Meeting Summary
by Joelle van der Walt, PhD, IPC Scientific Director

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The International Psoriasis Council (IPC) Think Tank was held at the Mondrian Hotel in Miami Beach, Florida, on November 30–December 1, where outside the air was warm, the music loud, and the clothing small, while, inside, the science sizzled and IPC councilors and invited guests engaged in a full program of scientific updates and future planning.

Nearly 100 attendees from 17 countries convened for the annual event, including IPC Board members, councilors, fellows, and industry partners. The main focus of the Think Tank meeting was to share and discuss important scientific topics of psoriasis clinical management and emerging areas of research.

IPC President Jonathan Barker welcomed the attendees, then presented the 2019 IPC Outstanding Councilor awards. IPC councilors donate their time and provide their expertise on all IPC projects. Each year, IPC honors individuals who contributed significantly to the organization. This year’s award-winning volunteers are IPC councilors Arnon Cohen, Israel; Elise Kleyn, United Kingdom; Murlidhar Rajagopalan, India; Fernando Valenzuela, Chile; and Xuejun Zhang, China.

Next came the opening of the scientific session featuring 3 topics presented by IPC councilors and other experts to further develop and inform IPC’s 2020 strategic plan. The topics were P4 (personalized) medicine, optimizing translational research in plaque and pustular psoriasis, and access to medicines. The session closed with an outstanding keynote lecture by Dr. Nicole Ward, United States, on mouse models used in translational psoriasis research.

The second day of the Think Tank featured a dynamic open discussion moderated by IPC Chief Medical Officer Peter van de Kerkhof, the Netherlands, in which councilors exchanged ideas from an international perspective. The discussion was robust and engaging, and provided the opportunity for key opinion leaders to offer input into shaping future IPC projects.

Summaries and key points of presentations from day 1 are listed below. Councilor comments on each topic collected on day 2 are listed under each topic section.
P4 MEDICINE AND PSORIASIS

Former IPC Board President Professor Chris Griffiths, United Kingdom, introduced the overarching concept of P4 Medicine and its importance in revolutionizing psoriasis care in the near future. The vision for P4 Medicine is health care that is predictive, preventative, personalized, and participatory, guided by an intricate network of data collected over time. Psoriasis is a chronic, systemic disease and is marked by psychosocial and clinical comorbidities. To reach a goal of comprehensive care, researchers are employing layers of multi-omics data and predictive analytics (machine learning) to predict drug response, adverse events, and appropriate dosing so that, ultimately, care can be individualized.

Professor Griffiths presented outcomes from key initiatives from the United Kingdom, including the BADBIR (British Association of Dermatologists Biologic and Immunomodulators Register) prospective registry, which collects longitudinal clinical data and biological samples from psoriasis patients and the PSORT Consortium (Psoriasis Stratification to Optimise Relevant Therapy), which conducts research to predict clinical response to biologic therapeutics to aid in clinical decision-making.

Research has identified that drug response is not only influenced by genetic background but also affected by other variables – such as BMI (body mass index), smoking, hypertension – that may be controlled by lifestyle changes. A personalized treatment plan would include the right medicine and lifestyle (wellness) management to promote the overall health of psoriasis patients. Professor Griffiths also provided an innovative example of psoriasis care strategy at the Manchester Rapid Access Clinic, which provides expert psoriasis care, screening for comorbidities, wellness coaching, and education to support newly diagnosed patients. This strategy can translate to early intervention, be a powerful approach to effective care, improve patient outcomes, and, ultimately, reduce risk of comorbidities.

Challenges and opportunities were debated on how to leverage digital health data, including artificial intelligence and big data, so that treatments can be tailored for patients with plaque and pustular psoriasis.

