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as of July 2020
To say that 2020 has brought about enormous change for us all is an understatement. When the COVID-19 pandemic broke in early March, IPC had to make changes – and quickly – in how we would be able to continue our mission to advance the care of people with psoriasis.

Our objective at the onset of the pandemic was to provide clinicians and patients clear recommendations and resources for psoriasis care and treatment that are rooted in existing science and medical evidence. With misinformation running rampant, it was important to provide guidance on psoriasis and the coronavirus from a trusted resource such as IPC.

This issue of the IPC Psoriasis Review chronicles a few of these efforts. We begin on page 10 with an essay by IPC Chief Medical Officer Professor Peter van de Kerkhof, who discusses how COVID-19 might impact patients with psoriasis and other diseases and the challenges clinicians faced when treating patients with psoriasis during the early days of the pandemic.

In an article following Professor van de Kerkhof’s essay, Dr. Romina Contreras, a 2019 IPC Fellow, portrays an instance of record-time research in an interview with Spanish dermatologist Dr. Alba Catalá, a co-researcher of a study that classified cutaneous manifestations of COVID-19 in Spanish patients.

Beginning on page 15 are 6 expert commentaries by an IPC board member and IPC councilors on recently published articles that examine COVID-19 and psoriasis. Their commentaries explore topics that include the use of teledermatology in monitoring patients with immune-mediated inflammatory disease; the risk of respiratory tract infections in patients with psoriasis who are treated with IL-17 biologics; and COVID-19 as it relates to the risk of cytokine targeting in chronic inflammatory diseases, including psoriasis.

On page 21, we learn from IPC Councilor Catherine Smith and colleague Dr. Satveer Mahil about PsoProtect and PsoProtectMe, 2 newly-created psoriasis registries, set up in record time, to document outcomes, therapy, and epidemiology of COVID-19 infection.

For those needing a break from the onslaught of pandemic news, we present the Top 6 – reviews of 6 key articles on psoriasis, published July through December 2019. Topics of the reviews, which begin on page 4, include the inflammatory mechanisms involved in persistent residual plaque psoriasis; the microbe-host interplay in psoriasis and atopic dermatitis; defining outcomes in psoriasis using real-world, population-based data; 2 head-to-head studies comparing risankizumab with adalimumab and guselkumab with secukinumab; and the IPC Psoriasis Severity Reclassification consensus study.

Lastly, please take a look at our 2021 education events calendar. COVID-19 halted all of our 2020 live events, but planning for 2021 is in full swing. Of course, dependent on the status of the pandemic, this schedule is subject to change. But I hold out hope that we all will be able to safely meet again in person. I look forward to that day.

As always, thank you for your support of IPC, especially at this time. Stay safe.

Cheers,

Jonathan Barker, MD, FRCP, FRCPath
President, International Psoriasis Council
EVERY 6 MONTHS, IPC’S BOARD AND COUNCILORS NOMINATE ARTICLES THAT MAKE THE GREATEST IMPACT ON PSORIASIS RESEARCH. THE 6 PAPERS THAT RECEIVED THE MOST VOTES FOR ARTICLES PUBLISHED JULY 1 THROUGH DECEMBER 2019 ARE REVIEWED HERE.

Summaries and commentaries were written by this issue’s co-editors, IPC Councilors Denis Jullien, MD, PhD, dermatology professor, Hôpital Edouard Herriot, Hospices Civils de Lyon, University of Lyon, France, and Richard Warren, BSc, MBChB, MRCP, PhD, dermatology professor, University of Manchester, Salford, England, United Kingdom.

1. Gene expression in residual and untreated psoriasis plaques reveal minimal differences, study shows


SUMMARY

This prospective cross-sectional study investigates the inflammatory mechanisms involved in the persistence of residual plaque in patients receiving a biological treatment for which they are good responders. The investigators assessed differences in global gene expression, immune skin cells, and histochemical phenotypes between cleared skin and residual lesions. The study involved 28 patients with psoriasis treated with 3 biologics with different mechanisms of action (adalimumab, ustekinumab, or secukinumab) and 12 untreated controls. The investigators noted that gene expression in residual and untreated plaques showed minimal differences. Gene signature analysis confirmed that residual plaques possess subtle molecular differences from untreated plaques. Interleukin (IL) -23, IL-17, and interferon pathways remained elevated in residual plaques, and no new mechanism emerged as a dominant disease-promoting pathway. Quantitative histochemical analysis demonstrated similarly minimal histologic differences between residual and untreated plaques. Ex vivo cytokine production analysis of skin-extracted CD45+ mast cells and T cells demonstrated a lower percentage of cells producing IL-17A in both populations from treated plaques, except for T cells from the adalimumab group. Epidermal CD103+ TRM cells showed no changes in IL-17 staining, while dermal CD16-CD103-T cells and CD161+CD103- T17 cells showed decreased IL-17A production in treated plaques, although not significantly in all groups. Globally, immune cell cytokine production was modulated in residual plaques. However, as for genetic and histologic data, this modulation was subtle and only observed in specific subpopulations.

COMMENTARY

The persistence of residual plaques in psoriatic patients treated with biotherapy and, with the exception of these plaques, good response to treatment is a frequent finding that is disconcerting to both patient and physician. Once the cutaneous T cell lymphoma hypothesis is ruled out, several hypotheses come to mind that may explain this situation. (1) Is there a primary heterogeneity in the inflammatory mechanism involved in different psoriatic plaques? In other words, could psoriasis be an inflammatory mosaicism in the same patient? (2) Is an immunological escape mechanism at stake within these plaques that, by definition, differs from the one targeted by the treatment? (3) Is this skin area, for unknown physiological reasons, not exposed to the treatment to the same extent? This study by Shunya Mashiko et al provides evidence for a much simpler hypothesis: The persistence observed within these plaques of the usually-observed TNF, IL-23, IL-17, and IFN-1 signatures is due to plaques that possibly have a higher inflammatory load and, also, that currently-approved doses of biologics fail to completely clear skin. Interestingly, instead of recommending a simple dose adjustment, the authors suggest that a combination of treatments with different mechanisms of action may be more suitable for the control of these plaques.

This approach remains to be demonstrated, but it is likely that switching from one class of biotheraphy to another is not the most appropriate response to patients’ demand for complete clearance.

