

# Radiónix™ WITH QXP™

**Radiónix™** offers a proprietary blend of ingredients that provides visible results with only 5 days of use. In just 9 weeks, **Radiónix**'s unique technology increases the skin's natural collagen level, resulting in an observable reduction in the length and depth of facial lines.

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## **Background**

Biocellrex (“the Company”) develops, manufactures, and markets a suite of products using its proprietary technology that was initially developed for the treatment of chronic wounds. An exciting outgrowth from this wound-care technology was the development of a pro-active, tissue-regenerative, dermatological formula for anti-aging, the **Radiónix™** skin care line. **Radiónix™**'s patent-pending formulas, which have been in development for many years and which benefit from a group of proprietary ingredients, provide the most advanced anti-aging treatment ever tested.

## **Oak Bark Extract Technology**

Chronic wounds are generally defined as wounds that have not healed after thirty days of consistent clinical treatment. These include diabetic ulcers, burns, pressure ulcers (bedsores), and venous stasis ulcers. The Company's broadly-enabling technology was discovered from oak bark extract and referred to as **QXP™**. **QXP™** down-regulates the production of certain proteases and matrix metalloproteases, or MMPs, which are protein enzymes that are proven to impede the healing of a majority of chronic wounds. Approximately 80% of chronic wounds display elevated levels of proteases (including MMPs), which impede or stop the wound-healing process. **QXP™** contributes to setting up a suitable environment to allow wounds to close.

Facial wrinkling associated with aging is caused – and exacerbated – by many factors. Beyond the physiological pathways, molecular mechanisms involved in facial aging include changes in collagen conformation, elastin polypeptide degradation, and problems of the skin lipid matrix.

The Company has worked with strategic partners to develop a line of cosmeceutical skin-care products trade named **Radién Ix™**, utilizing the same QXP™ technology found in its advanced wound-care dressings to down regulate proteases. Research at a number of universities found that QXP™ was effective in controlling a group of proteases and other enzymes associated with the breakdown of collagen and tissue in the skin. The breakdown of collagen is a key factor in the aging of skin. The Company's protease-targeting technology, QXP™, allows this product line to provide unique and superior skin care treatment.

A US government grant was awarded to the University of Florida to study aging of skin. Proteases have been identified as a contributing factor affecting aging skin by destroying the collagen in the dermis. The study divided the participants into four age groups: 1 to 20, 21 to 40, 41 to 60, and 61 up. Protease activity began at the cellular level in the dermis in the 21-to-40 age group. The activity became very high in the 41-to-60 age group, resulting in a greatly reduced level of collagen.

Recent studies also establish that changes can be significantly reduced by inhibiting SNARE complex formation, a core of membrane proteins that mediate neuronal exocytosis. Their inhibition by short synthetic peptides, used in Radién Ix™, can decrease facial wrinkle formation and aging.

Current products include a women's line of day cream, eye cream, and night cream for regular skin and a night cream for oily skin. There is a Men's anti-aging treatment, plus a product for post Retin-A or laser repair usage, which is a PEG-based wound and burn formula containing QXP™. This product is extremely beneficial when used with exfoliating products and laser repair, with studies showing greater than a 50% improvement in healing times.

Radién Ix™ is based on extensive clinical trials and pharmaceutical technology. When it is applied to the skin, it significantly reduces wrinkles due to aging and other skin conditions. In addition to QXP™, Radién Ix™ has a family of additional active ingredients for rapid and long-lasting effect. Each of the Radién Ix™ products incorporate active ingredients particular to that product's usage. The other active ingredients help prevent the degrading action of natural skin aging. The Radién Ix™ skin cream base is the finest combination of botanicals and moisturizers available today, as verified by double-blind clinical trials.

#### Active product ingredients:

- QXP™, used in the entire Radién Ix™ product line, limits the damage caused by the skin's enzymes, helping reduce the breakdown of collagen, laminin, elastin, and other components of the skin. Research over the last 10 years has found age-related changes in the activity of these enzymes, and QXP™ can reduce skin degradation and loss of skin tone. QXP™ enhances growth factors, regulates MMPs, and reduces inflammation.
- Peptides used in the entire Radién Ix™ product line are tiny fragments of protein molecules. These protein molecules are short chains of amino acids that naturally occur in the skin. Peptides can allow the natural production of collagen and elastin, both of which plump the skin and give it elasticity. The natural production of collagen and elastin decline as we age. In the Radién Ix™ products, the peptides work together with

oak bark, soy extract, and glycerin to enhance the stratum corneum to increase hydration. This in turn helps allow the natural production of collagen. In the day and night creams, a proprietary peptide is used to provide a protective effect against photo-induced aging, and it significantly stimulates synthesis of collagen I, IV, VII, XVII and nidogen I proteins. While these proteins of the dermis and dermal-epidermal junction usually decrease with age, Radien Ix™ rejuvenates the dermal structure, causing aging skin to behave like younger skin.

- Soy Extract – Phytoestrogen is used in the day and night cream. This molecule mimics the body's natural estrogen and contributes to the skin's softness and suppleness, much as natural estrogen does, without the drawbacks of estrogen.

