

15 Apr 2024 | Interviews

# Ratio Therapeutics On BMS Investment, Radiopharma R&D Trends, AI Use

*Sets Sail On Own Post Bayer, Merck, Lantheus Partnerships*

by **Vibha Ravi**

The CEO and CSO of radiopharmaceutical company Ratio Therapeutics, which now has Bristol Myers Squibb as an investor, talk about Ratio's R&D platforms, use of AI, an independent FAP-targeted asset and trends in radiopharma research such as combining other modalities like ADCs, in this podcast interview with *Scrip*

Recent deals in radiopharmaceuticals, the latest being [AstraZeneca PLC](#)'s acquisition of Fusion Therapeutics, have drawn investor attention to a modality that has been the focus of academic interest for a long time.

It was in 1896 that Henri Becquerel discovered mysterious rays from uranium and in 1951 the US Food and Drug Administration (FDA) first approved the radiopharmaceutical sodium iodide I-131 for use in thyroid patients.

[Novartis AG](#)'s prostate-specific membrane antigen (PSMA)-targeted lutetium vipivotide tetraxetan, used to treat castration-resistant prostate cancer, reported 2023 sales of \$980m in its first full year on the market, making it the most successful product in the category.

Boston-based [Ratio Therapeutics, Inc.](#) has two R&D platforms - Trillium and Macropa - to develop radiopharmaceuticals. With a fibroblast activation protein (FAP)-targeted diagnostic handed over to Lantheus for further development, the company expects to file an investigational



CEO AND CHAIRMAN, JACK HOPPIN

CEO and chairman, and John Babich, chief scientific officer, at Ratio Therapeutics about the company's pipeline, use of artificial intelligence and the latest R&D trends and developments like combining antibody-drug conjugates (ADCs) or poly-ADP ribose polymerase (PARP) inhibitors such as Lynparza (olaparib) with radiopharmaceuticals.

Previous licensing and development agreements with [Bayer AG](#), [Merck & Co., Inc.](#) and [Lantheus Holdings, Inc.](#), a manufacturing tie-up with PharmaLogic, a "melting ice cream" phenomenon and supply chain challenges which had caused shortages of Pluvicto were also discussed, among other topics.

### TIME STAMPS

00:09 Brief introduction

03:03 Funding environment

04:11 FAP-targeted PET-imaging diagnostic candidate progress

05:49 Out-licensing to Lantheus

06:22 Clinical trial plan for FAP-targeted therapeutic

new drug (IND) application for a FAP-targeted therapeutic by the fourth quarter of this year.

In a radionuclide-agnostic approach, the company has been experimenting with the use of both beta particle-emitting lutetium and alpha particle-emitting actinium. The latest round of funding led to an investment by [Bristol Myers Squibb Company](#), which notably acquired [RayzeBio, Inc.](#) to bolster its radiopharma portfolio towards the end of 2023.

*Scrip* spoke to Jack Hoppin,



CSO, JOHN BABICH

- 07:56 Actinium-225 use, monitoring, countering
- 10:56 Using Lutetium-177 in a therapeutic candidate
- 12:20 Radiopharmaceuticals in neurological disorders
- 14:06 Trillium platform to design candidates
- 18:54 Choice of FAP as a target
- 22:33 Combining radiopharmaceuticals with checkpoint or PARP inhibitors
- 26:26 Combining alpha- and beta-emitting isotopes
- 28:40 Role of AI in radiopharma
- 30:26 The melting ice cream phenomenon
- 33:00 Benefits of PharmaLogic partnership
- 36:12 Merck, Bayer, Lantheus tie-ups
- 37:39 Excitement in the field

[Click here to explore this interactive content online](#) 

## RELATED STORIES

(Also see "[AstraZeneca Looks To Many Modalities In Cancer](#)" - Scrip, 8 Apr, 2024.)

(Also see "[BMS Makes Second Big Buy Of December, Pays \\$4.1bn For RayzeBio](#)" - Scrip, 27 Dec, 2023.)

(Also see "[BMS' Boerner Bets On AI-Driven R&D In India, Points To Potential For MS, Lupus Drugs](#)" - Scrip, 4 Mar, 2024.)

(Also see "[What's New, And What's Coming, In Radiopharmaceuticals](#)" - Scrip, 2 Feb, 2024.)

(Also see "[Late To The Antibody-Drug Conjugate Party, But Will 2024 Be A Turning Point For India?](#)" - Scrip, 4 Jan, 2024.)

(Also see "[Bayer Saddles Up For Bicycle Radioconjugate Pact](#)" - Scrip, 10 May, 2023.)