

WHEYVOLUTION WHEYVOLUTION

From Whey to Therapeutics

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Advitech





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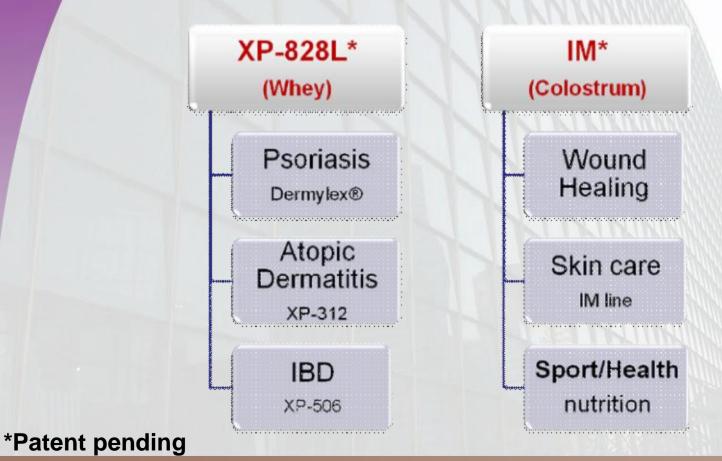
- Advitech is a life sciences & technology company
- Its mission is to discover and commercialize proprietary and evidence-based natural health products
- Focus on milk, whey and bovine colostrum
- ~ R&D, Production and Marketing Partnerships



Technological platforms

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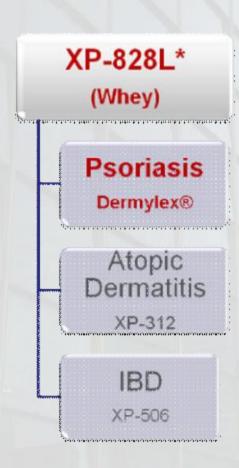
Advitech, a health sciences and technology company is focused on the discovery and commercialization proprietary and evidence-based natural health products.





Technological platforms

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*Patent pending



The story behind the idea...





- Maternal milk: baby's first immunization;
- Breast feeding provides antibodies which protect babies from many common respiratory and intestinal diseases associated with the immune system;
- The idea was to identify and isolate the ingredients from milk or milk derivatives, which are responsible for the immune protection associated with breast feeding.



Patents Portfolio

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Title of Patent	Process	Application	Country
Method for obtaining a TGF-beta enriched protein fraction in activated form, protein fraction and therapeutic applications (PCT/FR02/02489)			Europe, New Zealand, United States (US 7,141,262 B2), Ireland, Australia, Canada, Japan (Exclusive License from Pierre Jouan Biotechnology
Composition for treating psoriasis (US 11/007,912)			Canada, United States, Europe US CIP (April 3rd 2007) (Advitech)
Composition for treating Inflammation			PCT (Advitech)
Process for the manufacture of an anti- inflammatory composition		1011	USPR (Advitech)
Method for the treatment of Type I and Type IV hypersensitivity	H		USPR (Advitech)
Method for selective fractionation of growth factors from bovine milk, whey and colostrums			USPR (Laval University, CDR-NSERC Program)





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- Whey product extract
- ~ Rich in TGF-β2 (x60 vs conventional whey)
- ~ Promotes immune stability
- Modulates neutrophils activity1
- Modulates T cell activity2
 - è **ê**Cell Proliferation
 - è êPro inflammatory cytokines production



¹ Rusu D et al. IDF 2008

² Drouin R et al. CJPP 2007

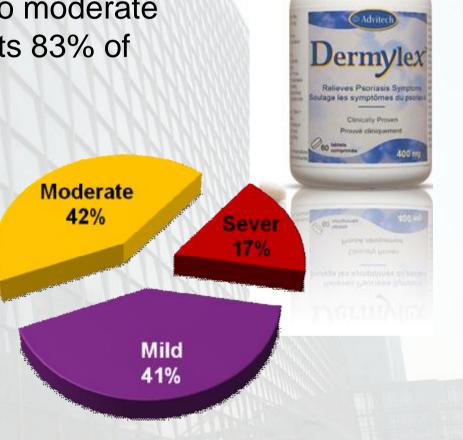


Dermylex®

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Dermylex® targets mild to moderate psoraisis which represents 83% of psoriasis population

- ~ 2-3% of the population
- 6 Million patients in North America
- ~ 20 Million for Europe





XP-828L & Psoriasis

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What is psoriasis?

