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0:00:04.4 Katie Berlin: Hi, welcome back to Central Line. I'm your host, Katie Berlin, and we have a guest today who's been on the podcast before. Dr. Renee Rucinsky, welcome back.

0:00:14.7 Renee Rucinsky: Thank you very much. I'm glad to be back.

0:00:17.9 Katie Berlin: The first time you were here, you were with Dr. Patty Lathan, who is amazing and wonderful. And was your task force companion on the diabetes guidelines task force. And now you're here having finished chairing, co-chairing the task force for these selected endocrinopathies of dogs and cats guidelines that are coming out in a few days from when we're recording this, which means they will be out and about and available for everyone to check out when this airs, so that's very exciting. How was that?

0:00:53.3 Renee Rucinsky: It was a big elephant to chew up, I tell you. It was really fun. It was a fantastic group of people who love endocrinology, so you can imagine the level of nerdiness working on that. But I mean because there's not really any in-between, I don't think, with endocrinology. I think you either love it and think it's super cool or wish that it would just go away, and so it was really great to be among a bunch of like-minded people who have a goal to make things easier for those of us who maybe don't like endocrinology so much.

0:01:39.4 Katie Berlin: Yeah, I think we talked about that when you and Patty were here, and we were talking about how for some people, it's like the best thing in the world when you get that pet that has that like the three... It's like an internal medicine nightmare, has three different things going on, you have to figure out how they all work together and how to manage them. And for other people, it's like that... Absolutely not. If there's anything you could do to turf that case, you're gonna do it. [laughter] And how that's okay.

0:02:01.0 Renee Rucinsky: It is okay, it is okay. You don't have to do everything.

0:02:07.1 Katie Berlin: Yeah, there are people who love that, and some of us would rather do a case like that, than go into surgery any day. [laughter]

0:02:12.0 Renee Rucinsky: Right, yeah, true story.

0:02:17.4 Katie Berlin: So Renee, would you mind just giving us, for people who haven't met you, but are familiar with your work before, do you mind just giving us a little bit of background and how you came to be talking to me today on the podcast?

0:02:25.0 Renee Rucinsky: Sure. Well, first of all, I am a University of Missouri graduate, so I'll say MIZ, and hopefully I'll hear ZOU come out through the atmosphere somewhere, but I have been doing a feline exclusive practice for the majority of my career. I have been a board certified ABVP feline specialist since 2001, and have my own regular wellness cat hospital, but we see a great deal of referral practice as well. I also have a separate hyperthyroid radioactive iodine treatment center. So in between diabetes and hyperthyroidism, my world has a lot of endocrinology in it. So that's great. We do like seeing our healthy cat friends too, but I love dogs. I just really, really like being able to provide this kind of atmosphere, this quiet, usually pretty chill atmosphere for cats 'cause they don't particularly like coming to see us.

0:03:52.0 Katie Berlin: Cats definitely do have a specific set of needs that sometimes it's hard to meet when you have a building full of dogs, even with the best efforts, so...

0:04:01.6 Renee Rucinsky: Yeah. Absolutely.

0:04:01.7 Katie Berlin: Yeah, that's super important. I feel like if I were to go back into practice, I would definitely consider feline practice. I'm certainly no specialist, but I feel like I understand cats and want them to... I would always wanna be around cats if I had the chance, because I do like that quiet atmosphere. I do miss rolling around on the floor with dogs though. I have a small dog so I don't get to do that very much now that I'm not in practice. I do miss that.

0:04:31.0 Renee Rucinsky: No. I totally miss that sometimes too, dogs are occasionally grateful for what you do as a veterinarian.

0:04:36.6 Katie Berlin: Yeah, that's true. [laughter]

0:04:40.1 Renee Rucinsky: And cats really are very humbling. I say it all the time that I really, truly believe that one of the a main purpose of cats that come into my life are to make me look bad, but it's fine, it's an exercise in humility on an every 20-minute basis.

0:05:06.1 Katie Berlin: It's the only way to send a cat home happy from the vet, is if they can make a fool out of you. [laughter]

0:05:11.4 Renee Rucinsky: Exactly, exactly. They're so smug about it.

0:05:15.6 Katie Berlin: They are, yeah.

0:05:17.5 Renee Rucinsky: They are very rude. But that's okay.

0:05:19.0 Katie Berlin: Yeah, well, and I guess it's dependent too, 'cause my cat is more like a golden retriever that he's like a cat, he's real chill and he likes to slob all over you, and he tries to eat your pizza crusts off your plate, and then my dog is a chihuahua and absolutely doesn't want anything to do with people.

0:05:35.5 Renee Rucinsky: So he's more of a cat. Yeah, or she.

0:05:38.2 Katie Berlin: Yeah, he's a cat dog. Yeah. He would hate to hear that, but it's true. So...

0:05:40.0 Renee Rucinsky: Yeah, that's alright.

0:05:42.7 Katie Berlin: Yeah, we're all... We've all got our stuff.

0:05:44.2 Renee Rucinsky: We do, we do so much.

[laughter]

0:05:47.6 Katie Berlin: So I think that's why I relate to cats. They're just like, they just tell you

about their stuff and you just... You gotta love them anyway, that's what I want.

0:05:56.7 Renee Rucinsky: Yeah, it's all out there.

