis, atopic dermatitis, and cutaneous T-cell lymphoma. So, phototherapy is an efficient treatment for these cutaneous diseases. The lecture will present the molecular mechanism and protocols of phototherapy such as UVB, UVA-1, and PUVA in Atopic Dermatitis or eczema. The significant antipruritic effect, the usually low rate of well-known side effects, as well as the possibility to treat adults of any age, pregnant and lactating women, and under certain circumstances also children, make phototherapy a valuable treatment option for pruritus of Atopic Dermatitis or eczema.





## **Symposium 4B: Combination Therapy for Rejuvenation** **The Broad Spectrum of Combined Procedures** **in Dermatology and Antiaging, or Advanced** **Procedures in Dermatology and Laser Medicine**

Dirk-harald Gröne

Director, Laser and Dermatologic Surgery Clinic, Germany

The distinguishing feature of dermatology is to have a large portfolio on therapeutic categories. Very often combinations are superior to monotherapy e.g. oraycea and solantra in rosacea, ablative lasers and field directed ALA PDT in AK's, 5FU and triamcinolon injection in hypertrophic scars, surgery and modern Biologics in acne inversa just to name a few. Patients with autoimmune diseases and bothersome symptoms on the skin are good candidates for more sophisticated strategies to stop disease activity, remove non healing tissue and reset the disease. This procedures often combine elements from cosmetics, pharmacology and surgery compiled to one Paramount treatment or performed sequentially. In this talk I will describe some typical cases where synergies arised from a combination of surgical, medical and cosmetic elements in tissue engineering - trinity procedures, as I may call them. Those synergies can be used in indications as vitiligo, lichen sclerosus, acne inversa and chronic radiodermatitis, just to name a few. Data on pigmentcell transfer will be presented. Clever combinations with medical devices and advanced HUDs adjuvant to surgery or for maintenance will be displayed and discussed.



## **Symposium 4B: Combination Therapy for Rejuvenation** **5 Years of Aesthetic Practice with a Thermo-Mechanical Fractional Device**

Nathalie Fournier

Aesthetic Dermatologist, Paris-Sud University and Biopark Cancer Campus Villejuif, France

**Introduction:** Clinical studies published with a new Thermo Mechanical device has been showing that ablative, non ablative treatments and transdermal drug delivery of hydrophilic molecules can be performed. All these modalities can be combined for aesthetic skin procedures in daily practice.

**Material and Methods:** A retrospective study on five years. According to severity of ageing, treatment settings were adapted, 3 to 6 sessions at interval 3 to 4 weeks, of transdermal drug delivery treatments and ablative treatments were applied. For transdermal drug delivery, after pretreatment with TM, sterile injectable mesotherapy compound was applied manually without massaging. patient satisfaction was noted.

**Results:** Local sides effects intensity were related to the intensity of procedure settings, very mild for transdermal drug delivery, 1 to 5 days for ablative treatments. Patients satisfaction was high. Improvement was related to the number of sessions.

**Analysis and Discussion:** Other technics for ablative resurfacing and transdermal drug delivery has been developed as microneedling, radiofrequency, electroporation, fraxel CO2 lasers. advantages and issues will be compared with our study's results. Ablative devices comparison will be discussed.

**Conclusion:** TM technology is a new effective way to perform antiageing treatment in daily practice.



## **Symposium 4B: Combination Therapy for Rejuvenation** **Comprehensive Management of Facial Rejuvenation**

Maggie Wang

Medical Consultant, Allergan Medical, Mainland China

What we have to face is that aging is irresistible and every face is imperfect. But nowadays the differences on the culture and aesthetic standad between east and west are mixed. And lots of cosmetic patients and physicians have just one-side idea about beauty and youth. In fact, what we persue should be individual aesthetic standard and integral and progressive medical treatments.

This speech is going to introduce the summary of mulriple facial rejuvenation treatments such as mesoherapy, Botulinum toxin and RF. The key point is how to apply the fillers on facial lifting and what is emotional beauty.



## Plenary Lecture 3

# Superficial Radiation Therapy of Keloids

David Goldberg

Director, UMDNJ-New Jersey Medical School, USA

Superficial Radiation Therapy (SRT) is now recognized as the ideal way to treat keloids. With success rates of all other therapies leading to cure rates of less than 50%, this technique has cure rates of 90-100%. This talk will review the relevant literature, the pathogenesis of keloids, and our approach to optimize treatment results.





## Symposium 5A: Clinical Aspects and Management of Eczema (2)

### Recent advances in the Treatment of Atopic Dermatitis

Thomas Luger

Chairman, Department of Dermatology, University of Münster, Germany

Atopic dermatitis (AD) is a multigenic chronic inflammatory disease characterized by eczema and pruritus. Recent progress has been achieved in our understanding about the complex mechanisms underlying the pathophysiology of AD involving dysfunction of the immune-system, an impaired skin barrier function and environmental factors such as the microbiome. Accordingly, in addition to emollients and topical corticosteroids novel topical and systemic therapies have been established. Recent topical developments include topical calcineurin inhibitors such as Pimecrolimus and Tacrolimus which are considered to be safe and highly effective in particular when they are used in early stages of the disease in a proactive approach. Very recently Apremilast a topical phosphodiesterase 4 inhibitor (PDE4) has been introduced for the treatment of mild AD. Dupilumab an antibody targeting interleukin 4 and 13 recently has been approved for the treatment of moderate to severe AD being highly effective in improving pruritus and eczema with a rapid onset of action and a favourable safety profile. Future developments include antibodies targeting IL-13 (Tralokinumab, Lebrikizumab), IL-31R (Nemolizumab), Jak inhibitors, PDE4 inhibitors, H4R inhibitors, NK1R inhibitors a.o. These novel therapeutic strategies not only will help to improve AD but also will lead to the identification of key-targets which ultimately will allow for the development of newer, safer and more effective compounds.



## Symposium 5A: Clinical Aspects and Management of Eczema (2)

### Topical Therapy in Atopic Eczema

#### Christina Cheung

Associate Consultant, Department of Medicine and Therapeutics, Prince of Wales Hospital, Hong Kong, China

Atopic eczema is a common, chronic relapsing inflammatory dermatological disorder characterized by dry skin and pruritic eczematous lesions. It occurs in all age groups and carries a significant impact on the quality of life of both the patient and their family. Defect in skin barrier, dysfunction in T-helper 2 (Th2) immune response, and dysbiosis of skin microbiota all play an important role in the pathogenesis of the disease. Despite the development of new small molecules and biologics therapy in atopic eczema, topical agents remain the mainstay of treatment for patients with mild disease, and they are often used in conjunction with systemic agents for moderate to severe cases.

In this presentation, the efficacy of various topical agents including moisturizers, calcineurin inhibitors, phosphodiesterase 4 (PDE4) inhibitors, and novel topical agents in the pipeline such as Janus kinase (JAK) inhibitors, and Aryl hydrocarbon receptor (AhR) agonist will be discussed.



## Symposium 5B: Vaginal Rejuvenation

# Update on Rejuvenation of Vaginal Tissue and Developing Proposals for Comprehensive Cases

Lin Gao

Associate Professor, Department of Dermatology, Xijing Hospital, The Fourth Military Medical University, Mainland China

**Aim:** To evaluate the clinical efficacy and safety of fractional carbon dioxide (CO<sub>2</sub>) laser for vulvovaginal rejuvenation.

**Method:** A total of 16 postpartum females with a desire for vulvovaginal rejuvenation visiting our laser center during 2017-2018 was enrolled in this study. Subjects were randomly assigned into vaginal canal only treatment group or vaginal canal plus vulvar area treatment group. The subjects were treated three times by CO<sub>2</sub> lasers with one month interval. The clinical efficacy and safety were evaluated by pelvic examination, FSFI, VHIS and urinary incontinence scores at the baseline and follow-ups at 1, 2 and 6 months after treatment.

**Results:** The subjects in both treatment groups showed statistically improvements in pelvic examination results, FSFI, VHIS and urinary incontinence scores after treatments as compared to baseline ( $p < 0.05$ ). The subjects in the vaginal canal plus vulvar area treatment group showed a significant improvement in sexual sensitivity after one time and three times treatments as compared to the subjects in the vaginal canal treatment only group ( $p < 0.05$ ). The subjects didn't show any obvious side effects including infection, bleeding and pain, etc.

**Conclusions:** Fractional CO<sub>2</sub> laser treatment can ameliorate vaginal rejuvenation and improve symptoms associated with urinary incontinence. In particular, vaginal canal plus vulvar area treatment can improve sexual function, especially sexual sensitivity. This treatment is quick, safe and with very minimal discomfort.



## Symposium 5B: Vaginal Rejuvenation

# Labia Minora Reduction: Surgical Approaches

## Sebastian Pop

Dermatologist, Private Practice, Romania

After carefully evaluating the indication for 'Labia Minora Reduction' and choosing the optimal, individually tailored cutting technique, surgery can be performed in the office, under local anaesthesia with or without sedation.

Choosing an adequate closure technique is almost as important as choosing the cutting technique, since the postoperative appearance of a beautifully reduced labia minora, can be compromised if an incorrect suture technique or material is used. Running, absorbable sutures can cause wound healing problems, while using solely non-absorbable materials can lead to scarring or dehiscence.

Therefore, we recommend performing a layered suture technique, with absorbable, buried sutures and minimal tension to the wound edges. Together with running, non-absorbable sutures - removable after 3 to 4 days for an optimal reapproximation of the labial margins - the outcome will definitely meet our and our patients' aesthetic expectations.





## Symposium 5B: Vaginal Rejuvenation

### Interaction Points in Female Intimate Treatments

Dirk-harald Gröne

Director, Laser and Dermatologic Surgery Clinic, Germany

A strong upward trend of intimate surgery has developed on recent years. In most cases, not only aesthetic reasons trigger a visit, but also the great suffering of the patients by incontinence, vaginal relaxation or vulvovaginal atrophy, the most bothersome condition among peri- and postmenopausal woman. Those genitourinary symptoms of menopause (GFM) result from decreased estrogen Levels and come along with the involution of subcutaneous fat, sparse pubic hair and other signs of ageing. Estrogens code for more than 2000 genes, thus estrogen based supplementation is somehow effective. Some females are reluctant to be supplemented due to health concerns or gestrichen medication. One of those patients, a 55 – year old female breast cancer survivor was refered to my clinic. Under Tamoxifen she had developed clinical signs of VVA and lichen sclerosus with substantial discomfort (intractable itching, soreness, dyspareunia) and morbidity (introital narrowing, atrophy labia minora) apart from unwanted sweating and sensitive skin in the radiated skin. Diminished volume and aged look of genitalia were also of some concern.

