Current Approaches to the Treatment of Early Mycosis Fungoides (Sponsored by Kyowa Kirin)

Ellen J. Kim, MD, FAAD, interviewed by Steven Chen, MD, MPH, FAAD

STEVEN CHEN, MD, MPH, FAAD: Welcome everyone to another episode of Dialogues in Dermatology, my name is Stephen Chen, and I'm excited to be joined by Dr. Ellen Kim. Today, we will be talking about everything that you wanted to know about the treatment for early stage cutaneous T-cell lymphoma. Welcome Dr. Kim to Dialogues.

ELLEN J. KIM, MD, FAAD: Thanks so much for having me. It's great to be here.

STEVEN CHEN, MD, MPH, FAAD: Now, as dermatologists, I think you and I both love taking care of lymphoma patients, and so I think we spend a lot of our both waking and sleeping time thinking about lymphoma, but I think a lot of us, just as regular dermatologists who are in the community or in academic settings, we're all going to see patients with CTCL. So, just in general, what is your approach to a patient who comes in, who has maybe the classic exam for mycosis fungoides, maybe if you could talk us through what that classic exam looks like, and what you're thinking, what your first approach is in clinic when you see a patient like that.

ELLEN J. KIM, MD, FAAD: Yeah, so 70% of the patients who walk through our door, who are new to us, they'll have early stage disease. And so, as a reminder, that's patches and plaques typically on sun protected areas, that's the classic presentation, but you can also see hypopigmented or hyperpigmented patches of its skin of color, and of course, MF can show up anywhere. The folliculotropic subtype loves to show up on the areas where there's hair, it can look more like pimples and alopecia. So, typically the patients come in and they have relatively limited body surface area, like for instance, stage 1A is less than 10%, and stage 1B, it's quite broad, between 10 and 80%. But typically they feel well, they usually don't have swollen lymph nodes, they don't have B symptoms, and the last thing is itching. So, it's really important to ask them about their itch status because that often is one of the most significant side effects.

STEVEN CHEN, MD, MPH, FAAD: Great. Yeah. And so, super helpful to think about when we might suspect MF, and when we might actually be thinking about maybe next steps. So, in terms of next steps, how do you approach diagnostics for that patient?

ELLEN J. KIM, MD, FAAD: Well, we often are a referral center, so our colleagues in the community often have a diagnostic biopsy that we like to review in-house, and then we can repeat the biopsies, particularly off of therapy, that's helpful to have them off topical steroids for a few weeks, and then for early stage disease, again, patches or plaques as their primary skin manifestation. You can do some blood work, and palpate their lymph nodes, and then scans are optional, depending on if you feel anything, or if they have really extensive disease or more plaque disease, then we'll do a PET scan or CAT scan. So, that's the typical staging workup, and we typically go by NCCN guidelines.

STEVEN CHEN, MD, MPH, FAAD: Yes, NCCN guidelines I think have changed a little bit over time. I'm just curious, it sounds like you judge based on the patient, as we all do, obviously, but you judge it based on the patient about whether you're sending scans, or they're sending blood work. One question I often get is when should I scan, and when should I send a peripheral flow? Curious if you have any suggestions or tips for our listening dermatologists.

ELLEN J. KIM, MD, FAAD: So, the easy category are the tumor and advanced stage patients, they get the whole kit and caboodle, flow, gene arrangement, and scans. For the early stage disease, I think it's important to focus on the patients with more significant plaque disease. So, if they have significant plaque disease or really extensive patch disease, like more than 50%, it's good to do the full workup. I think the easiest category is patch less than 10%, if they don't have the risk factors, the red flags. So, if they're immunosuppressed or rapid tempo disease, those patients, you probably want to err on the side of ordering the staging tests, but if it's just simple patch disease, you can keep it pretty simple. You can do just standard blood work, no flow, and then scans you can hold off on as well. And then, of course, there's the gray zone between the different types that I told you about. So, we want to be mindful of the cost of tests but also not miss anything.