0:05:56.7 Katie Berlin: Somebody to love me anyway. So today we're here because it was actually your idea to do this discussion, and I really loved that you suggested it because you had suggested that we talk about the new class of drugs out there to treat feline diabetes, and I think that's a really excellent idea. I'm sure a lot of people listening have heard talk about this, the drug that's on the market now, there's only one that's been approved so far I believe, right?

0:06:26.0 Renee Rucinsky: Yes, so far.

0:06:29.1 Katie Berlin: Yeah, and the brand name is Bexacat by Elanco. And it's... I've seen a bunch of articles about it and stuff, most of which quoted you.

[laughter]

0:06:39.6 Katie Berlin: Because like we were talking about before we got on, you tend to be the one everybody's heads just swivel and look at you and it comes to cat diabetes. [laughter]

0:06:48.4 Renee Rucinsky: Yeah, I don't know why. I mean, there's a lot of people who take care of diabetic cats. I don't know if nobody else answers their emails or what, but...

0:06:58.9 Katie Berlin: That is possible. [laughter]

0:07:00.0 Renee Rucinsky: Yeah, yeah.

0:07:02.1 Katie Berlin: Yeah, you are very responsive over email and I will not print your email in the show notes in case you're getting ideas, but you can email me.

0:07:07.3 Renee Rucinsky: That's alright.

0:07:08.0 Katie Berlin: And I'll pass them on to Renee.

0:07:10.4 Renee Rucinsky: I'm easily found.

0:07:12.9 Katie Berlin: But I love those... I love that because when something new comes on, it's scary, and we're either gonna jump right in and then use it potentially inappropriately, or we're all gonna be a little scared of it and not use it well or enough because we're worried about it. And neither of those is a great scenario. So we're here today to sort of address some frequently asked questions or some potential FAQs that might help people feel a little bit more comfortable understanding what it is and how to use it.

0:07:43.6 Renee Rucinsky: Good, yeah.

0:07:47.9 Katie Berlin: Okay, alright. So I wrote down some FAQs and you contributed a couple, so let's just jump right in. Okay, so can you tell us... We said we weren't gonna discuss pharmacology too much, which is good, but I also think it's cool to have a vague idea of how these

things work, so can you just give a sort of nutshell version of how this drug is different, this class of drugs?

0:08:08.6 Renee Rucinsky: Yeah. So one of the things that... So it's a SGLT2 inhibitor, so that stands for sodium glucose co-transporter 2. That's too many words for me, if anybody knows me, whether it's my clients or my staff or veterinarians I give lectures to, I really... I hate doctor words. I would just rather not work that hard? So I can use them if I have to, but I'd rather not. So we're just gonna call it SGLT2 inhibitors. One of the things that people have mentioned to me as the news of this comes out, colleagues of mine, veterinarians in the area that I may or may not meet for beers or something, but they're like, oh, the new insulin pill, the new insulin pill. It is absolutely not an insulin pill, it is a completely different type of drug. And so what this drug does is it reduces blood glucose levels, and so for it to work, the body still has to be making insulin. So we don't need to go into all of that, but we can go into that a little bit when we talk about how to choose which cat is appropriate for this type of drug, but probably the easiest way to think about it. So typically, when there is a high blood glucose level, it gets filtered through the kidneys a little bit, and then the kidneys resorb it back up.

0:10:00.0 Renee Rucinsky: The way this drug works, just as an easy way to think about it, is if you think about the blood flow through the kidney as being like a free way, and the glucose is traveling down the highway. In a normal kidney, it gets off at all the exits and goes back into wherever it needs to go. With Bexacat or with whatever other drug that comes out within this drug class, the off-ramps are blocked. So the glucose isn't gonna get back into the bloodstream, it is gonna go right into the urine instead. So instead of going back in and continually causing that blood glucose level to be high, the animal, whether it's a human or a cat or whatever, is able to clear that excessive glucose into the urine, which is gonna be a whole different way of looking at these things. 'Cause in the past, with the previous diabetic guidelines, we talked about using glucose, urine glucose measurements to help monitor these cats, and that's just not gonna be an option.

0:11:18.5 Katie Berlin: Right. You're gonna freak out, if you do that.

0:11:21.2 Renee Rucinsky: Right, right, these cats are always gonna be glucose uric, so that's a whole different way of thinking about these things, and there's gonna be a learning curve, there's gonna be some getting used to using this drug.

0:11:37.1 Katie Berlin: Yeah, that's really interesting. And I was just thinking about that, how the diabetes guidelines from, was it I think 2018?

0:11:44.6 Renee Rucinsky: Yeah, I think so.

0:11:46.0 Katie Berlin: You had... The task force had specifically said, we don't really recommend using oral drugs because this class of drugs wasn't out at that time, and then it also said you can monitor the glucose in urine. And there all these things available now to do that, like strips and special litter and a mat that goes under the... And none of that would work in this case because it'll always be full of sugar. And I was thinking about the reasons why we think about sugar in the urine, other than just it signals high blood sugar to us, but does that make these cats more prone to UTI?

0:12:26.5 Renee Rucinsky: Yeah, you know, when I first started working with Elanco on this, that was my big concern too. I was like, okay, great, so now we're gonna have fat cats that are messy

anyway, and now we're gonna create this perfect medium for bacteria to grow. The initial studies have not shown that to be an issue, which I was relieved about it. I think that we'll see what happens as time goes on, but at this point in time, it doesn't seem to be the biggest concern. I think it is on the label that to be concerned about that because it does seem like it would be a perfect storm. But in real life, it's hopefully not gonna be as big of an issue as we might be concerned about.