We put her on medication (Vagantin) against the unwanted sweating, treated her vaginal canal with minimal ablative lasers as well as introitus and vulva, addressed the teleangiectasia and chronic radiodermatitis of the décolletage with subsurfacing and dye lasers. Vaginal health and subject assessment of vaginal symptoms (VHI) improved as well as the DLQI with successive laser treatments. General Hyperhidrosis decreased within one week and focal sweating of the armpits could be easily addressed with Botox injections. Outer labia were recontoured with Lipofilling. A total of 40 cc of autologous fat mixed with PRP reestablished the missing fullness and tone immediately and the augmented volume was well maintained over weeks. Clinical signs of inflammation and the itch disappeared under UV – Photochemotherapy rapidly. Remission continued (12 month ongoing). The Patient is currently under maintenance with CIS/Tacrolimus as a local therapy and refered back to his gynecologist. Improvement in sexual gratification was reported.

“Too many cooks spoil the porridge“ is a saying for too many confronting opinion on a simple but delicate issue. This does not held truth in more intimate symptoms which cannot be addressed by the urogynecologist alone. In my opinion there is a high medical need for more interactive pathways and more interdisciplinary coworking between plastic and pelvic surgeons, urogynecologists and other medical groups. Clever interaction hold the potential to enhance the outcomes of intimacy, performance problems and self esteem. Dermatologists are trained in minimal invasive therapies and experienced in both: surgery and pharmacology, and often provide the laser infrastructure and cosmetic devices to address medical, surgical and cosmetic relevant issues in a sophisticated holistic procedure.



## Plenary Lecture 5

# Treatment of Psoriasis in China: An Overview

## Gang Wang

Chairman, Department of Dermatology, Xijing Hospital, The Fourth Military Medical University, Mainland China

Psoriasis is a common, chronic, inflammatory skin disease affecting about 0.5% of Chinese population. That makes 7 million Chinese patients living with psoriasis. Therapeutic methods in China include topical, systemic, physical (photo) and other therapies. Biologics (e.g. Etanercept, Influximab and Adalimumab) are increasingly used in China. Although remedies are largely the same as in other countries, differences still exist. The main feature is the use of Traditional Chinese Medicine (TCM), which diagnosing and treating psoriasis based on syndrome differentiation. TCM topical therapy also plays a positive role in the treatment. Patient's knowledge about the disease is lower in China. For psoriasis requires long-term treatment and continuous efforts made by both doctors and patients, it is crucial to enhance patient education and continuing medical education for doctors as well. Therefore, implementing standard guideline to psoriatic treatment is a way to prevent patient harm caused by charlatans and should be taken as the top priority in the management of psoriasis in China.



## Symposium 6A: Biologic for Psoriasis

# Research of Clinical and DNA Methylation in Patients with Generalized Pustular Psoriasis

Hongzhong Jin

Director, Department of Dermatology, Peking Union Medical College Hospital, Mainland China

Generalized pustular psoriasis (GPP) is a systemic inflammatory skin disease which may be life-threatening in severe case. With the carrying out of GPP genetic background research at present, IL36RN and CARD14 genes have been gradually recognized to be the susceptibility genes of GPP. However, some clinical phenomena remain to be further explained.

Objective: To investigate the genome wide DNA methylation state of peripheral blood mononuclear cells in GPP patients and normal subjects, with an aim to probe into the role of DNA methylation in the pathogenesis of GPP as well as its underlying mechanism.

Methods: Genome DNA was extracted from peripheral blood mononuclear cells of 3 GPP patients and 3 normal subjects, and DNA methylation sequencing was carried out using Illumina Human Methylation 450K BeadChip chip.

Results: Genome wide methylation pattern with enough sequencing depth and resolution was obtained using Illumina Human Methylation 450K BeadChip chip sequencing. 6311 differential methylation regions showed abnormal changes of methylation. Compared with peripheral blood mononuclear cells from normal subjects, genome wide DNA in peripheral blood mononuclear cells from patients with GPP displayed abnormal methylation state, among which, 390 sites had elevated methylation levels, while 5921 sites had reduced methylation levels. PCA analysis revealed closer distribution in two gestation-induced GPP patients. GO analysis suggested that genotypes with distinctly abnormal methylation changes included immune cell migration, inflammatory response and signal transduction. through altering methylation level in the body.



## Symposium 6A: Biologic for Psoriasis

# Management of Chronic Psoriasis from Intestinal Flora

## Zhu Shen

Director, Institute of Dermatology and Venereology, Sichuan Academy of Medical Sciences and Sichuan Provincial People's Hospital, Mainland China

Human intestinal symbiotic bacteria are closely related to the digestive, nutritional, metabolic and immune functions of human hosts, which is equivalent to an important "organ" of human symbiosis. Studies have shown that intestinal flora disorders are closely related to the occurrence and/or development of local and systemic chronic low-grade inflammation, such as inflammatory bowel disease of the intestine itself, obesity outside the intestinal system, insulin resistance, metabolic syndrome, asthma, Alzheimer's, autoimmune arthritis and chronic fatigue syndrome.

Investigations have shown that the occurrence of chronic diseases is closely related to the digestive system. Our observations and studies on psoriasis in our work also support this point. For example, the probability of gastrointestinal discomfort in psoriasis patients is higher than that in the general population, the probability of psoriasis patients complicated with inflammatory bowel disease is higher than that in the general population, and the probability of psoriasis complicated with inflammatory bowel disease is higher than that of the general population, psoriasis and inflammatory bowel disease. Shared susceptibility gene loci and some protective beneficial bacteria (such as *Clostridium praziquante*) were reduced in psoriasis and inflammatory bowel disease.

Our aim is to analyze the changes of intestinal flora diversity and composition in patients with psoriasis, as well as the regulation and possible intervention of immune cells (regulatory T cells, dendritic cells, neutrophils, etc.). By clarifying the relationship between intestinal flora disorders, chronic systemic inflammation and the development of psoriasis, the feasibility of regulating the chronic course of psoriasis from the perspective of diet is prospected.





## Symposium 6B: Skin Care & Drug Delivery

### Drug Delivery

#### Sidharth Sonthalia

Visiting Professor of Dermatology, Behl's Skin Institute (New Delhi), University of Mauritius, India

Introduction: Topical administration remains the favored route for cutaneous delivery of therapeutic agents. The specific challenge of designing any percutaneous delivery system is to achieve an optimal concentration of a certain drug at its site of action for an appropriate duration. Additionally, factors such as maintenance of the potency of the active drug ex-vivo at ambient environmental conditions are equally important.

Area Covered: In this lecture I shall review the basic principles of topical percutaneous drug delivery, the obstacles being faced by the innovators, the recent innovations and their evidence-based status, and future strategies.

Synopsis: Unlike oral drugs, drug application to the topical surfaces evades the hepatic first pass metabolism, gastric pH variations and fluctuations in plasma levels. Additionally, topicals have advantages such as better patient compliance and acceptance, non-invasiveness, provision of higher local, i.e. intracutaneous drug bioavailability, minimum-to-nil systemic toxicity, and safety in special situations such as pregnancy, lactation, and compromised renal/hepatic function.



## Symposium 6B: Skin Care & Drug Delivery

# Update on Transdermal Drug Delivery with Energy-based Device

Nathalie Fournier

Aesthetic Dermatologist, Paris-Sud University and Biopark Cancer Campus Villejuif, France

Introduction: Injectable or topical drugs may reach the dermis when a skin pretreatment is performed by laser or Energy Based Devices.

Material and Methods: Literature review has been showing that many EBD has been tested for TDD for hydrophilic compound.

Technics for transdermal drug delivery has been developed as microneedling, radiofrequency, electroporation, fraxel CO<sub>2</sub> lasers. Advantages and Issues will be compared. Mechanisms of TDD according to each device type will be explained, and particularly for a new thermo mechanical device, recently evaluated for TDD.

Conclusion: Many EBD are claiming to allow TDD. TMAb technology is a new effective way to perform efficient Transdermal Drug Delivery for hydrophilic molecule.



## Symposium 6B: Skin Care & Drug Delivery

# The Effect of Daily Aspirin Use on Topical Minoxidil Treatment for Pattern Hair Loss

Andy Goren

Professor, Department of Dermatology, University of Rome, Italy

Topical minoxidil is the only US FDA topical drug for the treatment of pattern hair loss. Millions of patients world-wide use minoxidil daily. Minoxidil is a pro-drug converted into its active form, minoxidil sulfate, by the sulfotransferase enzymes in the outer root sheath of hair follicles. In human liver, the phase II metabolism of xenobiotics by sulfotransferase is significantly inhibited by salicylic acid. Due to the widespread practice of daily aspirin use as a prophylactic treatment for heart conditions, it is important to determine if prolonged aspirin use affects sulfotransferase activity in hair follicles. In this study, we utilized the sulfotransferase activity assay previously reported by Goren et. al to determine sulfotransferase enzyme activity in hair follicles before and after 4 weeks of low dosage aspirin treatment. To the best of our knowledge, this is the first study to explore the relationship between long term aspirin use and its effect on topical minoxidil treatment.



## Symposium 7A: Biologic for Eczema

# Various Clinical Manifestations of Atopic Dermatitis

## Fei Hao

Dermatologist, Southwest Hospital of Army Medical University, Mainland China

Atopic dermatitis (AD) is the most common chronic inflammatory skin disease. During the 19th century, the description about AD has been given multiple different names based on the clinical phenotypes such as “Besnier’s prurigo” and “disseminated neurodermatitis” etc.. These various definitions indicate the different understandings for the term “atopic”. If the term “atopic” is considered as the presence of allergen-specific IgE antibodies according to WAO suggestion, about 20%-30% of patients with the clinical phenotype of AD have no evidence of IgE sensitization. In fact, IgE-associated/allergic AD and non-IgE-associated/non-allergic dermatitis have substantial overlap and cannot be divided into two subtypes. There are several diversiform manifestations of AD, including different disease course, variants of involved regions, pleomorphic skin lesions and so on. In addition, the following unique features, such as nipple eczema, cheilitis, hand eczema etc.. are an indicative manifestation. Many established criteria cannot fully meet the complex diversities.





## Symposium 7A: Biologic for Eczema

# Dupilumab for Eczema: The Hong Kong Experience

Christina Wong

Associate Consultant, Department of Dermatology, Queen Mary Hospital, Hong Kong, China

Biologics has been used to treat a variety of inflammatory skin conditions including Psoriasis. Dupilumab, a fully human monoclonal antibody which blocks the common alpha-chain of receptors for interleukin-4 and interleukin-13, has been approved in US and European countries to treat adult patients with moderate-to-severe Atopic dermatitis (AD) who failed or intolerable to topical /systemic treatment. Both the efficacy and safety profile of dupilumab proved favorable in recent randomized controlled trials<sup>1,2</sup>. Our local experience in AD patients treated with dupilumab will be shared and discussed.

