

Natasha Cowan · Corporate Communications Manager

The key to psoriasis innovation? Dispelling the shadow of the JAK inhibitor

Powerful therapies that can improve skin clarity dominate the psoriasis landscape, so why are most patients stuck in a cycle of ineffective topicals? Fishawack Health explores the market and reveals how life science companies can cut through the noise to drive uptake of innovative therapies, including novel TYK2 inhibitors.

During the last two decades, the landscape for psoriasis treatment has exploded. The advent of biologic therapies at the turn of the millennium and the subsequent development of T-cell targeted therapies and tumor necrosis factor (TNF) inhibitors have given patients therapeutic options beyond traditional treatments such as topical steroids, tar preparations, oral systemics, and light therapy. Suddenly, those with more severe psoriasis had safer and more effective treatment options that delivered the life-changing potential for clear skin.

Today, some of the most innovative therapies in development are Janus kinase (JAK) inhibitors, and the latest 'game changer' Tyrosine kinase 2 (TYK2) inhibitors.

The healthcare press has described TYK2 inhibitors as having the potential to revolutionize psoriasis treatment. The inhibitors work by blocking the action of TYK2 and preventing the downstream signaling effects of cytokines IL-12, IL-23, and type I interferons, thereby clinically improving psoriatic plaques.²

In contrast to many existing treatments for more difficult-to-control forms of psoriasis which are intravenous, TYK2 inhibitors – like Bristol Myers Squibb's deucravacitinib (BMS-986165) – are being trialed as oral medications, which could vastly improve the patient experience.

The results of the deucravacitinib Phase 3 studies caused a stir across the industry. A significant number of patients achieved a Psoriasis Area and Severity Index (PASI) 75 response, which means the patients score on the index dropped by 75%, and a static Physician's Global Assessment Score of clear or almost clear (sPGA O/1).³

In a disease where the impact on patients' quality of life has been likened to other chronic illnesses, like diabetes and coronary heart disease, the impact of these novel treatments could be ground-breaking.4 However, despite the increasing number of treatments available, a survey by the U.S National Psoriasis Foundation found 52% of patients with psoriasis are dissatisfied with treatment.⁵ In addition, recent data show moderate and severe psoriasis are often undertreated with more than 50% of patients prescribed only topical therapies.6

So, if striving for clear or almost clear skin is a realistic treatment goal, why are healthcare professionals refraining from prescribing more efficacious treatments, and what does this mean for yet-to-beapproved TYK2 inhibitors?

THE SHADOW OF THE JAK INHIBITOR

Although the media has hailed TYK2 inhibitors as 'ground-breaking,' and some key opinion leaders have expressed interest in the therapies, drug developers launching TYK2 inhibitors face a significant challenge; TYK2 inhibitors are considered the next generation of the JAK inhibitor, and this carries a stiama.

JAK inhibitors are associated with a number of safety concerns. The treatments block the activity of multiple cytokines, which are overproduced in many skin disorders including psoriasis. However, JAK inhibitors are often broad-acting therapies, targeting a number of cellular pathways and this increases the potential for adverse effects. For example, in 2019, the FDA issued a warning for increased risk of blood clots and death with the higher dose of tofacitinib.

While the risk is considered low, researchers are unsure of who is at risk or why the adverse events happen. Tofacitinib, baricitinib, and upadacitinib all carry black box warnings for cancer, infection, and venous thromboembolism. Additionally, earlier this year the FDA delayed approval of three JAK inhibitors illustrating that the authority is closely scrutinizing the safety of this class of drug.

As a result, one of the biggest barriers for healthcare professionals prescribing JAK inhibitors is the intense screening and monitoring process. Before beginning treatment, patients must be screened for HIV, hepatitis B and C, and tuberculosis. Once the treatment has started, in addition to physical exams and regular reviews of their symptoms, patients require regular monitoring to check their blood count, hepatic function, and fasting lipids.¹²

While the issue of patient safety is important in every therapy area, safety concerns are heightened in psoriasis treatment as dermatologists are acutely aware that although the disease is chronic, it is not lifethreatening. These concerns are amplified as patients face long-term exposure to the treatment.