0:13:20.0 Katie Berlin: That's good. Cats defy expectation anyway, so...

0:13:22.8 Renee Rucinsky: Totally.

0:13:24.1 Katie Berlin: Of course, if we're expecting it, then they're gonna be like, no, we're fine.

0:13:26.0 Renee Rucinsky: Whatever, we got this.

0:13:28.5 Katie Berlin: You might be worried about that, but we're not.

[laughter]

0:13:33.5 Katie Berlin: But now you have to throw out those eight boxes of test strips you bought.
[laughter]

0:13:39.3 Renee Rucinsky: There's still gonna be a lot of cats on insulin.

0:13:41.7 Katie Berlin: Yeah. Well, yes, and so that's the next question is how do we know what cases are appropriate because clearly this isn't a drug that everybody's recommending instead of insulin for diabetic cats in general?

0:13:54.9 Renee Rucinsky: Yeah, so the patient selection for this class of drugs is gonna be imperative and... Because back to what I initially said, the cat still needs to have a source of insulin. So if you think of the big fat cats being more like a type 2 diabetic, or there's just... They're really insulin-resistant, not insulin deficient. So that insulin is still being produced by the pancreas, it's still trying to get to where it needs to get and do its job. There's just so much resistance there. So we want these cats to be healthy cats, these are the cats that come in for their regular annual or semi-annual visits that we notice that they have lost weight or that people notice that they've been losing weight, but they're eating really well, and they're still drinking great, and they, oh man, they pee like everything. They're doing great doc. And we as veterinarians are like, It sounds like they might be diabetic. And so they don't come in with the problems of vomiting, they don't come in with a plan to grade stance normally, 'cause those cats will have been sick for a while. They don't come in with concurrent pancreatitis, they are just these cats that we are diagnosing diabetes almost incidentally.

0:15:40.4 Renee Rucinsky: So when you really think about the cats that come in, that we diagnose as diabetic, how many of them are coming in without other clinical signs? Not that many. So those cats are still gonna need to be on insulin if they're sick at all, because we just don't have a way to measure insulin production in cats that's efficient and cost-effective. And so we're gonna have to use other means to make sure that we pick the right cats.

0:16:18.9 Katie Berlin: So if a cat comes in sick or at least moderately sick, I would say the majority of cats that I've seen anyway and diagnosed as new diabetics were kind of sick, not like the

DKA emergency, but not like the fat cat that the owner is finally excited they're not gonna get lectured about the cat's weight and then you're like, Oh. [laughter]

0:16:40.6 Renee Rucinsky: Yeah, yeah.

0:16:42.0 Katie Berlin: But those moderately sick cats who clearly aren't well, but they're managing and they're still eating and stuff, if those cats go on insulin, is there a chance that they'll eventually be able to transition over, or once a cat's on insulin, it's on insulin and it's just...

0:16:55.9 Renee Rucinsky: Yeah. Once the cat is on insulin, then that's it. This class of drugs at this point in time, and probably for the foreseeable future, this class of drugs is purely for the brand new newly diagnosed diabetic cat.

0:17:16.2 Katie Berlin: Okay, what about complications, like what do we need to worry about when it comes to this drug? Say we've picked the right patient and the case is right, but are there complications or side effects that we should watch for, or warn people about once we start to use it?

0:17:36.3 Renee Rucinsky: Yeah, yeah, absolutely. So the cool thing about this class of drugs is that we don't have the normal diabetic cat on insulin complication, the odds of a cat becoming hypoglycemic on this class of drugs is practically zero. Which is amazing, absolutely amazing. But the flip side of that is that when they do get sick, we can't necessarily look at hyperglycemia as being one of the red flags, so the complications are mainly that they will mainly occur if, for some reason, the cat is no longer producing enough endogenous insulin. So that would be diabetic ketoacidosis, which is gonna be a little bit more challenging to potentially diagnose because they're not gonna be hyper-glycemic. So the phrase euglycemic diabetic ketoacidosis is gonna be much more prominent in the vernacular because these cats are gonna potentially be very, very sick with ketones, but normoglycemic.

0:19:07.0 Katie Berlin: Okay. So ketones in the urine can still be a diagnostic aid there, or is that something that we might see anyway in these cats?

0:19:17.1 Renee Rucinsky: You shouldn't see ketones in the urine on one that's doing well, but because the main monitoring, instant monitoring with these guys is a ketone level, the recommendation, if people don't have them in their hospitals already is to have a hand-held ketone monitor, a BHB is the ketone that we're looking at. And people are like, oh my God, I don't know what that is. So if you work on cows at all, you know what these things are, this is...

0:19:54.3 Katie Berlin: I'm like this sound so familiar.

0:19:57.1 Renee Rucinsky: I know, right? It's like you dig it out in the bowel of your...

0:20:00.8 Katie Berlin: It was 15 years ago or whatever. It was sort of a... [laughter]

0:20:00.9 Renee Rucinsky: So the cool thing about these little hand-held ketone meters is that they look just like your bedside glucometer. It's basically the same little machine, it's a little... It's one drop of blood. It's an instant read, and that's what we're gonna use to monitor these guys both before we start potentially, and then as you start the initial treatment.