### References:

1. Thaçi D, Simpson EL, et al. Efficacy and safety of dupilumab in adults with moderate-to-severe atopic dermatitis inadequately controlled by topical treatments: a randomised, placebo-controlled, dose-ranging phase 2b trial. *Lancet*. 2016 Jan 2;387(10013):40-52.
2. Blauvelt A , Simpson EL , et al. Long-term management of moderate-to-severe atopic dermatitis with dupilumab and concomitant topical corticosteroids (LIBERTY AD CHRONOS): a 1-year, randomised, double-blinded, placebo-controlled, phase 3 trial. *Lancet*. 2017 Jun 10;389(10086):2287-2303.



## Symposium 7B: Treatment of Acne and Rosacea

# Combination Approach for Acne and Acne Scar Management

### Ganesh Pai

Dermatologist, DERMA-CARE, Skin and Cosmetology Centre, India

When it comes to acne scars, protocols differ between dermatologists. Depressed and fibrotic scars would need subcision followed by fractional CO<sub>2</sub> laser to achieve good results. However, patients with dark skin are susceptible to PIH and therefore the density needs to be minimal.

Acne scar vary from boxcar, atrophic, icepick and rolling scars. Greater density and energy are applied to thick contracted and fibrotic scars while minimal density on soft and superficial scars. Thus there is improvement in acne scar.

Acne scars can be divided into atrophic and hypertrophic acne scars. Atrophic scars are the most common type which are again divided into icepick, rolling and boxscars.

Fractional ablative resurfacing lasers are used in the treatment of acne scars. Fractional photothermolysis ablates tissue and stimulates collagen remodeling and neocollagenesis leaving surrounding rings of viable tissue, sparing the noninvolved, intertreatment epidermal and dermal regions. Fractional carbon dioxide laser is most commonly used for the treatment of acne scars. Boxcar scars does not show much improvement after the laser.

Acne scars are treated with fractional carbon dioxide laser. The boxscar are again treated individually with erbium laser. The base of the scar is filled with sodium hyaluronate and then four passes of 800mj of erbium laser are given. The scars when reviewed after a gap of four weeks, show significant improvement in the depth of the scar as well as the texture of the scars. The shoulder of the scars also show significant improvement.



## Symposium 7B: Treatment of Acne and Rosacea

### Rosacea and Laser – A Practical Approach

Victor Gabriel Clatici

Dermatologist, Skin Laser Clinic, Romania

Rosacea represent a chronic relapsing inflammatory skin disease, with an increasing prevalence (generally underdiagnosed and often overlooked), and multiple risk factors (genetics, age, phototype, alcohol consumption and ultraviolet exposure). The lesions in rosacea are erythema, papules, telangiectasia, edema, pustules, or a combination, with a specific localization (central face - cheeks, forehead, chin, and nose) and associated with symptoms (facial flushing, stinging, pain, burning sensations).

The etiopathogeny of rosacea is unknown, but age, phototype, gender, alcohol consumption, genetics, ultraviolet exposure and infections (Demodex with Bacillus oleronius, Staphylococcus epidermidis, Helicobacter pylori) are strong involved in the development of the disease. The main triggers of the disease are heat, alcohol, sunlight, hot beverages, stress, medications and some foods.

Rosacea is frequently associated with systemic diseases (neurologic and cardiovascular disorders, diabetes and metabolic disorders, autoimmune diseases and digestive disorders) and have an important negative impact on quality of life (anxiety, depression, embarrassment, frustration, social and professional isolation etc.).

The ROSacea International Expert (ROSIE) consensus highlighted that current treatment of rosacea are symptomatic, and signs and symptoms represent the base of therapeutic decision.

The triad of rosacea care are represented by education (about triggers factors, diet, proper use of photoprotection methods), skin care, and treatment (local treatment and general treatment, laser treatment).

Laser interventions represent a recently new possibility of treatment, and have a lot of effects, like ablation of vascular anomalies (destroy small vessels and reducing the symptoms), reorganization and remodeling of dystrophic dermal connective tissue and interruption of the release of inflammatory mediators. The new “5W” paradigm of laser treatment in rosacea is represented by WHO is the doctor, WHY we choose laser, WHEN we apply the laser treatment, WHAT laser we use, WITH what effects for patient. In conclusion, rosacea need a holistic approach with a strong collaboration between doctor and patient, and a comprehensive care to patients with rosacea.



## Symposium 8A: Update on the Treatment of Psoriasis and Eczema Current Issues in Contact Dermatitis – An Asian Perspective

### Chee-leok Goh

Senior Consultant Dermatologist, National Skin Centre, Singapore

Contact and occupational dermatoses remain the commonest work related disease in many countries around the world. Occupational skin disease (OSD) poses a high social, economic and personal burden. Many work-related skin diseases in many countries is underreported. Progress in understanding the underreporting of OCD and the underlying reasons continues. The problem that needs to be resolved in contact and occupational skin disease that needs to be address globally are:

- (a) Public awareness of contact dermatitis and occupational skin disease so that medical investigations and treatment can be instituted early and preventive measures introduced. The impact of OCD on quality of life and mental health conditions, employment and financial aspects is increasingly documented.
- (b) Improvement in the diagnostic skills of physician in areas of contact dermatitis and occupational dermatoses. Identifying the etiological factors is of paramount importance as avoiding or minimizing these factors play an important role in treatment. Many details of the patient's perspective are often overlooked, but need to be considered. Failure to do so may mean that well-meant interventions will not reach the addressed audience successfully.
- (c) Early prevention of occupational skin diseases is very important to avoid severe chronic eczema. The introduction of legislation on chromate contents in cement and nickel leaching in jewellery in the EU has seen significant reduction in the prevalence of chromate and nickel allergy in the EU, but not so in many developed and developing countries.
- (d) A regulatory system where occupational skin disease is reportable so that affected individual can be compensated and rehabilitated accordingly.
- (e) A system to monitor environmental contactants that has the potential to cause contact dermatitis. Patch test database surveillance systems have documented reductions in the occurrence of sensitivity to some allergens such as chromium wherein regulatory efforts have reduced workplace exposures. These surveillance data have also documented increases in sensitivity to several allergens in particular trades, serving as an effective system to identify new exposure situations or new allergens

Recent reports of epidemics of contact allergy to preservatives and fragrances, in particular recent increasing prevalence of MCI/MI contact allergy in skin care products and industrial sources is a cause for concern that may require more proactive actions.

Research and development in areas of contact dermatitis and occupational skin disease must continue. The role of genetics and control of environmental contactants, the potential of allergenicity and epidemiology of contactants, of new chemicals introduced into personal care products and industry. Understanding of the underlying genetic and environmental agents contributing to OCD is increasing.





## Symposium 8A: Update on the Treatment of Psoriasis and Eczema Applications of Conventional Systemic Medicines in Psoriasis

Qing Sun

Chairman, Department of Dermatology, Qilu Hospital, Shandong University, Mainland China

Current therapies for psoriasis include topical agents, phototherapy, conventional systemic agents and biologics. Methotrexate, cyclosporine and acitretin are the first-line conventional systemic agents, they are commonly used in moderate to severe plaque psoriasis, pustular psoriasis, erythrodermic psoriasis and psoriatic arthritis, with an exception of acitretin in psoriatic arthritis. All the three drugs mentioned above can be used in combination with topical agents. Combining methotrexate or acitretin with narrow-band UVB can enhance treatment efficacy and reduce cumulative UV exposure. The combination of cyclosporine with phototherapy is inappropriate. Adverse drug reactions should be carefully monitored, and therapeutic regimens should be personalized. Medications should be used with caution in special populations, such as children, pregnant women, nursing mothers and the elderly.



## Symposium 8A: Update on the Treatment of Psoriasis and Eczema Diagnostic Criteria and Management of Psoriasis Arthritis

Yuling Shi

Director and Dean, Department of Dermatology, Shanghai Tenth People's Hospital and Institute of Psoriasis, Tongji University School of Medicine, Mainland China

Psoriatic arthritis (PsA) is a heterogeneous disease that can involve a variety of distinct anatomical sites. The clinical manifestations of PsA include psoriasis of skin and nails, peripheral arthritis, distal interphalangeal(DIP) involvement, dactylitis and enthesopathy. The radiographic findings include erosions and resorptions, joint space narrowing or involvement of enthesal sites, new bone growth at the enthesis, syndesmophytes and sacroiliitis. Early diagnosis is very important to the management of PsA. The latest diagnostic criteria for PsA are CASPAR. There are no diagnostic tests of PsA, so it is important to distinguish PSA from RA. Usually, PsA patients have psoriasis-like lesions, but their rheumatoid factor is negative. Treatment of PsA patients should aim at controlling symptoms, preventing structural damage, restoring the normal function of joints, and maximizing the quality of life of patients. In patients with PsA, NSAIDs may be used to relieve musculoskeletal signs and symptoms. In PsA patients with peripheral arthritis, DMARDs should be considered at an early stage. Biologic agents, such as TNF inhibitor, IL-17A inhibitor and IL-12/23 inhibitor, have a quick effect on PsA. When NSAIDs drugs and functional exercises cannot control medial axis PsA, phalangitis PsA and enthesitis PsA, we can choose biologic agents directly. As PsA patients have both skin and rheumatic symptoms, multidisciplinary cooperation is necessary. The dermatologist can help to distinguish psoriasis patients that may develop into psoriatic arthritis so that improve the early diagnosis of psoriatic arthritis. Early, active and effective treatment can control the progression of psoriatic arthritis.



## **Symposium 8B: Botulinum Toxin and Fillers**

### **New Botulinum Toxin in USA**

Michael Gold

Medical Director, Gold Skin Care Center, USA

The use of botulinum toxin injections for cosmetic enhancement has revolutionized the cosmetic and aesthetic medical practice with these injections being the most common cosmetic procedure being performed worldwide. We have recently seen new toxins being evaluated in the US and in this presentation, we will present the information that is in the public domain for these new and potentially interesting toxins – what makes them different and what role they may play as we move forward in the toxin world.



## Plenary Lecture 6

# Lasers and EBDs for Inflammatory Acne Management

## Maurice Adatto

Founder and Medical Director, Skinpulse Dermatology, Laser & Beauty Centres, Switzerland

**Background and Objectives:** Acne is a common skin disorder. It affects millions of patients every year, 60% of men and women and 90 % of adolescent will suffer from acne . Lasers of various types as well as EBDs are an option in the treatment of acne. The purpose of this study is to evaluate the safety and efficacy of various devices to improve acne.

**Study Design and Methods:** We have now a 10-year experience and more than 500 patients treated for acne with various lasers and EBDs. During this talk we will explain our personal results and also review the current literature.

**Results:** Almost all treated patients have a benefit from being treated with one of the described technique rather than left without laser treatment.

**Conclusions:** This report shows good to very good improvement in number of acne lesions, without serious side effects, if patient selection is made adequately.