– Denis Jullien
2. Microbiome-host interaction in atopic dermatitis and psoriasis holds promise in prevention and treatment of inflammatory diseases


SUMMARY
The relevance of microbial dysbiosis in skin inflammatory disease is poorly understood. Notably, the extent to which skin microbiota may associate with the host skin phenotype observed in atopic dermatitis (AD) and psoriasis and the underlying distinct Th2 and Th17 inflammatory mechanisms remains elusive. In this study, based on a large cohort (n=351), author Nanna Fyhrquist and an international team present a large-scale, comprehensive analysis of the microbiome (using 16S amplicon or whole genome sequencing) and microbiome-associated host transcriptome (using microarrays) in skin of healthy volunteers and patients with atopic dermatitis and psoriasis. In most patients assessed, AD was characterized by an increased abundance of a single microbe, Staphylococcus aureus, and a loss of microbial diversity with a reduced abundance of strictly anaerobic bacteria. Using AD lesional-skin samples containing high or low abundance of S. aureus, they identified S. aureus-differentially regulated host genes functionally enriched for activities that were disease-relevant: skin barrier function and antimicrobial factors (S100A7, DEFB4A/B, S100A9, MMP12, FLG2, CLDN8, ADAM12), immune activation (IL-1B, CCL2, CCL19), tryptophan metabolism (KYNU, TDO2, KMO), and TH2 signaling (IL-4R, IL-5, IL-13, PI3, TNFRSF4, CCR4). In contrast, psoriasis was characterized by multiple co-occurring microbial species, including increased colonization by C simulans and C. kroppenstedtii, and a loss of Lactobacillus, C. acnes and Corynebacterium spp. Looking for a relationship between host transcriptomic profiles and microbial abundances, the authors found that Corynebacterium spp was negatively associated with a module enriched for “interferon signaling,” suggesting a potential protective or regulatory role of pathways relating to psoriatic inflammation. However, with this ready exception, and in contrast to what is observed in atopic dermatitis, when the investigators screened psoriasis-associated microbes against modules of co-expressed genes, they detected only weak associations between potential pathogens and the expression of disease-related host transcripts.

COMMENTARY
Several studies in AD and psoriasis have described disease-specific features of the skin microbiome that differ from healthy patients, but direct demonstration that the differential microbiota has pathophysiologic significance has remained elusive. This approach, still in its infancy, involves the titanic task of describing to which extent, at a given topographical niche, a particular microbial community modifies the host tissue transcriptomic response that locally or remotely may contribute to the pathophysiology of the disease. Through accessibility to both microbiome species and underlying tissue, author Nana Fyhrquist and colleagues took advantage of the opportunity that skin provides to study host–microbiome interactions. They established that, in AD, S. aureus-dominated skin microbiome is associated with a disease-relevant host transcriptomic signature. However, evidence of a pathophysiological link between psoriasis and co-occurring communities of skin microbes is weak. This is an essential work which, as the authors point out, “provides a basis for biomarker discovery and targeted therapies in skin dysbiosis.” But this is a first stone, and many other aspects will have to be explored before a clear idea of the role of microbiome-host interaction in the physiopathology of inflammatory skin diseases emerges. As we can see, studying microbe-host interplay will be a fascinating journey, and Dr. Fyhrquist and her colleagues are on the road. – Denis Jullien
3. To optimize access to care for patients with psoriasis, IPC proposes universal criteria for measuring disease severity


**SUMMARY**

In this study, IPC Board Member Bruce Strober and a steering committee led International Psoriasis Council board members and councilors through a Delphi exercise aimed at defining psoriasis disease severity in a new, practical manner that is useful in both clinical and research settings. In a brainstorming stage, the IPC board and councilors, along with corporate sponsor representatives, were asked to propose anonymous statements fulfilling this goal. Of 78 statements the committee collected and reviewed, 30 were selected for consideration. After discussing the merits and weaknesses of the statements and after 2 rounds of voting, the committee chose 7 for voting at an in-person consensus meeting. The final consensus statement is as follows: “Psoriasis patients should be classified as candidates for topical therapy or candidates for systemic therapy.” The latter are patients who meet at least 1 of the following criteria: (1) BSA > 10%; (2) disease involving special areas, such as face, palms, soles, genitalia, and scalp; (3) failure of topical therapy. Aiming to satisfy clinicians, patients, and payers, the statement includes an objective numeric threshold that relies on an easily performed severity criterion as well as concepts relevant to a patient’s experience. This new consensus statement goes beyond strict assessor-driven cutoffs, which in many instances incorrectly downgrade disease severity and often restrict access to the therapies most appropriate for a given patient.

**COMMENTARY**

The classification of the severity of psoriasis as mild, moderate or severe is not based on any consensus, which has led to the development of multiple definitions. These varying definitions result in confusion and potential miscategorization of disease severity and, thus, undertreatment of the disease. Objective measures, such as the Psoriasis Area and Severity Index (PASI), which clinicians use to categorize mild, moderate and severe psoriasis, ignore disease involvement of special areas and the impact of psoriasis on quality of life. The IPC consensus statement recognizes the need for alternative tools to assess patients’ own perception of severity. It also recognizes that payers need to be certain that health resources will be equitably distributed. The development of new and universal criteria such as those proposed by the IPC represents a unique opportunity to optimize access to care for patients with psoriasis. To achieve this goal, it is necessary that these criteria, with the agreement of health agencies such as the Food and Drug Administration (FDA) in the United States and the European Medicines Agency (EMA), be widely used in clinical studies. This goal may take time, but, thanks to IPC, a tool now exists. – Denis Jullien
4. Risankizumab outperforms adalimumab in randomized, 605-patient trial


SUMMARY

Risankizumab is a humanized IgG1 monoclonal antibody that inhibits Interleukin (IL-) 23 by selective binding of the p19 subunit. The aim of the IMMvent study was to compare the efficacy and safety of risankizumab against one of the most-used biologics worldwide, adalimumab, a fully human IgG1 monoclonal antibody that binds to tumor necrosis factor (TNF)-α. The study, conducted in 11 countries, involved 605 patients randomly assigned to receive risankizumab 150 mg at weeks 0 and 4 versus adalimumab 80 mg at randomization; and then 40 mg at weeks 1, 3, 5, and every other week to week 16 (Part A). The co-primary endpoints at week 16 were Psoriasis Area and Severity Index (PASI) 90 and static Physician’s Global Assessment (sPGA) 0/1. At week 16, participants who received risankizumab in Part A continued to receive it in Part B, while those in the adalimumab arm were reassigned based on response. Those not achieving PASI 50 switched to risankizumab, those in the PASI 50-90 response group were re-randomised to risankizumab or stayed on adalimumab, while those achieving a PASI 90 remained in the adalimumab group. A further primary endpoint of PASI 90 was then assessed in these groups at week 44. At week 16, PASI 90 was achieved in 218 (72%) of 301 patients treated with risankizumab versus 144 (47%) of 304 patients given adalimumab (adjusted absolute difference 24.9% [95% CI 17.5-32.4]; p<0.0001). In addition, sPGA scores of 0 or 1 were achieved in 252 (84%) receiving risankizumab and 252 (60%) receiving adalimumab (adjusted absolute difference 23.3% [16.6-30.1]; P<0.0001). Importantly, part B of the study (weeks 16-44) showed that 35 (66%) of 53 patients who were only partial responders to adalimumab (PASI 50-90) and were switched to risankizumab went on to achieve PASI 90 at week 44. Adverse events were reported in 168 (56%) of 301 patients given risankizumab and 179 (57%) of 304 patients given adalimumab in part A. Among adalimumab intermediate responders in part B, adverse events were reported in 40 (75%) of 53 patients who switched to risankizumab and 37 (66%) of 56 patients who continued adalimumab.

