



## **DEVONIAN ANNOUNCES POSITIVE IN VIVO RESULTS OF THYKAMINE™ ON GENE EXPRESSION ASSOCIATED WITH FIBROSIS**

- ***Statistically significant changes in fibrosis genes following three weeks of treatment with Thykamine™***
- **Genes expression changes potentially expand the anti-fibrotic effects of Thykamine™ to fibrotic diseases**

**QUÉBEC, Québec, February 18, 2025** – Devonian Health Group Inc. (“**Devonian**” or the “**Company**”) (TSXV: **GSD**; OTCQB: **DVHGF**), a clinical stage corporation focused on developing unique solutions to inflammatory diseases, today announced positive results from a gene analysis conducted as part of in vivo study in STAM™ mouse model.

Thykamine™ was administered orally, at doses of 0.5 mg/kg, 5.0 mg/kg and 50.0 mg/kg once a day for a period of three (3) weeks.

Thykamine™ treatment was associated down regulation of key genes associated with the progression of inflammatory diseases toward fibrosis. These include inhibitory (%) effects on inflammatory-related genes and fibrosis-related genes namely:

Act2: up to 57%,  
TGFβ : up to 49.3 % (p<0.05),  
Ctgf: up to 44.2%,  
Ccl2: up to 77.28% (p<0.005),  
MMP9: up to 58.2% (p<0.005),  
Timp1: up to 73.5% (p<0.0005),  
Ccr2: up to 70.8% (p<0.0005),  
Socs3: up to 46.7%,  
SerpinF: up to 62.1% (p<0.05),  
IFNγ: up to 73.1% (p<0.05).

Results will be published in a peer-reviewed scientific publication in 2025.

Fibrosis is the common and final pathological outcome of chronic inflammatory diseases. Several genes are associated with different fibrotic diseases such as eye fibrosis, heart fibrosis, hepatic fibrosis, intestinal fibrosis, lung fibrosis, pancreas fibrosis, renal fibrosis and skin fibrosis<sup>1</sup>. Most genes involved in the overlapping fibrosis diseases<sup>1,2,3,4,5</sup> were



downregulated following Thykamine™ treatment expanding its potential anti-fibrotic effect to several organs.

*“The changes in gene expression observed following treatment with Thykamine™ provide further evidence of its potential benefit not only as anti-inflammatory medication and related diseases but may expand its potential use as antifibrotic medication for many chronic diseases in multiple organs”,* said Dr. Andre P. Boulet, PhD, Chief Scientific Officer of the Company.

### **About Fibrosis<sup>1,2,3,4,5</sup>**

A complex physiological process, fibrosis encompasses both acute and chronic inflammatory disorders. It is characterized by an excessive buildup of fibrous connective tissue in and around damaged or inflamed tissues, which results in the production of permanent scars. In several organs, including the skin, heart, lungs, gut, liver, and kidneys, fibrosis is the final stage of chronic illness. Fibrotic tissue pathologic buildup leads to a loss of structural integrity and function, which raises morbidity and mortality.

### **About Thykamine™**

Thykamine™, the first pharmaceutical product issued from Devonian’s SUPREX™ platform, is a highly innovative product for the prevention and treatment of health conditions related to inflammation and oxidative stress including ulcerative colitis, atopic dermatitis, psoriasis, rheumatoid arthritis, and other autoimmune disorders. The anti-inflammatory, anti-oxidative and immunomodulatory properties of Thykamine™ have been demonstrated by a considerable number of in vitro and in vivo studies as well as in a Phase IIa clinical study in patients with mild-to-moderate distal ulcerative colitis and in a large phase II study in adult patients with mild-to-moderate Atopic Dermatitis. Both Thykamine™ and SUPREX™ platform are protected by several patents in North America, Europe and Asia.

### **About Devonian**

Devonian Health Group Inc. is a clinical stage pharmaceutical company specializing in the development of drugs for various auto-immune inflammatory conditions with novel therapeutic approaches to targeting unmet medical needs. Devonian’s core strategy is to develop prescription drugs for the treatment of inflammatory autoimmune diseases including but not limited to ulcerative colitis and atopic dermatitis. Based on a foundation of over 15 years of research, Devonian’s focus is further supported by a U.S. Food and Drug Administration set of regulatory guidelines favoring a more efficient drug development



pathway for prescription botanical drug products over those of traditional prescription medicines.