## Free Paper Abstracts

### Analysis of Clinical Effect of Erbium Laser Combined with Broad-Spectrum Intense Pulsed Light in Treating Acne Scar (ABS-001)

Zhe Jian<sup>1</sup>, Wenting Song<sup>1</sup>, Linhan Qian<sup>1</sup>, Yanting Wang<sup>1</sup>, Chunying Li<sup>1</sup>, Gang Wang<sup>1\*</sup>

<sup>1</sup>Department of Dermatology, Xijing Hospital, Fourth Military Medical University, Xi'an, China

\*Correspondence: Prof. Gang Wang, M.D Ph.D

**Objective:** Acne often occurs in the face and neck of young patients, and nearly 30% of patients will form severe scars after acne healing, which has negative impacts on their psychology and social life. As the most common treatment, dot-matrix laser has remarkable effects, but there exist problems of postoperative facial erythema, pigmentation and long recovery time. Based on this consideration, our hospital adopts the mode of erbium laser combined with broad-spectrum intense pulsed light to treat acne scar, so as to achieve faster and better curative effect and improve the postoperative recovery process.

**Methods:** a total of 78 cases of patients with facial acne sag scar who visited our department from January 2015 to December 2017 were reviewed. Erbium dot matrix laser (26 cases), intense pulsed light (28 cases) and erbium dot matrix combined with intense pulsed light (24 cases) were administered. The erbium dot matrix laser group adopts the Profile super platform (2940nm), ProFractional mode with depth of 300-500um, density of 5.5%, stage 1 solidification, and single spot tool is used to grind 20-30um at the edge of obvious concave scar, which forms a relatively gentle wound surface according to the repeated grinding times. Lamellar skin with an area of more than 2cm<sup>2</sup> was ground 30um with the MLP tool. Each treatment interval was 2-6 months, a total of 3-5 times. The intensity pulsed light group was treated by the BBL intensity pulsed light module in Profile super platform, with wavelength of 560nm/590nm, pulse width of 30-50ms, energy density of 12-15mj/cm<sup>2</sup>, 1-3pass, once a month, 5 times in total. In the combined treatment group, dot-matrix laser treatment was given, followed by intense pulsed light treatment 1 month after surgery, then continued the combination treatment 1 to 3 months later, a total of 3 to 5 times. ECCA scores were used to evaluate the scar status before and after treatment, and adverse reactions were observed 1 month after treatment.

**Results:** The ECCA scores of three groups before treatment has no significant difference. Acne scarring erythema and color became shallow with no obvious change of sag in intense pulsed light group after treatment, and the ECCA scores slightly decreased ( $p > 0.05$ ). Furthermore, the ECCA scores were reduced from 47.5 to 33.8 ( $p < 0.05$ ) in erbium laser dot matrix group and reduced from 49.3 to 29.8 ( $p < 0.05$ ) in the combination treatment group. In addition, the scar were improved in these two groups and the improvement is more obvious in the combination treatment group. No serious adverse reactions were observed in three groups, and some patients showed erythema, edema, and slight bleeding, which were all relieved by themselves.

**Conclusion:** Both monotherapy of intense pulsed light or fractionated erbium laser have certain curative effect in the treatment of acne scars, while erbium laser combined with wide spectrum intense pulsed light has better effect in the treatment of acne scars, and the incidence of laser adverse reactions and complications is significantly reduced after treatment.

### Analysis of Clinical Effect of Local Injection of Autologous Platelet Rich Plasma (PRP) in the Treatment of Orbital Static Wrinkles (ABS-002)

Zhe Jian<sup>1</sup>, Yanting Wang<sup>1</sup>, Jingyi Wei<sup>1</sup>, Huan Jing<sup>1</sup>, Lin Gao<sup>1</sup>, Chunying Li<sup>1</sup>, Gang Wang<sup>1\*</sup>

<sup>1</sup>Department of Dermatology, Xijing Hospital, Fourth Military Medical University, Xi'an, China

\*Correspondence: Prof. Gang Wang, M.D Ph.D

**Objective:** Static orbital wrinkles have been the focus of research on the anti-aging of the face. Therefore, the clinical efficacy and safety of local injection of autologous platelet rich plasma (PRP) in the treatment of orbital static wrinkles were observed.

**Methods:** Twenty women aged 30 to 50 with static wrinkles were included. The images of bilateral periorbital wrinkles were taken and the skin detector (Visia and Antera 3D) was performed to record the relevant data of periorbital wrinkles. After centrifugal preparation of platelet rich plasma (PRP) by centrifugal extraction of 8ml blood from each patient, unilateral orbital periorbital fillings were selected for treatment by random scale. Each interval of 4 weeks is treated and three times in total. The images of bilateral periorbital wrinkles and skin detector were administered in 2 weeks, 1,3 and 6 months after injection. After 6 months, the data of the experimental side and control side were analyzed. Evaluation was conducted and recorded by 2 non-test participants.

**Results:** after 3 months of treatment, the length ( $4.3 \pm 0.6$  vs.  $2.9 \pm 0.5$ ), depth ( $0.3 \pm 0.03$  vs.  $0.15 \pm 0.02$ ) and width ( $0.4 \pm 0.06$  vs.  $0.21 \pm 0.07$ ) of the static orbital wrinkles in 20 patients were significantly decreased compared with the control group ( $P < 0.01$ ). In addition, the Visia detection results also observed that the skin texture, pores and color spots of the patients were improved. Redness and local congestion were observed in 28% of the patients after treatment, but all disappeared within 1-3 days without any adverse reactions such as postoperative infection and foreign body granuloma.

**Conclusion:** Local injection of autologous platelet rich plasma (PRP) for the treatment of orbital static wrinkles has a good clinical effect with little trauma, high safety, and significant effect of wrinkle removal as well as improvement of skin quality, which is worthy of clinical application in the future.



## Free Paper Abstracts

### Analysis of Clinical Effect of Q-switched Ruby Laser Dot Matrix Mode Combined with Needle-Free Injection of TCA in Treating Melasma (ABS-003)

Zhe Jian<sup>1</sup>, Huanhuan Qu<sup>1</sup>, Jine Zhang<sup>1</sup>, Jingyi Wei<sup>1</sup>, Chunying Li<sup>1</sup>, Gang Wang<sup>1\*</sup>

<sup>1</sup>Department of Dermatology, Xijing Hospital, Fourth Military Medical University, Xi'an, China

\*Correspondence: Prof. Gang Wang, M.D Ph.D

**Objective:** Melasma is a common and refractory skin disease, which has negative impacts on patients' psychology and social life. It has been reported that Q switch ruby (694nm) laser lattice mode and tranexamic acid (TCA) introduction have a positive effect in the treatment of melasma, but both of them have problems of short maintenance time and high recurrence rate. Therefore, we observed the curative effect of q-switched ruby laser dot matrix mode combined with needle-free injection of TCA in the treatment of melasma.

**Methods:** treatment of TCA: the injection of TCA was performed using the Israeli My Jet high pressure needle-free syringe injection, which was injected for 3 times on each side, and 2ml of tca was introduced, with 1 treatment every 2 weeks and 5 times for 1 course. Each patient was randomly selected from half of the face for laser combination therapy: the German askole Q switch ruby (694nm) laser lattice mode, with the size of 7.1\*7.1 cm<sup>2</sup> spots, energy density of 2.5-3.5 J/cm<sup>2</sup> 2-3 times was adopted, once every 2 weeks, 5 times for 1 course of treatment. The patients were photographed, and Visia and 3D skin detection were performed to record the melanin value before and after treatment. In addition, the area and severity index (MASI) of chloasma skin lesions were used, and the efficacy was observed before/after self-treatment and left/right control, and the onset time, recurrence and adverse reactions were recorded.

**Results:** 40 patients were treated for 3 months. Both side facial melanin numerical and MASI scores were significantly decreased after second treatment. The combination with ruby laser therapy had more obvious improvement effects. After five times treatment, melanin numerical (86.3 + 9.2 vs. 52.5 + / - 7.6) and MASI score (16.5 + 4.6 vs. 9.3 + / - 3.1) significantly decreased ( $P \leq 0.01$ ) compared with control side and treatment side. 5 patients showed recurrence of melasma after discontinuation of treatment, and no adverse reactions including decreased menstrual flow and obvious hyperpigmentation or hypopigmentation were found during treatment.

**Conclusion:** The combination treatment of Q-switched ruby laser dot matrix mode and needle-free TCA injection is a safe and effective therapeutic strategy in treating melasma.

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### Clinical Effect of Q Switch 694nm Ruby Laser in the Decolorization of Treating Generalized Vitiligo (ABS-004)

Zhe Jian<sup>1</sup>, Huanhuan Qu<sup>1</sup>, Zhanfeng Yang<sup>1</sup>, Yanting Wang<sup>1</sup>, Linhan Qian<sup>1</sup>, Tianwen Gao<sup>1</sup>, Chunying Li<sup>1\*</sup>

<sup>1</sup>Department of Dermatology, Xijing Hospital, Fourth Military Medical University, Xi'an, China

\*Correspondence: Prof. Chunying Li, M.D Ph.D

**Objective:** Current treatment tend to have poor repigmentation effect on patients with generalized vitiligo which total body area is more than 95%. For this kind of patients, especially those with small areas of normal pigment island left on their faces, the reverse treatment with decolorizer is often more effective than the traditional treatment in improving patients' satisfaction. Therefore, the effect of Q switch 694nm ruby laser in the decolorization of topical vitiligo was observed in this study.

**Methods:** Q switch 694nm ruby laser with 2.5mm spots, 4.0-6.0 J/cm<sup>2</sup> energy density and 1.5hz frequency were used for decolorization of normal facial skin in patients with generalized vitiligo. 5-8 times of treatment were conducted, and fixed-point photography was used to observe the decolorization and hyperchromatism of facial skin.

**Results:** After the q-switch 694nm ruby laser treatment for 1-3 times, the normal skin on the face of the patient was decolorized, but some patients showed hyperchromatism with the extension of time. After 5-8 times of treatment, the skin loss was basically stable, and no hyperchromia was found in the follow-up for 4 years. Except for local flushing and pain, no adverse reactions such as blisters, ulceration and infection were observed.

**Conclusion:** Q switch 694nm ruby laser decolorization is safe and effective in the treatment of generalized vitiligo with high satisfaction.



## Free Paper Abstracts

### Microneedling RF in 2019 - What Have We Learned (ABS-008)

Michael Gold

M.D., Medical Director Dermatology Gold Skin Care Center, Tennessee Clinical Research Center, USA

Microneedling with RF needles has become a very popular modality for treating wrinkles, photodamaged skin, and atrophic acne or traumatic scars. Many of the EBD companies have developed microneedling RF devices that use either insulated or non-insulated needles and use fractional or stamp delivery of the needles into the skin. The different devices that are available now will be reviewed with the evidence-based medicine to support their effectiveness and their safety. This class of device for cosmetic practices has become very important and from this presentation, how they work, why they work, and how well they work will be reviewed.