COMMENTARY

It has become clear in recent years that inhibition of IL-23 gives high and sustained levels of response, and this study adds evidence that this cytokine is a key target in psoriasis treatment. Therefore, it may well have been expected that risankizumab would be significantly superior in efficacy to adalimumab. However, without a well-designed study, it is difficult to know exactly how the drugs would compare and, in particular, how patients would respond if they have only had a partial response to adalimumab and were then switched to risankizumab. Head-to-head studies have historically been few and far between, so the emergence of more studies in the last 5 years has been helpful to clinicians. This study clearly details that risankizumab shows considerably greater efficacy at week 16 than adalimumab, with more than 20% additional patients achieving PASI 90 in the risankizumab group. Furthermore, patients who showed a partial response to adalimumab (defined in this instance as PASI 50-90) and switched to risankizumab had better outcomes versus those who stayed on adalimumab. One issue with the real-world applicability of this study is defining partial response. In a clinic setting, it would be unlikely that patients achieving anything over a PASI 75 at week 16 would be switched. In some parts of the world, adalimumab is now available as a biosimilar so is therefore considerably cheaper than biologics still under patent. It remains to be seen if, in countries where health economic outcomes drive drug sequencing, the clinical differences shown in this study are enough to allow the more effective therapy to be used first. As is often the case with phase 3 psoriasis studies, those from Asian and African American backgrounds were poorly represented, comprising ~15% of the total study population and data. These populations should be a priority. – Richard Warren
5. Use of absolute measures to determine disease severity can improve psoriasis treatment, according to population-based study


**SUMMARY**

Data from the British Association of Dermatologists Biologics and Immunomodulator Register (BADBIR) were analyzed to identify absolute thresholds for Psoriasis Area and Severity Index (PASI) 90 and PASI 75, as well as for Physician’s Global Assessment (PGA) clear or almost clear (6-point scale). A total of 13,422 patients were included in the analysis with more than 23,000 longitudinal PASI and PGA scores included in the dataset. An absolute PASI of ≤ 2 and ≤ 4 was concordant with PASI 90 and 75 respectively in 90% and 88% of cases, respectively. A PGA clear or almost clear was concordant with PASI ≤ 2 in 90% of cases.

**COMMENTARY**

For years, relative improvement in psoriasis has been the key outcome for clinical trials studying the disease. Clinical trials, in which data are almost always complete, can give robust comparisons between therapies. However, relative improvement can still mean that patients are left with a high degree of residual disease. For example, patients starting with a PASI 40 at baseline may achieve a seemingly good level of response by hitting PASI 75; however, they might be left with a residual PASI of 10, which still is moderate to severe disease. Aiming for an absolute measure will resonate better with patient-reported outcomes, especially if that absolute measure is set low. Furthermore, having a low level of residual disease may also contribute to other improved outcomes, such as lower risk of cardiovascular disease associated with higher ongoing inflammatory disease burden. In addition, one of the major issues with real-world data is defining an accurate starting point for disease severity. Many patients need overlapping treatment as they transition from one therapy to another, making it impossible to gain a true baseline PASI. In addition, in real-world datasets, PASI measures are missed or taken at a time too far from the actual time of new drug initiation to allow an accurate baseline to be recorded. It is therefore helpful that this study shows that absolute measures have been validated versus relative improvement in a real-world dataset, removing the need for a baseline reading. Finally, it is of great relevance that the commonly used PGA correlates strongly with relative PASI outcomes. Also, this measure is easier to perform and is often included in United States guidelines.

– Richard Warren
6. Guselkumab shows superior long-term efficacy compared with secukinumab in randomized study


SUMMARY

Guselkumab selectively blocks the P19 subunit of Interleukin (IL)-23, whereas secukinumab blocks IL-17A. Both drugs have shown high levels of response when treating patients with psoriasis, so it is of great interest to clinicians to see these two drugs compared in a robust randomized controlled trial. Adult patients with moderate to severe psoriasis were recruited from 9 countries from Europe, North America, and Australia. Patients were randomly assigned to guselkumab (100 mg at weeks 0, 4, and then every 8 weeks) or secukinumab 300 mg (weeks 0, 1, 2, 3, and 4, and then every 4 weeks). The primary endpoint was at week 48, with a Psoriasis Area and Severity Index (PASI) 90 response in the intention-to-treat population. Major secondary endpoints were the proportions of patients in each group who achieved PASI 75 response at both weeks 12 and 48, a PASI 90 response at week 12, a PASI 75 response at week 12, a PASI 100 response at week 48, an Investigator’s Global Assessment (IGA) score of 0 at week 48, and an IGA score of 0/1 at week 48. Importantly, to control for type 1 error for multiple comparisons, the primary and major secondary analyses were tested in a fixed sequence. Following a nonsignificant test for any endpoint (either noninferiority or superiority), formal statistical testing was not to be done for remaining endpoints. Guselkumab was superior (p<0.0001) to secukinumab at week 48 with 451 (84%) of patients achieving a PASI 90 versus 360 (70%). Noninferiority was demonstrated for the first major secondary endpoint of PASI 75 at both week 12 and 48, but superiority for this endpoint was not established (p=0.0616) so no further sequential testing was carried out for other major secondary endpoints. Generally, safety was consistent with previous trials that had included either of these two agents.

COMMENTARY

This study helps to fill a key data gap in psoriasis treatment. IL-17A had shown levels of response not seen before with older agents such as ustekinumab. However, with the more specific targeting of IL-23 via inhibition of P19, one key question for clinicians has been deciding if it was better to use an IL-17 or IL-23 blocking drug. This paper shows that at week 48, a significantly greater proportion of patients on guselkumab achieved a PASI 90 when compared with secukinumab with a difference of 14.2%. A knowledge of statistics is then needed to understand the major secondary outcomes. For example, examining raw numbers at week 48 shows that, numerically, guselkumab outperformed secukinumab with PASI 100, IGA 0 and 0/1. However, because these were ranked after an endpoint that had not reached statistical significance, they cannot be formally compared. Furthermore, other differences between the drugs were seen that were not formally tested, such as the faster achievement of PASI 90 in the secukinumab group by week 3; by week 16, similar PASI 90 responses were seen with both drugs. Overall, although we cannot state there is a statistical difference between these drugs for some outcomes, this study is pivotal, and shows that high levels of drug response (PASI 90 week 48) are better maintained with guselkumab versus secukinumab. Given the lifelong nature of psoriasis, this matters for patients. This study will also offer many more mechanistic insights in the future, as samples collected as part of this study and ongoing studies involving guselkumab will elucidate the mechanism whereby by targeting IL-23 maintains efficacy more robustly than other mechanisms of action.

– Richard Warren
COVID-19 POSES CHALLENGES IN TREATING PATIENTS WITH PSORIASIS DURING THE COURSE OF THE VIRUS

By Peter van de Kerkhof, MD, PhD
IPC Chief Medical Officer

When it became clear in early March that the COVID-19 was taking hold around the world, IPC board members and councilors began discussing how the virus might impact our patients with psoriasis and other chronic inflammatory diseases.

At the start, the question of the safety of using immunosuppressive treatment during the pandemic was perhaps the most compelling. Of course, there was no literature on COVID-19 and psoriasis. At that time, IPC released a statement recommending clinicians follow commonly accepted guidelines for immunosuppressant therapy, including discontinuing therapy in cases of an active infection.