STEVEN CHEN, MD, MPH, FAAD: And this is maybe just from one practitioner at a tertiary care referral center to another. Just curious, how often are you seeing patients who come in with that atypical T cell dyscrasia, the atypical lymphocytic infiltrate? Are you seeing much of that, or do you just see the full-blown biopsy confirmed MF in your practice?

ELLEN J. KIM, MD, FAAD: Definitely see those borderline cases, and one could argue maybe even more so with the advent of biologics for atopic dermatitis, psoriasis, et cetera. And then, I

think it's important to keep in mind, MF, even classic forms, sometimes even though clinically it might look like MF, the pathology may take time to fully declare itself. So, we certainly have many patients where the path is not quite there. So, clin-path correlation, my residents get a little tired of me saying that over and over again, but that is the mantra and the way we accurately diagnose MF, and distinguish it from mimickers, or other subtypes of CTCL.

STEVEN CHEN, MD, MPH, FAAD: Great, thank you. Obviously, let's get to the meat of the discussion, the point of today's Dialogues is to talk about treatment in early stage MF. And so, getting to that, in my mind just broadly, when I think of early stage MF, I'm thinking about stage 2A and below. First question for you is, would you agree with that assessment, or do you kind of draw the line at a different place? Because for me, that's really where the line goes from when I, as a dermatologist, am directing therapy, to when maybe I am reaching out to a colleague in radiation oncology or medical oncology to start helping with things. Would you draw the line there, or do you feel like there's more advanced or less advanced disease that we should be drawing the line at?

ELLEN J. KIM, MD, FAAD: I agree with you 100%. That is the classic kind of demarcation. And I would say that the only thing I might add is about 85% of my early stage patients, 1A, 1B, 2A, skin directed therapies are enough. So, basically, the broad categories are topicals, phototherapy and radiation therapy, and for 85% of my early stage disease, that's enough. About 15% will prove to be either initially or with follow-up will be what I call refractory or stubborn. And so, those are the patients who either have really extensive patch plaque disease, like [inaudible 00:06:48] subtype, or just intractable horrible itch, or very disfiguring MF, then those patients are the ones who may need systemic therapy upfront, or depending on their prior treatment history, or eventually. So, that's the way I think about the early stage cohort.

STEVEN CHEN, MD, MPH, FAAD: And I realize that as we're talking about these different stages, you and I, who see MF all the time, probably throw around the stages pretty easily, but just a reminder to our listeners. So, as Dr. Kim mentioned 1A, patch plaque less than 10%, 1B is 10 to 80% coverage of patch/plaque disease, two A just means palpable lymph nodes, but once you've got tumors, once you've got erythroderma, once you've got other involvement, including blood, you're dealing with more advanced stage disease. So, focusing in on the early stage stuff, you mentioned skin-directed therapy, which is our mantra, and even our oncologists are

very used to saying, this is just skin-directed therapy, the dermatologist is going to take care of you until they need some extra help.
And so, you mentioned topicals, you mentioned phototherapy, you mentioned radiation... Do you have an algorithm, a ladder, a framework that you work through with your patients? Or is it... Obviously every patient's different, but I'm just curious if you have a general approach when you start talking about treatment with your early stage patients.

ELLEN J. KIM, MD, FAAD: The initial approach is, the simplest one is localized disease versus generalized disease. And thinking about it that way, there are some treatments that bridge both, like topical steroids bridges both, topical mechlorethamine gel, you can use localized or generalized safely. And then, this is a little bit more the goals of care, and the holistic view of the patient, because just as a reminder, MF is not permanently curable in most patients, it is very much a chronic disease, and chronic disease management and defining all those goals of therapy, cost, access, side effect profile, comorbidities, all of that goes into the decision on which treatments we pick. But if we were to think broadly, phototherapy is definitely, we tend to do more for more extensive disease, and then there's some topicals, such as retinoids or imiquimod, which we do use off-label, for localized disease, it's just not practical or tolerable to do it on generalized disease. So, each skin directive therapy, we approach it that way.