KEY POINTS:

- “Actionable possibilities,” such as specific clinical biomarkers, could be identified to inform and improve health.
- Genetic and environmental factors are strong determinants of psoriasis disease and response to biologics.
- Lifestyle management and coaching are instrumental to care.
- Early intervention strategies are needed.
- Need exists for strong networks across international academic centers.
- Standardization of data collection to pool data is crucial.
- In order for the P4 approach to transform or even replace routine care, awareness of this approach requires focused education.
OPTIMIZING TRANSLATIONAL RESEARCH IN PSORIASIS: BIG DATA APPROACHES TO DISCOVERY AND APPLICATION

In this session, faculty discussed the use of big data, focusing on a patient-centered approach in translational research. Discussion leaders suggested ways in which IPC can contribute to translational research, such as exploring professional networks, standardizing data collection, and promoting patient-centered research.

Integrative multi-omic approaches
Professor Kevin Cooper, United States, outlined the use of data tracking across multiple health dimensions to individualize psoriasis diagnosis and treatment. He posed intriguing questions:

- For patients with psoriasis with similar clinical external morphology and distributions, how can we distinguish those with emerging comorbidities?
- Can we harness big data bioinformatics to identify a biomarker of each endotype (lab-defined parameter) that can be used to link to extreme phenotypes (irreversible comorbidities)?

The current treatment paradigm for psoriasis is to manage it as a single disease, but, in reality, psoriasis presents many clinically indistinguishable subtypes. The identification of endotypes will guide treatment and help predict the risk of future comorbidities (reversible and irreversible).

Professor Cooper presented data on monocytes as a potential biomarker that can be used to dissect the disease into monocyte-defined endotypes and predict psoriasis comorbidities. He stressed the need for a simple, inexpensive biomarker or panel of biomarkers (red blood cell distribution width [RDW], mean platelet volume [MPV]) to determine cardiovascular disease risk in patients with psoriasis. For example, data analysis from the Explorys electronic health record database suggests that psoriasis patients with higher RDW and MPV are at greater risk for cardiovascular disease.

Large datasets of lab-derived values matched with clinical records are needed to identify the clinical comorbidity-defined phenotypes. Examination of multiple datasets through principal component analysis and artificial neural networks allows for the interpretation of more complex interrelationships. Ultimately,

KEY POINTS:

- Define endotypes of psoriasis.
- The actual level of control of psoriasis needed for each comorbidity is not known.
- Whether every drug that results in psoriasis response provides equally effective prevention of specific comorbidities is not known.
- Which patients are at most risk for various comorbidities is not known.
- Many comorbidities are not easily monitored or require serial invasive or risk-associated testing, eg, CT, angiography, brain MRIs, joint biopsies.
- Non-invasive tests that tell us which patients are at risk for which comorbidities (endotypes) and whether the comorbidity has been rendered inactive (biomarkers or biosensors) may be discoverable through bioinformatic mining of in-depth patient studies.
- International collaborations for sufficient data are needed.
meaningful correlations that are uncovered through big data and later validated may lead to a personalized management approach that is able to reduce disease burden and prevent comorbidities.

Let’s be real: Pragmatic clinical trials
Professor Joel Gelfand, United States, described the differences between effectiveness (real world) and efficacy (ideal setting) studies, outlined the methodological characteristics of pragmatic trials, and emphasized the importance of patient-centered research. Registry data suggest that many patients with psoriasis would not be eligible for randomized controlled trials (RCTs) due to strict inclusion criteria. Studies have shown that real-world responses to treatments are not the same as responses reported in clinical trial participants and that patients in the real world are more susceptible to adverse events due to underlying comorbidities. In addition, patients vary in their adherence and motivation, as does physician knowledge of treatment. A set of criteria has been established that structures a pragmatic trial. However, it should be noted that there are trade-offs between efficacy and effectiveness designs.

Professor Gelfand provided an example of a pragmatic study, Light Treatment Effectiveness (LITE), funded by Patient-Centered Outcomes Research Institute (PCORI) and directed by Professor Gelfand at the University of Pennsylvania in the United States. The study aims to compare the effectiveness, safety, and duration of treatment response at 12 weeks of home- versus office-based narrowband ultraviolet B phototherapy to treat psoriasis. In this study, narrowband UV phototherapy dosing is based on skin type and personalized data, and other outcome measures are being collected. Professor Gelfand called for a shift from efficacy clinical trials to patient-centered, pragmatic trials in order to examine clinical outcomes that are meaningful to the patient.