April and May brought the publication of 2 important papers, which report on the course of COVID-19 in patients with psoriasis. These papers suggest that biologics are not an evident risk factor for contracting a more serious course of the virus in patients with psoriasis, although the series were too small for solid conclusions in this respect. This is discussed in my commentary on page 19 and in commentaries by Drs. Ulrich Mrowietz and Mark Lebwohl on pages 17 and 18, respectively.

Experiences from colleagues in the field made it clear that decisions on continuing or discontinuing immunosuppressive treatments for psoriasis have to be made on a case-by-case basis. At the same time, the need for real-world evidence to guide our treatment choices in the face of this virus is urgent. The new PsoProtect patient registries for COVID-19 and psoriasis, which IPC helped create along with other health care organizations, are helping to fulfill this need. (See page 21 for more about these registries.) We encourage dermatologists around the world to submit their cases. This will enable us to retrieve evidence for making the right selection on whether to continue immunosuppressive treatments in patients with psoriasis in the context of COVID-19.

As the pandemic wore on, dermatologists involved in the treatment of patients with COVID-19 began to describe skin manifestations that appear to be related to the virus. (See page 10 for an interview with study co-author Dr. Alba Català.) These manifestations consisted of acral areas of erythema-oedema with vesicles or pustules (pseudo-chilblain) (19%); vesicular eruptions (9%); urticarial lesions (19%); maculopapular eruptions (47%); livedo or necrosis (6%). We learned from dermatologists working in COVID-19 units that skin manifestations of the virus are not infrequent. Therefore, information on COVID-19 skin manifestations should be common knowledge for dermatologists moving forward.

During the months that the coronavirus dominated our health care systems, teledermatology became a major opportunity as physicians had to avoid direct patient contact. The positioning of teledermatology is currently a discussion in health care systems globally. The opportunities and limitations of caring for psoriasis patients in the virtual environment are detailed in a commentary by IPC Councilor April Armstrong on page 15.

COVID-19 has turned the world upside down. Old ways of caring for patients may fall away and new systems may take their place. Rather than reducing the role of the medical dermatologist, this pandemic has brought new opportunities for physician experts, especially those in psoriasis, to give guidance and input.

REFERENCES
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Spanish study identifies 5 distinct skin manifestations in COVID-19 patients

IPC FELLOW DR. ROMINA CONTRERAS TALKS WITH CO-AUTHOR DR. ALBA CATALÁ ABOUT THE STUDY AND HOW IT CONTRIBUTES TO A GROWING UNDERSTANDING OF THE NOVEL CORONAVIRUS

By Romina Contreras, MD, MSc

Dr. Contreras is a 2019 IPC Fellow who specializes in dermatology and venereology. She holds clinic and teaches at the Hospital de Clínicas Department of Dermatology in Asunción, Paraguay. Her special interest is the integral management of psoriasis, combining clinical practice and research.

The cutaneous manifestations in patients with different severities of COVID-19, as well as cutaneous lesions in those with mild symptoms or asymptomatic disease, sparked the interest of a group of Spanish researchers led by Dr. Alba Catalá and Dr. Cristina Galván. The investigators decided to conduct a study that would characterize these lesions and relate them to other clinical findings.

The study, conducted from 3 to 16 April 2020, described 5 major clinical patterns. This classification of the cutaneous manifestations of COVID-19 has helped to improve the understanding of disease severity and the temporal relationship (the different times and durations that lesions appear) during the course of the infection. It is the first study to classify COVID-19-associated skin lesions and provide an atlas of images of them.

In a videoconference interview (one of the many activities incorporated in our new way of living with the COVID-19 virus that allows us to stay close despite our distances), Dr. Catalá discussed her research.

Dr Catalá, a Spanish dermatologist, is an associate professor at Hospital Plató in Barcelona. She is one of the main authors of the COVID-19 study. A Spanish version of the study, entitled “COVID-19 y piel/COVID-19 and the Skin,” was published in the Spanish journal Actas Dermo-Sifiliográficas.1 An English version, entitled “Classification of cutaneous manifestations of COVID-19: A rapid prospective nationwide consensus study in Spain with 375 cases,” was published in the British Journal of Dermatology.2

Dr Catalá said the idea for this study was initiated by chance. She and Dr. Galván, a dermatologist at the Hospital Universitario de Móstoles, Madrid, met when each of them joined an online dermatology chat group to gather as much information as possible about this novel virus. At the time in March 2020, information about COVID-19 and skin symptoms was scarce.

One of the doctors participating in the chat presented the case of a COVID-19 patient with a skin rash and no other symptoms to see if other participants had patients with similar clinical findings. Drs. Catalá and Galván exchanged ideas and decided to collect information about cases that were flooding social networks. Eager to contribute to the understanding of COVID-19, especially its skin manifestations, they decided to conduct a national study. Their goal was to characterize the skin manifestations associated with the disease and investigate their possible diagnostic, prognostic, and epidemiological value.

The study protocol was designed in conjunction with Dr. Gregorio Carretero, a Spanish dermatologist at the Hospital Universitario de Gran Canaria. It began after approvals by an ethics committee and the Spanish Drug Agency.

With the help of the Spanish Academy of Dermatology and Venereology (AEDV), the researchers requested the collaboration of all Spanish dermatologists. Taking into account the high workload imposed on these doctors, many of whom were reassigned to the acute care of patients with COVID-19, they designed a simple online questionnaire.

Initially, their objective was to collect at least 60 cases in a span of 2 weeks during the peak of the pandemic. Due to the extensive participation of their colleagues, they obtained 120 cases by the middle of the recruitment period. By the end of the 2 weeks, they had collected 430 cases, 375 of which were entered into the study.

Drs. Catalá and Galván were also assisted by the research unit of AEDV’s Piel Sana Foundation, which was responsible for technical support, guidance, and statistical analysis, and for ensuring good research practices. The AEDV publicized the study through social networks and the media reported on it as well. The publicity prompted patients to ask their doctors to be included in the study.

More than 100 dermatologists from hospitals, private centers, and outpatient clinics across Spain participated in the study. Dr. Catalá
credited the “solidarity” of these colleagues as well as that of COVID-19 patients who were willing to participate in the study for its completion and national distribution. All of the participants, she said, were eager to help understand more about this new disease.

For her part, Dr. Catalá said the study has reinforced her own research skills and helped her learn more about COVID-19. The study’s worldwide distribution has given her the satisfaction of having contributed to the knowledge about this challenging disease.

Another lesson from this national, collaborative study: Its completion in such a short time and during a time of so much adversity shows that joint effort and teamwork are key to achieving extraordinary results.

REFERENCES

COVID-19 and psoriasis: IPC response
As a response to the pandemic, IPC followed up with a series of actions.

**Action 1**
Released a *statement in multiple languages* to guide physicians in making treatment decisions for patients with psoriasis who have contracted COVID-19. More than 45,000 people read these statements.

**Action 2**
Mobilized our community of expert dermatologists to provide *commentary and insight* on recently published research.

