



Purgenesis™: Commercializing a Skin-Care Revolution

HEALTHCARE | BIOTECHNOLOGY



JEFF NEILSON STOCKHOUSE

André Boulet, the President and CEO of **Devonian Health Group Inc** (TSX: V.GSD, Forum), is a veteran of the pharmaceutical industry. This experience ranges from drug development through to regulatory affairs, marketing, and finance. Since 2005; Boulet has applied his expertise to leading this biopharma company.

Devonian has raised more than \$50 million over this period, using this capital to expedite development of GSD's lead drug. The Company has already completed its Phase 2 clinical trial for ulcerative colitis and is in the midst of a Phase 2 trial for atopic dermatitis.

Commercializing licensed drugs is generally very expensive and time-consuming. Devonian manages costs through farming out its clinical testing and minimizes time through its botanical drug focus. With less tolerance/toxicity issues, moving through the regulatory process is generally faster within the botanical drug development regulation.

Even with this focus on conserving capital, the Company made a strategic decision early in its development to expand operations to **include a "cosmeceutical"** division (centered on skin-care products) to complement its biopharma division. The rationale is simple: cosmeceuticals can be developed and marketed rapidly, hence generating short term revenue.

With a much faster and less-expensive path to commercialization, Devonian's cosmeceutical division is the Company's vehicle to generate better/faster returns for investors over the near term. This also represents a revenue stream that can be used to offset some costs in Devonian's biopharma R&D, thus minimizing dilution.

Dr. André Boulet is a man of science. While intent on bringing these skin-care products to market expeditiously, Boulet and the Company's research team have applied the same mindset to the development of Devonian's skin-care product line as with GSD's formal drug-development program.

What does that mean, in practical terms? Devonian has taken a more rigorous approach not only with respect to the development of its **Purgenesis™ skin-care product lines** but









also in the testing. In scientific terms, the typical product testing used in the cosmeceutical industry is inadequate.

How? In a conference call with Stockhouse Editorial, Dr. Boulet explained.

It centers around a "placebo effect" that is created with standard industry testing for any skin-care product. How do you "test" a skin cream? You rub it into your skin. The *mechanical effect* of this friction can produce a therapeutic benefit by itself, with the obvious example being massage therapy.

The Company has designed its product testing specifically to eliminate any placebo effect. The method to do so was a double-blind study. While such research is commonplace in the pharmaceutical industry, Devonian has raised the bar by incorporating this same level of science into its cosmeceutical research and product development. Not surprisingly, the result of this rigorous scientific approach is a superior product: Purgenesis™.

What *is* Purgenesis[™]? This is Devonian's cosmeceutical brand with upcoming product lines, beginning with an anti-aging treatment in the form of a day cream, night cream, and eye lotion. This is the first Purgenesis[™] product line that is currently being taken to market. In a 28-day comparison study with two leading "prestige" brands, Purgenesis[™] demonstrated clearly superior results.

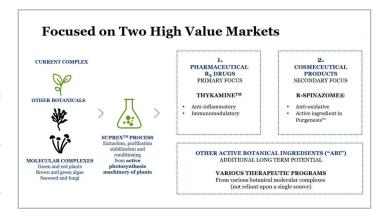
The key active ingredient in Purgenesis™ is R-Spinazome®, an anti-oxidant derived from the organic green leaves of plants such as spinach. In two 14-day consumer panel studies, 92% of the women surveyed indicated they would switch from their existing skin-care product(s) to Purgenesis™.

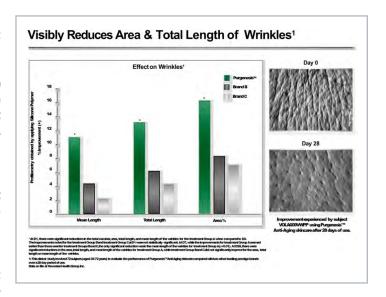
Backed by these strong results, Devonian has now taken the next major step in commercializing Purgenesis™. On May 16, 2018; the Company announced that it has been granted a Canadian patent. The patent covers cosmetic and topical compositions that are derived from R-Spinazome® and used in Purgenesis™ cosmeceuticals.