STEVEN CHEN, MD, MPH, FAAD: And I think for the, let's say, a community dermatologist who's taking care of someone who's got early stage MF, I think it's very... Phototherapy and topical steroids are kind of the stuff that we're so used to using for all types of inflammatory conditions. Do you have a regimen that you'd like to use for either phototherapy or topical steroids? I always think phototherapy is pretty standard in terms of treatment, almost like what we do for our plaque psoriasis patients, and then topical steroids, we have our own little regimen, but I wonder how much of that is just institutional, how much of that is what we're used to doing? I'm just curious what your take is on what you normally do for your patients.

ELLEN J. KIM, MD, FAAD: Yeah. The reality is most of the patients have come to us on topical steroids, so many of them have seen topical steroids, and of course, Triamcinolone, and then the class one super potent steroids. But my perspective is about one third of my early stage patients, that's actually all they need, it turns out, they're often the ones that are not terribly itchy and have thinner lesions. And so, they often just do a combination of, for instance, like Triamcinolone, twice a day for three to six weeks, but then taking breaks. And then, active

observation is also appropriate for patients who have very limited disease, that doesn't bother them, and is very slow disease tempo, meaning just sitting there. So, that's one important note. And then, phototherapy, of course, if there's sensitive sites, like hydrocortisone 2.5% for the face, for the body folds, and that sometimes has this annoying tendency to start to [inaudible 00:10:50] to the body folds over time, but if you have it on your hands and feet or scalp, then class one steroids.

In terms of phototherapy, I think we use a lot of narrowband UVB, we've moved to it almost exclusively, PUVA, as you know, Steve, the accessibility has decreased, a lot of offices don't have it. Oroxylin is currently in short supply, topical oroxylin is not available, and also it's much more carcinogenic than narrowband UVB. So, we've moved away from it, but it still plays an important role in skin of color plaque disease. So, we fortunately still have PUVA. But narrowband, I would say the protocols we use tend to be more the atopic dermatitis protocols, because often the scale is thinner than in the psoriasis patients.

But if they have very psoriasis form scale, then you can follow the psoriasis protocols, I know in psoriasis they like to do it three times a week, because there are definitely studies that show the cumulative dose is less to achieve clinical responses, if you go three times a week, but because MF is such a chronic [inaudible 00:11:52] disease for some patients, a lot of them are on twice a week because it's just hard for them to go. So, that's maybe one big difference. I don't know if you have any other tips to add to that, Steve because I'd love to hear, because there are institutional preferences.

STEVEN CHEN, MD, MPH, FAAD: For sure, and I think that that's super helpful to hear. I think one institutional difference that I will throw out there, and I'd love to hear your take too, is I often tell my patients, no matter what treatment we're using, you have to give it three months, and then after three months we're going to reevaluate, and then we'll decide if there's improvement, then maybe we stick with it, and we taper or ramp or depending on how you did, we'll figure out the plan from there. However, if there's no improvement, then we move on to the next category of treatment.

And so, for us, in phototherapy, we do use more of a psoriasis standard algorithm, we also throw on mineral oil as well. I think part of that may be because I give them that three month window, and I really want to see that improvement in three months. It's almost like I want to sell it to the patient, and say like, look, it's so much better, let's stick with this, let's get you clear, if we can. So, at least that's what we've done, I'm curious if you have a different approach.

ELLEN J. KIM, MD, FAAD: No, you bring up maybe the most important point, which is expectation setting, because I do think that the responses in total course of phototherapy needed for MF I think is, it's not as fast as psoriasis patients and you might need longer, so I totally agree with that. And three months is a great time point to reassess. And I sometimes tell patients, full clearance may take between four months to 24 months, just because there's so many variables that affect, like phototherapy efficacy, if they're escalating the dose properly, if they're missing treatments, all that kind of... And using mineral oil or not, all those types of things. So, yeah, totally agree.