**Action 3**
Created an *online resource center* featuring treatment guidelines and other relevant information on COVID-19 and psoriasis from organizations around the world. More than 4,700 viewers visited the site.

**Action 4**
Presented a webinar series for Latin America physicians treating people with psoriasis during the pandemic, with with nearly 200 clinicians from all over Latin America attending.

**Action 5**
Launched a "Stories from the Field" video series that give first-person perspectives on the impact of COVID-19 on dermatologists and their patients around the world. Watched by more than 2,500 people.

**Action 6**
Partnered with the PsoProtect patient registries project to better understand the impact of COVID-19 on people with psoriasis.
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IPC experts comment on articles describing virus impact on psoriasis treatment

Editor’s note: Views expressed in the following commentaries are those of the authors and do not necessarily represent the position of the International Psoriasis Council or its Board of Directors.

Since March 2020, when the World Health Organization (WHO) declared the SARS-CoV-2 virus, also known as COVID-19, a worldwide pandemic, the novel virus has affected all medical practices, including dermatology. In the following commentaries, an IPC board member and 5 IPC councilors discuss recently published scientific articles that describe the impact of the virus on various aspects of psoriasis treatment. These IPC experts also provide their own perspectives on managing psoriasis treatment during the pandemic.


Commentary by April Armstrong, MD, MPH
Associate Dean, Keck School of Medicine
University of Southern California
United States

Nothing has thrust teledermatology to the forefront of healthcare models more than the COVID-19 pandemic. Whether one loves it or hates it, many dermatologists are practicing teledermatology to manage patients with skin diseases during this pandemic.

In this paper, Brunasso and Massone, dermatology specialists in Liguria and Genoa, Italy, respectively, described their teledermatology experience for chronic cutaneous autoimmune diseases during COVID-19 in a tertiary center in Italy. Notably, the institution lacked a teledermatology platform. Thus, the dermatologists had to depend on phone calls and emails as ways of caring for their patients remotely.

The dermatologists treated 126 patients with moderate to severe psoriasis, with more than half of these patients on either oral or biologic agents. Of the 126, 110 patients continued their prior therapies during the pandemic. The remaining 16 initiated new therapies, changed doses, or discontinued therapy. I commend the authors for sharing how remote care of patients with psoriasis was possible with telephone and email alone.

Having cared for patients with psoriasis via teledermatology for more than 10 years prior to the pandemic, I recognize the benefits and limitations of teledermatology for managing psoriasis. I would like to share a few practice pearls.

First, be flexible about how you use communication technology. Various offices may have different resources to support synchronous technology (interactive video-based encounters or telephone) and/or asynchronous technology (store-and-forward methods).

In general, when initiating systemic medications or managing psoriasis exacerbation, synchronous teledermatology (such as online video-based encounters) is preferred due to the opportunity for dialogue. If video-based technology is not available, telephone encounters are acceptable, too, to allow for dialogue, as was described by Brunasso and Massone.

It is important to supplement those video or telephone encounters with still digital images of psoriasis lesions. This is because some online video-based technology does not provide images clear enough for diagnosis and/or management. Having the clearer digital images before the online visit will aid in management decisions and make the visit more efficient.

For routine follow-up remote visits, either synchronous or asynchronous communication is acceptable. It is still preferable to have digital images available prior to the online synchronous visit whenever possible. Obtaining laboratory workup during the pandemic may be an issue for many patients, and it is important to carefully consider the benefit/risk ratio of obtaining laboratory workup versus the potential risk of exposure to SARS-CoV2 at a healthcare facility.

Second, for special populations such as the elderly, it is helpful to have a family member test the teledermatology platform prior to the visit and be available to assist with the actual online visit. For children, evaluating their lesions over video-based encounters is a substantial challenge. Especially for young children, parents should take digital photographs of their skin lesions prior to the online visit.
Third, for special areas such as the scalp and intertriginous areas, it is best to obtain still digital images of those regions prior to the online visit. This is because trying to examine those areas in real-time via video-based encounters can be both physically challenging and awkward for patients.

Finally, no matter how good one’s teledermatology platform is, it is important to know the recommendations from professional dermatological societies regarding the management of psoriasis during the COVID-19 pandemic such that you can care for your patients based on the latest evidence.

The risk of respiratory tract infections and symptoms in psoriasis patients treated with IL-17-pathway inhibiting biologics: A meta-estimate of pivotal trials relevant to decision-making during the COVID-19 pandemic. Wan MT, Shin DB, Winthrop KL, Gelfand JM. J Am Acad Dermatol. 2020 May 19;S0190-9622(20)30866-

Commentary by Luigi Naldi, MD
Director, Centro Studi GISED
Bergamo General Hospital
Italy

Searching for signals of increased risk of infection in specific subgroups is vitally important, especially when confronted with a severe threat to health, such as the worldwide spread of the SARS-CoV-2, or COVID-19, virus. There are two complementary needs: (1) the need to interrupt or reduce the speed of viral dissemination within the community and (2) the need to mitigate the consequences of the infection and to inform timely clinical decisions, both at the population and clinical level. The cure should not be worse than the disease and decisions should be informed by adequate evidence, balancing benefits and risks.

Whether biologic agents for psoriasis place patients at a higher risk for COVID-19 or influence a more severe disease course is an important question. In their paper, Wan and colleagues have tried to address this question for Interleukin (IL) -17 inhibitors. No data exist on exposure to IL-17 antagonists and COVID-19 incidence or outcome, and the authors’ approach to address the question was an indirect one, using surrogate measures.

In a meta-analysis, the authors pooled data on the rates of respiratory tract infection (RTI) obtained in placebo-controlled phase 3 studies of IL-17 antagonists. The meta-analysis documented a 56% increased risk of RTI in the IL-17 antagonist arm, compared with the placebo arm. The authors concluded there was a signal of a potential danger. In my opinion, the evidence presented by the authors may help inform clinical decisions when confronted with COVID-19 infection.

The questions raised by the paper are threefold: (1) Are all RTIs created equal? (2) Can an increased risk for one agent be translated into an increased risk for any other agent causing RTI? (3) Are the severity and outcome of RTI influenced by the treatment?

The IL-17 cytokine family is a pleiotropic group of molecules that function in a wide variety of beneficial and pathological processes, mainly at the mucosal interface. The IL-17/IL-22 axis is important in both responding to and recovering from pathogens. However, aberrant expression or overexpression of IL-17 contributes to a number of pathological outcomes, including pneumonitis and development of pulmonary fibrosis. As indicated by Dr. Wan and colleagues, severe COVID-19 illness is characterized by a dysregulated immune response, the so-called cytokine storm, with increased levels of plasma pro-inflammatory cytokines mainly derived from Th1-Th17 cells. Trials evaluating IL-17 antagonists are ongoing in COVID-19 management.

Direct evidence is required to inform clinical decisions. We need to know if people with psoriasis exposed to IL-17 antagonists are at an increased risk of COVID-19 infection as compared with people exposed to other treatments, if they develop a more severe disease, and if, once infected, they may spread the virus more easily. In the lack of evidence, a randomized withdrawal trial in people with COVID-19 and psoriasis exposed to IL-17 antagonists may be the only way to provide a definitive answer.
Classification of the cutaneous manifestations of COVID-19: a rapid prospective nationwide consensus study in Spain with 375 cases.

