Transcript Details
This is a transcript of an educational program. Details about the program and additional media formats for the program are accessible by visiting: https://reachmd.com/programs/project-oncology/diving-into-new-directions-of-radiopharmaceuticals/24059/

ReachMD
www.reachmd.com
info@reachmd.com
(866) 423-7849

Diving into New Directions of Radiopharmaceuticals

Host Intro:
Welcome to *Project Oncology* on ReachMD. On this episode, we're joined by Brianna Cagle, who will share her presentation on radiopharmaceuticals from the Society of Nuclear Medicine and Molecular Imaging, or SNMMI, 2024. Ms. Cagle is a Research Scientist at Perspective Therapeutics in Iowa. Here she is now.

Ms. Cagle:
Hi, I'm Brianna Cagle. I've been with the company since January of 2022, so about a year and a half now. I graduated from the University of Iowa with my PhD in Pharmaceutical Sciences. So there I was actually setting something a little bit different, where I was looking at the toxicology of pesticides and how they're associated to Parkinson's disease and might affect dopamine metabolism. So it's been really cool to take some of that background and now apply it to my work at Perspective Therapeutics.

So yesterday, I was honored to be able to present some of my work at Perspective Therapeutics, and I talked about this new compound that the Discovery Team at Perspective has developed, called PSV-359. And it's actually targeting a protein called fibroblast activation protein, or FAP, which is a pan-cancer target, so it's expressed in a wide variety of cancers. And this compound that we developed is a cyclic peptide radiopharmaceutical, and we use lead-based Theranostics. So we use lead-212, which is an emitter of alpha particles, which is known to be really strong at killing cancer cells. And so then this lead-212 PSV-359, we tested in two different preclinical models, and we saw really great responses. So we're really excited about this compound, and it was great to be able to present the work yesterday.

So these two preclinical models that we tested PSV 359 for, one was where the FAP was actually expressed more on the cancer cells, so this was in a fibrosarcoma model. And fibrosarcoma is a disease that hasn't achieved many new drugs recently. So that's really exciting to be developing a compound towards something that has a high unmet medical need like that. And then the other one that we studied as well was where the FAP was expressed more in the stromal environment, which is the tissue that helps to support the cancer cells. And there's some additional diseases of high unmet medical need there where the FAP can be expressed in that stromal tissue, including things like cancer of unknown primary, or pancreatic cancer. And we saw great responses in both of these types of models, so we think that's really exciting.

And we also use an approach of these lead-based Theranostics. So lead-203 is used for the imaging, and then lead-212 for the therapy. And since it's lead in both cases, it's essentially a chemically identical molecule that we're using for the imaging, as well as the therapy, so this makes it really easy for us to be able to see the disease, and then treat what we see with this lead-212 therapy.

I think, overall, it's been really good to just learn from the other scientists and to see a wide variety of sessions as well. I actually just attended a scientific Session 09 that was on other novel preclinical platforms. So it's just really cool to see what other people are doing

© 2024 ReachMD

as well, and since I'm fairly new to this field as well to just learn more and more. And as a scientist, you always want to be learning, so it's great to be here and be learning and meeting other scientists.

Host Outro:

That was Brianna Cagle diving into her presentation on new directions in radiopharmaceuticals from SNMMI 2024. To hear this and more episodes in this series, visit Project Oncology on ReachMD.com, where you can Be Part of the Knowledge. Thanks for listening.

© 2024 ReachMD