STEVEN CHEN, MD, MPH, FAAD: And then you mentioned mechlorethamine or nitrogen mustard, obviously something else that is in our armamentarium. I don't use it a ton, but when I do, it's got to be the right patient, it's got that risk of allergic contact dermatitis as well. I guess, when are you reaching for that? Because I think it's got, for me at least, it's been a relatively small number of patients that are willing to do mechlorethamine, I'm curious about your practice pattern.

ELLEN J. KIM, MD, FAAD: Yeah, I would say mechlorethamine gel, it was FDA approved in 2014, it has a long history before that. So, we know that the safety is there, there's no systemic absorption with generalized application, and that's a big plus, but I would say that phototherapy is often much easier for patients because you only have to do it three times a week, twice a week, whereas, mechlorethamine is daily or every other day. So, I would agree with you that, in general, more of my patients prefer phototherapy for that reason, but if they don't live close or they want to do something that can be used at their own home, then it's certainly an option. And then the contact dermatitis part is, again, it's I think counseling and using concomitant steroids can be super helpful for managing patients, because sometimes after an [inaudible 00:14:55] contact term, you can get clearing of their MF temporarily, that immunologic response.
So, I think that comes to, and probably you're a veteran too, Stephen, we don't want to abandon therapies too quickly in MF, our toolbox is limited, it's not like psoriasis that has ever more things. So, that's something I've learned over the years, I think I gave up on therapies too quickly, so I'm trying to spend more time counseling patients on what to expect, and then trying to troubleshoot or manage side effects so that we can really give each treatment adequate shot to helping them.

STEVEN CHEN, MD, MPH, FAAD: Yeah, that's wonderful. And for mechlorethamine at least, there's a standard algorithm that I follow that our patients follow as well, and it sounds like we almost have a very similar algorithm, topical steroids is kind of an easy start, phototherapy is relatively easy sell, depending on the patient's ability to get to a phototherapy center, your point about PUVA is well taken. I was recently told by my department, I'm the only one that still prescribes PUVA, [inaudible 00:15:57] of MF. And then, otherwise I think mechlorethamine is another option. I wanted to ask about imiquimod, obviously that's something that we've all learned as maybe for a smaller body surface area of disease. What's your experience? I use it very rarely, so I'm very curious about your experience with using something like imiquimod for more limited body surface area.

ELLEN J. KIM, MD, FAAD: Yeah, it's a good thing to have in the back pocket for stubborn, small, thicker lesions. So, again, it's off-label, it does come in somewhat inconvenient packaging, and then it can obviously cause local inflammation, and sometimes even systemic immune responses, but I guess when do I use it? I tend to use it for small plaques that are stubborn, that say are hidden from the phototherapy, there's sanctuary sites, where the phototherapy doesn't penetrate. I like to use in the genital area, so again alluded to the fact that you can get sanctuary site involvement by the MF, especially if they're in phototherapy. The disease is very sneaky, so it can go in the axilla, it can go in the inframammary, intraabdominal, in then the vulva and scrotum, and penis is not unusual, or the intra-gluteal cleft. So, you know can use imiquimod safely there, and then the dosing that I use is it mirrors the superficial basal cell treatment algorithm, daily, Monday through Friday, off Saturday, Sunday for six weeks. If no inflammatory response then do a daily, if too much inflammation, then Monday, Wednesday, Friday.

STEVEN CHEN, MD, MPH, FAAD: Great, thank you. And the last category you mentioned was radiation. So, when you're reaching for radiation for these patients, I have over the years come to realize that the radiation oncologist is really my best friend in my multidisciplinary clinic in terms of controlling both widespread disease as well as very limited disease. What's your approach with tapping our colleagues to jump in and help out?