*Disclosures - EndyMed, Invasix*

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### New Cosmeceuticals Making Waves in the US Market in 2019 (ABS-009)

Michael Gold

M.D., Medical Director Dermatology Gold Skin Care Center, Tennessee Clinical Research Center, USA

The recommending and dispensing of cosmeceuticals has become part of the practice of aesthetic medicine in many, if not most practices in the US. We are introducing many new and exciting new products and ingredients into our armamentarium and we must understand what they all are about, what they potentially can do for our patients, and what their clinical trials are showing to convince us to use them with our patients. Whether we are talking about new antioxidant products, new growth factor products, products derived from stem cells or other skin lines, we must explore and evaluate how they came to be and how our patients will benefit from their use. Some of the newer skin care lines and products will be reviewed in this presentation as well as looking at how we are using cosmeceuticals to fight pollution effects on our skin - one of the big concerns facing us today.

*Disclosures - Skinceuticals, Pierre Fabre, Swiss American, Merz Aesthetics, Defenage, Sente, Under Skin*



## Free Paper Abstracts

### New Fillers in the US Making Their Way through the Process (ABS-010)

Michael Gold

M.D., Medical Director Dermatology Gold Skin Care Center, Tennessee Clinical Research Center, USA

One major difference between Europe and the US when it comes to the dermal filler market, is that in Europe, there are many fillers and filler companies bringing a myriad of products to our colleagues, which allows them great variety when it comes to using them for wrinkle reduction or for volumization. This is in stark contrast to the US, where we have a limited number of dermal fillers, due to a more stringent approval process by the US FDA and by the costs of running the clinical trials needed to bring a filler to the market. Several new fillers have recently been or will be approved and several more are primed to begin US clinical trials looking for approval when those trials are complete. This presentation will review what is going on in the US, where things stand, and what we can hope for in the near to not too distant future.

*Disclosures - Allergan, Galderma, Merz Aesthetics, Prolenium, Sinclair Pharma, Croma*

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### IPL Technology - What We Know From Research From Long-Term Analyses (ABS-011)

Michael Gold

M.D., Medical Director Dermatology Gold Skin Care Center, Tennessee Clinical Research Center, USA

Intense pulsed light (IPL) devices really revolutionized the EBD market when they arrived over 25 years ago. IPL technology was developed to treat vascular lesions, found to work well on pigment, and then on collagen and elastin itself, giving us the first real EBD treatment for photorejuvenation. Over the years, the IPL technology became more and more sophisticated and we are now at a time and place that the IPLs of today are safe, sophisticated, and predictable in giving our patients the results that we all want for their skin. What's even more impressive is that, in a review of the largest clinical trial for IPL use over 10 years, those patients who had yearly IPL treatments had continued improvement in their skin, actually showing a lowering of their actual age when photographic analyses were made by blinded investigators. This important clinical trial will be reviewed in detail.

*Disclosures - Lumenis*





## Free Paper Abstracts

### New Toxins in the US – What is Making its Way Through the Clinical Trial Domain (ABS-012)

Michael Gold

M.D., Medical Director Dermatology Gold Skin Care Center, Tennessee Clinical Research Center, USA

Botulinum toxin A transformed the aesthetic and cosmetic arena into heights that no one saw coming when the first toxin was approved many years ago. Newer toxins have emerged into the clinical scene and this presentation will differentiate these newer toxins and show the clinical evidence that has entered into the public domain with respect to these toxins. In addition, several newer toxins are in clinical trials at this time, and preliminary, public domain data will also be presented. It is an exciting time still for toxins for cosmetic use and we will focus on how some of these newer toxins may make a difference for our patients.

*Disclosures – Allergan, Galderma, Merz Aesthetics, Revance, Croma*

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### Fractional CO<sub>2</sub> Lasers With or Without Pulsed Dye Lasers in the Treatment of Hypertrophic Scars (ABS-013)

Michael Gold

M.D., Medical Director Dermatology Gold Skin Care Center, Tennessee Clinical Research Center, USA

The use of fractional CO<sub>2</sub> has been shown to improve hypertrophic burn and traumatic scars. The evidence-based medical evidence showing this improvement will be reviewed in this presentation. In addition, a new clinical study comparing the use of fractional CO<sub>2</sub> versus fractional CO<sub>2</sub> and the pulsed dye laser show that when they are used in combination, a more favorable outcome can be achieved. This clinical trial will be reviewed and the results will also be reviewed.

*Disclosures – Lumenis, Syneron-Candela*



## Free Paper Abstracts

### Acne Vulgaris Treatments with Lasers & EBD's (ABS-014)

Michael Gold

M.D., Medical Director Dermatology Gold Skin Care Center, Tennessee Clinical Research Center, USA

Acne is the most common dermatologic disorder that dermatologists see on a regular basis in our offices. Dermatologists are fortunate to have some new topical and systemic therapies which work extremely well but some patients need more, and this is where EBD's may play a significant role. These devices work mainly by targeting the *P. acnes* bacteria found in the pilosebaceous gland. Clinical studies showing the efficacy of several new devices will be reviewed, including the short-pulsed 1064 nm laser and the combination 589-1319 nm laser. This presentation will show how these devices can be incorporated into one's clinical practice.

*Disclosures — Aerolase, AdvaTx*

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### The Use of Silicone Gel in 2019 – What's New for the Treatment of Hypertrophic Scars and in Our Post-Procedure World (ABS-015)

Michael Gold

M.D., Medical Director Dermatology Gold Skin Care Center, Tennessee Clinical Research Center, USA

The treatment of hypertrophic scars continues to evolve, and international guidelines on their treatment have shown that there are a number of modalities that are effective in their treatment. One constant remains that topical silicone gel is the appropriate first line therapy for these lesions. The evidence-based medicine supporting the use of silicone gel will be reviewed. In addition, the use of a novel silicone gel will also be reviewed, one that can be used on open wounds to potentially prevent scars from developing will also be reviewed. Silicone gel has had a long history and newer agents are going to make a difference in how we approach our patients post-procedure as well with older scars.

*Disclosures — Stratpharma*



## Free Paper Abstracts

### The Use of Absorbable Sutures in Lifting and Volumizing the Skin – The US Consensus Report (ABS-017)

Michael Gold

M.D., Medical Director Dermatology Gold Skin Care Center, Tennessee Clinical Research Center, USA

Skin lifting and volumization can be achieved by a variety of clinical procedures including the novel absorbable sutures with associated cones made of PLLA and PLGA (in the US). This presentation will describe the technique used and the US Consensus Report on the use of the absorbable sutures in clinical practice. Who are the best candidates and what are the best practice techniques making this one of the most exciting new procedures for cosmetic physicians.

*Disclosures – Sinclair Pharma*

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### Successfully Managing Skin Necrosis Following Dermal Filler Injection with Intense Pulsed Light (IPL) (ABS-018)

[C.H. Lee](#), [K.W. Lee](#), [K.W. Chan](#), [K.F. Lee](#)

**Background:** Vascular compromise with skin necrosis is a devastating complication of dermal fillers injection. This study evaluates the efficacy of Intense Pulsed Light (IPL) for Chinese patients with iatrogenic skin necrosis following dermal fillers injection, after the initial treatment with hyaluronidase.

**Methods:** 4 cases with fillers-induced (Hyaluronic Acid and Ellanse) skin necrosis referred by other doctors of mild, moderate and severe severity were studied. 3 of them received 4-12 sessions of IPL treatment 4-10 days after the skin necrosis episode. The fourth case (who already had keloid scar formation during her first visit) only received one IPL treatment and defaulted subsequent follow up. All patients had received hyalase injection by their primary doctors. Clinical photos were taken every time before treatment. 2 individual blinded investigators were asked to assess and compare with the pretreatment photos.

**Results:** There was an overall clinical improvement in the hyperpigmentation, thickness, hardness, redness of the scars in the 3 patients who received a few sessions of IPL treatments. For the fourth case, who only received initial medical treatment followed by one IPL treatment did not have an improvement as good as the other 3 cases.

**Conclusion:** This study suggests IPL is effective in improving the erythema, hardness, thickness and appearance of skin necrosis secondary to fillers injection.



## Free Paper Abstracts

### A Split-Face Assessment of Combined Treatment Using Optimized Pulsed Light Followed by a Non-Ablative 1565 nm Fractional Laser for Facial Rejuvenation (ABS-020)

Shaomin Zhong, Yajing Cao, Xinyun Tong, [Yan Wu](#)

Department of Dermatology, Peking University First Hospital, China

**Objective:** To evaluate the safety and efficacy of combination treatment by optimized intense pulsed light (OPT) with non-ablative fractional laser (NAFL).

**Methods:** This is a prospective, split-face, randomized study. 20 patients finished three treatment sessions at 4-week intervals, in which OPT was conducted on a randomly selected side of the face followed by NAFL treatment for full-face immediately thereafter. Immediate skin responses were assessed within 30 minutes of treatment. Skin physiology parameters including skin color, hydration, TEWL and gloss as well as side-reactions were recorded at day 0, day 30 and day 60.

**Results:** (1) The average pigment value (N) in OPT+NAFL group was significantly decreased at day 30 and day 60 compared with baseline ( $P<0.05$ ) while the pigment value in NAFL group did not show any statistical difference. Both groups did not show statistical difference of erythema values (E) before and after the treatment. (2) The skin hydration was significantly increased compared with baseline in both OPT+NAFL and NAFL group ( $P<0.05$ ); The TEWL was significantly decreased compared with baseline in both groups ( $P<0.05$ ); (3) The skin gloss and elasticity were both significantly improved compared with baseline in both OPT+NAFL and NAFL group ( $P<0.05$ ), OPT+NAFL was superior to the NAFL group at day 90. (4) The short term adverse events included transient pain, erythema lasting 2-3 days, swelling and slight desquamation. Slight hyperpigmentation occurred in several patients, which subsided after 2-3 months.

**Conclusion:** The combination of OPT with NAFL during the same treatment session was clinically superior over the NAFL only regimen, especially on pigmentation, skin gloss and elasticity, which could be used as a safe and effective skin rejuvenation technique.

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### Clinical Efficacy of Non-Cross-Linked Hyaluronic Acid-based Compounds on Skin Rejuvenation using Different Transdermal Delivery Methods (ABS-021)

Meng-yen Hsieh, Chen Yuan, Shaomin Zhong, Zijun Zhang, Li Yang, [Yan Wu](#)

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**Methods:** (1) Intradermal micro-injections of non-cross-linked HA (IMJ-NCLHA) was administered every 4 weeks; (2) polycomponent NCLHA formulations applied with microneedle roller delivery (MNR-PNCLHA) was administered every 2 weeks; (3) combination therapy of IMJ-NCLHA and MNR-PNCLHA was administered every 4 weeks. All three studies were full-face, self-control. The assessments performed at baseline, prior to each treatment session, and four weeks after the third treatment session. Photos were taken by VISIA imaging system, Corneometer, Tewameter, MX18, Chromameter, MPA580 were used to evaluate changes such as the water content in stratum corneum, transepidermal water loss (TEWL), skin color, glossary, elasticity etc. Patients provided a post-treatment subjective rating on changes in skin wrinkles, pore size and glossary etc.

