Voyageur Launches Market Introduction of Barium Contrast Product Line Following Successful Clinical Study Results

written by Raj Shah | April 23, 2025

- Positive feedback received after completion of CDC tests on 24 subjects
- All key product performance milestones met or exceeded expectations
- Well positioned to compete with international counterparts in qualified jurisdictions
- Advancing towards development of Frances Creek project and initiation of phase II testing to support FDA licensing

April 23, 2025 (Source) — Voyageur Pharmaceuticals Ltd. (TSX.V:VM) (OTC Pink:VYYRF) ("Voyageur" or the "Company") a radiology contrast media company focused on vertical integration and secure supply chains, is pleased to announce the initial market introduction of its new line of barium contrast media products in Canada and additional other global markets that accept Health Canada standards. Prospective customers, including diagnostic imaging centers, have begun receiving product samples for evaluation as part of a targeted test marketing phase. This is a critical step before any orders can be placed.

The Company's barium contrast line was recently evaluated in a performance study conducted at Canada Diagnostic Centres (CDC)

in Calgary with 24 subjects. The study assessed image quality and product behavior under standard clinical protocols in comparison to competing product equivalents. The radiologist leading the study, Dr. Robert Davies, and consulting radiologist Dr. Dan Johnson, both provided positive feedback, particularly for Voyageur's high-density barium suspensions used in double contrast upper GI and small bowel examinations. From a product performance perspective, this positive feedback puts Voyageur's products on par with existing products on the market.

Voyageur believes it is now a player in the contrast media market, establishing its initial supply chain, which can be replicated in other markets and improved through the development of the Frances Creek project. There are very few players in this growing and dynamic industry, and Voyageur now officially joins them. Voyageur firmly believes it has a competitive product suite to go head-to-head with its international counterparts.

Voyageur will now be focusing some of its efforts on sales and marketing in jurisdictions where it is able. In addition, as mentioned in the press release dated February 5, 2025, Voyageur will advance trials of its products using Frances Creek barium sulfate against competing products on the market with the assistance of Alberta Innovates. Lastly, Voyageur will initiate phase two testing to support FDA licensing under the 505^{(2)(b)} pathway. The next phase will generate clinical and operational data focused on key performance indicators, including safety, efficacy, pharmacokinetic, pharmacodynamics, regulatory compliance and market readiness.

Brent Willis, President, CEO, and Director states ""This milestone marks a transformative moment for Voyageur Pharmaceuticals as we begin the market introduction of our innovative barium contrast product line in Canada. It represents a critical first step in our broader commercialization strategy

and reinforces our commitment to vertical integration and supply chain security. As we move forward with plans to expand globally, this launch highlights the growth potential of our business and our dedication to delivering long-term value and innovation to patients, partners, and shareholders alike."

Voyageur's initial product portfolio includes:

- SmoothX (2%w/v): For CT imaging of the gastrointestinal tract; preferred taste noted in testing.
- SmoothHD® 105%: High-density suspension for upper GI and double contrast studies; excellent clarity and mucosal detail.
- SmoothLD® (60% w/v): Low-density suspension for single contrast imaging of the esophagus, stomach, and small bowel.
- **VisionHD**® **(98% w/w):** Powdered high-density suspension for double-contrast radiographic studies of the GI tract.
- **VisionLD**® **(96**% w/w): Powdered low-density suspension for single contrast studies.

Additionally, Voyageur is preparing to introduce **V-Gas**™ **Effervescent Granules**, a companion product used in double contrast studies and for managing digestive discomfort. This product is currently pending Health Canada licensing.

A New Entry in a Critical Market

Barium contrast media plays an essential role in gastrointestinal imaging, offering a reliable, radiopaque medium with favorable safety and cost profiles compared to iodinated agents. Voyageur's innovative formulations are designed to meet the needs of both adult and pediatric patients in a range of imaging contexts.

Amidst global supply chain disruptions and increased imaging demand, Voyageur's vertical integration model, centered around the Frances Creek barium project, positions the company to deliver stable, domestic supply to North American markets. The global contrast media market was valued at USD 6.28B in 2023 (Market), with barium-based products comprising approximately 10% of that total and projected to grow steadily through 2030.

Preparing for Commercial Expansion

With regulatory groundwork laid and clinical validation achieved, Voyageur is now preparing for broader commercialization. As part of this next phase, the company is:

- Finalizing product monographs, Instructions for use, and educational materials.
- Establishing post-market surveillance and product support infrastructure.
- Engaging radiology clinics across Canada for sample-based evaluations.

Diagnostic centres interested in evaluating Voyageur's barium product line may contact Ethan Mohan at Ethan@Vpharma.ca.