### **Women's Radién Ix™ Products**

**Radién Ix™ Eye Cream** – Particular peptides are effective in diminishing darkness and puffiness around the eyes and general skin discoloration. Poor circulation and capillary fragility are primary factors that exacerbate the appearance of under-eye circles.

**Radién Ix™ Day Cream** - Sesame protein is a skin-tightening agent that visibly smoothes the skin and is a very effective base for application of make-up. Sunscreen is also added to the day product.

**Radién Ix™ Night Cream** – Walnut extract provides the skin with phytic acid, polyphenols, proteins, mineral salts, and vitamins. This protects the cell's antioxidant pool and has biostimulating properties while shielding from the consequences of oxidative stress. The walnut extract provides substantiated effects on extrinsic aging by reducing apoptosis and by reducing the inflammation processes.

### **Men's Product**

**QXP™ Anti-Aging Treatment for Men** - Particular peptides are effective in delaying the signs of aging, restoring a more youthful appearance. Walnut seed extract provides the skin protection against oxidative stress, bio-stimulation of skin protein synthesis, and delays the visible signs of aging. Men's faces tend to be very dry. Special ingredients are included to allow increased skin volume by holding moisture, which is important as we age. Collagen is also added, which keeps connective tissue firm and helps it to hold the skin's shape, essential for maintaining youthful skin. The product increases skin hydration, elasticity, and humectancy. Glycolic acid and Alpha hydroxy acid are derived from cane sugar, which allows the product to penetrate skin deeply and easily, effective for treating fine lines.

### **General Radién Ix™ Products**

**Radién Ix™ DeJaVu** - DeJaVu is the most advanced anti-aging product, clinically proven to reduce wrinkles by tightening the elastins in the skin around your eyes to diminish the visible signs of aging. The patent pending formulation will immediately

tighten and plump up the thinner, more sensitive, skin around the eyes and with continued use, provide long lasting results with the reduction of lines and wrinkles.

DeJaVu is formulated for instant gratification, but with longer term benefits. It is part of our anti-aging product line to work with our clients lifestyles. Apply anytime you want to be “Red Carpet Ready”!

The DeJaVu provides the following benefits:

- Tightens skin to reduces fine lines and wrinkles
- Diminishes dark circles and puffiness
- Will even skins texture
- Creates younger healthier looking appearance
- Treats the skin for long term benefits by strengthening the muscles around the eyes

### **Radien Ix™ Skin Repair Cream**

The Radien Ix™ Skin Repair Cream provides the following benefits:

- Designed to provide tissue regeneration after dermabrasion, or the use of products such as retinoid and laser treatments, or other similar treatments that cause peeling.
- Uses QBx™ technology originally developed as a pharmaceutical product for the treatment of burns and tissue regeneration
- Great for general sunburns, minor burns, skin irritation, and bee stings.

### **Radién™ Cleanser**

Properly cleaning the skin is the first step to the Radién Ix™ anti-aging system. Radién Ix™ Cleanser is formulated for make-up removal and deep skin cleansing. This allows for faster and more efficient penetration of the Radién Ix™ creams.

Directions: Apply a small amount to damp skin morning and night using gentle circular motions. Rinse.

### **Radién Ix™ Toner**

Using Radién Ix™ Toner is an essential part of the skin care regimen. Radién Ix™ Toner provides hydration to your skin, which is essential in maintaining elasticity, smoothness, moisture, and a more youthful appearance. Proper skin hydration reduces the signs of aging skin and provides an effective base for the application and absorption of skin care products. Large facial pores allow more dirt, oil, and toxins to enter the skin and can cause irritation, infections, and facial blemishes. Radién Ix™ Toner helps tighten your facial pores, allowing fewer oils and toxins to settle into the skin. This creates a fresher, cleaner, and less oily appearance while helping your skin prevent acne-related breakouts. This hydrating, balancing, and firming formulation provides instant hydration for thirsty skin while removing excess oil.

Directions: Spritz face lightly after cleansing to help rapidly restore the PH levels to the skin.

Can be used throughout the day to minimize oil production. Can also be spritzed onto cotton balls and used to lightly wipe skin.

**Clinical trials** – Trials were conducted in High Point, North Carolina, under the direction of Dr. Zoe Draelos using our development name InTon.

Fifty women participated in the test, with 40 testing the active product against a placebo (a very good botanical base), and 10 testing the product against a cold cream-type placebo.

The study was double-blind. Each woman used one cream (an active or a placebo) on each side of her face, and neither Dr. Draelos nor the participant knew which was the active cream.

At the beginning of the study and at mid point, each participant was interviewed, photographed, and visually examined. Each side of her face was tested for skin moisture and skin conductivity, and a small silicone mask was taken from each side of her face. Each woman turned in unused product (which was weighed) and a diary of her experience.

Dr. Draelos made very positive comments about the product in her report, and results were dramatic, particularly over the first six weeks.

Essentially all participants wanted more skin cream at the end of the study (which was provided), and all felt the moisturizing quality of the cream was outstanding.