0:20:29.8 Katie Berlin: Very cool. Yeah.

0:20:31.6 Renee Rucinsky: It is cool.

0:20:33.8 Katie Berlin: It's another little gadget that you get to have in your... [laughter]

0:20:35.1 Renee Rucinsky: And they're very inexpensive, although I was speaking with somebody this weekend that said that you used to be able to get them from our distributors for about \$25 to \$30, and now they're like 45 to 50.

0:20:51.6 Katie Berlin: Of course.

0:20:51.7 Renee Rucinsky: But it's really for lab monitoring equipment that we need to have it, that's really nothing in the whole scheme of things, and I truly believe that you should not be using this drug without one of those in your hospital, because if you have to send it out to a reference lab and it takes 24 to 36 hours or more to get that back that cat could be in really, really bad shape, so you have to have this in your hospital if you're gonna start treating these cats with this kind of drug.

0:21:23.2 Katie Berlin: Oh, that's really good to know. It's like a starter kit for starting out with this drug.

0:21:30.0 Renee Rucinsky: Absolutely.

0:21:30.7 Katie Berlin: And is there a human... Are there ketone meters for humans and ones for animals, or is this something we don't usually use in human medicine?

0:21:39.4 Renee Rucinsky: No, there are a couple that are for animals. I've got one brand, I think the drug companies are coming out and recommending another, there's at least a couple of different brands right now.

0:21:53.9 Katie Berlin: Okay, yeah, I'm picturing because it happens now with the glucometers, I'm picturing the clients coming in and being like, I have one, and not having any clue whether it's good or not. [laughter]

0:22:04.6 Renee Rucinsky: Yeah, and I don't know. There's gotta be something for humans, I'm just not familiar with that.

0:22:10.4 Katie Berlin: Yeah. Maybe it's for people in the old school Atkins diet, I think you were supposed to measure the ketones in your blood when you're on Atkins. It's like maybe ringing a bell.

0:22:20.5 Renee Rucinsky: I think with the... I think ongoing... Definitely having people look at ketones in the urine, that's fine at home. But there's gonna be a lag time between when you start seeing those ketones go up in the bloodstream versus when they're in the urine, so...

0:22:39.6 Katie Berlin: Yeah. Do you see cats go into remission on this drug?

0:22:48.4 Renee Rucinsky: What's remission? Right?

[laughter]

0:22:52.1 Katie Berlin: It's true. Yeah, do not need the drug anymore, I should say.

0:22:55.3 Renee Rucinsky: So typically, when we're talking about cats on insulin, we talk about diabetic remission being when they don't need insulin anymore, that's the easiest way to define it. So will they go into remission on this? I don't know. I don't know. Is it something where this is an opportunity where we can start this drug, we can really aggressively work on weight loss and diet change and other things without that inherent risk of administering insulin twice a day. So maybe when we're able to work on everything else that's contributing to that cat's diabetes, we can take them off of this drug. Is that the same as remission? I don't... I think it's gonna be a little bit of a shift in definition at some point, but... So can we get them off the drug? I don't see why we wouldn't be able to if we take care of all the reasons why they were diabetic in the first place.

0:24:08.3 Katie Berlin: Yeah, and it seems like that's something that a fair number of owners might actually be able to relate to, because type 2 diabetes is pretty... It's not uncommon in human adults, and a lot of people take oral drugs for that, and at some point with lifestyle changes could potentially go off of medication and that might be something that owners could relate to well. I'm just thinking about after decades, I don't know how long, after decades of hammering into owners about insulin and remission and the blood sugar monitoring and all the things, and now we're coming in here with this pill and saying like, we're gonna do this instead, how... What do we need to make sure... What conversations do we need to make sure we have with clients before we start this?

0:24:56.3 Renee Rucinsky: Well, I think just to go back to talking to clients and diagnosing this, before we talk about what we tell them, you think about just what we've had to go through educating cat owners about the potential of their cat being diabetic, and most every cat needs twice a day insulin, so that's a lifestyle change for the cat, it's a lifestyle change for the human, so now they've gotta be home, maybe not on the dot every 12 hours, but they need to be home when they can administer this drug and make sure that cat ate and all the things. Right?

0:25:40.8 Katie Berlin: Yeah. It's very stressful.

0:25:43.6 Renee Rucinsky: And then... Very stressful. And then the cat's like, why are you watching me? Stop watching me, leave me alone. And they...

0:25:49.4 Katie Berlin: If there's one thing that's gonna make a can act weird, potentially sick.

0:25:55.7 Renee Rucinsky: And as much as we explain to owners that this needle is tiny and the cats typically don't care, there are still people that are afraid of needles, and there are still cats that are like, yeah. No, I don't wanna get poked twice a day. So then that affects the relationship between the owner and their pet, and then even before it starts affecting their relationship, once people just hear the diagnosis of diabetes, there's a fair number of cats that will get euthanized at that point or some time within the first several months of being on insulin and all the changes and do we have the right dose yet? And do we this and do we that. And so the opportunity to have a once a day chewable medication that they can either break up and take like a treat or get mixed in food with no risk of hypoglycemia and no chasing the cat around the house and ruining that

relationship. If the cat's a good candidate for it, I think that's gonna be a complete game changer. So the question was, how do we educate the clients about this, the fact that it doesn't always have to be with a meal and they don't have to have Karo Syrup.