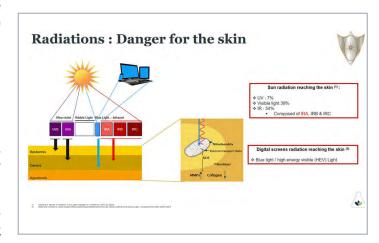
Superior product testing. Superior results. Further reinforcing the science behind the brand, Purgenesis™ now carries the seal of recognition of the Canadian Dermatology Association's Skin Health Program.

Clearly, the Purgenesis™ anti-aging treatment is an extremely promising skin-care product line that raises the bar in terms of the process for bringing a cosmeceutical product to market. But does this really constitute a "skin-care revolution"?

The answer to this question is that the anti-aging treatment is only the starting point for Purgenesis TM . As the description implies, this anti-aging







click images to enlarge







treatment counters the effects of aging through decreasing the number and depth of wrinkles while simultaneously increasing the skin's hydration and firmness.

In addition, R-Spinasome® can be formulated to protect from damage caused by the Sun's ultraviolet light, both UVA and UVB rays. However, the Sun's ultraviolet rays are far from being the only form of radiation that impacts the health (and appearance) of our skin. It is these additional health concerns that Devonian is targeting with new product lines for its Purgenesis™ brand. Through the Company's "GlareShield™" program, Devonian anticipates bringing to the market these additional product lines.

More protection from the Sun? Yes, but much more than that.

The Glare Shield™ program is designed to protect us from an even more insidious threat to our skin: the blue light that emanates from all LED screen displays. From televisions and desk-top computers down to our smart-phones, all of these screens emit radiation that medical science now understands has a deleterious effect upon the health of our skin.

Devonian is expected to be the first Company to bring to market a product specifically designed to provide this blue light protection. The initial formulation is expected to be completed some time in June, setting the stage for testing this next Purgenesis $^{\text{TM}}$ product line.

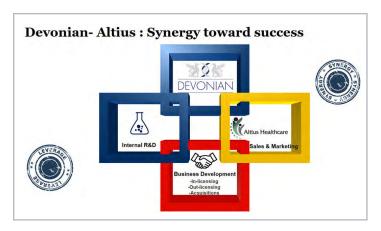
After that? The Company is already targeting yet another health issue as the basis for an additional Purgenesis™ product line. Along with (ultra) violet light and blue light is red light – infrared radiation. Previously, the infrared light spectrum had been dismissed from consideration as a health concern.

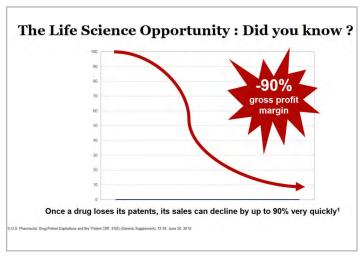
However, as with (cool) blue light, medical science is now reaching the conclusion that (hot) red light is also harmful. GSD is already working on a new Purgenesis product line specifically designed to provide skin protection from Infrared-A light.

Slightly farther along the horizon? Yet another product line that provides protection from all of these harmful effects.

Producing a full spectrum of skin-care products that covers the full spectrum of harmful radiation can only be characterized as "a skin-care revolution".

The Revolution is here. Next on the agenda is to transform this R&D achievement into bottom-line profits. Enter Altius Healthcare. Devonian acquired Altius specifically to expedite the commercialization and mar-





keting of its pharmaceutical and cosmeceutical products. The Stockhouse audience was alerted to this in a feature article from February 6, 2018.

Sybil Dahan, the President of Altius (a division of Devonian) explains how the Company plans to commercialize a Revolution.

Purgenesis™ will be exclusively available from dermatologists and medical spas, and for a good reason. Who else but medically-trained skin care experts can appreciate the decades of research that has given life to R-Spinasome® and Purgenesis™ anti-aging treatment? Which is why our science-based, clinically proven formulations are chosen by experts for the daily skincare for women and men of all skin types. Altius Healthcare will partner with these medically-trained experts to ensure our services and communications are well aligned with the need of their clientele.