About Frances Creek Pharmaceutical Project

The Voyageur Frances Creek Project is a pivotal initiative by Voyageur Pharmaceuticals Ltd., centered on a 100%-owned barium sulfate (barite) quarry located in British Columbia, Canada. This project is a cornerstone of Voyageur's strategy to vertically integrate the production of high-quality barium contrast agents for radiology, addressing global supply chain vulnerabilities and enhancing imaging quality.

Resource and Scale: The project boasts a 120,000-tonne resource

of USP-grade (United States Pharmacopeia) barium sulfate, independently valued at CAD\$344M under NI-43-101 standards. Supply entire industry for 50 yrs. (PEA)

Cost Advantage: Production costs at Frances Creek are significantly lower than synthetic alternatives, at C\$650 per tonne compared to C\$7,000–C\$24,000 per tonne for synthetic barium sulfate (source: www.hpt-hanseatic.de). This cost efficiency enables Voyageur to achieve gross margins exceeding 70%, providing a competitive edge in the \$600M barium contrast market. (PEA)

Strategic Importance: The project disrupts the current market monopoly which has shifted to synthetic barium due to depleted natural sources. By reclaiming access to high-quality natural barium, Voyageur can leverage its cost and quality advantages to capture market share.

Supply Chain Security: Frances Creek ensures a secure, domestic-controlled supply of pharmaceutical-grade barium sulfate, reducing reliance on imports and mitigating shortages that have impacted North American markets.

Sustainability: The project aligns with Voyageur's environmental goals, incorporating sustainable mining practices and plans for carbon-neutral operations.

In summary, the Frances Creek Project is a high-value, strategically significant asset that empowers Voyageur to disrupt the barium contrast market, enhance diagnostic imaging, and drive long-term growth while addressing critical supply chain and quality challenges in radiology.

About Voyageur Pharmaceuticals Ltd.

Voyageur, a Canadian public company trading under the symbol VM

on the Exchange, is in development of barium and iodine Active Pharmaceutical Ingredients (API) that offer high-performance and cost-effective imaging contrast agents. With a strategic focus on vertically integrating the barium and iodine contrast markets, Voyageur aims to become a key player by producing its own barium and iodine. In addition, Voyageur is pursuing the development of new endo fullerene drugs.

Voyageur's business plan is set to generate cash flow by partnering with established third-party GMP pharmaceutical manufacturers in Canada thereby ensuring the validation of its products by regulatory agencies worldwide. As Voyageur solidifies its presence in the market, it plans to transition into a high-margin domestic manufacturer of radiology drugs.

Voyageur is committed to sustainability and environmental stewardship. Voyageur envisions a future where reducing carbon emissions is the norm, and to achieve this, it intends to build state-of-the-art carbon-capture infrastructure utilising the Rain Cage $EDEN^{TM}$ system. By investing in carbon capture energy sources and sustainable manufacturing practices, Voyageur aims to generate revenue from carbon captured "advanced carbon production". Voyageur believes its unwavering commitment to the environment sets it apart as a pioneer in the industry.

At the core of its operations, Voyageur owns a 100% interest in the Frances Creek barium sulphate (barite) project. Currently, the worlds pharmaceutical barium sulphate is almost entirely synthetically produced resulting in a less effective imaging quality product. Voyageur's Frances Creek resource boasts a rare and exceptional grade mineral suitable for the pharmaceutical marketplace that Voyageur believes will replace the current synthetic products with higher quality imaging products.

Voyageur's ambitious vision is to become the first vertically

integrated company in the radiology contrast media drug market. By controlling all primary input costs, from the sourcing of raw materials to final production, Voyageur believes it can ensure quality and cost efficiency. With its approach, it embodies the motto of "From the Earth to the Bottle," highlighting Voyageur's commitment to responsible sourcing and manufacturing practices.

For Further Information:

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Cautionary Statement Regarding "Forward-Looking" Information

This news release may contain certain forward-looking information and statements, including without limitation, statements pertaining to: Canadian, FDA and other regulatory approvals; and the effectiveness, efficiency and market acceptance of the five barium contrast drugs and one gas agent. All statements included herein, other than statements of historical fact, are forward-looking information and such information involves various risks and uncertainties. There can be no assurance that such information will prove to be accurate, and actual results and future events could differ materially from those anticipated in such information. A description of assumptions used to develop such forward-looking information and a description of risk factors that may cause actual results to differ materially from forward-looking information can be found in the Company's disclosure documents on the SEDAR+ website at

www.sedarplus.ca. Voyageur does not undertake to update any forward-looking information except in accordance with applicable securities laws.