0:27:24.6 Renee Rucinsky: Golly! I hope everybody who has stock in Karo Syrup sells it now, because it's just gonna crash. But it's gonna be a different sort of education, so now instead of spending all of our time educating on how to give insulin and the timing and the storage and all of that, we're gonna be talking about just monitoring that cat for how they're feeling, because if they start feeling icky, is it because of something else, or is it because they're developing DKA? And it's not that common, the development of DKA is not that common with the cats that are on this drug, but when it happens, like any DKA, it needs to be addressed super quickly. And so having the owners, be aware that that's a complication if they have to go to the emergency vet who may not know yet that these cats aren't gonna be hyperglycemic, it's gonna be really important to get that message out too.

0:28:31.8 Katie Berlin: Absolutely, yeah. So anybody who works at an ER who's listening to this, remember, don't assume that a diabetic cat that comes in crashing is gonna have a high blood sugar, if they are in DKA, because if they're on...

0:28:48.2 Renee Rucinsky: Exactly.

0:28:49.8 Katie Berlin: An oral drug like Bexacat then it could potentially be DKA without hyperglycemia. I feel like that's gotta be the key message today.

0:28:54.5 Renee Rucinsky: It is, yeah. And even though their blood sugar is normal, they're still gonna have to give them insulin, they still need insulin to fix that problem, so...

0:29:03.9 Katie Berlin: Oh gosh. Yeah. I'm picturing the mindset of that ER vet being like, Oh my god.

0:29:09.0 Renee Rucinsky: I know right. I think for a while, it's gonna be really, really weird and I'm worried about some cats, but we'll all get through it, and it's still a really good option for a lot of diabetic cats.

0:29:29.2 Katie Berlin: So I actually did a podcast with my brother and his wife who have a diabetic cat, Audrey, she's in remission now. Shout out to Audrey, and she was on insulin. And my sister-in-law is one of those people who like can't get in the room with a needle, they told the story about her in the fetal position clutching a stuffed animal when she went to get her flu shot. And she's the one who ended up being a ninja at getting blood from Audrey to check her blood sugar. But it was a... She had to really... It was like she had to overcome the mental battle of like, this is for her, this is what she needs, but I'm guessing that if they could have had a pill, 'cause Audrey, I believe is also on Apoquel. It's off-label. Don't do what we do. [laughter]

0:30:15.9 Renee Rucinsky: It's what we do.

0:30:19.4 Katie Berlin: Yeah. [laughter] I'm sure they would have loved to have that option, now I don't know if she would have been a candidate at the time, I don't remember that detail, but I could just imagine the relief that my sister-in-law would have felt if she had heard about the diabetes, and

then heard that she did not have to learn to be okay with needles. No matter how tiny, she did not want them.

0:30:45.5 Renee Rucinsky: Yeah, I mean, it's huge. It's an amazing option. It really is. I think it's really gonna be a potential game changer.

0:30:58.6 Katie Berlin: Yeah, so how do we make sure that vet teams, so the vet team at the hospital that might be prescribing the drug and then vet teams say, who are checking the patient in at the ER and potentially having to relay the message that this cat is on this drug, how do we train the teams to be aware and know what's important for them to know?

0:31:25.5 Renee Rucinsky: Yeah, I think there's two main levels to that. So how many times as veterinarians, we're not always the first people in the building. So our front desk team has come in in the morning and they have received a phone call from whoever's owner, Max's owner who says, Oh my God, Max, he just won't eat this morning, so do I give him his insulin? Do I do this? And then you have to go through, well, they need to eat, blah, blah, blah, blah, blah, don't give the insulin, to now that risk of becoming hypoglycemic has gone. So our front desk staff needs to know that all this training that they've had to prevent hypoglycemia, it doesn't apply to the SGLT2 inhibitor class of drugs. So there's that, so they can talk people off the ledge a little bit when it comes to that.

0:32:31.6 Renee Rucinsky: But the flip side of that is that if this cat continues to take his SGLT2 inhibitor and isn't feeling well, and maybe it wasn't just the I vomited this morning 'cause I ate a bug or whatever it is, but this cat is really sick, that it's not gonna be a problem with having to stop the Bexacat per se, just because their blood sugar is too low. But those are the cats that we need to come in and say, "You know what, we need to do a spot check at least of this ketone and just double check everything." As far as going to the ER, I believe that the client information pack and travel pack kind of stuff was a little bit delayed coming from Elanco and then whatever companies come after this with this kind of drug. I think that there will be something that the owners can always have with them to help inform the emergency staff going forward to make sure that everybody is set up for success.

0:33:47.5 Katie Berlin: That makes so much sense. I was just thinking, how do you put a medical bracelet on a cat? [laughter]

0:33:51.1 Renee Rucinsky: Well, exactly.

0:33:53.5 Katie Berlin: Because my cat won't even wear a collar.

0:33:55.4 Renee Rucinsky: Wouldn't it be cool if we could put all that on a micro-chip, right? But...

0:33:58.9 Katie Berlin: It would, one day.

0:34:01.7 Renee Rucinsky: But having QR codes or something that's stuck to the carrier. I don't know how they're gonna do it, but I think that that is gonna be key until this becomes a more common drug to use.