**Results:** Among patients that received IMJ-NCLHA, the water content in stratum corneum and elasticity showed significant increase ( $P<0.05$ ) 4 weeks after the third treatment session compared to baseline. Among patients that received MNR-PNCLHA, the erythema value decreased significantly after two treatment sessions ( $P<0.05$ ); skin glossary measurements increased significantly after two treatment sessions and 4 weeks after the third treatment session compared to baseline ( $P<0.05$ ); melanin values improved slightly but was not statistically significant; skin elasticity slightly increased but was not statistically significant. Among patients that received combination therapy of IMJ-NCLHA and MNR-PNCLHA, the erythema value decreased significantly after the first treatment session compared to baseline ( $P<0.001$ ) and the effects continued 4 weeks after the third treatment session ( $P<0.001$ ); skin glossary improved significantly after the first treatment session compared to baseline ( $P>0.05$ ); the water content in stratum corneum increased significantly after the first treatment session compared to baseline ( $P<0.05$ ) and the effects continued 4 weeks after the third treatment session ( $P<0.05$ ); other biophysical parameters such as skin brightness ( $L^*$  value) as measured by Chromameter, skin elasticity and TEWL all improved after treatments but were not statistically significant.

**Conclusion:** Treatments with IMJ-NCLHA alone or as a combinational approach can improve skin elasticity and the water content in stratum corneum very significantly; MNR-PNCLHA alone or as a combinational approach can improve erythema and increase skin glossary more significantly. The advantage for combinational approach is faster display of effects, more and significant improvements in skin biophysical parameters were found after the first treatment session.



## Free Paper Abstracts

### Dermoscopy Facilitates Laser Dermatological Practice for Patients with Darker Skin Types (ABS-025)

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**Introduction/Overview:** Dermoscopy allows identification of over hundred features for skin lesions. It plays an important role in the diagnosis and management of various non-pigmented and pigmented lesions in laser dermatological practice especially when treating patients with darker skin types. Portable non-contact polarized dermoscope with connection kit for the camera of mobile phone can be a convenient and valuable tool for laser physician to increase diagnostic accuracy and avoid side effect from laser treatment.

**Analysis:** This is a review of 5-years experience of how dermoscopy can assist laser dermatological procedures for Fitzpatrick skin type III and IV (FST III and IV) patients in a single laser dermatological practice in Asia.

**Conclusion:** Dermoscopy is more favorable than Wood's lamp in differentiating different types of pigmentation in darker skin types patients by simple colour and pattern analysis and so can determine the best choice of lasers. Since nevi removal by ablative laser is a very popular practice for FST III and IV patients in Asia, dermoscopy can assure the nature of the lesions and rule out other differential diagnoses before performing the laser procedure. Dermoscopy can also identify dermal vessels and pigmentation not seen by naked eyes which otherwise when stimulated by high laser fluence may result in post-inflammatory hyperpigmentation. Finally, dermoscopy helps us to visualize clearly the appropriate laser treatment endpoints such as frosting and dermal vascular coagulation. This helps laser physicians to achieve better treatment efficacy and at the same time avoid side effect especially for darker skin type patients.

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### Study on Images of Common Facial Inflammatory Skin Diseases and AI-Assisted Diagnosis (ABS-027)

[Xiaoming Liu](#), [Kai Liu](#), [Li Ma](#), [Jialiang Shi](#), [Tianmeng Yan](#), [Zhili Wu](#), [Yulin Zheng](#)

Nowadays, Artificial intelligence (AI) is making great strides in medical data analysis and can improve the efficient and effective of clinical diagnosis. Since dermatology is a subject based on morphology and AI has already demonstrated its power on image analysis, AI is well suited to assist dermatologists to analyze skin diseases. Among all skin problems, inflammatory diseases are most common.

**Objective:** we aim to build an AI-assisted diagnosis system for inflammatory skin diseases. 30,000 facial skin images with inflammatory skin diseases were collected and manually annotated by dermatologists. Based on these data, studied by computer algorithms.

**Methods:** Firstly, these images were ranked based on quality, including resolution, contrast, facial pose, and whether makeup-wearing or not. Then, an image annotation system was developed to help dermatologists to label data. Secondly double-blind test would be performed based on 2 dermatologists' clinical diagnosis. These inflammatory skin diseases were categorized into acne rosacea, sensitive skin, acne, contact dermatitis, seborrheic dermatitis. The ages of these patients are mainly between 18-42, accounting for 94%. The skin types are also studied, where the proportion of mixing is 43%, neutral is 20%, oily is 18%, and dry is 19%. Patients who have acne rosacea, acne or seborrheic dermatitis turn to have mixing facial skin, while sensitive skin has neutral skin and contact dermatitis has dry skin. Using the the results of double-blind test, AI models were built which has ability to detect various skin diseases. The predict accuracy of AI models achieves 97% .

**Conclusions:** AI is well-qualified to assist dermatology to diagnosis the skin diseases. For some facial inflammatory diseases which have no clear criteria for classification, the diagnosis would combine the results of AI and the feedback of treatments. Additionally, proper image quality is important for obtaining an accurate diagnosis and effective treatments.



## Free Paper Abstracts

### A Preliminary Study on the Animal Experiment and Immunological Mechanism of Lipoxina4 to Inhibit the Growth of Malignant Melanoma (ABS-029)

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**Objective:** To study the immune mechanism of lipoxinA4 and its inhibitory effect on the growth of malignant melanoma.

**Methods:** The murine malignant melanoma cell line B16 was subcutaneously inoculated into the abdomen of C57BL / 6 mice to establish an animal model of MM, and the samples were randomly divided into PBS and BML-111 groups. LXA4 analogue was injected into BML-111 group; as a comparison, PBS was injected into PBS group. The treatments were given to two groups once every two days and five times in total respectively. The growth of tumor was observed and recorded. After the administration, tumors were weighed and their growth rates were calculated in mice, leading to the inhibitory rates of tumor growth in group BML-111 and group PBS respectively.

**Results:** The inhibitory rate of tumor growth in group BML-111 was significantly higher than it in group PBS. However, when calculating the relative quantities of T Cell in spleen or peripheral blood, there was negligible difference between group BML-111 and group PBS.

**Conclusion:** LXA4 inhibits the growth of MM. However, the effect of LXA4 on the T Cell's immunization in peripheral blood and spleen hadn't been found yet.

*Key words: lipoxinA4; melanomam; immune mechanism; T cell*

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### Non-Invasive Energy-Based Device Combination for Fat Destruction and Body Shaping (ABS-030)

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Non-invasive body shaping has continuously been a fast-growing trend and there are many kinds of body contouring modalities. High intensity focused ultrasound reduces the volume of subcutaneous adipose tissue and eliminated via natural mechanism. However, to achieve total body rejuvenation and shaping goals for patients, skin tightening treatments are inevitable. Combination approaches with radio-frequency devices allow this to be achieved. Introduction to the best practice of combining two technologies will be shared and also understand the ideal candidates for combination body treatments.

## Free Paper Abstracts

### The Efficacy and Safety of Using Fusion Mode of CO<sub>2</sub> Fractional Laser for Atrophy Acne Scars: Clinical Evaluation (ABS-031)

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**Objective:** This study evaluated the efficacy and the safety of the Fusion mode of CO<sub>2</sub> fractional laser for atrophy acne scars.

**Methods & Materials:** 21 patients with atrophy acne scars were treated by 2-4 sessions of CO<sub>2</sub> fractional laser in fusion mode at 8-week interval. After 3 months of the last treatment to evaluate the efficacy. The clinical improvement was assessed using VISIA Complexion Analysis System, and statistic on patient satisfaction degrees and pain scores.

**Results:** 19 patients reported significant improvement, satisfaction achieved 95%, the average pain score was 7.2. 2 patients reported PIH, disappeared within 1 month. No blistering, burning or other side effects.

**Conclusion:** The fusion mode of CO<sub>2</sub> fractional laser was efficient and safe for treating atrophy acne scars.

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### Market Review of Non-Invasive Fat Reduction & Comparison on Different Focused-Ultrasound Fat-reduction Technology in China (ABS-032)

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Department of Plastic Surgery and Laser Aesthetic

China non-Invasive Fat Reduction Market has great potential with low market penetration and huge demand. Currently, there are many different fat-reduction devices in China Market. They can be divided into main three types according to the function principles: cooling, thermal and mechanical action. This abstract will compare different technologies which are most commonly used in China in the aspect of the immediate and long term clinical outcome, safety or selectivity, level of comfort and length of downtime.

At the same time, comparing the local focused ultrasound device with the UltraShape technology, the unique cavitation effect created by the UltraShape plays an important role in differentiating the outcome between the two technologies. Introduction of the Ultrashape technologies including the focused ultrasound, pulse mode, 3D detection technology and the evaluation of the cavitation effect will also be shared with clinical outcomes.

## Free Paper Abstracts

### Beneficial Effects of an Alkaline Topical Treatment in Patients with Atopic Dermatitis (ABS-034)

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**Introduction:** It is generally assumed that healthy skin has a pH of around 4.5. However, it is much less known that, concerning pH, there is a difference between healthy and inflamed skin. Inflamed cells produce acidic metabolites that are secreted. The increased local acidity can contribute to lesions, worsening the skin situation. It is out of that reason that applying a slightly alkaline cream to the inflamed regions, might allow the skin cells to cope with the extracellular acidity and regenerate. Many patients with skin diseases reported that an alkaline cream improved their skin problems. In a clinical study we further investigated the effect of an alkaline cream in patients with atopic dermatitis and evaluated the efficacy and effects on various immunological parameters.

**Methods:** 24 patients with atopic dermatitis without using glucocorticoids or antihistamines were included in the study. Patients were instructed to the daily use of an alkaline cream (Siriderma Cream Phase 1 and 2, Sirius GmbH, Monheim, Germany) on their inflamed parts of the skin for a period of 8 weeks. Skin parameters (lesion size, erythema, desquamation, lichenification, impetiginization, itching) were scored by the physicians at week 0 and 8. Patients reported outcomes on itching, redness, dryness and cracking of their diseased skin at 0, 2, 4 and 8 weeks. Skin pH was determined at 0 and 8 weeks. Patients' blood samples were taken at 0 and 8 weeks and tested for various cellular and immunological parameters.

