

Radiomer Therapeutics: Revolutionizing Targeted Radiopharmaceuticals for Faster Cancer Treatment



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Interview conducted by:
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CEOCFO: *Dr. Varadhachary, what is the concept behind Radiomer Therapeutics?*

Dr. Varadhachary: Radiomer Therapeutics is developing a new class of targeted radiopharmaceutical drugs based on our proprietary targeting platform.

To provide some background, targeted radiopharmaceuticals, also known as Radioligand Therapies (RLTs) are a rapidly growing class of targeted anti-cancer drugs. RLTs consist of a radioisotope attached to a “ligand” or “vector”. When an RLT is injected into a patient, the ligand, acts as a targeting agent, preferentially attaches itself to cancer cells. These cancer cells are then killed by the radiation from the radioisotope. RLTs promise stronger anti-cancer activity, including against cancers that may not respond to other therapies, with fewer side effects.

Our Radiomers hold the promise of being particularly effective RLTs. A critical component of an effective RLT is the targeting ligand, and our unique strength lies in our powerful ligand discovery platform. Our ligands are a novel class of binders that can target a broad range of cancers. We have created powerful ligands against targets found on some of the most common cancers including breast, lung, colorectal, prostate and pancreatic cancer.

CEOCFO: *What is it about your approach that is different, easier, faster and more useable for the purpose it is designed?*

Dr. Varadhachary: Radiomers exhibit attractive RLT properties including specific and strong binding to cancer cells and rapid elimination from the body to minimize exposure of normal tissues to radiation. Radiomers can also incorporate all of the radioisotopes commonly used in radiotherapy. Most importantly, Radiomer Therapeutics can make ligands against novel cancer targets in 1-2 months, substantially faster than other available technologies. This allows us to bring a novel Radiomer to testing in cancer patients in less than a year, which is crucial, especially for patients with advanced cancer who do not have the luxury of time.

CEOCFO: *How did the idea originate?*

Dr. Varadhachary: The field of targeted therapies in cancer and beyond has been growing exponentially due to the data generated by the “omics” revolution that began with the human genome project. Fannin, the parent company of Radiomer Therapeutics, was particularly interested in creating targeted drugs for cancer, and was searching for a platform that could do it rapidly and cost-effectively. Five years ago, we were introduced to a company created by Dr. David Gorenstein, and we realized we could adapt his technology to provide the platform we needed.

Dr. Gorenstein, the inventor of the technology, is a distinguished researcher who retired as Associate Dean for Research at the University of Texas in Houston. Over a decade ago, he created a new class of ligands combining nucleotides (like the mRNA vaccines with which people are familiar) and peptides (like Ozempic). Dr. Gorenstein created a services company to develop these ligands, that we call Raptamers, mainly for diagnostic testing applications. Fannin bought the company about five years ago and we successfully adapted the process to develop targeted drugs rather than just diagnostic agents. Earlier this year, we spun out Radiomer Therapeutics to leverage Raptamers as a ligand for radiopharmaceuticals.

CEO CFO: *Why now for the spin-out?*

Dr. Varadhachary: Radiopharmaceuticals and RLTs have been around for a while, but the field was recently energized by the commercial success of Pluvicto - a prostate cancer drug. Novartis received FDA approval in 2022, and by 2023, it had already achieved blockbuster drug status. Several other major pharma companies have also entered the radiopharmaceutical space as have major venture investors. Between the strong excitement in the field and our promising data, we felt this was the perfect time to spin out Radiomer Therapeutics. Since our spin-out, we’ve attended several scientific meetings, and have seen significant interest in our assets and our technology.

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CEO CFO: *Where are you in development and eventual commercialization?*

Dr. Varadhachary: We have three Radiomers with pre-clinical anti-cancer data, and many others earlier in development. Two of our more advanced programs are against what we call first-in-class targets, those for which there are no approved drugs, while the third is against a well-known target. Additional animal testing is currently underway and we expect to start a clinical trial in cancer patients early next year.

Our initial human trial will be an imaging study to measure the effectiveness of our Radiomer in reaching a patient’s cancer and the the risk of exposure to normal tissue. A successful imaging study will allow us to rapidly move forward with safety and efficacy testing in cancer patients. Our targets are found in a large number of cancers, so we hope they will make a difference in the lives of many cancer patients while being commercially attractive.

CEO CFO: *What surprised you as Radiomer Therapeutics has evolved?*

Dr. Varadhachary: The supply chain for radioisotopes has strengthened substantially in a relatively short time, reflecting the strong demand by the radiopharmaceutical space for reliable commercial isotope supply. When we started, ensuring an isotope supply chain was critical and top of mind for major investors. Today, the most commonly used isotopes are readily available reducing uncertainty and investment requirements. We have also been pleasantly surprised by the strong interest from industry and investors in our platform, despite our limited outreach.

CEO CFO: *Are you seeking funding, investment or partnerships?*

Dr. Varadhachary: Although we have ongoing discussions with both pharma companies and potential investors, we are not actively seeking funding or partnerships right now. Our focus is on leveraging internal funding to de-risk our technology. We are working towards our imaging clinical trials in patients, which will help validate our platform and make us a more attractive partner. Although we are waiting until we have patient data to actively seek funding or partners, we

welcome interest, since an attractive transaction could increase the credibility of our program and provide additional resources to move more rapidly with a broader set of programs.

CEO CFO: *What has been the interest from the medical community?*

Dr. Varadhachary: The medical community appears to be increasingly excited about radiopharmaceuticals in general. Oncologists have known for decades that radiation is an effective anti-cancer tool, but targeted radiation delivery has faced roadblocks. In the last decade many of those challenges have been successfully addressed with better targeting modalities and additional isotopes. Equally important is the growth in infrastructure that allows more doctors to prescribe the radiopharmaceutical drugs to their patients. There are still only a handful of targeted radiopharmaceutical drugs that have been approved by the FDA, so optimism will likely remain guarded until more drugs receive marketing approval.

The medical research community is far more excited about radiopharma, and many companies and individual researchers have expressed a strong interest in learning more about our technology.

CEO CFO: *Final thoughts, what else should people know about Radiomer Therapeutics?*

Dr. Varadhachary: We are excited about the promise that radiopharma and RLTs offer to cancer patients and we are delighted about potentially contributing to this burgeoning field. Due to the short path that radiopharmaceuticals have to human trials, we expect to have results from Radiomer trials in cancer patients in 2025. We expect that positive data will increase both pharma and investor interest.

The growth in the radiopharmaceutical space has been extraordinary, projected to reach \$15 billion in revenues over the next decade. With over \$10 billion in M&A so far, most major healthcare venture capital groups have either already invested in or are exploring investments in the space. With the power and speed of our technology, we expect to contribute to this growth by rapidly introducing many more Radiomers into clinical trials across a broad range of cancers. Our goal is to help as many cancer patients as we can, as quickly as possible.