Devonian is also involved in the development of high-value cosmeceutical products leveraging the same proprietary approach employed with their pharmaceutical offerings. Devonian also owns a commercialization subsidiary, Altius Healthcare Inc., focused on selling prescription pharmaceutical products in Canada, under license from brand name pharmaceutical companies.

Devonian Health Group Inc. was incorporated in 2015 and is headquartered in Québec, Canada where it owns a state-of-the-art extraction facility with full traceability “from the seed to the pill”. Devonian is traded publicly on the TSX Venture Exchange (the “Exchange”) (TSXV: GSD) and on OTCQB exchange (OTCQB: DVHGF).

For more information, visit [www.groupedevonian.com](http://www.groupedevonian.com)

## References

1. Gu Chang, Shi X, Dang X, et al. Identification of Common Genes and Pathways in Eight Fibrosis Diseases, *Frontiers in genetics*, Jan 15 (11), art 627396, 2021.
2. Guo S, Zhang Q, Guo Y, et al. The role and therapeutic targeting of the CCL2/CCR2 signaling axis in inflammatory and fibrotic diseases. *Frontiers in Immunology*, Jan 09, 2025.
3. Kitagawa K, Wada T, Furuichi K, et al . Blockade of CCR2 ameliorates progressive fibrosis in kidney. *AJP*, 165 (1), 237-246, 2004.
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5. Steen EH, Wang X, Balaji S, et al. The role of the anti-inflammatory Cytokine Interleukin-10 in Tissue Fibrosis. *Advances In Wound Care*, 9 (4); 184-198, 2019.

## Cautionary Note Regarding Forward-Looking Statements

All statements, other than statements of historical fact, contained in this press release including but, not limited to those relating to the economic impact of clinical study, the efficiency of the highly anti-inflammatory potency proven and the position of the Thykamine™ as a possible first-line treatment of choice for several autoimmune conditions in the early stages of the disease and the reduced need for aggressive treatments with biologics and other immune modulators, that are associated with serious side effects and long-term negative consequences, and, generally, the above “About Devonian” and “About Altius”



paragraphs, which essentially describes the Corporation's outlook, constitute "forward-looking information" or "forward-looking statements" within the meaning of certain securities laws, and are based on expectations, estimates and projections as of the time of this press release.

Forward-looking statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable by the Corporation as of the time of such statements, are inherently subject to significant business, economic and competitive uncertainties and contingencies. These estimates and assumptions may prove to be incorrect. Many of these uncertainties and contingencies can directly or indirectly affect, and could cause, actual results to differ materially from those expressed or implied in any forward-looking statements. There can be no assurance that these assumptions will prove to be correct and there can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements.

By their very nature, forward-looking statements involve inherent risks and uncertainties, both general and specific, and risks exist that estimates, forecasts, projections and other forward-looking statements will not be achieved or that assumptions do not reflect future experience. Forward-looking statements are provided for the purpose of providing information about management's expectations and plans relating to the future. Readers are cautioned not to place undue reliance on these forward-looking statements as a number of important risk factors and future events could cause the actual outcomes to differ materially from the beliefs, plans, objectives, expectations, anticipations, estimates, assumptions and intentions expressed in such forward-looking statements. All of the forward-looking statements made in this press release are qualified by these cautionary statements and those made in our other filings with the applicable securities regulators of Canada. The Corporation disclaims any intention or obligation to update or revise any forward-looking statements or to explain any material difference between subsequent actual events and such forward-looking statements, except to the extent required by applicable law.

Neither the Exchange nor its Regulation Services Provider (as that term is defined in policies of the Exchange) accepts responsibility for the adequacy or accuracy of this release.



**CONTACTS:**

**Devonian Health Group Inc.**

Mr. Luc Gregoire

President & CEO

Dr. Andre P. Boulet, PhD

Chairman, Chief Scientific Officer

Telephone: 1 (450) 979-2916

E-mail: [investors@groupe-devonian.com](mailto:investors@groupe-devonian.com)

**Renmark Financial Communications Inc.**

Mr. Ben Ozerkevich

Telephone: (416) 644-2020 or (212) 812-7680

E-mail: [bozerkevich@renmarkfinancial.com](mailto:bozerkevich@renmarkfinancial.com)

[www.renmarkfinancial.com](http://www.renmarkfinancial.com)