0:34:16.6 Katie Berlin: So if the cat... I just have a couple more... I'm just thinking about... I don't even work in a clinic now, but if I did, these are the questions that I would have. And so in terms of a cat who comes in with vomiting and is sick and turns out to have be DKA, is that... And then that cat needs insulin at the hospital even though they're euglycemic, is that cat ever gonna go home on Bexacat again, or is that cat now on insulin?

0:34:47.3 Renee Rucinsky: No. That cat will now be on insulin.

0:34:50.2 Katie Berlin: Yeah. Okay.

0:34:52.1 Renee Rucinsky: Yeah.

0:34:53.9 Katie Berlin: And I feel like there's a fair number of owners who cannot afford a DKA hospitalization, it's like if it gets to that point, they're just not gonna be able to continue, which isn't wrong. It's just a section of care.

0:35:04.9 Renee Rucinsky: It's just the way it is.

0:35:08.2 Katie Berlin: Yeah. And so I'm seeing like these cats come in, good candidate, healthy feeling cat, other than showing some signs that are suspicious, turns out to be diabetic, started on Bexacat because the owners are pretty tight on funds, and they're saying, "Well, I don't have the money to not only start insulin, but do all the glucose curves, the serial glucoses that we need to do." That's... I'm assuming that when you start a cat on Bexacat, you just send it home and tell the owners what to watch for versus having to have the cat come in and do some extensive monitoring the way that you would if you started it on insulin, is that right?

0:35:50.8 Renee Rucinsky: It's just different. It's different, so you will have done your regular work out to see if the cat's diabetic, including checking for any evidence of pancreatitis, 'cause any evidence of pancreatitis makes us worried how much insulin is being produced. So assuming it's a good candidate, so we're going to make sure that we're not... That their BHB levels are not elevated, 'cause we don't wanna start a cat on this drug if their ketones are starting to creep up. And then we're gonna have that cat come in. So for instance, for me, I try to start these cats on a Monday if I can. Or a Friday would be fine also, to be honest, but regardless, you want to get these cats back in three to five days after you've started the drug, and just do that bedside ketone meter check just to make sure that everything is cool. And as we're starting to learn this new class of drugs and monitoring, we're gonna ask that those cats come back relatively frequently for the first little bit. So two weeks, to four to six weeks, eight weeks, and then if everything seems to be plugging right along at that point, then we can go a little bit longer, but it's not that this... Just because it's not insulin isn't gonna be... It's not gonna... To mean that diabetic cats aren't still an investment.

0:37:34.1 Katie Berlin: Yeah, and fragile.

0:37:36.3 Renee Rucinsky: They're still sick cats, they still have a major disease, so we have to monitor that. And just like diabetic cats that are on insulin, they still need to be monitored even once they've got their right dose. Where the difference is gonna be, is that there's just one dose. So it's not that when they come in, we're trying to dose changes and tweak things here and there and all that sort of stuff. So that could potentially be a little bit of a financial savings, but you still have to pay close attention to these cats without a doubt.

0:38:20.0 Katie Berlin: Do you think we'll see a time, once we're a little more comfortable with the drug where we send ketone meters home with owners the way that we do glucometers now and have them check ketones at home?

0:38:31.0 Renee Rucinsky: Absolutely. Yeah. I don't see why we wouldn't. It's not gonna be... Just like with handheld glucometers it's not gonna be a replacement for our regular work-ups, but it will definitely be one of those things where owners can check that at home and decide whether this is, oh my gosh, this is a panic moment and we need to go right away or okay, I can have a little breathing room to figure out if it's something else.

0:39:00.3 Katie Berlin: Yeah, yeah. I mean, it's just a whole new world. Isn't it? Like I just...

0:39:05.8 Renee Rucinsky: It is. Does it make you wanna sing... But...

0:39:08.8 Katie Berlin: Yes. I mean, it does. [chuckle] And a lot of needle-phobic cat people. [laughter]

0:39:14.3 Renee Rucinsky: Yeah, I think it's super exciting. My biggest concern is that that patient selection won't be as careful as it needs to be. I think that because it's not a needle, because it's a pill, because it's once a day, because there's no risk of hypoglycemia, I think that there's gonna be a lot of pressure. I think there's gonna be a lot of pressure from the owners when they hear about this, they're gonna want this and not insulin, and they're... Some people are really hard to say no to. So there's gonna be a lot of pressure, there's gonna be pressure from your distributors, your distributors are gonna come in and say, "Oh, we've got this great new drug, and you should put all your diabetic cats on this." Hopefully, they won't be like that, but you know what I mean. It's a very slippery slope, and then your staff. I think your staff and other doctors in the hospital are gonna be like, Why don't we do this? This is gonna be so much easier. And I think that it's gonna require a lot of, potentially a lot of saying no. And sticking up for the patient and is this the best thing? And no. The answer is gonna be no, and I'm really sorry, but I don't wanna kill your cat. I think we can be that blunt about it. If we choose incorrectly, the cat will not survive. So that's not meant to sound ominous, it's just we have to be so careful.