Commentary by Lluís Puig, MD, PhD
IPC Board Member
Director, Dermatology Department
Hospital de la Santa Creu i Sant Pau
Barcelona, Spain

COVID-19 has disrupted many aspects of social behavior and medical practice. The flow of information on the different manifestations of the disease is bewildering, with more than 9,500 publications in just four months, many of them freely available.

The dermatological aspects of the disease (apart from occupational dermatitis) were revealed when dermatologists became involved in the care of COVID patients and, soon, cases pervaded social media.

The pandemic, which at the time of this writing affected close to 250,000 in Spain, causing close to 26,000 deaths, struck Madrid, then Barcelona in early March. Spanish officials declared a “state of alarm” on March 14. In both cities, dermatological consultations in most hospitals shut down. All the available dermatology residents and most staff below age 60 were redeployed to COVID wards, which made up 80% of the available beds. Intensive care units tripled their capacities. Field hospitals were set up, including 1,500 beds in Madrid Exhibition Halls.

At that time, Dr. Alba Català (a dermatologist at Hospital Plató, serving a population of 135,000 in uptown Barcelona) and Dr. Cristina Galván Casas (working at Hospital Universitario de Móstoles, serving a population of 168,000 in the periphery of Madrid) were attending to COVID-19 patients full time. The 2 were struck by the dermatological manifestations which were starting to be noted in COVID-19 cases. Because no publications on skin symptoms in COVID-19 were available, Drs. Català and Galván Casas joined an online dermatology chat group to better understand the issue. Based on those discussions, the dermatologists launched a survey, designing the protocol and navigating red tape, with the help of Dr. Gregorio Carretero (Hospital Universitario de Gran Canaria, which serves a population of 350,000).

With the support of the Spanish Academy of Dermatology and Venereology (AEDV), they began an amazing collaboration: In the first 2 weeks of April, 100 dermatologists working on the frontlines of COVID care contributed 430 documented cases of dermatological manifestations, of which 375 with confirmed or suspected COVID-19 made the cut. With the support of the AEDV’s research unit, the collaborators reached a consensus, resulting in of a landmark paper published in the British Journal of Dermatology that outlined a comprehensive clinical categorization of the skin manifestations of COVID. An exhaustive companion atlas as an online supplement accompanied the article.

This is an exhilarating example of teamwork and generous collaboration of dermatologists from all ranks who worked long shifts in COVID-19 wards, switching PASI (Psoriasis Area and Severity Index) for PAFI (Platelet-Aggregation Factor Inhibitor). Busy days with varying supplies of personal protective equipment, phones in polyethylene bags, sleepless nights, and perhaps some contagion were perhaps worth the effort. Kudos and thank you.

Editor’s Note: See an interview with Dr. Català about this study that begins on p. 12.


Commentary by Ulrich Mrowietz, MD
Department of Dermatology
University Medical Center Schleswig-Holstein
Kiel, Germany

Soon after COVID-19 was declared a pandemic, scientific and medical experts wanted to know whether patients with immune-mediated inflammatory disease (IMID) and/or those on an immunosuppressant treatments were at higher risk to become infected with the virus and/or were at risk for developing a more severe course of the disease. Patients with IMIDs including psoriasis are frequently treated by cytokine inhibitors, and this type of treatment often is referred to as immunosuppressive.

At the beginning of the outbreak, data about COVID-19 in IMID patients were sparse and came mostly from China, which made it difficult to extrapolate if patients of other races might show similar signs and symptoms.
Experts from rheumatology, dermatology, and gastroenterology at the German Center for Immunotherapy in Erlangen summarized published research on the potential effects of cytokines as targets for biologic therapy on patients’ susceptibility for viral infections and anti-viral responses. They concluded that cytokines known as pathogenic in IMID do not affect anti-viral host responses. There is no signal yet that biologic therapies balancing overexpression of these cytokine targets have a negative effect on anti-viral responses. As influenza vaccination is possible during biologic treatment and results in a normal vaccination response, there is no scientific rationale why COVID-19 infection and future vaccination may behave differently.

In their study, Schett et al mention that only with anti-TNF and anti-Interleukin 6 therapies is there an increased risk for bacterial infections (a complication in patients with severe COVID-19). On the other hand, uncontrolled hyperactivation of primarily innate immune responses in severe COVID-19 known as a “cytokine storm” can be treated with biologics against IL-6.

There is debate whether the new class of Janus kinase inhibitors (JAKi) used to treat rheumatoid arthritis, psoriatic arthritis, and ulcerative colitis, may be harmful or beneficial regarding COVID-19 infection. JAKi decreases IL-6 effectively, but also interferons, depending on JAK-specificity. Tofacitinib increases the risk of venous thromboembolism, a known complication in COVID-19. However, there is evidence that JAK2-inhibition also inhibits viral entry of COVID-19 and at least 2 JAK inhibitors (baricitinib and ruxolitinib) will be tested in severe COVID-19 patients.

For physicians treating IMID patients for diseases that include psoriasis, the message given by Schett and colleagues is clear and reassuring: Treatment should be continued or initiated in patients newly presenting with severe IMID to control systemic inflammation.

The authors also mention that systemic steroids, common therapy in rheumatology and gastroenterology, increase the risk of infections and may lead to COVID-19 complications. Because many patients with psoriasis and/or psoriatic arthritis are still being treated with systemic steroids despite negative recommendations, a thorough medical history is necessary, and measures to stop the use of systemic steroids must be initiated.

Of course, with increasing knowledge from registries and published literature, current recommendations will be amended. Physicians must stay informed.


**Commentary by Mark Lebwohl, MD**

Professor/Chairman, Department of Dermatology
Mount Sinai School of Medicine
New York, United States

At the start of the COVID-19 epidemic in New York City, many of our patients with psoriasis as well as our colleagues were concerned that biologic therapies might increase susceptibility to COVID-19 infections or make those infections worse.

An early review of pivotal trials looking at susceptibility to viral respiratory infections calmed some of those fears, as numbers were small and in the case of many psoriasis drugs, not much higher than the placebo rate of viral infections or even lower for some of our biologic therapies. Moreover, individuals born with defects in the Interleukin (IL) -17 pathway (which is blocked by secukinumab, ixekizumab, and brodalumab) have increases in monilial infections, not viral infections. People born with defects in p40 (which is blocked by ustekinumab) suffer from salmonella and mycobacterial infections, not viral infections.

The report by Haberman et al, cited above, is based on small numbers, but supports the safety of biologic therapies. It points out that baseline use of biologics in COVID-19-infected patients with immune-mediated inflammatory diseases was not associated with worse outcomes.

