EADV ANNUAL CONGRESS 2016

Austria Center Vienna,
Vienna, Austria
28TH SEPTEMBER–2ND OCTOBER 2016

Welcome to the *European Medical Journal* review of the 25th Annual Meeting of the European Academy of Dermatology and Venereology Congress

This year's EADV Congress took place in Vienna, Austria, with a record number of 11,320 attendees. Coined as the 'city of dreams' because it was the home of psychoanalyst Sigmund Freud, Vienna was a spectacular setting for Europe's largest dermatology and venereology meeting. More than 700 speakers were invited to present and there were 180 thought-provoking sessions, featuring contributors from over 30 countries.

Speaking at the opening ceremony, the President of the EADV Prof Erwin Tschachler said: "This Congress offers to all a collegial, collaborative, and congenial setting in which experts, participants, and speakers alike can share their knowledge and learn from one another. Painstakingly designed, this year's scientific programme has been built from the success of last year, employing varying levels of teaching that enable participants to optimise their session selections and best meet their professional needs. Great care was taken to ensure that we bring both cutting edge speakers, lecturers, and scientists, as well as rising stars in the widest range of relevant topics."

Genetics was a core theme of the scientific programme, with 2 days of lectures detailing everything clinicians need to know about both basic skin diseases with classical genetics and the growing understanding of the biological coding underlying complex diseases including psoriasis and atopic dermatitis. Further highlights of the congress included 2 half-day tracks covering dermatology and important diseases from the Americas and diseases in dark skin, which were presented by key speakers from Africa and India.

The President's symposium featured a brand new element this year, with the addition of an interactive aspect that enabled the audience to use their smartphones and tablets to send questions directly to the speakers and make comments. These audience responses were projected onto a screen in real time, as were answers provided by the audience to questions raised by the speakers. Building on its success in Copenhagen, Aesthetic Sunday made a return, putting aesthetics and cosmetic dermatology in the foreground of proceedings. The sessions focussed on a variety of topics including dermocosmetics,

aesthetic lasers, and aesthetic surgery, with renowned specialists detailing the very latest advances.

This year's congress saw a change in the leadership of the EADV. Dr Michael Reusch took over as Secretary General, with the previous holder of the post, Prof Carle Paul, elected President-Elect. Also, Prof Erwin Tschachler's term as President ended, and Prof Luca Borradori was installed as President of the EADV until 2018. After assuming his duties as President, Prof Luca Borradori outlined his vision for his term, saying: "My goal for the next 2 years is for the EADV to consolidate its role as a successful educational promoter and effective policy advocate in our changing world, as well as, together with Ms Nancy Induni, to optimise the organisational structure of the EADV and its operation model."