**Results:** In all investigated parameters physicians noted a highly significant improvement in scores after 8 weeks (lesion size: -30%, erythema: -54%, desquamation: -59%, lichenification: -59%, impetiginization: -84%, itching: -74%). Patients scores on their skin were already significantly improved after 2 weeks, after 8 weeks all scores were highly significantly lower (itching, redness, dryness, cracking: -41%, -70%, -60% and -70%, respectively). Skin pH at week 8 one day after the last use of the cream was not significantly different from week 0. Most cellular and plasma immunological parameters (EGF, IFN- $\gamma$ , IL-1 $\alpha$ , IL-1 $\beta$ , IL-2, IL-4, IL-6, IL-10, MCP-1, TNF- $\alpha$ , VEGF; measured by Randox Analysis) were not significantly changed after 8 weeks. A small increase in monocytes still within the normal range was observed that corresponded to an increase in plasma IL-8 (+30%).

**Conclusion:** In patients with atopic dermatitis use of an alkaline topical treatment led to a highly significant improvement in skin parameters. After 8 weeks 80% of patients reported that they would like to continue with the use of the cream. A relevant systemic effect of the alkaline cream on immunological parameters could not be observed.

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### A Preliminary Study of Fractional CO<sub>2</sub> Laser Added to Topical Tacrolimus Combined with 308 nm Excimer Lamp for Refractory Vitiligo (ABS-035)

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**Introduction:** Vitiligo is the most common disorder causing hypopigmentation of the skin and mucous membranes. Since many patients with vitiligo remain resistant to conventional treatment, combination treatment strategies have become a focus of interest. Recently, fractional CO<sub>2</sub> laser has been proposed to be effective and well tolerated in patients with refractory vitiligo.

**Objective:** The present study was based on the widespread use of topically applied tacrolimus ointment plus 308nm excimer lamp for vitiligo, and tested the additional combination with fractional CO<sub>2</sub> laser.

**Material and Methods:** In this preliminary, prospective study, 21 patients with multiple, localized, refractory, non-segmental vitiligo lesions were randomized to receive either tacrolimus ointment plus 308 nm excimer lamp (control), with or without the addition of fractional CO<sub>2</sub> laser. Three sessions of fractional CO<sub>2</sub> laser were performed at 1-month intervals in treatment group. During the pre-treatment visit and at 6 months after enrollment, photographs were taken, and were assessed by two blinded dermatologists.

**Results:** There was no statistically significant improvement in the repigmentation on the laser side compared to the control side. Treatment was generally well-tolerated; only localized adverse effects were noted. Conclusions: The triple combination therapy was not superior to tacrolimus ointment plus 308nm excimer lamp. Treatment failure may reflect insufficient penetration of tacrolimus ointment through the holes created by fractional CO<sub>2</sub> laser on the skin.



## Free Paper Abstracts

### Clinical Application of Facial Anatomy in the Treatment of Skin Laxity by Monopolar Radiofrequency (ABS-036)

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**Background:** The monopolar radiofrequency is a procedure commonly used for the treatment of skin laxity from an increase in tissue temperature. However, we observed results varied by different doctors. The facial retaining ligament is a connective tissue complex that travels between soft tissues. As an anchor point, it connects the superficial muscularis aponeurotic system (SMAS), dermis, deep fascia and periosteum, supporting and fixing the facial skin and subcutaneous soft tissue in the corresponding area.

**Objectives:** To investigate the efficacy of facial anatomy strategy in the treatment of skin laxity by Monopolar Radiofrequency.

**Methods:** 15 patients with mild to moderate facial skin laxity were treated using the Monopolar Radiofrequency based on facial retaining ligaments positions. Patients were surveyed between 1-12 months after treatment to determine degree of improvement, satisfaction, and presence of side effects.

**Results:** With the new treatment strategy, 93.3% (n = 14) reported at least mild correction of skin laxity, 80% (n = 12) noticed skin texture improvement, average pain level was 7.21 (0-10 scale), and 80% (n = 12) would have the procedure again.

**Conclusion:** The new monopolar radiofrequency treatment anatomical strategy is safely tolerated and efficacious for most patients.

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### Clinical Observation of Intense Pulsed Light Vascular Filter in the Treatment of Facial Telangiectasia in China (ABS-037)

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**Objective:** To evaluate the efficacy and safety of intense pulsed light vascular filter in the treatment of facial telangiectasia in China.

**Materials and Methods:** Thirty subjects (Fitzpatrick skin types IV and V) with facial telangiectasia who were treated by intense pulsed light vascular filter at our department from January to August 2018 were enrolled. Data regarding demographics, lesion types, photographs, treatment procedures, outcomes, and follow-ups were collected and analyzed. The primary endpoint was a 2-point improvement of telangiectasia based on a 5-point Telangiectasia Scale comparing the pre-treatment photograph to the post treatment photograph at 30 days post final treatment by an independent reviewer. Treatment completion was defined as >75% vessel clearance. Efficacy was measured by blinded analysis of pre and post images and self-assessment by the subjects. The intense pulsed light vascular filter was configured to produce a narrow spectral output, peaking at 530-650/900-1200nm, with 20-40 millisecond pulses over an energy density range of 15-20 J/cm<sup>2</sup> utilizing a 15x35mm spot size were delivered.

**Results:** The total effective rate was more than 90%. The scores of facial discomfort, erythema and telangiectasia were significantly lower than those before treatment. (p<0.01). No adverse reactions such as purpura, infection, scar occurred during the follow-up.

**Conclusions:** The intense pulsed light vascular filter is safe and effective in the treatment of facial telangiectasia.

[Key words] intense pulsed light; vascular filter; telangiectasia; treatment



## Free Paper Abstracts

### Pathology Changes After Polydioxanone Thread Insertion and Monopolar Radiofrequency Combination Therapy: An Animal Study with Pigs (ABS-038)

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**Background:** Polydioxanone (PDO) sutures have been widely used to tighten and lift the face. When the PDO component is injected into the body, it does not merely disappear but leads to specific changes in the surrounding tissues, including fibrous capsules formed around the thread, followed by inflammation and increased collagen. The monopolar radiofrequency is a procedure commonly used for the treatment of skin laxity from an increase in tissue temperature. The pathology changes and clinical safety of monopolar radiofrequency treatment after polydioxanone thread insertion remains unclear.

**Objectives:** To investigate the Pathology changes after polydioxanone thread insertion and monopolar radiofrequency combination therapy:

**Methods:** We selected two White pigs with skin that closely resembles the structure of human skin. PDO thread was inserted into the subcutaneous fat. After 2 weeks treated by monopolar radiofrequency. Tissue samples were obtained at 4, 12weeks. For the histologic analysis, H&E staining, Masson trichrome staining techniques were used.

**Results:** panniculitis histological change was found in the combination therapy pig models. the collagen fibers of the dermis thickened. And A large number of fibroblasts can be observed in the dermis

**Conclusion:** PDO sutures cause specific changes to the surrounding tissues that results impedance changes. These changes might affects monopolar radiofrequency treatment, Abnormal increase temperature in subcutaneous fat layer may inducing panniculitis.

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### Facial Manifestations of Pachydermoperiostosis Treated with Botulinum Toxin Type-A (Report of 3 Cases) (ABS-039)

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**Background:** Pachydermoperiostosis (PDP) is an uncommon genetic syndrome characterized by distinctive digital clubbing, periostosis and pachydermia. PDP is a chronic condition that, while not life-threatening, decreases the patient's quality of life. Among other clinical manifestations, the thickened skin of the upper third of the face gives a leonine appearance to the face. There is no accepted therapy for alleviating the aesthetic defects associated with pachydermia.

**Objective:** The aim of this study was to evaluate the role and long-term effect of botulinum toxin type A (BTX-A) in improving facial manifestations in patients with PDP.

**Material and Methods:** Three patients with PDP were treated with BTX-A. The main outcome measures were physician rating of wrinkle severity in relaxation, at baseline and after treatment. Secondary measures were patient global assessment of improvement.

**Results:** Case 1 and Case 3 were successfully treated with BTX-A; Case 2 reported an exacerbation of the eyelid ptosis possibly related to treatment. Case 1 underwent 4 sets of injections over a 48 week period which has never been described. We suggest temporal improvement of cosmetic appearance of patients with PDP could be achieved by BTX-A injection. Repeated treatments remained effective.

**Conclusions:** The pathogenesis of PDP is thickening and folding of skin, we speculate that the reason that BTX-A contributes to the aesthetic improvement could be the inhibitory effects that BTX-A exerts on muscles. As the injected muscles relax, the surrounding tissue relaxes as well. In addition, injection of botulinum toxin type A into the dermal-subdermal layer has been anecdotally reported to improve skin texture and turgor. Although the pachydermia improved after treatment, the mechanism is still unclear. It remains to be confirmed the optimum technique for injection of BTX-A, and the optimum doses and treatment repetition regimen in PDP patients.

## Free Paper Abstracts

### Potassium Iodide Potentiates Antimicrobial Photodynamic Inactivation Mediated by Rose Bengal: In Vitro and in Vivo Studies (ABS-040)

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Rose Bengal (RB) is a halogenated xanthene dye that has been used to mediate antimicrobial photodynamic inactivation for several years. While highly active against Gram-positive bacteria, RB is largely inactive in killing Gram-negative bacteria. We have discovered that addition of the non-toxic salt potassium iodide (100mM) potentiates light-mediated killing by up to six extra logs with Gram-positive methicillin resistant *Staphylococcus aureus*, Gram-negative *Escherichia coli* and *Pseudomonas aeruginosa*, and fungal yeast *Candida albicans*. The mechanism is proposed to be singlet oxygen addition to iodide anion to form peroxyiodide, that decomposes into radicals, and finally forms hydrogen peroxide and molecular iodine. The effects of these different bactericidal species can be teased apart by comparing killing when cells+RB+KI are mixed together then green light, cells+RB centrifuged then KI+green light, RB+KI+green light then cells. We also showed that KI could potentiate RB-PDT in a mouse model of wounds infected with bioluminescent *P. aeruginosa*.

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### Pruritic Vesiculobullous Eruption Associated with Multiple Myeloma: A Case Report (ABS-041)

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Multiple myeloma (MM) is a malignant disorder of plasma cells, typically manifested as bone pain, anemia, kidney failure with presence of a paraprotein. Skin involvement in MM is rather rare and several cases about bullous dermatosis associated with MM have been reported. Here we described a case of a 55-year-old woman, who presented with pruritic vesiculobullous eruptions on her trunk and extremities 2 weeks before admission. Laboratory tests, skeleton CT scan and bone marrow smear confirmed the diagnosis of multiple myeloma. The skin biopsy of the hemorrhagic bulla showed subepidermal blisters with neutrophil-predominant infiltrate and leukocytoclastic vasculitis. DIF from perilesional skin revealed strong deposits of IgA at intercellular space of the epidermis and dermal-epidermal-junction (DEJ), as well as both IgM and C3 deposits at DEJ. Circulating antibodies against Dsg1/3 or BP180 was negative. This was the second case so far in literature which presented IgA depositions at both intercellular space and DEJ in patients with MM. Furthermore, among all other reported cases of bullous dermatosis associated with MM, our report for the first time demonstrated multiple types of immunoglobulins (IG) or complement deposits at DEJ, which might indicate poorer prognosis when compared with cases presenting cutaneous depositions of unique IG type.