KEY POINTS:

- Promote importance of pragmatic studies that are patient-centered. Visibility through IPC.
- What key psoriasis clinical practice questions can best be answered by pragmatic trials?
- How can we strengthen the infrastructure for embedding psoriasis trials in real-world care settings? Advocate for EMRs. Collect more data.
- How do we find consensus on margins for comparative studies?
- How do we translate pragmatic trial research findings to clinical practice?

In his presentation, IPC Councilor Joel Gelfand called for pragmatic, patient-centered clinical trials.

Councilor comments on P4 Medicine:
- Share data, make data compatible (standardize). IPC can have an impact in this area by suggesting a minimum dataset.
- Improve patient participation, take in views from patient-focused organizations that have strength in this area. Patients are going to be the most motivated group to collect the data.
- Play an active role in collecting clinical data and biomarkers. IPC can support by facilitating connection, laboratory collaborations.
- IPC could be a mechanism for bringing registries together.
- Problem with collecting electronic health data – collection is fragmented across medical institutions (different software packages, different data collected), creating a huge challenge for analysis.
- Other challenges include how to collect unstructured data that could be more meaningful but is more difficult to capture and analyze.
- Privacy issues and consent on use of data and biological samples differ across institutions/countries.
Professor Hervé Bachelez, France, introduced this session’s topics, which included the clinical spectrum of pustular psoriasis, genetic associations, correlation between genotypes and clinical presentations, and the therapeutic opportunities. The impact of research in this field on personalized care was explored, as well as the potential for IPC to contribute to this area.

**Mechanistic scenarios in pustular psoriasis: Where do we go now?**

The goal of this session was to deepen our understanding of the disease mechanisms of pustular psoriasis, with the aim of identifying phenotypes and correlations of genetic variants. Professor Bachelez described the clinical manifestation of pustular psoriasis attributed by either a single causative gene (monogenic) or oligogenic (complex mode of inheritance of disease-causing variants). Rare variants in IL-36RN, CARD14, and AP1S3 are causative for pustular psoriasis. To establish causality of mutations, protein prediction models, in vitro studies, and mouse models are required to determine the structural and functional impact of mutations and examine consequences on skin and the immune system. Professor Bachelez provided examples of biological and functional impact of mutations, such as CARD14 AD gain of function mutation, which causes upregulation of cytokines and impacts NFkB and IL-36 pathways. AP1S3 mutation causes dysregulation of pro-inflammatory cytokines and upregulate IL-36 and TNF production in keratinocytes. IL-36RN mutations are more frequent in generalized pustular psoriasis (GPP) and acrodermatitis continua of Hallopeau (ACH) versus palmoplantar pustulosis (PPP) and causes an imbalance of the IL-36 pathway. Although the genes mentioned are major pathogenic players in pustular disease, a large number of patients do not carry these mutations, which indicates that other gene variants have not been identified.

**Pustular psoriasis and related disorders: Nosological and therapeutic challenges, the dawn of a new era**

Pustular psoriasis is an orphan disease which is under-researched and has a huge impact on patient quality of life. Professor David Burden, United Kingdom, emphasized that pustular psoriasis:

- Is phenotypically distinct from psoriasis vulgaris;
- Is genetically distinct from psoriasis vulgaris;
- Responds differently to treatment than psoriasis vulgaris does.

It is not uncommon in clinical observations to find some pustules in inflammatory plaques of psoriasis vulgaris, which may confound diagnosis. It was recognized early on that there is a need to harmonize the phenotypic descriptions of pustular disease. In 2014, the European Rare
And Severe Psoriasis Expert Network (ERASPEN) was formed in order to establish international agreement on nomenclature, diagnostic, and classification criteria. To date, the collaborative effort has collected data on more than 900 individuals in Europe.