ELLEN J. KIM, MD, FAAD: It's changed over the years, so it's a great topic to talk about. Classically, we would keep it in our back pocket if you had thick plaque or tumor disease, particularly ulcerated tumor disease, the number one first line treatment is radiation to heal that

ulcerated tumor so you don't get super infection and bacteremia. But now, because of the advent of low dose regimens, so just for the audience, in the old days, full dose was often three weeks worth of treatment, three to four times a week for three weeks, or what they call 24 to 30 gray cumulatively dose. But since the mid-2000s, or I would say 2010, 2015, low dose regimens, what they call boom boom, has been coming out, and that's four gray times two, or four gray times three. And it's extremely affected at clearing lesions, but then much less toxicity, radiation dermatitis, and you can repeat it over and over again. And there's a distinction between localized and full body radiation, and so total skin electron beam... Do you have that, Stephen? You do, right?

STEVEN CHEN, MD, MPH, FAAD: We do not. So, I'm at Mass General, you would think we would have something like that, but we actually have to refer about 30, 45 minutes out to get total skin.

ELLEN J. KIM, MD, FAAD: Yeah. It's a specialized, it's admittedly specialized, but worth talking about because... So, you need a special machine accelerator... Total skin electron beam, essentially it's analogous to PUVA or UVB, it's a full body treatment. Patients do disrobe, and their full skin is exposed except for some areas are shielded. And it is very effective. It has a 98% clearance rate, but in the old days, again, we would do it for 10 weeks, and that's really hard on patients. So, now, they're doing 12 gray, or three or even two weeks of treatment, and it's essentially achieving the same goals as phototherapy, but in three weeks.
So, it almost is a way, and it's helpful to have, because now that PUVA is hard to get, UVB frankly, again, it's a little bit hard for patients to go to, sometimes you can think about total skin electron beam for those stage 1B patients, that have patch and some plaque disease and they're super itchy, and they are either refractory to phototherapy, or they just don't want to do that long course, then you could refer them. And the safety profile is quite good and you can repeat it three or four times in their lifetime, so that's something that we've been doing a bit more.

STEVEN CHEN, MD, MPH, FAAD: Yeah, I think the biggest thing for us, obviously, like I mentioned, is just access. Access to the machine, access to the specialists, and luckily we have a nice partnership now. So, if you're listening to this, and that's something you want to think about, one of the first things to do is to reach out to your radiation oncology department and see if that's something that's offered, or where the closest site might be. And then, the last thing I

wanted to touch on treatment-wise, there's this in-between, sometimes we reach for pills, that we'll use for our patients, like methotrexate and bexarotene, and sometimes the cousin of Bexarotene, like acitretin. That, in my mind, I put in our territory, because we're so used to using methotrexate and vitamin A derivatives. I'm curious, in your practice, is that similar as well? Do you consider that skin-directed, or are you thinking that more systemic, more severe disease?

ELLEN J. KIM, MD, FAAD: Yeah, we feel comfortable prescribing and overseeing those medicines, for sure. The other category we would add would be interferon, so we use a fair amount of interferon alpha and interferon gamma, because of our, just historically we've been very interested in immunotherapy at Penn, my mentor, Dr. Rook. So, those three categories, retinoids, interferons, and methotrexate, those systemics are definitely, they play a role in refractory early stage disease, and generally it's not necessarily upfront, most patients I do try to just manage with skin-directed, but that subset of 75% BSA, plaque, folliculotropic, super itchy patient, going crazy, then I might start it upfront, in combination with skin-directed therapy. So, I think that's an important principle, even if you move on to the systemics, skin-directed therapies and monitoring for infection, those are all still very important roles for us as dermatologists, even if our onc colleagues start to drive the ship, so to speak.