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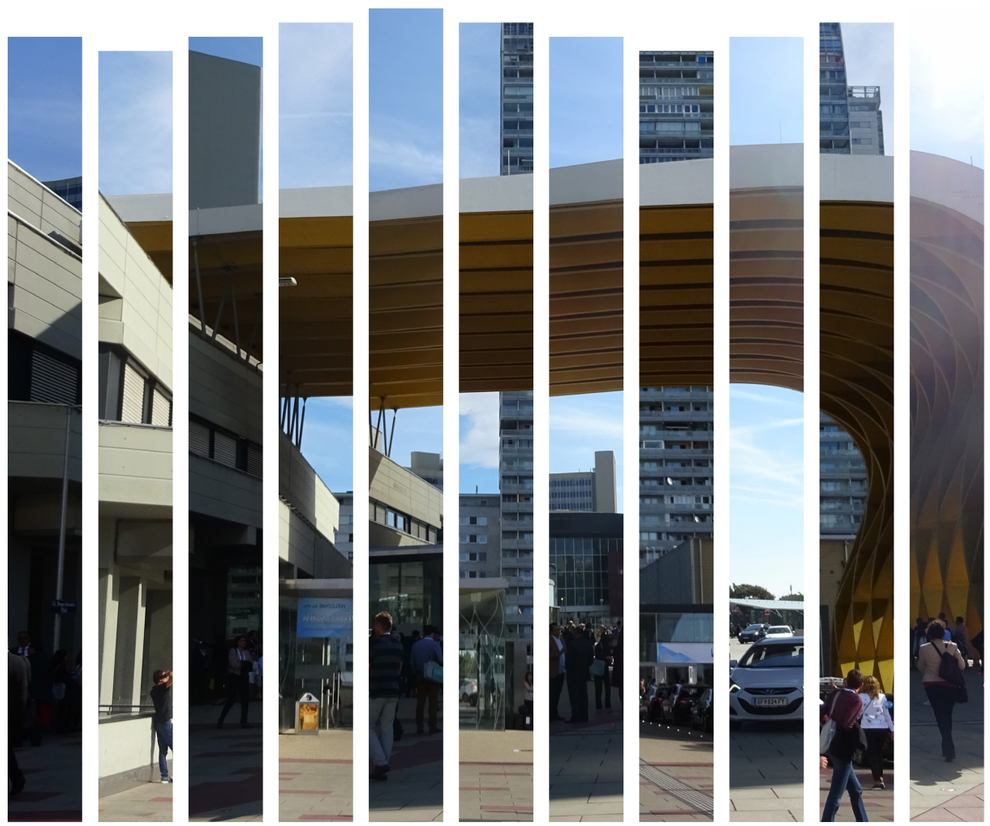
In this issue of *EMJ Dermatology*, we present some of the key features of the EADV Congress 2016, with a review of the most impactful research from the congress and summaries of some of the presentations made this year. We hope this gives you an insight into the latest in the field of dermatology and will be of use in your practice in the future. The 26th edition of the EADV Congress is set to take place next year in Geneva, Switzerland, in September 2017, and we are already looking forward to this next instalment with much anticipation.



Congress Highlights

EADV 2016 Revealed: Interaction and Innovation

INAUGURATING the 25th aggregation of dermatology and venereology specialists from Europe and beyond, Prof Erwin Tschachler, EADV President, spoke of both interaction and innovation as congress itinerary highlights. As noted by a EADV press release dated 28th September 2016, Prof Tschachler explained that: "It is my honour and pleasure to welcome you in my hometown and [I] hope that together, we can use the Congress to advance excellence in clinical care, research, education, and training in the field of dermatology and venereology in Europe."

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Directly from the frontier of genetic research, EADV saw 32 of the most auspicious clinician-geneticists provide a comprehensive cross-section of this innovative field of dermatology. With a focus on the genetics of a variety of skin diseases, the lectures provided a real opportunity for all delegates to learn more about this aspect of dermatology. Over 2 days, EADV offered delegates a whirlwind tour of the genetic landscape, covering everything from basic to complex skin disease genetics and the implications of this fast-paced field for real-world practice and treatment.

DERMATOLOGY • November 2016

Founded in 1987, this non-profit organisation has long stood as an advocate for both patients and specialists. Honouring this dedication, EADV 2016 for the first time hosted a policy roundtable press conference, engaging delegates in their impressive work on behalf of the public and healthcare professionals. The emerging key issues included skin cancer risk for outdoor workers, health policies concerning sunbed use, and advocacy of tattoo regulations and awareness. A spotlight on the World Health Organization (WHO) resolution on psoriasis proved to be a highlight of the discussion.

The congress design was imbued with innovation; from start to finish, digital audience and presenter interaction was facilitated. The president's highly anticipated symposium covered important topics including the use of biologics with psoriasis patients, teaching green flags to general practitioners, and new global challenges for dermatology. "We sure expect a highly interactive, and above all, interesting discussion between the panellists and the attendees," Prof Tschachler anticipated.

Dermatology Deemed First Medical Discipline to Develop Immunotherapy Against Solid Cancer

SURVIVAL of patients with metastatic diseases has, for the first time, remarkably improved following immunotherapy of solid cancers, according to a EADV press release dated 4th October 2016. This provides considerable hope for those with advanced and metastatic melanomas as well as for the field of oncology more generally.