There is certainly reason for concern in patients with psoriasis who are infected with COVID-19. Our patients have many of the risk factors associated with poor outcomes in individuals infected with this coronavirus. Patients with psoriasis are more likely to suffer from hypertension, diabetes, and obesity, all risk factors for worse outcomes from COVID-19. Nonetheless, in contrast to biologic therapies, patients treated with oral steroids, hydroxychloroquine, and methotrexate were more likely to require hospitalization. And the two patients with the most severe outcomes were not treated with long-term biologic therapies.
While it is reassuring that a signal was not found implicating biologic therapies in worse COVID-19 infection, this study was based on only 86 patients with immune-mediated inflammatory diseases. Much more data will be needed to establish the safety of these drugs in the setting of COVID-19 infection. Moreover, the drugs should not be lumped together. TNF blockers may have different outcomes than drugs that block IL-17 or IL-23 or IL-12 and IL-23.

In the meantime, most of the patient and professional organizations such as the National Psoriasis Foundation, the American Academy of Dermatology, and the International Eczema Council have issued similar statements. They advocate continuing biologic therapies in uninfected patients but discontinuing the therapies, according to the package insert guidelines, in patients who are actively infected.

REFERENCES


Commentary by Peter van de Kerkhof, MD, PhD
IPC Chief Medical Officer
Amsterdam, The Netherlands

The treatment of patients with psoriasis has been challenged by the COVID-19 pandemic. In March 2020, with a lack of data allowing an evidence-based approach, IPC formulated a statement urging physicians to discontinue immunosuppressive treatments in patients with active COVID-19 disease. For psoriasis patients with no signs or symptoms of COVID-19, decisions about continuing treatment needed to be taken on a case-by-case basis, balancing risk with benefit.

I would like to draw your attention to a publication (cited above) by Paulo Gisondi, an IPC councilor and practitioner from Verona, Italy, on the risk of hospitalization and death from COVID-19 in psoriatic patients receiving biological treatments (980 patients) and renal transplant recipients on immunosuppressive treatment (247 patients).

No psoriatic patients were hospitalized or died because of COVID-19 and 1 kidney transplant recipient died. In the general population of Verona, 0.28% of the COVID-19 patients were hospitalized or died. The average ages of patients with psoriasis and renal transplant recipients were 56 and 57 years, respectively. Of the psoriasis patients, 39% were obese and 12% had diabetes and cardiovascular disease. The authors indicated several limitations of the study. Nevertheless, the study provided important early information.

At present, dermatologists are collecting information in COVID-19 registries. IPC is pleased to be a partner on the PsoProtect registry for psoriasis and COVID-19-positive patients. Please consider submitting a case or cases to the registry, as it is of utmost importance that we collect the data from patients with psoriasis suffering from COVID-19.
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How to build a registry in record time: an interview with Catherine Smith and Satveer Mahil

THE REGISTRIES, PSOPROTECT AND PSOPROTECT ME, AIM TO HELP HEALTH CARE WORKERS UNDERSTAND HOW THE NOVEL VIRUS AFFECTS PATIENTS WITH PSORIASIS

Psoprotect is an international registry for health care providers to report outcomes of confirmed or suspected COVID-19 in people with psoriasis. The data collected in this registry have the potential to advance the understanding of how such factors as immunomodulator therapies and comorbidities affect outcomes in people with psoriasis who contract COVID-19.

PsoprotectMe is a companion registry to collect patient-reported data on the pandemic and psoriasis. PsoprotectMe asks all patients to self-report even if they have not had coronavirus, as the investigators are interested in understanding behavior changes during the pandemic.

The Psoprotect registries are supported by an expert international scientific advisory board and led by an executive team that includes IPC President Jonathan Barker, IPC Councilor Catherine Smith, and researcher Satveer Mahil, all from St John’s Institute of Dermatology, Guy’s and St. Thomas’s Hospital, and University of Manchester, England, United Kingdom. IPC and 23 other dermatology-focused organizations are partners in the Psoprotect registries project.

IPC interviewed Professor Smith (left) and Dr. Mahil, to get the story behind the founding and launch of these important pandemic resources for the psoriasis community.

What prompted you and your colleagues to start a patient registry for psoriasis and COVID-19?

Catherine Smith: We realized that patients with psoriasis may be at increased risk of contracting and developing a more serious course of COVID-19 because of the multi-morbid burden of psoriasis and the systemic therapies we use to treat the disease. Additionally, anxiety and low mood are a known problem for people with psoriasis. When you consider the impact of social isolation on mental health, people with psoriasis could potentially be very vulnerable in the pandemic.

In contrast to virtually all other times in medicine, there was a complete absence of information or knowledge on the impact of COVID-19 on people with immune-mediated diseases such as psoriasis. Very early on in the pandemic, I contacted the lead author of one of the first papers published in the New England Journal of Medicine on outcomes of COVID-19 in China. The investigator responded that none of the patients who had died in their study were taking any immunosuppressants or had psoriasis. This was the only information we had on the issue.

This situation in medicine – where patients are asking questions and you have no information to draw on – was (and still is) unprecedented. We set up a call with our group (St. John’s Institute of Dermatology, Guy’s and St. Thomas’s Hospital and University of Manchester) to find the quickest way to obtain information about COVID-19 and psoriasis. Psoprotect came out of these conversations.

What was the timeline and process to launch Psoprotect and PsoprotectMe?

Satveer Mahil: It took us about 6 weeks to set up and launch the registries globally. We started with Psoprotect. A group of scientists, clinicians, epidemiologists, health data researchers, and patient representatives developed the Psoprotect case report form and aligned it with those of other immune-mediated-disease COVID-19 registries. We decided on a minimum core set of variables to include and produced a succinct and easily accessible online case report form that could be quickly completed by busy clinicians during their virtual consultations. We then spread the
word: We encouraged clinicians to report any individual with psoriasis under their care with confirmed or suspected COVID-19. We are grateful for the support of IPC and all of our other international partner organizations, which have helped promote and disseminate details of PsoProtect to clinicians all over the world.

CS: PsoProtectMe came about when we realized that only dermatologists were submitting cases to PsoProtect because general practitioners were busy on the front lines of the pandemic. PsoProtectMe would give us a vehicle to collect information **directly from patients** with psoriasis on their experience with the virus. The PsoProtectMe data will help us understand how the pandemic impacts people with psoriasis who contracted COVID-19 in terms of mental health, treatment adherence, and of course, their outcomes.

To develop PsoProtectMe, we took the PsoProtect case report form and “translated” it into lay language with help from the Psoriasis Association in the United Kingdom and patients themselves. We enlisted the help of Professor John Weinman, an expert in psychology as applied to medicines at King’s College London, for the questions on adherence. For the topics of jobs and social considerations, we modeled our questions on validated tools used by the World Health Organization (WHO).

**How did this compare to launching a patient registry during nonpandemic times?**

**SM:** It was much quicker! From inception to launch, it was mere weeks. This accelerated timeline was possible in part because all contributors to the development process (from devising the questionnaires, websites, achieving regulatory approval through to implementation and launch) were incredibly responsive and collaborative. Every single person did their bit.

One of the silver linings to this experience has been a strong sense of community. Many of the links, partnerships, and collaborations forged during this process within the psoriasis community and across immune-mediated diseases will endure. The urgency of the pandemic helped focus and sharpen our decision-making.