When making treatment decisions, healthcare professionals will therefore weigh up the potential long-term risks of the therapy and balance this with the impact of prescribing or not prescribing the therapy on the patient's quality of life.

In contrast to JAK inhibitors, TYK2 inhibitors show higher selectivity for their target, which could indicate that this drug class will be safer. ¹³ However, dermatologists remain concerned that these therapies will always be challenging to prescribe, and patients may still need to be carefully monitored.

Additionally, while some key opinion leaders are excited about TYK2 inhibitors, they are also unsure of where the therapies will fit into the treatment algorithm.

THE FEAR FACTOR

Another barrier faced by dermatologists treating patients with psoriasis is the patient's reluctance to receive more invasive treatments, such as oral medications or injections. Patients who view their psoriasis as a cosmetic issue, or are not as concerned about their disease. may be less likely to move on from topicals to more efficacious treatments.¹⁴ One of the primary factors behind their reluctance to progress to more invasive treatments is patients' fear, which stems from a lack of understanding about the systemic nature of their disease.

In a recent interview with The Dermatologist, Jason E. Hawkes, MD, MS, Associate Professor of Dermatology at the University of California, Davis, and a member of the National Psoriasis Foundation (NPF) Medical Board, said: "There are still a large subset of patients who do not understand psoriasis is a chronic disease. I like to start the discussion there, because they oftentimes have only thought about their disease as being 'skin only'. A patient's willingness to pursue particular treatments that might seem invasive, such as a pill or injection, is largely dictated by how bothered they are by their skin disease. I try to balance this by explaining that untreated, more widespread psoriasis has implications that extend far beyond the skin."15

A point echoed by James Song, MD, FAAD, who told HCPLive that while access was the biggest barrier preventing him from prescribing novel treatments, the "fear factor" around invasive treatment was also a major challenge for him. He reveals: "I've found that getting some patients to understand they have a systemic disease that needs a systemic treatment can be very difficult." 16

66 In contrast to JAK inhibitors, TYK2 inhibitors show higher selectivity for their target, which could indicate that this drug class will be safer

66 There are still a large subset of patients who do not understand psoriasis is a chronic disease

However, rather than considering the patient's lack of understanding as a barrier to uptake, for life science companies, this is an opportunity to carve a name for themselves in the minds of patients and educate them on the chronic nature of their disease, empowering them with the knowledge to take part in shared decision-making—a process that is rarer in dermatology than it is in other disease areas like oncology.

WHAT IF THE PATIENT COULD TAKE CONTROL?

With more and more dermatology patients searching the internet to find information on their disease, share their experiences, and hear about their peers' experiences, it's clear that we're living in a world where word of mouth has become word of mouse.

A value-adding omnichannel campaign that not only surfaces and addresses the negative beliefs patients have about their psoriasis, but also provides the education and tools needed to seek innovative treatments will build strong therapeutic alliances between dermatologists and their patients.

Life science brands can start by understanding the drivers behind patients' negative beliefs about invasive treatment. Developing insights on the patient journey – including their expectations, experiences of past treatment and care, perceptions of their disease, and environmental factors such as system pressures and the structure of the care team – will help brand teams to understand the barriers to behavior change and develop content, tools, and services that shift beliefs.

By mapping the customer journey, brands can identify the educational and customer experience gaps faced by patients and healthcare professionals. Life science companies can then explore the channels that allow them to connect with the psoriasis community personally and deeply to build knowledge and trust. Doing so enables brands to enrich the patient experience and craft communications across a variety of targeted channels to help empower patients to take control of their disease.

DRIVING CONNECTED COMMUNITIES



Kim Kardashian, a media personality, influencer, and psoriasis sufferer with 228 million social media followers

Building value-adding educational content is essential for cutting through a market complicated by the sheer number of treatments available and positioning more efficacious therapies as superior to topicals.

Before launch, brands should consider building content destinations and leveraging existing platforms to drive awareness of psoriasis as a chronic disease with implications beyond skin clarity.