In Europe and Northern America, melanomas are among the eight most frequently fatal cancers. However, there are two key aspects which divide melanomas from other types of cancer. Firstly, the risk of death from melanoma is strongly affected by differences in tumour size on the order of millimetres as opposed to centimetres, and secondly, metastatic melanomas have an electively low sensitivity to conventional chemotherapy. As of yet, no clinical trial involving either chemotherapy or immune-chemotherapy has shown to significantly lengthen patient survival rates.

> It was found that immunotherapies with antibodies aimed against a molecule, programmed death 1, can provide help for >50% of patients for ≥2 years providing they have low metastatic burden and a strong immune system.

Networks of signalling molecules are able to inform cells how to thrive within healthy environments, and subsequently, further research discovered signalling events able to initiate the development of benign pigment cells to melanomas. As a result, drugs that are able to act specifically for melanoma therapy were developed but were only able to provide a short-term solution. New investigations into these signalling events have now led to the creation of more effective combination therapies able to help patients for ≥3 years. However, metastases generally return quite quickly following such therapies if treatment is interrupted.

Publicly-funded research has led to the development of immunotherapy treatments for metastatic melanoma. The retrospective study, including hundreds of patients receiving immunotherapy, presented the vital necessity of beginning immunotherapy for metastatic melanoma at the earliest stage possible. It was found that immunotherapies with antibodies aimed against a molecule, programmed death 1, can provide help for >50% of patients for ≥2 years providing they have low metastatic burden and a strong immune system.

This discovery has important implications for dermatologists: after primary excision, melanoma patients must have numerous follow-up investigations to enable the detection of metastatic disease at the earliest stage possible; dermatologists must learn to carry out targeted therapies and immunotherapies as well as how to treat associated immune-mediated side effects. If there is a single recurrent metastasis, excision is still vital.

Health of Europe's Outdoor Workers at Risk

NON-MELANOMA skin cancer risk has been proven to at least double after just 5 years of outdoor work compared with those who work indoors. This is according to a EADV press release dated 30th September 2016.

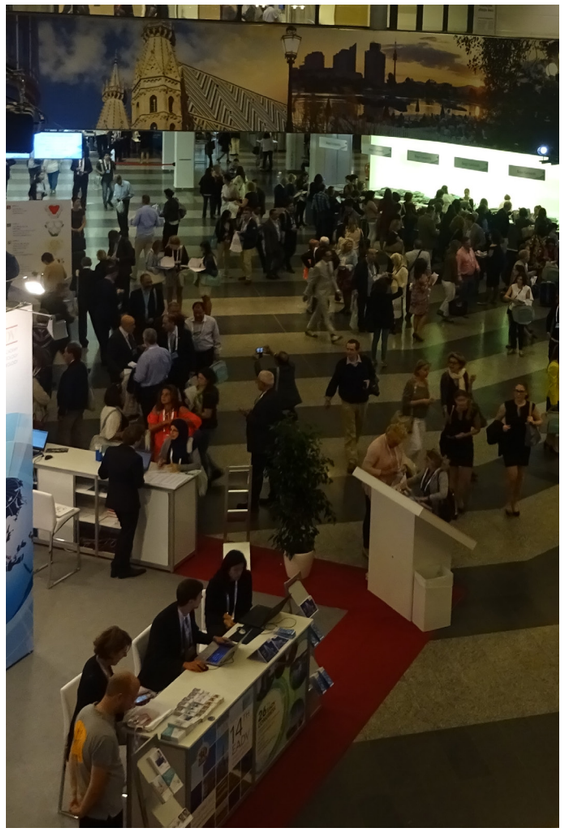
> "...with a workforce of approximately 14.5 million occupied for at least 75% of their work time outdoors, in Europe alone, attention to the invisible risk of UV exposure to develop occupational skin cancer has been vastly neglected."