Professor Burden discussed 2 types of PPP, Type A (more prevalent in Japan) and Type B, which are characterized by clinical differences. He discussed the clinical and genetic differences between pustular subtypes and highlighted mutations frequency differences across geographic regions.

In general, there is no gold standard therapy for pustular psoriasis and clinical trials are few. Clinical studies (guselkumab, sekukinumab) on PPP demonstrated limited efficacy. More trials are needed in larger patient populations with standardized eligibility criteria, severity scores, outcome measures, and patient-reported outcomes. A proof-of-concept study investigating an IL-36R inhibitor is currently underway and may prove to be an effective targeted therapy for GPP.

**KEY POINTS:**
- Pustular psoriasis is phenotypically distinct from psoriasis vulgaris.
  - international agreement on nomenclature, diagnostic and classification criteria
  - global atlas of epidemiology
- Pustular psoriasis is genetically distinct from psoriasis vulgaris.
  - international bioresource for these rare diseases (ERASPEN)
- Pustular psoriasis responds differently to treatment than psoriasis vulgaris.
  - unmet need for new therapeutics, especially in PPP
- Trial design needs harmonization (inclusion criteria, severity scores, outcome measures).
- How many range of phenotypes are there and what are they? Other diseases beyond GPP, PPP and ACH.
- There is a need to understand geographical variation and variation over time.
- Extending or building on the success of ERASPEN, large bioresource for large-scale genotype phenotype, and explore association with PV.

**Councilor comments on pustular psoriasis from gene to clinic:**
Councilors discussed several potential opportunities for IPC and the need to take an international perspective.

- There is a need to understand the geographic differences in disease presentation and severity. Opportunities exist in genetics, immunology, and therapeutics.
- Slight concern that trials are running without validated scoring systems. IPC can help validate outcome measures that would be acceptable to regulators.
- Disease severity and variance present an opportunity for IPC to define and continue genetic research.
- Finding patients for clinical trials is problematic. Can IPC facilitate the collection of interested patients? A registry is needed.
ACCESS TO MEDICINES

Professor Bruce Strober, United States, moderated this session. Using the World Health Organization (WHO) statement that psoriasis is a serious disease as a framework, faculty discussed the causes of variable access to medications across the world. These include economy, culture, positioning psoriasis as a health care priority, and education of both physicians and patients. In addition, access to health care systems in various regions of the world were highlighted as another important challenge for patients living in rural areas and underserved regions.

Treatment access in underserved regions

Over the last 2 decades, the understanding of psoriasis pathogenesis has led to the development of many effective and safe treatments that can reduce the burden of disease in many patient populations. However, even in this era of innovation and availability of multiple treatment options, psoriasis is still undertreated, particularly in underserved regions. In this session, Professor Claudia de la Cruz, Chile, described multiple barriers to psoriasis care, including the high out-of-pocket costs to the patient, geographic barriers, willingness of patients to receive therapy, and lack of physician knowledge. The high cost of medicine and the effects of reimbursement decisions (restricted, delayed, denied) may lead to limited access to effective therapy. The financial barriers also contribute to disparities between patients, whereby those who can afford to pay for expensive biologics and oral therapies are treated optimally, while those who cannot are resigned to a cheaper therapeutic and a longer road to treatment satisfaction.

Professor de la Cruz provided a few striking examples of how multiple barriers create extreme challenges to care. In her home country, there are only 350 dermatologists for 17 million people, which greatly limits patient access to expert care. In addition, treatments are expensive and are not covered by the public health system. Patients who can afford private health insurance may be covered for biologic treatments. In India, care in government hospitals is free of cost; however, biologics are not routinely available in all government hospitals or covered by insurance.

Professor de la Cruz issued a short IPC survey to councilors from 12 countries to assess differences in availability and access to psoriasis treatments (phototherapy, systemics, biologics). The responses from the survey revealed a sense of frustration from councilors regarding access to many therapies.

