Aims: The aim of this presentation is to introduce a novel, supersonic delivery system for the delivery of actives into the skin. Methods: This presentation is a collection of the clinical work to date for this novel delivery system, showing how the device works to the various actives which are utilized to improve the skin.

Today, skin rejuvenation procedures are among the most popular treatments for those in search of a youthful appearance. Sun and age-related imperfections such as wrinkles and pigmented lesions as well as scars and actives are all treated with a revolutionary, multifunctional, skin rejuvenation technology based on jet aviation engineering. A two phase supersonic jet that consists of microdroplets of active solution and air is used to improve skin appearance in a non-invasive, short, painless treatment. The aesthetic market continues to expand, apparently with no end in sight. Over the last few years, skin rejuvenation procedures have become doctors' favorite physician performed treatments, meeting patients' needs in the rapidly expanding aesthetic, skin care market.

The new revolutionary technology used by the JetPeel system is recommended for a variety of skin conditions and enhances skin appearance in a non-invasive procedure. The system uses a specially designed hypersonic to create a liquid-gas jet which is accelerated to 200 m/sec. When the very small jet-moving droplets from the jet stream strike the skin several things happen:

1. The kinetic energy of the droplets exfoliates the outer layer of the epidermis. The pressure created by the high-velocity jet stretches the skin at the point of contact, causing micro-canal formation to break down the skin stretch and creating new canals. This process, called “hyperpeeling”, is in the result of pressure variance. If facile hydration and cleansing of the treated area and without needles opens access to the skin’s inner layers providing deep penetration and allowing introduction of actives such as mela-therapy vitamins and other solutions. Nutritional elements currently being used include Hyaluronic acid which can reach the skin’s natural connective tissue; vitamin C, which improves the ability of cells to even out pigments; and vitamin A, B and E which are important ingredients for the proper functioning of cells.

Due to its multi-purpose nature and painless treatment, the JetPeel system is recommended for:

1. Skin rejuvenation
2. Wrinkles: crow’s feet, peri-oral etc.
3. Scars
4. Acne
5. Stretch marks
6. Enhancing results of laser, IPL and other treatments.

New medical aesthetic techniques are designed to achieve visible effects with a single treatment of short duration, with no downtime for the patient. The new JetPeel® system answers this need as part of an anti-aging sciences program. The 200 meter per second micro-flow not only smoothes the skin, but also improves the various skin conditions that affect the patient's appearance in a short non-invasive procedure. JetPeel® can be used on any skin surface of the body and face, the pustule part of the head, diffusely and on the hands and feet.

Combining traditional procedures with JetPeel treatment is most beneficial in facial rejuvenation.

The JetPeel® can be used for the trans-dermal delivery of nutrient supplements, mesotherapy products, vitamins and minerals without needles. A typical treatment lasts about 35-45 minutes for treatment of the full face. Patients feel comfortable and relaxed during the treatment and they appreciate the results. After a single session, the skin texture is improved; the skin looks more radiant and has a more youthful appearance. The JetPeel® advanced, painless technology can deliver actives transtransiently without needles.

Experimental study was conducted by HPBM®. Its report is being presented hereby:

1. Essential Summary
   Objectives
   - Transcutaneous transport process aims skin surface delivery of treatment with Calitene®.
   - JetPeel® Calitene® response tested on an auto-immune presentation of skin. Calitene® high concentation levels were maintained for 30 Days.

2. Methods
   Calitene®
   - Test: Market, Calif., Inc., 1.00/0.100
   - Method:
     JetPeel®
     - Skin Treatment
     - Calitene® was delivered in liquid or solid form, and the JetPeel® device delivered in the form of a laser beam. The device delivers a high-speed, high-energy jet of air to the skin, sending out the solution. The air is pressurized to 200 m/sec. The jetting effect is then directed at the skin, and the solution is applied. The solution is applied in a spray-like fashion, and the jet is directed at the skin.

3. Results
   Summary
   - Calitene® response tested on an auto-immune presentation of skin. Calitene® high concentration levels were maintained for 30 Days.

4. Discussion
   - Calitene® response tested on an auto-immune presentation of skin. Calitene® high concentration levels were maintained for 30 Days.

Results: The novel delivery system has shown effectiveness in improving the quality and texture of the skin, of improving acne vulgaris, and in the delivery of other important actives into the skin.

Conclusions: The JetPeel® is a new, novel delivery system which finds a place in dermatology.