Among those who work outdoors in Europe, it is reported that health literacy levels are far poorer than among those who work indoors. Prof Swen Malte John, Chairman of the Department, Dermatology, Environmental Medicine, Health Theory, University of Osnabrück, Osnabrück, Germany, commented: "The effects of recreational solar ultraviolet (UV) radiation inducing skin cancer are largely recognised, and numerous national campaigns have been launched over the past decades as a response to this fact. However, with a workforce of approximately 14.5 million occupied for at least 75% of their work time outdoors, in Europe alone, attention to the invisible risk of UV exposure to develop occupational skin cancer has been vastly neglected."

Last April, the EADV instigated a global call to action aimed at encouraging policy makers, employers, workers' organisations, and physicians to help protect outdoor workers from solar UV radiation-induced skin cancer. Prof John noted: "Employers rarely undertake health surveillance, seldom introduce organisational changes at the worksite, and

provide poor or no instructions on adequate sun protection. Yet, what seems to make a difference to sun-safe behaviour is perception of workplace support, including proper safety and health regulations."

Among the 24 health and safety directives of the European Commission which aim to protect workers from a whole host of problems, one in particular is currently under review: the artificial optical radiation directive, which aims to limit the amount of exposure workers' skin and eyes have to artificial optical radiation. This directive however, fails to address the issue of workers' exposure to natural UV radiation. Prof John stated: "Awareness-raising campaigns addressing the general population seem to bear results: people's knowledge on solar UV radiation risks and on their sun protection behaviour has increased. Why then shouldn't this be possible for occupational skin cancer?" Consequently, the EADV is currently working towards including solar UV radiation within this directive in the hope of protecting outdoor workers.



11,320 attendees

Sentinel Node Biopsy for Melanoma Patients Discussed During Plenary Lecture

THE LEADING ROLE that should be played by dermatologists as primary caregivers for melanoma patients, especially with reference to the sentinel lymph node biopsy (SLNB), was a core theme of the plenary lecture at this year's EADV Congress. The lecture was presented on 29th September 2016 by Dr Timothy Johnson, Lewis and Lillian Becker Professor of Dermatology, University of Michigan, Ann Arbor, Michigan, USA, and in a EADV press release.

> "The next time you are in the moment with that patient with melanoma, you should view them through the eyes of many specialties, and with the most contemporary knowledge base."

While the field of melanoma spans several specialties, patients typically first look to their dermatologist for guidance and information, including on the subject of SLNB. In medical practice, accurate staging of melanoma is the key factor driving the course of treatment and the range of treatment options available to the patient. Speaking about current global practice guidelines, Dr Johnson stated: "The staging accuracy of sentinel node biopsy is not argued anymore. There is a small likelihood of identifiable distant disease if the SLNB is negative." He noted that the majority of patients did not require consideration for SLNB, although those with a Breslow depth ≥1 mm or from 0.75–0.99 mm with higher-risk factors should be considered.

SLNB results will enable clinicians to determine the need for adjuvant therapy, as well as the type of adjuvant therapy required. It is expected that in the future, more effective adjuvant therapy will remove the necessity for completion lymph node dissection after a positive SLNB result. Although it is thought that in the near future sentinel lymph node staging is likely to become more relevant and frequent, within our lifetime it is probable that few (if any) SLNBs will be carried out once true precision medicine has been developed.

Finally, Dr Johnson discussed the importance of taking a holistic approach to treating patients with melanoma, in order to reflect the wide range of specialties it covers. He commented: "The next time you are in the moment with that patient with melanoma, you should view them through the eyes of many specialties, and with the most contemporary knowledge base."

'Tanorexia': A Health Concern for Sunbed Users

SUNBEDS have been a hot topic at this year's EADV Congress, according to a EADV press release dated 30th September 2016. The overwhelming concern, alluded to by Dr Mariano Suppa, Hôpital Erasme, Université Libre de Bruxelles, Brussels, Belgium, was the greatly increased risk of skin cancer development from sunbed use and the 'fashionable' aspect of the product.