0:40:58.0 Katie Berlin: Yeah. And really, there are so many cats who live happy lives either on insulin or post-insulin, like Audrey is so happy, and so it's not like insulin is the big bad bear that we're so glad to be rid of, but it certainly... This hopefully will provide a lot more cats with the ability to stay happy and healthy with diabetes, because we've all been in the room and thought like, "Oh, I don't wanna euthanize this cat now, he looks good." And insulin was just absolutely a no-go. And then it's just a matter of, do we wait until he's suffering to do it? Or do it now? And that is such a... That's the moral distress and that situation is so hard, but I can see exactly what you're saying. I can feel myself in that situation where especially for newer vets who may not be in a position to assert themselves in a practice, they feel pressure to do things the way the other doctors who are more experienced are doing them. And there's a doctor in the practice who might be the owner, we all know how it goes, who might be handing Bexacat out like candy to the diabetic cats, and that is gonna be a challenge, but we figured it out, a lot of us figured it out when it came to steroids. [laughter] And we could figure this out too.

0:42:20.9 Renee Rucinsky: Yeah. Absolutely.

0:42:22.4 Katie Berlin: So spreading the word is important.

0:42:24.4 Renee Rucinsky: I think it's just like when we put out the diabetes guidelines a few years ago, one of the main aspects of that was that there is no perfect way to monitor, there is no perfect... There's no perfect anything. So having this class of drugs come out, the SGLT2 inhibitors, I think it just gives us another option. A baseball pitcher has four or five different pitches he can throw based on the kind of batterer that's up. So you don't throw a fast ball to a fast ball hitter. So this is kind of one of those sorts of things, you have insulin, you... Maybe there are cats that you can correct their hyperglycemia by putting them on a high protein all can diet, maybe that's good enough. Maybe another cat gets an SGLT2 inhibitor, so it's just... It's another tool in our ever-growing arsenal of how to take the best care of our patients.

0:43:37.3 Katie Berlin: Yeah, absolutely. I love that. And it's very exciting.

0:43:42.5 Renee Rucinsky: It is, it is exciting.

0:43:45.9 Katie Berlin: It feels like we're... It's a new era of feline diabetes, and it's a big deal. I was around when it was a new era for treating allergies, we just talked about that a little bit, and you didn't have to give everybody steroids. That was a big deal. And this is a big, big deal. So I'm sure we'll be seeing more drugs in this class come out, and I'll be really excited to see updates from not just you, although, [laughter] definitely from you. [laughter] Where there's endocrine disease, there is a Renee.

0:44:20.7 Renee Rucinsky: Absolutely. That sounds bad. No, it's weird. It's like you never wish a disease process on anything. But since we have this available, we see, my associate and I, we see on the appointments like a cat drinking water we're like whooo can we try it? Can we try it? And then I'm like, Oh my God, what's wrong with us? Why are we... But it's just really, really cool to be able to do something different that... We have a recently diabetic, newly diabetic cat who it's been a client for forever, it's been a patient, her owner has been a client for forever, and there is no way that this owner... I shouldn't say no way, 'cause we always say that. There's no way she could have given insulin, she would have figured it out. But the fact that her cat came in and it was a perfect candidate for this. You could just see her face relax, you could see her blood pressure go down when we said your cat is diabetic because she immediately thought, oh my God, I'm gonna have to do insulin, and then when she found out that that didn't have to be her only option, it just felt so good on so many levels. So we are optimistic that this cat continues to do well, she's doing great so far. It's just kind of fun. Sometimes it's fun to be a vet.

0:46:06.9 Katie Berlin: It's not often that you get to have something new to offer people that can really offer hope in a place where they might not have been any anymore, and that is just really... It's a great feeling. So I can totally relate to the idea of waiting for that case to come in, even though you don't want any cats to have to have diabetes, but they're gonna have diabetes anyway, it's gonna happen. Diabetes happens. So if they do happen, it's great to have something new and pretty revolutionary to offer, so...

0:46:36.2 Renee Rucinsky: It is, it is.

0:46:39.4 Katie Berlin: I will say in the guidelines that you were recently one of the chairs of the

task force, the selected endocrinopathies of dogs and cats, that is coming out here in a few days, and feline diabetes is not in there. So you're just showing your well-rounded endocrinopathy prowess, but...

0:47:00.6 Renee Rucinsky: Right yeah, that's what it is.

0:47:01.5 Katie Berlin: But it's because diabetes is such a big topic, which has its own guidelines for a reason, and that guideline will be updated at some point in the future, and I'm sure will contain information about this class of drugs, but in the meantime, people... This podcast is a good reference, there have been a lot of articles out about it, and is there any place that you would recommend people go to get more information about it or just kind of like stock VIN boards and... 'cause we're gonna have to learn from each other's experience.

0:47:33.2 Renee Rucinsky: Honestly, I think the company and future companies that are making this drug, I think they're gonna be a really good resource. I would say come to AAHA Con and hear a lecture about it. Somebody might...

0:47:47.4 Katie Berlin: That's an excellent idea.

0:47:47.4 Renee Rucinsky: Somebody might be giving a lecture.

[laughter]

0:47:51.4 Katie Berlin: Yeah. I can't imagine who.

[laughter]

0:47:56.8 Renee Rucinsky: Yeah, and just pay attention. I think that the discussion on this will be vigorous and knowing that opinions are like everything we know, everybody's got one. And just be ready to be open-minded and remember that case selection is gonna be the most important thing about this, and I think my concern is that people are gonna not choose wisely and have a bad experience and then give up on it completely. And I hope that doesn't happen, 'cause I do think that it is a relatively safe medication when used correctly, like any other medication.