## Free Paper Abstracts

### Interleukin-33 Alleviates Psoriatic Inflammation by Suppressing Th17 Response (ABS-043)

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**Objectives:** Psoriasis is a chronic inflammatory skin disease and the pathogenesis of psoriasis is unclear. Interleukin(IL)-33 is reported to be highly expressed in psoriasis patients, while the role of IL-33 in psoriasis is unknown.

**Subjects and Methods:** IL-33 expression was determined by using enzyme-linked immunosorbent assay, real-time fluorescent quantitative polymerase chain reaction and immunohistochemical staining. CD4<sup>+</sup> T cells were sorted by using magnetic beads. The frequency of immune cells was determined by using flow cytometry. The cytokines level of mice skin was measured by using cytometric bead array.

**Results:** IL-33 expression is increased in psoriasis patients of Chinese population. IL-33 can inhibit Th17 cells differentiation and IFN- $\gamma$  expression of psoriasis patients. IL-33 can enhance iNKT cells proliferation of psoriasis patients. Subcutaneous injection of IL-33 can alleviate imiquimod-induced mouse psoriatic inflammation. The percentage of Th17 cells is decreased while Treg cells and iNKT cells are increased in the skin draining lymph nodes of mice treated with IL-33. IL-23 and TNF- $\alpha$  expression are decreased in the skin of mice treated with IL-33.

**Conclusion:** IL-33 participates in the pathogenesis of psoriasis by down-regulating Th17 response.

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### Adult Black Dot Tinea Capitis caused by Trichophyton Tonsurans Complicated with Herpes Zoster: A Case Report (ABS-044)

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We present a case of adult black dot tinea capitis caused by trichophyton tonsurans complicated with herpes zoster.

A 53-year-old female with scalp erythema, scale, and pruritus for 3 months was diagnosed as tinea capitis in other institution. She was treated with itraconazole (0.2g bid) and 2% ketoconazole lotion for two weeks, which was not effective. Thus itraconazole was transferred to terbinafine (0.25g qd) for a week, but the scalp erythema extended, and bald spots appeared. A corkscrew hair was selected under dermatoscope for microscopic examination, which showed septate hyphae and chainlike spores inside the hair shaft. Fungal culture of infected hairs indicated trichophyton tonsurans according to morphology and microscopic characteristics, which was consistent with molecular identification results (GenBank accession number: AB220045.1). Since fungi susceptibility test showed the effectiveness of terbinafine and itraconazole, we treated the patient with terbinafine (0.25g qd), naftifine hydrochloride and ketoconazole cream (bid), and 2% ketoconazole lotion (qd). Two weeks later, new hair growth was observed, however, the patient complained paroxysmal causalgia at left head for 10 days, subsequently zonal distributed clustered tension blisters appeared and subsided soon, but the pain existed. The clinical manifestation suggested the diagnosis of herpes zoster. She recovered after antifungal and 3 weeks of antiviral therapy, without relapse for 9 months after withdrawal, leaving no scar and bald, no post herpetic neuralgia occurred.

Dermatoscope can help select corkscrew hairs for mycological examination, and dynamically observe changes of lesions during the treatment. Incorrect means of medicine intaking may decrease the absorption of itraconazole, leading to unsatisfied effect. This patient has a history of breast cancer and adheres to letrozole, causing the suppression of immunity.



## Free Paper Abstracts

### Combined Therapy of Dual Wavelength (595 & 1064nm) and Fractionated CO<sub>2</sub> Laser in Treatment of Port Wine Stain: A Pilot Study (ABS-045)

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**Background:** Port wine stain is congenital malformation of dermal capillaries and postcapillary venules. They are present at birth as blanchable, pink to red patches and do not regress with time but grow in proportion to the child's growth. The lesions become thicker and darker in color during adulthood. The goals of treatment are cosmetic improvement and prevention of complications. Current therapies include pulsed dyed laser, Intense pulsed light, Nd:yag laser. But there is not any report of combined therapy with fractionated CO<sub>2</sub> laser.

**Purpose:** In our pilot study, we used dual-wavelength 595 & 1064nm laser combined with fractionated CO<sub>2</sub> laser to treat port wine stain. We tested the efficacy and safety of this novel method and try to figure out the optimal treating parameters and courses.

**Method:** Our study included seven port wine stain patients with 3-6 treatments at 1 month interval. We used varied sequence of treating modality, treatment mode according to the color, depth and treatment history of patients. We had subjective and objective evaluation to observe the efficacy.

**Result:** All seven patients had satisfied result after 3-6 treatments with more than 50% improvement.

**Conclusion:** Combined therapy of dual wavelength and fractionated CO<sub>2</sub> laser is a safe and effective method of treating port wine stain. However, larger sample studies should be carried out to further optimized the parameters of this novel method.

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### A Case of Porphyria Cutanea Tarda (ABS-046)

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**Objective:** We report a case of porphyria cutanea tarda in a 61-year-old man with accurate diagnosis and successful treatment.

**Methods:** A 61-year-old male presented with the chief complaint of erythema and papules on head, neck and upper limbs for 7 years, and a two weeks of aggravation of blisters. Laboratory tests showed 24 hours urinary total porphyrin was 1599.90ug/24h. The color of 24 hours urine changed into the coral red after Wood lamp. Histopathological examination revealed epidermal hyperkeratosis, skin blisters. Leather shallow sparse lymphocytic infiltrates around small blood vessels. And immunofluorescence IgA, IgG, IgM, C3 were negative.

**Result and Conclusion:** Symptoms were alleviated after intravenously compound glycyrrhizin injection and oral hydroxychloroquine. In summary, pathological diagnosis is not the gold standard of porphyria cutanea tarda. It also indicates that urinary porphyrin positive would be more useful to diagnosis.

*Key words: cutanea porphyria; tarda*



## Free Paper Abstracts

### Clinical Analysis of 70 Seroresistance Syphilis Patients (ABS-047)

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**Objective** To investigate the relevant factors of seroresistance of syphilis by clinical analysis.

**Methods** To review and analyze the clinical data of 654 cases of syphilis in our hospital in recent 4 years.

**Results** The seroresistance rate was 18.75% in the primary and secondary syphilis patients (13/70), and 81.43% in the latent syphilis patients (57/70). 10 cases repeated use benzathine penicillin treatment, 4 cases for penicillin allergic used erythromycin or ceftriaxone. The trust titer of 9 patients with benzathine penicillin treatment decreased or even negative conversion, but the other patients trust titer only decreased in 3 cases.

**Conclusion** Syphilis serum have been done with syphilis stage, duration, initial baseline concentrations, stage of disease of unknown latent syphilis. If given the same treatment again, it can reduce the recurrence of patients. It is essential to strengthen of latent syphilis in the early screening and early treatment.

*Key words: Syphilis; Seroresistance*

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### Enhanced Cyr61 Levels in Patients with Psoriasis Vulgaris (PV) (ABS-048)

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**Objective:** Cysteine-rich protein 61 (Cyr61), also known as CCN1, a multifunctional non-structural protein found in the extracellular matrix (ECM), is a pro-inflammatory cytokine, which can amplify inflammatory microenvironment by inducing TNF- $\alpha$ , IL-6 and IL-8 in many types of autoimmune diseases. This study is to investigate the association of Cyr61 in the pathogenesis of psoriasis vulgaris (PV).

**Methods:** The serum levels of Cyr61 in patients with PV and controls were measured by ELISA. The mRNA expression of Cyr61 in PBMCs and skins from PV patients and controls were observed by Real-time PCR and Immunohistochemistry. The CYR61 expression in HaCaT cells treated with EGF or PBS. The effects of Cyr61 on the expression of cytokines, such as IL-6, IL-17, IL-8, IL-4, IL10, IFN- $\gamma$  and TNF- $\alpha$ , were evaluated in PBMCs and CD4+ T cells from PBMCs of PV patients.

**Results:** Our data indicated that serum Cyr61 levels were significantly elevated in patients with PV when compared with those in atopic dermatitis (AD) patients and control group. Moreover, the expression of Cyr61 in PBMCs and skin from PV patients were also higher than those in control group. Furthermore, Cyr61 up-regulated the mRNA expression levels of IL-6, IL-17 and IFN- $\gamma$  in PBMCs from PV patients. In addition, Cyr61 enhanced the IFN- $\gamma$  and IL-17 expression on the CD4+ T cells from PBMCs of PV patients.

**Conclusions:** This study provides first observations on the association of Cyr61 and PV, and showed the elevated Cyr61 levels. We suggest that Cyr61 may play a role in the pathogenesis of PV.



## Free Paper Abstracts

### HMGB1 Inhibitor Effectively Alleviates Psoriasis-like Lesions and Inflammatory Cytokines in K14-VEGF Transgenic Mouse (ABS-049)

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**Background:** High mobility group box-1 (HMGB1), a pro-inflammatory cytokine, is closely associated with the pathogenesis of psoriasis. In our previous study, we explored the association of HMGB1 with psoriasis vulgaris (PV) firstly, and indicated that PV patients had increased the serum levels of HMGB1 and altered HMGB1 distribution in skin lesions.

**Methods:** in this study, we investigated the therapeutic effects of anti-HMGB1 monoclonal antibody (mAb) in K14-vascular endothelial growth factor (VEGF) transgenic homozygous mice. We continuously injected anti-HMGB1 mAb or IC mAb i.p. once every two days for three times. The clinical and histological changes of the mice were evaluated by clinical score, epidermal thickness changes and Baker score. The number of T cells, neutrophils and DCs were detected by immunohistochemical staining. The mRNA expression of IFN- $\gamma$  and IL-17 were assayed by qPCR.

**Results:** we found that anti-HMGB1 mAb could effectively ameliorate the clinical skin lesions. It was shown that histopathologic changes and improvements in K14-VEGF transgenic homozygous mice after three treatments. Moreover anti-HMGB1 mAb also decreased the number of the cellular infiltration of CD3+T cells, MPO+neutrophils, and CD11c+DCs, reduced the number of  $\gamma\delta$  T-Cells, and down-regulated the expression of IL-6, TNF- $\alpha$ , IFN- $\gamma$  and IL-17 in psoriasis-like lesions of mice skin.

**Conclusions:** our data suggest that HMGB1 blockade might be a promising molecular target for the psoriasis therapy.

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