KEY POINTS:

- The most important barrier is cost/lack of reimbursement in underserved regions.
- Biosimilars are available in some countries, but, in some countries in Latin America, price reduction is below 20%.
- There is a lack of dermatologists (in number and/or with knowledge in psoriasis).
- Underserved areas lack referral centers.
- IPC must move access forward. Many countries offer effective treatments, but access is limited due to lack of dermatology care and high cost.
which the journey of a psoriasis patient can either go down due to barriers (chutes) toward illness or the path can lead up to improved health by using solutions (ladders). In this illustration, she noted that no two patients follow the same path to good health and that many different “ladders” may be used to move them through their treatment journey.

She described an analytical framework with 4 barrier dimensions:

- Geography (distance, cost of transport)
- Availability (waiting time, non-integrated services, availability of treatment, lack of qualified care workers)
- Affordability (price of services, cost of treatment)
- Acceptability (trust, stigma motivation, cultural, depression, non-adherence, difficulty navigating health care system)

Barriers to health services and medications will differ according to a patient’s culture and age, and, therefore, will require varied solutions to overcome them. Once all barriers are recognized, solutions can be applied, and health care disparities can be reduced. Professor Rehmus listed several successes or solutions to barriers, including telemedicine, educational programs, new drug development, World Health Organization (WHO) essential medicines, guidelines, patient-support programs, widening insurance coverage, and awareness campaigns.

In order to promote social justice in medicine, solutions must be employed to eliminate health disparities and move patients with psoriasis toward optimal health.

**KEY POINTS:**

- World Health Organization essential medicines must be available and expanded.
- Health education for local providers helps with acceptability. They can partner with volunteer doctors for psoriasis teaching.
- Patient organizations connect patients to care.
- Online social networks help increase health literacy.
- Cross-cultural work is needed across the globe to decrease stigma and raise visibility of psoriasis.
- Prioritize psoriasis as a serious health concern, link in comorbidities as significant health concerns.

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**Councilor comments on access to medicines:**

Improving health care delivery and access to effective psoriasis treatments are needed to alleviate disease burden in global populations.

- A deeper understanding of access (to both health care services and medications) is needed in every geographic region in order to assess specific situations and solutions.
  - Ask the questions (at a master class for instance) to get a scope of the region.
  - Ask access and barrier questions through the Global Psoriasis Atlas. (See page 11 for GPA updates.)

- IPC can support local activities, master classes, and telemedicine/telementoring, and promote interaction with payors, government, and health care systems. IPC can help educate across the access spectrum. Example: WhatsApp can be used as a telementoring tool. The mission would be to support patients where they live, limit patient travel, and support physicians in treating patients to provide access to the best of IPC’s collective knowledge.

- Checklists for doctors who are not confident or lack experience in prescribing biologics would be helpful (gives them confidence and a “backing” from IPC).

- Providing a forum for stories and successes that don’t have publication value can be powerful for increasing awareness and removing the stigma of the disease.

- Cost is a major barrier to access to medicines. Is there a way to influence price? Can IPC connect with other organizations to find out what work has been done in this area?

- Concept is teaching volunteer trips – teaching local physicians, GPs, dermatologists. Example: Health Volunteers Overseas helps organize visas, housing, and other activities. IPC could find partners to connect with locations that want a psoriasis center.
KEYNOTE LECTURE

Mouse models helping to understand psoriasis pathogenesis

Mouse models have been instrumental in understanding the complex interplay between the immune and genetic mechanisms involved in psoriasis pathogenesis. In her Think Tank keynote lecture, Dr. Nicole Ward, United States, discussed the insights gained from experimental mouse models and how these discoveries can be translated into advanced care for patients with psoriasis. Her work has primarily focused on 3 unique, but overlapping, conceptual areas in psoriasis pathogenesis. They are: 1) skin inflammation drives remote vascular inflammation and thrombosis, 2) the neural activation of skin inflammation and proliferation, and 3) elucidating a role for IL-17c and IL-17RE signaling in psoriasis pathogenesis.