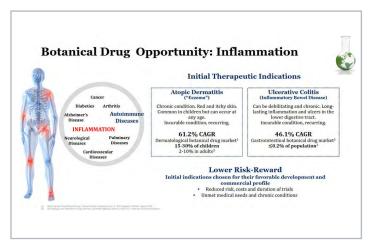
While the Canadian marketplace will be the first step in monetizing Purgenesis™, the world beckons. Devonian is already in negotiations

click images to enlarge









with potential international partners to bring this Revolution to the rest of the world. The Company's Canadian patent is actually Devonian's second Purgenesis™ patent. GSD has already been issued a Japanese patent for this discovery.

The market potential here is enormous. The global anti-aging market alone is estimated to grow from US\$140.3 billion in 2015 to US\$216.5 billion, 50% growth over 6 years. It's difficult to attach a market figure to Devonian's entire Skin-Care Revolution, since the Company is pioneering new niches in the cosmeceutical market.

While investors may be rightfully enthused about the potential of Purgenesis™, they should not forget about GSD's primary focus: the development of botanical pharmaceuticals within its biopharma program. Devonian is engineering a Revolution in skin-care, but it is also part of a massive evolution in the pharmaceutical industry. CEO Boulet frames this evolution.

The number of New Chemical Entities has been steadily decreasing over the past 15 years. Blockbuster drugs are also increasingly rare. To counteract the negative impact of the patent cliff and the decrease in their internal R&D productivity, Big Pharma looks outward for innovative products. Indeed, 60% of innovator small molecules and 82% of innovator biologics come from outside Big Pharma's internal R&D. The Botanical Drug category is, therefore, emerging as a source of new products for Big Pharma, and Devonian is well positioned to be a leader in that field.

Exacerbating this trend for Big Pharma (and creating opportunity for small biopharma companies) is the Patent Cliff. From 2016 through 2018 alone, Big Pharma is faced with the loss of patent protection on licensed drugs with combined revenues of US\$116 billion. What does the loss of these patents mean?

click image to enlarge

The loss of up to 90% of revenues: that is indeed a "cliff". Big Pharma has never been hungrier for new drugs to replenish its depleted pipeline. At the same time, conventional drug development has never been more expensive and more time-consuming.

With a more streamlined drug-development business model, not only can biopharma companies address the Patent Cliff, they must be a solution. From 2010 through 2018, Big Pharma has spent most of this time making cuts to its budgets.

This is a ball-game where even a single drug success can be worth \$100's of millions. As noted, two of Devonian's biopharma initiatives are already advancing through Phase 2 of the clinical trials process. The lynchpin of Devonian's current biopharma research is ThykamineTM -- also derived from organic green leaves.

Thykamine[™] has been shown to possess potent anti-inflammatory properties. Inflammation is a key factor in numerous medical conditions, including several of our most endemic diseases. While Purgenesis[™] is Devonian's near-term strategy for delivering value (and revenues) to shareholders, it is GSD's botanical drugs pipeline that provides the real home-run potential. Stockhouse readers should look for more coverage of Devonian's biopharma program later in 2018.

New in the Company's pipeline is a treatment for "radiodermatitis": damage/irritation/discomfort in skin tissue as a consequence of the radiation from medical therapies, notably the treatment of cancer patients. See the Appendix below for updates on GSD's biopharma pipeline.

Are skin-care products beauty aids or health treatments? As Devonian commercializes a Revolution, the Company is blurring this distinction. In doing so, the profit potential for Purgenesis™ is coming sharply into focus for investors.

Appendix: [click to enlarge images]

DevonianDE2_Appendix2-(2).jpg

DevonianDE2_Appendix3-(2).jpg

Devonian full-length feature article (September 5, 2017)

FULL DISCLOSURE: Devonian Health Group Inc is a paid client of Stockhouse Publishing.