0:48:54.8 Katie Berlin: Right great to know. It's not the thing to send home just in case just 'cause you gotta do something. Don't do it.

0:49:02.2 Renee Rucinsky: No, no, no, no.

0:49:03.2 Katie Berlin: Yeah. I think everybody, when they heard there was a new diabetes drug that came out, I think everybody was hoping it would be that drug.

0:49:08.3 Renee Rucinsky: Yeah, right?

0:49:10.2 Katie Berlin: Which you could just send home like, "Oh, you can't afford any diagnostics, take this pill." But as of now...

0:49:14.7 Renee Rucinsky: Right. And it's only 3 bucks.

0:49:16.3 Katie Berlin: Right. Yeah, it's 3 bucks. Okay, well, Renee, one last question before I let you go. You've now been on the task force for multiple AAHA guidelines, and we greatly appreciate that. The guidelines are such a valuable resource to be a guiding light for our vet teams and putting best practices into their own hospitals and adapting them as they need to for their own teams and clients and patients, and we call them guidelines because everybody's got a little bit of a different way of using them, and we all have something that guides us on our journey as veterinary professionals, and I was just wondering, what is it that guides you?

0:50:06.1 Renee Rucinsky: It's such a big question after we've talked about all these heavy things. So what a gear switch. What guides me? I think in a general sense, I try to just be nice. I think that if you use that as your grounding point, you can't go too terribly wrong, not everybody's always having a good day. People are grumpy. You can always be kind. But I think as far as being a part of helping write the guidelines and other things, I think it goes to one of my favorite lines is, if I can't change the world, I can at least change the world within my reach. So if I can continue to spread what I know to other veterinarians who might want to learn that, I don't know everything. I'm never gonna know everything. I am never gonna be the best person to talk to about cat diabetes or other endocrine things. I know some stuff, but I can...

0:51:33.9 Katie Berlin: You're sure?

[laughter]

0:51:37.9 Renee Rucinsky: I can share what I know, but by helping with AAHA or with talking to other veterinarians and educational things, it allows me to change the world for cats within my reach and what I've learned over the years, and I might have said this on the other podcast that we did with Dr. Lathan, but I don't think... I think there are a lot of vets who don't particularly like cats. And that's okay. I mean, truth be told, I don't particularly like horses, so I don't work on them. And so I think it's important to really help the people who do like cats to figure out how to best help this... They are still a neglected portion of veterinary medicine, even though we have all these drugs coming out that are finally approved for cats, we have cat hospitals, we have cat specialists that presumably like to work on cats, we still have to help change the world for our cat patients.

0:52:56.6 Katie Berlin: Yeah, I think you're right, people love cats or they're just not that into them, and it's kind of like endocrine diseases.

0:53:03.4 Renee Rucinsky: Exactly.

0:53:04.3 Katie Berlin: However, you're not that into them. And cats with endocrine diseases just exacerbate that, I'm sure, for people who aren't cat people, so...

0:53:11.3 Renee Rucinsky: We just have pillows against... One pillow against the wall in every room so we can just bang our head on it and...

[laughter]

0:53:18.9 Katie Berlin: Yeah, and the cat's like that's right. [laughter]

0:53:21.3 Renee Rucinsky: Yeah, I made you do that.

[laughter]

0:53:24.3 Katie Berlin: Yeah. Well, Renee, I can say as far as being kind, being nice, they're not always the same thing, and sometimes being too nice gets you signed up for too many task forces, so I think you're doing a good job.

0:53:35.5 Renee Rucinsky: Yeah, true story.

0:53:36.9 Katie Berlin: But we, I think goal achieved there because everybody that I talk to whenever I say, "Oh, I get to Renee Rucinsky." They say she's amazing, and I absolutely agree. Talking to is a pleasure, and I'm very glad that you have been such a great friend to AAHA. And that we'll get to see you again in San Diego in September.

0:54:01.1 Renee Rucinsky: Well, thank you. I appreciate that, and I hope you can adjust the lighting or whatever, 'cause I feel like I'm bright red now. So I appreciate the kind words, thank you so much.

0:54:14.9 Katie Berlin: Absolutely. Thank you so much for your time today and for everybody listening, completely unrelated to this podcast, because cat diabetes is nowhere in it, definitely check out the new, the 2023 AAHA selected endocrinopathies of dogs and cats guidelines. It is the first guidelines on that topic, and it is out now, you can find it at aaha.org/endocrine-disease.

0:54:41.4 Renee Rucinsky: It is a captivating read.

[laughter]

0:54:46.6 Katie Berlin: Yeah. There's a ton of information in there. So...

0:54:48.8 Renee Rucinsky: There is, it's a lot.

0:54:52.4 Katie Berlin: Yeah, absolutely. Take some time going through it, there's a lot of stuff in there, but it's there as a reference for you and your team to use, it's free to the whole profession, so a lot of work from the task force headed up in part by Dr. Renee Rucinsky, who we are so pleased to have today. Thank you so much for your time.

0:55:11.1 Renee Rucinsky: Thank you.

0:55:12.4 Katie Berlin: And we'll see you in September.

0:55:13.6 Renee Rucinsky: Sounds good, sounds good. See you there.

0:55:14.4 Katie Berlin: Thanks to all of you for listening. Yeah, we'll catch you next time on Central Line.