- A chronic, recurrent,
 hyperproliferative inflammatory
 skin disorder of unknown cause;
- Plaque psoriasis (psoriasis vulgaris) accounts for 85 to 95% of all forms of psoriasis;
- Affects 2-3% of the general population;
- Characterized by an over production of Th1-related cytokines (IL-2 and IFN-y)





3 Clinical Studies

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Study I: Open-label

Poulin Y, Pouliot Y, Lamiot E, Aattouri N, Gauthier SF. Safety and efficacy of a milk-derived extract in the treatment of plaque psoriasis: an open-label study. *J Cutan Med Surg 9(6):* 271-7, 2005

Study II and III: Double-blind against placebo

- Poulin Yet al. XP-828L in the treatment of mild-to-moderate psoriasis: A randomized, double blind placebo-controlled study. J Cutan Med Surg 10(5): 241-8, 2006
- Touin R et al. XP-828L (Dermylex™), a new whey protein extract for the treatment of mild to moderate psoriasis. Can J Physiol Pharmacol 85: 943-51, 2007
- Drouin R et al. A double-blind placebo controlled randomized trail of XP-828L (800 mg) on the quality of life and the clinical symptoms of patients with mild-to-moderate psoriasis. Alt Med Rev 13(2), 2008



Results at a glance

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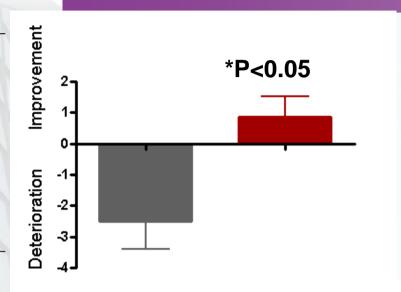
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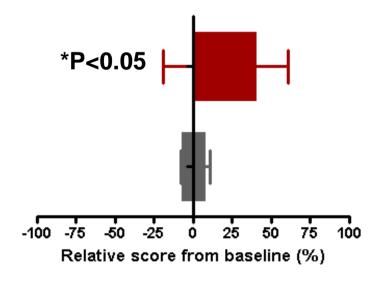
Dermatlogy Life Quality Index

- Deterioration of LQ with placebo
- Improvement of LQ with Dermylex (P> 0.05)

PASI score

- No change with placebo
- Decreased PASI with Dermylex (P> 0.05)
- 38% of the patients have a decreased PASI score of 25% and more





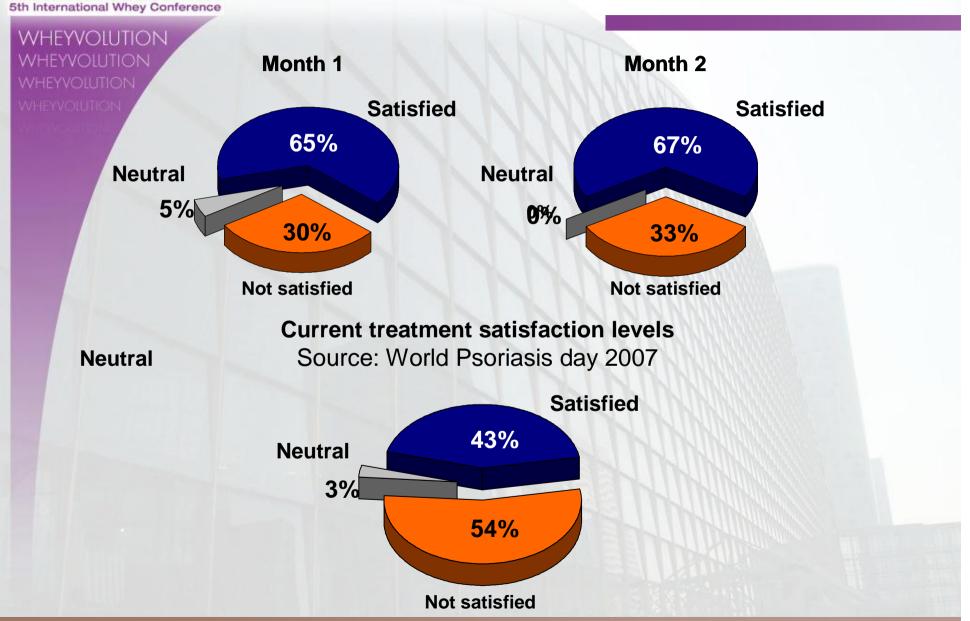
Deterioration

Improvement

from Drouin et al. Alt Med Rev 13(2),2008



Survey-Degree of satisfaction





Results at a glance

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Dermylex® around the world

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Definitive Agreements

- è Canada
- è France
- è Belgium
- è Taiwan
- è USA
- è Indonesia
- è Mexico
- è Iran
- è Hong-Kong
- In Discussion
 - è Europe)





Dermylex®

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www.advitech.com



www.groupeiprad.com



















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XP-828L* (Whey) **Psoriasis** Dermylex® Atopic Dermatitis XP-312 IBD XP-506

IM* (Colostrum) Wound Healing Skin care IM line Sport/Health nutrition

*Patent pending



Preliminary results

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Score Day	30	60	90
EASI (%)*	56	66	66
DLQI (%)**	56	67	67
BSA (%)	I .		56

^{*}EASI score summarize the intensity of four clinical symptoms (erythema, infiltration, lichenification, excoriation)

^{**}A decreased DLQI score reflects an increased quality of life.