The content destinations can provide a trove of educational resources that drive better and more meaningful conversations about the chronic nature of the disease and novel treatments. Such resources can include bitesize learning, educational videos, patient stories, podcasts, and conversation guides which are central to imparting knowledge and facilitating shared decision-making.

In addition to owned channels. the psoriasis space is dominated by numerous #psoriasiswarriors, social media influencers who have an engaged following of psoriasis patients. Some of the top names include Zoe Khan, Sabrina Skiles, Holly Dillon, Nicki de Wit, and Mohammed Khan, who collectively have more than 40,000 followers on Instagram alone. However, their followers pale in comparison to some of the most famous psoriasis influencers including celebrities like Cindy Lauper with 985,000 followers, and Kim Kardashian who has a whopping 228 million followers at the time of writing. By engaging these influencers. life science brands can connect with an already captive audience of patients seeking education on the nature of their disease.

Before launch, brands should consider building content destinations and leveraging existing platforms to drive awareness of psoriasis as a chronic disease with implications beyond skin clarity

Patient advocacy groups are also leveraging the world of social media to better serve psoriasis patients. In 2020, The National Psoriasis Foundation partnered with MyHealthTeam, a social network platform for people with chronic health conditions, to make its platform, MyPsoriasisTeam, its exclusive and official online community. More than 80,000 members have signed up to the platform, which provides medical education and is designed to empower patients and their families.

By leveraging social media channels and working with patient advocacy groups, life science brands can connect with patients, providing ammunition to have more constructive conversations with their dermatologists and take a more active role in decision-making.

For life science companies developing novel psoriasis therapies, a value-adding omnichannel campaign not only helps to drive better education, but it also gives patients the power to speak to their dermatologists about treatment innovations. Through these conversations, patients can compel their healthcare professionals to review the therapy and its benefits.

For drug developers launching TYK2 inhibitors, taking this approach could not only bring them one step closer to dispelling the shadow of the JAK inhibitors; they can transform the relationship between patients and their dermatologists, giving patients the knowledge to take control of their health and the power to change their own lives.

For drug developers launching TYK2 inhibitors, taking this approach could not only bring them one step closer to dispelling the shadow of the JAK inhibitors; they can transform the relationship between patients and their dermatologists

To find out how Fishawack Health can help you commercialize your psoriasis brand, portfolio, or service, contact us.

References

- https://www.healio.com/news/rheumatology/20200214/ novel-tyk2-inhibitor-may-be-a-game-changer-forpsoriasis
- 2. https://www.the-dermatologist.com/article/novel-tyk2-inhibitor-treatment-plaque-psoriasis
- https://news.bms.com/news/details/2020/Bristol-Myers-Squibb-Announces-Deucravacitinib-BMS-986165-Demonstrated-Superiority-to-Placebo-and-Otezla-apremilast-in-Pivotal-Phase-3-Psoriasis-Study/ default.aspx
- **4.** https://www.sciencedirect.com/science/article/pii/SOO222O2Xl5357O67
- 5. https://onlinelibrary.wiley.com/doi/10.1111/jdv.16274
- 6. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5389757/
- 7. https://www.healio.com/news/rheumatology/20200214/ novel-tyk2-inhibitor-may-be-a-game-changer-forpsoriasis

- 8. https://www.medpagetoday.com/aad/psoriasis/92610
- 9. https://www.medpagetoday.com/aad/psoriasis/92610
- 10. https://www.medpagetoday.com/aad/psoriasis/92610
- 11. https://www.fiercepharma.com/marketing/more-relieffor-dupixent-as-fda-pushes-back-lilly-incyte-pfizereczema-decisions-amid-jak
- 12. https://www.medpagetoday.com/aad/psoriasis/92610
- 13. https://www.medpagetoday.com/aad/psoriasis/92610
- **14.** https://www.hcplive.com/view/challenges-in-treating-patients-with-plaque-psoriasis
- **15.** https://www.the-dermatologist.com/article/shared-decision-making-key-mastering-psoriasis
- **16.** https://www.hcplive.com/view/challenges-in-treating-patients-with-plaque-psoriasis