Dr. Ward described the dynamic course of psoriasis in which patients may fluctuate between quiescent, flaring, or chronic and recurrent states. These states and associated comorbidities can be modeled in experimental mouse models achieved through numerous technical advances. More than 40 unique models have been generated through these technologies, each with inherent advantages and limitations.

Specific mouse models are chosen to address specific questions and, most importantly, must reflect psoriasis pathogenesis, present similar histopathology, and respond to therapeutics. Dr. Ward provided an interesting experiment which demonstrated that anecdotal reports of events from patients can be modeled in mice (disease remission following denervation). Mouse models may be useful for modeling comorbidities of skin inflammation, including vascular inflammation, myocardial infarction, stroke, thrombosis, and aortic root lesion inflammation. In addition, the effect of causative gene variants identified in patients can be modeled to examine the impact on pathogenesis and response to targeted therapy.

KEY POINTS:
- Identifying protein in mice translates back to human psoriasis and models comorbidities.
- Can mouse models be used to identify biomarkers and/or mechanism of action?
- Models of lesional and nonlesional skin are important.
- It would be helpful to overlay information on mouse models with machine learning of big data and translate to P4 Medicine.

Keynote speaker Nicole Ward presents data from her lab at Case Western University, where mouse models are instrumental in her study of psoriasis pathogenesis.
The Think Tank meeting also included a half-day session for IPC councilors, fellows, and board members to hear reports from the organization’s education, patient care, and research committees. Following each report, councilors commented and made suggestions for future activities. Below are summaries of the reports.

**Education and Outreach Committee**
Claudia de la Cruz, Chile, chair of the education committee, reported that, in 2018, the committee:
- Launched the International Fellowship program with 3 fellows.
- Launched the IPC Psoriasis Master Class, a day-and-a-half, comprehensive education program. Master Class sessions were held in Mumbai, India, and Barcelona, Spain.
- Offered more than 10 online education programs.

Education will continue to be a key IPC focus during 2019 by:
- Expanding the International Fellowship program to 4 fellows.
- Hosting Master Classes in Egypt, Argentina, and India.
- Increasing online programs and resources for clinicians.
- Increasing councilor representation from Asia and Eastern Europe.

Professor de la Cruz also reported on the activities accomplished by the Latin American Working Group during 2018, including:
- Satellite symposia held at the Reunión Anual de Dermatólogos Latinoamericanos (RADLA) in Cancun, Mexico, and Colégio Ibero Latino-americano de Dermatologia (CILAD), with more than 500 attendees.
- Exhibit booth sponsored at both congresses, where copies of the **IPC Psoriasis Review** were distributed in Spanish and Portuguese.
- Active participation in the Global Psoriasis Atlas project.

In 2019, the working group will focus on two new manuscripts, along with hosting a symposium at the RADLA congress in May and a master class in Buenos Aires.

**Research Committee**
Hervé Bachelez, France, chair of the research committee, provided details on a new structure for IPC scientific symposia that has been very successful. Each symposium focuses on a theme, features several invited speakers (councilors or external experts), and includes a panel discussion. The symposium ends with a “lightning round” of curated poster presentations by early-career researchers.

**Satellite symposia**
Committee members finalized the agendas for several key research symposia planned for 2019. The

**Councilor comments on the Education and Outreach Committee:**
- To increase the reach of IPC, it was suggested that a standardized set of slides should be developed for councilors to present at local conferences.
- Councilors noted that if local health practitioners (at all levels of psoriasis treatment) could attend an IPC Master Class, it could have a significant impact on improving care in many global medical communities.
spring symposium at the Society for Investigative Dermatology (SID) annual meeting in Chicago in May will focus on cardiovascular disease and psoriasis, examining the interface of both systemic diseases by multiple measures, including epidemiology, in vivo studies, clinical trials, and real-world evidence. In the fall, the IPC will hold a symposium at the European Society for Dermatological Research (ESDR) annual meeting in Bordeaux, France. This meeting will explore both the adaptive and innate immune systems and the overlap of these pathways to assess their impact on disease pathogenesis and presentation of plaque psoriasis and other clinical psoriasis subtypes. The research symposia series will close in the winter with a symposium at the Japanese Society of Investigative Dermatology annual meeting in Aomori, the focus of which is still in development. Details for these important events will be updated on the IPC website as they become available.