STEVEN CHEN, MD, MPH, FAAD: Yeah, I always like to feel a little bit more old school when I add a retinoid and they're on phototherapy, and I can point at it and say like, oh, it's just like our PUVA, but obviously a little bit different when we're not really using PUVA anymore. I guess the thing I'd like to close on is thinking about our referral patterns, and thinking about ourselves as referring dermatologists. So, the first part is, who do you feel like needs to be referred to a tertiary care center for care? And obviously, I think I speak on behalf of both of us, and all of us who work at tertiary care centers, we're happy to see anyone, if you feel like you need the help, you should feel comfortable referring to us, but there are also some patients who could very safely be managed by their local dermatologists, which I think is totally reasonable.
And then, I guess the other question is, when do you start to get worried about the other side? When do you feel like your patients are maybe progressing? When are you worried about needing the oncologist, and what's your threshold for tapping them? Obviously, in a multidisciplinary clinic it's relatively fluid, you just kind of say, hey, can you come take a look at this patient for me? But is there anything like a red flag that makes you think, okay, I've got to really think about this pretty carefully because maybe it's time for something bigger, something stronger?

ELLEN J. KIM, MD, FAAD: Yeah, the first part of the question, at least in Philly, we're lucky to have two great centers, both us and Jefferson, we're specialty centers. So, at the moment, everything depends on how much staff and colleagues you have. We're willing to see everybody at least once. I think it is reassuring for patients to be referred to a specialty center, at least once, just to get the evaluation, counseling, and then a treatment plan or discharging back to the local dermatologist is perfectly fine. Phototherapy is administered locally, so a lot of my patients, their local dermatologist plays a huge role in administering phototherapy, doing their skin checks, monitoring them, and treating their skin cancers as needed. So, we definitely encourage that model, and we want local dermatologists to be comfortable with patch, limited patch, limited patch thin plaque disease, and they're not so crazy itchy, and healthy patients, and who are reliable, those patients, you can feel comfortable managing them.

I think for the ones who we plug in to oncology, obviously if they're refractory, and even if they have patch disease, but they're just really itchy, or they really hate the way it looks, I have some patients with very extensive hyperpigmented MF, they're not itchy at all, but they're so emotionally distressed by their disease, and nothing we're doing is touching it. I would say the thick plaque, the BSA, greater than 50% patch plaque, that are refractory to what we do, including the retinoids, interferons, and methotrexate, the high risk folliculotropics... So, we didn't really talk about too much, but folliculotropic MF used to have a really bad rap, like refer everybody to the specialty center and oncologists. But we've realized there's low risk disease and there's high risk disease, so the folliculotropics with really thicker lesions, itch, and somebody who's not getting better on our full court press.

I will say that the ones that immediately go to medical onc upfront, are those of you thinking about stem cell transplant. They're high risk patients. So, if they have large cell transformation on the biopsy, that's a little bit of a red flag, again, thick folliculotropic disease with severe itch, history of multiple infections, so some CTCL patients, early stage, for whatever reason, they get colonized with staff, and they have required multiple antibiotics. So, those patients I might send to onc for a meet and greet, and especially if they're young, and say, hey, I'm here... And just meet just in case we need them. And then we don't necessarily talk about stem cell transplant upfront, but that's in the back of our mind, in case their trajectory just goes super, super aggressive.

And I guess the last thing I might say is we didn't talk about it, it's kind of out of the realm of me and you and the local dermatologists, but there are some IV systemics that are part of our toolbox for refractory early stage disease. And they are the NCCN guidelines, and so the most

common ones are photophoresis, if you have a little bit of blood involvement, if you have mogamulizumab, the clinical trial did treat stage 1B patients, and because the safety profile is quite good, it is an option to think about. And then finally, brentuximab is very helpful for plaque disease, if they're CD30 positive, it can be a very efficient way to clear their disease. So, definitely it's climbing up the ladder, but I'm grateful to have these options, it's a very different landscape than it was 15 years ago.

STEVEN CHEN, MD, MPH, FAAD: And it turns out, I lied, I have one last question just because I can't help but ask you, as an expert in our field, what's your tip for treating intractable pruritus for these patients? Because we've mentioned it a couple of times, that's a reason why we might escalate therapy, but curious if you have any tips or tricks when we're dealing with that in particular.