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IM Platform

A Colostrum-derived Extract for Wound Management



IM Platform: A Colostrum-derived Extract for Wound Management

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- ~ Colostrum-derived
- ~ Protein content < 2%
- ~ Rich in growth factors (IGF-I)
 - è IGF-I are important in tissue repair and regeneration processes
- ~ Rich in antimicrobial peptides (AMPs)
 - AMPs have antimicrobial activity and modulate immune responses

¹ Independent studies from NIS labs



IM Platform: A Colostrum-derived Extract for Wound Management

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In vitro Studies

Charles J. Doillon M.D. Ph.D.

Oncology & Molecular Endocrinology Research Center CHUL's Research Center, CHUQ





third congress of the

World Union of Wound Healing Societies

Problem - One Voice

One Problem - One Voice

June 4 - 8, 2008

Toronto a world within a city



IM Platform and Wound Management

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- At high concentrations increased significantly fibroblast activity and growth in monolayer and in fibrin.
- Low concentrations stimulated significantly collagen synthesis and deposition in cell-matrix environment (vs soluble form).
- High doses limited the contraction of collagen gel by fibroblasts; therefore their remodelling capacity. They also decreased their cell number in the presence of collagen.



Discussion and Perspectives

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OBJECTIVE #1: Accelerate Wound Healing

- ~ Phase I:
 - High doses of IM Fraction been applied to stimulate fibroblast growth
- ~ Phase II:
 - Lowering dose to stimulate collagen synthesis and deposition
- Possible applications:
 - Pressure sores; Diabetic Ulcers; Burns Venous Stasis & Arterial Ulcers



Discussion and Perspectives

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OBJECTIVE #2: Control Collagen Remodeling

- ~ Phase III.
 - High doses of IM Fraction may limit excessive remodeling of the pre-existing collagen fibres (ANTAGONIST) as well as cell growth.
- Possible applications:
 - è Hypertrophic scars ; Keloids ; Contracture
 - è Plastic & Reconstructive Surgery
 - è Cosmetic procedures

IN VIVO studies will provide FUTURE CLINICAL APPLICATIONS



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IM Platform

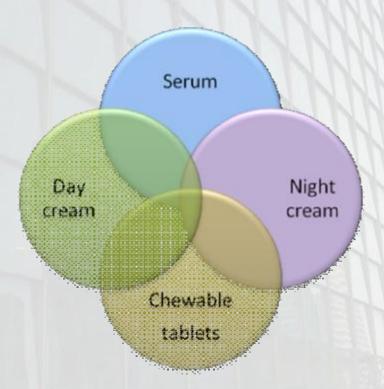
Skin Regeneration and Skin immune support



IM Platform: Skin Regeneration and skin immune support

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IM-Platform is a natural derived composition specifically developed to provide the nutritional and functional support to reduce acute skin inflammation reaction related to cosmetic procedures while promoting healthy skin regeneration following the treatments.





Go-forward strategy

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- Wound healing/ skin ulcers : sign a R&D alliance with a major.
- New products and technologies :evaluate opportunities and financing strategies:
 - è Cognitive functions
 - è Muscle recovery
 - è Immune enhancement



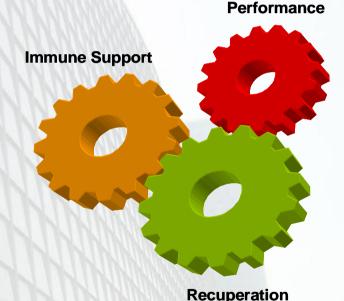


IM Platform: Sport Nutrition

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Natural-derived IGF-I and peptides for muscle repair and immune support

Scientific data has reported that intensive exercise sessions are associated with muscle damage and suggests that various immune cell functions are temporarily impaired.



Growth factors (IGF-I) has immune modulating activity as well as anabolic activity optimizing training and post training recuperation.

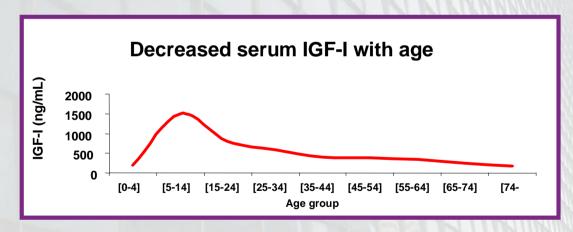


IM Platform: Health Nutrition

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Natural-derived IGF-I against cognitive functions decline

As the proportion of the aging population continues to rise, reducing the burden of age-related conditions, such as cognitive decline takes an increasing importance



Maintaining IGF-I levels is associated with better cognitive performance and lower risk of cognitive decline .11



Go-forward strategy

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- ~ Open 2nd production site (US)
- Wound healing/ skin ulcers : sign a marketing alliance with a major.
- ~ Acquisition /new products :evaluate opportunities and financing strategies