> Indeed, it has been suggested that addictive sunbed use should be regarded as a type of substance-related disorder.

As it stands, individual exposure is higher in both Northern and Western Europe in comparison to the USA and Australia, in both adults (42%) and adolescents (24%). "It has been reported that over 3,400 melanoma cases are attributed to sunbed use every year in Europe and that the risk of melanoma is significantly increased for subjects ever exposed to sunbeds, particularly over the age of 35," explained Dr Suppa. It has been estimated that 429,927 cases of skin cancer are attributable to indoor tanning annually, in comparison to 362,941 cases of smoking-related lung cancer.

Over 30 countries

The psychological wellbeing of individuals who engage in sunbed use is another cause for concern, with suggestions that there are certain addictive qualities about it. "Indeed, it has been suggested that addictive sunbed use should be regarded as a type of substance-related disorder," emphasised Dr Suppa. American studies have supported this, linking sunbed use to anxiety, depression, and substance abuse, indicating that some of those who use sunbeds possibly suffer from psychological stress.

Currently there are no specific European Union (EU) regulations regarding sunbeds. It does, however, fall under the Low Voltage Directive (2014/35/EU) which ensures the safety of electrical consumer products. Over the last 20 years more and more countries have initiated the development of legislation aimed at reducing sunbed use, including special taxes, lower amounts of UVB output, and age restrictions. Dr Suppa commented on the positivity of such steps, pointing out that: "There are some indications that restrictions in sunbed use may succeed in reducing prevalence of use and, eventually, associated risks."

For now, Dr Suppa will turn his attention to the manufacturers, concluding with the statement that: "Our first goal is to make the sunbeds industry admit that they are selling a product that can cause skin cancer and enhance addictive behaviours. To this matter, the parallelism with [the] tobacco smoking industry is quite interesting."

Global Action Plan for Tackling Psoriasis in Development

PSORIASIS is not merely a skin disease, states a recent resolution by the World Health Organization (WHO), but it also has many other negative consequences. The subsequently published WHO report recommends 20 actions and practical solutions to control and reduce the harm of this disease. To analyse the significance of the resolution and the report to dermatological practice, Ms Sophie Andersson, Executive Director, International Federation of Psoriasis Associations (IFPA), was invited to this year's EADV Congress to talk about the group's significance, as well as to explain the aims of the IFPA following the publication of the report.

The resolution stated that psoriasis, aside from being a skin condition, is a "chronic, non-communicable, painful, disfiguring, and disabling disease for which there is no cure." Ms Andersson expanded on this in a EADV press release dated 30th September 2016, emphasising that psoriasis is a systemic disease that has high physical, mental, emotional, social, and economic implications for patients, with an increased risk of associated comorbidities such as cardiovascular disease. "Even though the disease itself is rarely fatal for the patient, the comorbidities might [be]," she explained.

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The WHO's Global Action Plan for the Prevention and Control of Non-Communicable Diseases (NCDs) for 2013–2020 was also discussed by Ms Andersson during her presentation. Within the plan itself, there are four main recognised NCDs (cardiovascular diseases, diabetes, respiratory diseases, and cancer), and four main prevention areas are focussed upon (healthy diet, exercise, alcohol, and tobacco). It was noted by Ms Anderson that at least two of the NCDs overlap with psoriasis-associated comorbidities. She then described how the IFPA plans to focus its efforts on early scanning to detect psoriasis, as well as on the four prevention areas, in order to achieve improved diagnoses and treatments for patients.

Finally, Ms Anderson spoke about the IFPA's strategic goals over the next few years, informing the audience of the upcoming meeting at the United Nations (UN) in 2018 to revise the Global Action Plan. It was also made clear that the IFPA is actively seeking to expand the scope of the proposed plan, working to achieve a global psoriasis coalition which will include patient associations, healthcare professionals, pharmaceutical companies, medical associations, and policy makers to assist in this effort.