ELLEN J. KIM, MD, FAAD: Oh yeah, I'm glad you remember to discuss it, because that is absolutely part and parcel of managing patients. So, treating the underlying disease definitely will help. So, that is important to know, that treating the underlying disease should help the itch. And it's important to know a lot of patients, and some even physicians, are like, oh, well, steroids and phototherapy, they don't actually treat the disease, they're just treating the symptoms or appearance. I don't know if you get asked that question. And I'm like, no, no, they're biologically active, they decrease the malignant T cell population. So, it's not just treating the skin symptoms, that's an important thing to be prepared for patients might ask. So, the pruritus algorithm is very similar to what we have for other itchy skin disorders, so good skincare, gentle skincare, topical steroids... A lot of our patients have already tried oral antihistamines, so I usually, gabapentin and mirtazapine as non-antihistamine agents, we use that a lot.
I would say gabapentin is probably the one we use most, we start at 100 milligrams for patients who are small and have a history of sensitivity to antihistamines, and 300 milligrams for those who don't. And then, just, it has a very wide therapeutic range. So, as you know, you can escalate it, can be given three times a day, maximum dose 3,600 milligrams a day. So, we use that a ton, I don't know, do you have any other opinions about gabapentin?

STEVEN CHEN, MD, MPH, FAAD: No, what you said about gabapentin is exactly how I prescribe it. I always start, if it's someone who, body size, body habitus looks kind of similar to me, I'm like 300 milligrams, and someone who's small, maybe elderly, I'm worried about

sensitivity, start with 100 nightly, and then increase from there. And I always say the same thing, max 3,600, I don't go above that, there's just no point to go above that, and for patients who have intolerance to gabapentin, they've got lower leg edema, they're super somnolent, or for whatever reason, pregabalin is kind of a nice "cleaner version" in terms of adverse effect. I think the biggest issue, at least, I don't know about Pennsylvania, for us in Massachusetts, pregabalin is considered a controlled substance and gabapentin is not. And so, it's just easier for us to prescribe that gabapentin than it is pregabalin.

ELLEN J. KIM, MD, FAAD: Interesting. Yeah. I have not used much pregabalin, but not for any other reason, just that we've gotten... We've had good success with gabapentin in general. Are you using mirtazapine?

STEVEN CHEN, MD, MPH, FAAD: Mirtazapine, at times. Usually I don't have to get to that point, because usually I go to pregabalin after gabapentin, if anything.

ELLEN J. KIM, MD, FAAD: Aprepitant is an interesting one, and our experience though, usually it's difficult to get it, given that it's covered for chemotherapy induced nausea, and then the quantity, often, they're very restrictive about how much. But some of our patients, our [inaudible 00:30:01] patients do well with aprepitant. And then in terms of off-label things that are coming down the pike, there are some interesting things that we need much more data, there are no trials yet, but I think the IL13 and IL31 inhibitors, particularly IL31, that if patients have concomitant [inaudible 00:30:23], it could be used for that, then we may see beneficial effects, but again, we have to have more experience in data.

STEVEN CHEN, MD, MPH, FAAD: Great. Well, Dr. Kim, thank you so much, I think we have gone past our allotted time, and you can tell how much I love speaking with you about one of our mutual interests, just because I would love to keep picking your brain about how you treat patients, but at this point I think it's probably best for, especially our listeners, for us to wrap up. Ellen, thank you so much for spending some time with me today on Dialogues in Dermatology, really appreciate all of your expertise. Any last words or words of wisdom for our Dialogues listeners before we log off?

ELLEN J. KIM, MD, FAAD: No, just happy that we could shine a light on this area, and also, I want to thank our community dermatologists because you guys are partners with us in referring patients and helping us manage their early stage population. Thank you.

STEVEN CHEN, MD, MPH, FAAD: Wonderful. Totally agree. Thank you again, and I hope everyone tunes into the next episode of Dialogues next time. Take care.