Global Psoriasis Atlas
The committee reviewed the history and status of this project, including:

• Established in April with a mission to provide the common benchmark on the complete burden of psoriasis in all countries and regions throughout the world.

• Staff-appointed; contract between International League of Dermatological Societies (ILDS) and Manchester University signed.

• 17 regional coordinators appointed.

• Systematic review presented at the 2018 European Academy of Dermatology and Venereology Congress.

• Epidemiology study in Israel; paper submitted to the British Journal of Dermatology.

• Epidemiology study in Chinese Taipei.

• 130 healthcare databases identified to date.

• Delphi survey on diagnostic criteria to be sponsored by IPC, December 2018.

• Health survey in 7 Latin American countries; plans to conduct surveys, following translation, in China, Nepal, Burma in 2019.

• e3Creative digital agency, based in Manchester, United Kingdom, appointed to update the GPA website and market the project.

• Good industry support, but many opportunities remain.

Patient Care Committee
Professor Bruce Strober, United States, chair of the Patient Care Committee updated key 2018 projects, including classifying psoriasis severity, biosimilars, palmoplantar psoriasis, and
P4 Medicine. Below are summaries of each project.

Classifying psoriasis severity
Over the past 2 years, IPC’s key opinion leaders and stakeholders have discussed challenges in the current definitions of psoriasis severity, as well as opportunities for IPC to create consensus regarding the definition for patients with lower levels of body surface area (BSA) involvement.

After conducting a systemic literature review, councilors agreed that the Delphi survey method would be used to achieve consensus on classifying psoriasis severity. Using this approach, participants were able to suggest severity statements that refine or even replace current definitions of mild, moderate, and severe psoriasis.

The multi-stage voting exercise, chaired by Dr. Strober, occurred over 4 months and was completed with a final round of voting on 7 statements during the IPC Think Tank meeting. It is hoped that these definitions will guide clinical decision-making to be practical, meaningful, and better aligned with the true severity of a patient’s disease; strengthen psoriasis treatment guidelines; and guide future clinical trials of drugs targeting various severities of psoriasis. A manuscript is currently in development.

Biosimilars
In July 2018, IPC convened a Hot Topics Roundtable on biosimilars preceding the International Federation of Psoriasis Associations annual conference in Stockholm, Sweden. IPC councilors, staff, invited speakers, and corporate partners attended the daylong program, which focused on interchangeability, physician education, and integrating biosimilars into clinical practice. Industry partners and regional thought leaders made presentations that highlighted a variety of perspectives on biosimilars in practice. Following the presentations, IPC members discussed current perspectives and data in view of updating IPC’s position on biosimilar issues.

Palmoplantar psoriasis
This condition was identified by the IPC board of directors as an area of focus for 2018. A small task force was established to review the need for a palmoplantar psoriasis atlas with case photos and to discuss the framework for the clinical phenotyping methodology.

P4 Medicine
The Patient Care Committee will continue efforts to communicate the opportunities and challenges of P4 Medicine throughout 2019. An article entitled, “P4 medicine: Personalized, predictive, preventive, participatory medicine in a digital environment,” available in the January 2019 issue of the IPC Psoriasis Review, describes this approach and how IPC can contribute to it. Also planned for 2019 are IPC educational programs and peer-reviewed publications on big data and P4 Medicine. These and other activities are expected to increase the awareness of this innovative approach to psoriasis care.
The IPC would like to acknowledge everyone who made the IPC 2018 Think Tank possible.

Thank you to all of our speakers.
Thank you to the IPC staff.

IPC Staff pictured from left to right: Tina Burke, Amanda Bledsoe, Michele Borsa, Nicora Gardner, Peter van de Kerkhof, Christy Langan, Joelle van der Walt, and Erika Fey.

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