**What are your plans for analyzing the data and future research?**

**SM:** We have produced aggregated data summaries as the registries have gathered more information and have shared these on the “current data” pages of the PsoProtect and PsoProtectMe websites. Our first in-depth analysis of the PsoProtect data is focused around identifying the factors associated with hospitalization for COVID-19 in individuals with psoriasis. We are using information in PsoProtectMe to explore the potential impact of risk-mitigating behaviors (such as social isolation) in people with psoriasis.

**CS:** Following this first analysis, we will continue to interrogate the clinical dataset. As cases accrue, so will the power of the data. In the medium term, we are planning to link our data with population-based datasets from the United Kingdom. This means we will be able to determine how representative our findings are. We also hope that the platform we’ve developed, perhaps particularly for PsoProtectMe, will be important for understanding the impact of COVID-19 and associated lifestyle changes in the longer term. Some of the lessons and findings gleaned from the pandemic will be generalizable. For example, how people perceive their psoriasis and their willingness to take medicines. The global reach of the registry – especially with the translations now online in Spanish, French, Portuguese, Italian, Japanese, Polish, and Chinese – provides us with the opportunity to understand more about psoriasis across the world.

To learn more about PsoProtect and submit a case, visit psoprotect.org. Here you can also explore preliminary data in aggregate and find a list of participating organizations. Individuals with psoriasis can report their experiences in the pandemic (whether or not they have had symptoms of COVID-19) at psoprotectme.org.
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THANK YOU, ALEXA

Join us in extending a heartfelt “Thank You!” to Dr. Alexa Kimball for her service on the IPC Board of Directors from 2017-2019. Under her tenure as IPC president from 2017-2018, the organization published 6 articles on a range of psoriasis topics, initiated work on the Global Psoriasis Atlas project, hosted 20 education events for dermatologists across the world, and launched the Psoriasis Masterclass program, among other achievements. Fortunately, Dr. Kimball remains an IPC councilor and will continue to help our organization meet our mission of advancing care for patients with psoriasis worldwide.

NEW BOARD MEMBERS

IPC is pleased to welcome 3 members to the Board of Directors.

Joel M. Gelfand, MD, MSCE
Philadelphia, Pennsylvania

Dr. Gelfand is a professor of dermatology and epidemiology at the University of Pennsylvania Perelman School of Medicine. He serves as vice chair of clinical research, medical director of the school’s Dermatology Clinical Studies Unit, and director of its Psoriasis and Phototherapy Treatment Center. An author of more than 260 scientific publications, Dr. Gelfand is an internationally recognized expert in psoriasis, clinical epidemiology, drug safety, and clinical trials. An elected member of the American Society for Clinical Investigation, he has received numerous awards. The overarching goal of Dr. Gelfand’s research and clinical practice is to improve psoriasis patient outcomes in the skin and joints, while lowering the risk of diabetes, cardiovascular disease, and mortality.

Johann Gudjonsson, MD, PhD
Ann Arbor, Michigan

Dr. Gudjonsson is an associate dermatology professor at the University of Michigan Medical School. Dr. Gudjonsson’s primary research focus is basic immunological and genetic research on psoriasis, with projects directed at improving diagnosis and treatment. He is an author on more than 240 dermatology publications. Dr. Gudjonsson has been named the Frances and Kenneth Eisenberg Emerging Scholar of the Taubman Medical Research Institute. He has earned awards from the American Skin Association, the Dermatology Foundation, Doris Duke Foundation, and the National Institutes of Health.

Mahira Hamdy El Sayed, MSc, MD
Cairo, Egypt

Dr. El Sayed is a professor in the dermatology and venereology department at Ain Shams University in Cairo. Since 2000, she has served as the department’s administrative director. She also directs the university’s dermatology training program. Dr. El Sayed is committed to improving the outcomes for patients with psoriasis in Egypt. She has lobbied the Egyptian government to improve access to health care and medicine, and is a member of multiple national and international dermatology societies. She lectures at dermatology meetings around the world on psoriasis care.

RECENTLY PUBLISHED IPC MANUSCRIPT


This paper reports the results of a survey of IPC dermatologists from 26 countries that focused on the availability of topicals and how their prescription was influenced by disease severity. Based on the survey results, the study concluded that “Stratification of the use of different classes of corticosteroids and vitamin D based treatments in different expressions of diseases severity and disease activity may improve the standard of care of topical drugs in psoriasis.”
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UPCOMING IPC EVENTS

MARCH 18, 2021
IPC Global Education Day Symposium – Hot Topics and Challenging Cases in Psoriasis
Annual Meeting of the American Academy of Dermatology (AAD)
San Francisco, California

APRIL 15-18, 2021
IPC Symposium – Challenging Cases in Psoriasis: A Focus on Biologics and Adverse Events
Annual Meeting of Latin American Dermatologists (RADLA)
Asunción, Paraguay

MAY 5-8, 2021
IPC Pre-Conference Symposium – Biomarkers, Disease Models and Machine Learning for Psoriasis Research
Society for Investigative Dermatology (SID) Annual Meeting
Chicago, Illinois

JUNE 4-5, 2021
IPC Latin America Regional Masterclass
Bogota, Columbia
*Invitation only

SEPTEMBER 22-25, 2021
IPC Symposium on Biomarkers
European Society of Dermatological Research
Amsterdam, Netherlands

OCTOBER 13, 2021
IPC Subspecialty Society Symposium
European Academy of Dermatology and Venereology
Berlin, Germany

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A compilation of evidence-based guidelines for psoriasis diagnosis and management collected from around the world.

MEASUREMENT TOOLS
Commonly used measurement tools for psoriasis management and clinical trials.

CONGRESS COVERAGE
Reviews of psoriasis highlights from important congresses around the world.

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Find resources for managing psoriasis in clinical practice.
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Founded in 2004, the International Psoriasis Council (IPC) is a dermatology-led, voluntary, global, nonprofit organization with a network of more than 100 psoriasis experts, thought leaders, and professionals, dedicated to improving patient care around the globe.

Through our work, we deepen the understanding of the disease and its management. We lead advancements in care by facilitating cutting-edge research, convening partners to collaborate and advocate for improved treatment, and growing capacity for psoriasis management by sharing our knowledge. Unbiased and science-based, our collective expertise and influence have a direct impact on how patients around the world are treated.

OUR VISION IS A WORLD FREE OF PSORIASIS.

We believe that psoriasis patients, no matter where they live in the world, no matter how complex their symptoms, should have access to the best care available to them, and that ultimately a world without psoriasis is possible.

OUR MISSION IS TO IMPROVE THE CARE OF PEOPLE WITH PSORIASIS WORLDWIDE THROUGH EDUCATION, RESEARCH, AND ADVOCACY.

CO-EDITORS
IPC gratefully acknowledges co-editors Richard Warren, BSc, MBChB, MRCP, PhD (left), dermatology professor, University of Manchester, Salford, England, United Kingdom, and Denis Jullien, MD, PhD, dermatology professor, Hôpital Edouard Herriot, Hospices Civils de Lyon, University of Lyon, France, for their writing and editing contributions to the August 2020 IPC Psoriasis Review.

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