Legislation Progress to Target Tattoo Ink Toxicity

TATTOO ink constituents should be better regulated stressed Dr Christa De Cuyper, Dermatologist, Sint-Jin General Hospital, Bruges, Belgium, and founding member of the European Society on Tattoo and Pigment Research (ESTP). This is according to a press release dated 30th September from this year's EADV Congress, held in Copenhagen, Denmark.

Tattoo inks are developed, manufactured, and sourced largely from the USA, Europe, and Asian/Chinese markets. Selected by artists

individually, the substances used to make each dye are not uniformly controlled, resulting in a differential chemical profile across companies. The popularity of tattoos is increasing, particularly among those aged 18–24 years old, and dermatologists are becoming increasingly concerned with the broad range of adverse reactions and complications presented within their practice. Both tattoos and permanent make-up involve the dispersal of coloured pigments, additives, and often unintentional particulates, under the epidermis and into the underlying dermis of clients, presenting the ideal environment for infections and allergic reaction development.

> “We need a positive list of safe pigments and ingredients. Tattoo inks should at least meet the same standards as cosmetic products.”

Speaking at last year’s event, Dr Cuyper emphasised: “We need a positive list of safe pigments and ingredients. Tattoo inks should at least meet the same standards as cosmetic products.” After the success of EADV’s custom cartoon video highlighting the importance of the topic in June, Dr Cuyper returned to this year’s congress to explain recent developments, namely by the European Commission (EC), who have now requested that the European Chemicals Agency (ECHA) implement a potential restriction of tattoo products within their REACH (registration, evaluation, authorisation, and restriction of chemical substances) framework.

More than 700 speakers

Based on a proposed strategy from the final Report on the Safety of Tattoos and Permanent Make-Up, published in 2015, the ECHA now have a year to obtain the necessary chemical profiles and manufacturing information from companies before a final decision is made. Dr Cuyper commented: “The interested parties now await the conclusion of the ECHA on whether chemicals used in tattoo inks will come under REACH with some anxiety. Indeed, if the decision is positive, there is a very high risk that many current inks will ultimately be considered unsafe.”

The Future of Dermatology: Can You Imagine?

VISUALISATION of the possibilities within dermatology was the overarching theme in the opening lecture to this year’s EADV Congress in Vienna, Austria. Prof Alfred Vendl and Dr Stephen Katz presented their thoughts on the current status of dermatological research.

> “If we glean anything from the tremendous advances of the past decade, one can only imagine what the future holds for us and our patients who have skin diseases.”

Dr Stephen Katz began the lecture by summarising the extraordinary achievements of dermatologists across the world in the past 10–15 years of research. As Director of the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) at the National Institutes of Health (NIH), as well as having extensive experience training the most distinguished immune-dermatologists across the world, Dr Katz is uniquely placed to reflect on the successes of his colleagues in the field. In a EADV press release dated 29th September 2016, he commented: “If we glean anything from the tremendous advances of the past decade, one can only imagine what the future holds for us and our patients who have skin diseases.”

Dr Katz also emphasised the importance of research into rare diseases: “Research on rare diseases has tremendous potential to improve the lives of affected individuals. It also substantially advances our understanding of fundamental biology, and therefore often provides insights that can be applied to other diseases that affect larger numbers of people.” It is this basic biology, explained Dr Katz, that has allowed us to view diseases such as psoriasis, atopic dermatitis, and metastatic melanoma in a completely new light.

Following on from this, Prof Vendl, Technical University of Vienna, Vienna, Austria, played clips from his award-winning film ‘Planet You’. The visualisation of the human body as a planet, inhabited by a vast population of microcreatures, allowed the audience a glimpse into the normally invisible world of the human body. Prof Vendl, who has achieved success within the worlds of both medicine and film-making, explained the importance of multimedia resources such as this, which was created using high-resolution microscopic techniques: “[These] phenomena are outside of the limits of human perception when being too small, too big, too fast, too slow, or outside the visible part of the electromagnetic wavelength spectrum. The average human is host to almost 4 pounds of alien creatures that inhabit every nook and cranny of our body.”

180 thought-provoking sessions