

**FOR IMMEDIATE RELEASE**



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**Phrixus Pharmaceuticals announces European Access Program for Carmeseal-MD™ (P-188 NF) for patients with Duchenne muscular dystrophy**

*- Ethicor to distribute Carmeseal-MD™ (P-188 NF) in Europe for the treatment of respiratory and cardiac dysfunction in Duchenne muscular dystrophy (DMD) -*

**ANN ARBOR, MI – 2 December 2014** – Phrixus Pharmaceuticals, Inc. and Ethicor Pharma Ltd. today announced the initiation of their European Access Program (EAP) for Carmeseal-MD™ (P-188 NF). EAP is intended to make Carmeseal-MD available to patients with respiratory and cardiac deficits in DMD through their specialty physicians, primarily cardiologists and pulmonologists, as unlicensed medicinal product ('Special'). In accordance with local regulations, Ethicor will make Carmeseal-MD available in January 2015 to such patients regardless of their genetic mutation. "For boys and young men with DMD and for their parents time is of the essence. We are committed to making Carmeseal-MD available to patients and their physicians using the most expeditious pathway available," stated Thomas A. Collet, President and Chief Executive Officer of Phrixus Pharmaceuticals, Inc.

The underlying agreement provides Ethicor with the distribution rights to Carmeseal-MD in the European Union, with the possibility of an expansion to other regions of the world, excluding the United States, Canada and Mexico, prior to and until the registration of the product in the different countries covered by the agreement. Under the European medicines legislation (Directive 2001/83/EC, Article 5(1)), Ethicor will be able to supply, prior to regulatory approval, Carmeseal-MD as a "Special". A "Special" may be requested by an authorized healthcare professional to meet the special needs of an individual patient under their direct responsibility. Specials cannot be actively promoted to healthcare professionals. Once Carmeseal-MD becomes an approved drug in a given country, the marketing rights to the approved product in that country revert back to Phrixus.

***About Carmeseal-MD™***

Carmeseal-MD (Poloxamer 188 NF) has been in clinical development for unrelated indications and has been used as excipient for several decades. In animal models of DMD, it has been shown to improve the efficiency of damaged hearts and to improve

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the performance of damaged diaphragms with once-a-day subcutaneous administration at low doses. When infused into the bloodstream, it encounters and binds to microscopic tears in the muscle. This prevents the pathological leakage of calcium into the cells, which causes calcium overload and keeps the muscle from performing as required. Carmeseal-MD is expected to have its effect in patients with DMD irrespective of the genetic defect that causes the disease.

***About Duchenne muscular dystrophy (DMD)***

DMD is the most devastating of the muscular dystrophies. It is a genetic disease that affects about 20,000 boys and young men in the United States and a comparable number in Europe. The hallmarks of DMD are skeletal muscle weakness, followed by respiratory distress and heart failure. As a degenerative disease it inevitably leads to premature death, most commonly through respiratory failure but now increasingly through heart failure.

***About Phrixus Pharmaceuticals, Inc.***

Phrixus Pharmaceuticals, Inc. is developing Carmeseal as Carmeseal-MD™ (P-188 NF for subcutaneous injection) for DMD and as Carmeseal-HF™ (P-188 NF for intravenous administration) for acute decompensated heart failure. Phrixus has assembled the leading global patent portfolio for the use of poloxamers in DMD, heart failure and respiratory dysfunction. For more information: Thomas A. Collet, [thomas.collet@phrixuspharmaceuticals.com](mailto:thomas.collet@phrixuspharmaceuticals.com) or [www.phrixuspharmaceuticals.com](http://www.phrixuspharmaceuticals.com).

***About Ethicor Pharma Ltd.***

Ethicor Pharma Ltd is a specialty pharmaceutical company committed to the distribution of unlicensed medicinal products (“specials”) on request from healthcare professionals to meet the clinical needs of individual patients when authorized medicines are not appropriate treatment option. ‘Specials’ are unlicensed medicines that are produced in limited quantities and are primarily used for the unmet clinical needs of an individual doctor’s patients, particularly where authorized medicines are not available. Ethicor is active in markets worldwide excluding the US and has a portfolio of generic and IP protected products. Please email [enquiries@ethicorpharma.com](mailto:enquiries@ethicorpharma.com) or visit [www.ethicorpharma.com](http://www.ethicorpharma.com) for more information on Ethicor.

**Forward-Looking Statement Disclaimer**

This announcement may contain, in addition to historical information, certain forward-looking statements that involve risks and uncertainties. Such statements reflect management's current views and are based on certain assumptions. Actual results could differ materially from those currently anticipated as a result of a number of factors. The company is developing several products for potential future marketing. There can be no assurance that such development efforts will succeed, that such products will receive required regulatory clearance or that, even if such regulatory clearance were received, such products would ultimately achieve commercial success.

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