

# ERMATOLOGY NOVATIONS HOWCA





DERMAVANT.COM

2019

#### WE WILL RISE TO THE OCCASION

Began Phase 3 PSOARING clinical trial for tapinarof

**March:** Announced plan to initiate Phase 3 PSOARING clinical program for tapinarof

Presented Phase 2b secondary efficacy data of tapinarof in plaque psoriasis and Phase 2b secondary outcomes of tapinarof in atopic dermatitis at the American Academy of Dermatology Annual Meeting

**June:** Dosed first patient in Phase 3 PSOARING clinical trial program for tapinarof in plague psoriasis

FOUNDED

# WE WILL CHALLENGE THE STATUS QUO

Founded to be a force of change

**September, 2015:** Dermavant Sciences founded with the mission to be an unrelenting force of change in the industry —unstoppable, uncompromising and unwavering in its purpose

2018

# WE WILL IGNITE INSPIRING INNOVATION

Acquired tapinarof

**July:** Dermavant purchased rights to tapinarof, an investigational therapeutic aryl hydrocarbon receptor modulating agent for the treatment of plaque psoriasis and atopic dermatitis

October: Presented new Phase 2b tapinarof data on patient-reported outcomes for plaque psoriasis and atopic dermatitis at the Fall Clinical Dermatology Conference

2020

#### WE WILL BLAZE NEW TRAILS

"Landmark" Licensing Deal to develop tapinarof in Japan

**January:** Signed exclusive license agreement for development and commercialization of tapinarof in Japan

**April:** Completed patient enrollment for two identical Phase 3 clinical trials, PSOARING 1 and PSOARING 2, evaluating tapinarof in plague psoriasis

**May:** Efficacy and patient-reported outcomes data from Phase 2b study **evaluating tapinarof in plaque psoriasis** was published in the *Journal of the American Academy of Dermatology (JAAD)* 

# BUILDING A STRONG FOUNDATION TO PROPEL THE NEXT WAVE OF BREAKTHROUGHS

At the core of everything we do, you'll find a fundamental force that drives us forward. **Unbreakable. Relentless. Fearless.** It's the tireless will to challenge the past and shape the future — and that irresistible pull to change lives for the better influences every move we make.

Together, we will transform dermatology.

2021

#### WE WILL DELIVER ON OUR PROMISES

New Drug Application submitted to US FDA

**January:** Presented **new tapinarof data in plaque** psoriasis from Phase 3 PSOARING clinical trial program at Maui Derm for Dermatologists

**February:** Announced **new safety and efficacy data** in plaque psoriasis from a planned interim analysis of PSOARING 3

**March:** Presented interim analysis of PSOARING 3 evaluating tapinarof in plaque psoriasis at the Innovations in Dermatology Conference

**April:** Presented secondary efficacy and patient-reported outcomes data from PSOARING 1 and PSOARING 2 evaluating tapinarof in plaque psoriasis at the American Academy of Dermatology Virtual Meeting Experience

**May:** New Drug Application submitted to the US FDA for tapinarof for the treatment of plague psoriasis in adult patients

**June:** Completed patient enrollment for PSOARING 3, a long-term safety study of tapinarof in adults with plaque psoriasis

Efficacy and patient-reported outcomes data from Phase 2b study **evaluating tapinarof in atopic dermatitis** was published in the *Journal of the American Academy of Dermatology (JAAD)* 

**August:** Announced **new data results** from PSOARING 1 and PSOARING 2 evaluating tapinarof in plaque psoriasis

**October:** Presented efficacy and safety data from Phase 3 PSOARING clinical trial program evaluating tapinarof at the Fall Clinical Dermatology Conference and European Academy of Dermatology and Venereology Congress

**FUTURE** 

#### WE WILL CHANGE LIVES FOREVER

WITH 140+ YEARS of combined dermatology expertise from the Dermavant leadership team working toward our goal of transforming lives, the future is bright.

Watch where the power of our will takes us next.



### WHAT'S NEW IN UV RESEARCH?

Exploring the impact of sun exposure on the skin barrier



**CHARBEL BOUEZ, PhD** 

VP, Advanced Research Americas L'Oréal

The impact of UV exposure on skin cancer and photoaging has been extensively studied. However, the direct impact of UV irradiation on skin barrier integrity under clinical settings remains poorly explored. Additionally, despite our growing understanding of the benefits of lipid-containing formulations in promoting skin barrier repair, there is limited knowledge on the clinical efficacy of these formulations following UV exposure.<sup>1</sup>

Therefore, we investigated the impact of reallife, daily UV exposure on skin barrier integrity and evaluated the protective and restorative benefits of a ceramide-containing sunscreen and moisturizing cream from CeraVe.

In our study, we used a physiologically relevant dose of UV exposure: 2x the minimal erythema dose (2 MED). This equates to about 2 hours of UV exposure during a sunny day in July in New York City, bringing the exposure and its intensity closer to what most of your patients experience daily.<sup>1</sup>

## REAL DAMAGE AT REAL-LIFE UV EXPOSURE

Using scanning electron microscopy, we observed that UV exposure at 2 MED significantly increased the appearance of weakly differentiated cells in untreated skin (Figure 1).<sup>2</sup>

In the normal cell morphology of unexposed skin, you can see well-structured hexagonal cells (Figure 2A). As we move into UV exposure at 2 MED, you can see the cells have lost their shape (Figure 2B).<sup>2</sup>

Conversely, treatment with a routine of CeraVe ceramide-containing sunscreen and moisturizing cream significantly preserved the appearance of well-differentiated corneocytes, with cells similar in appearance to unexposed skin (Figure 2C).<sup>2</sup>

Additionally, this ceramide-rich treatment improved skin hydration over time, indicating that the skin water content, which is essential for maintaining barrier function, was both maintained and ameliorated.<sup>1</sup>

# WHAT THIS MEANS FOR YOUR PATIENTS

Similarities in skin barrier damage observed between UV-exposed skin and barrier-compromised dermatological conditions demonstrate the importance of a routine of ceramide-containing skincare.<sup>2</sup>

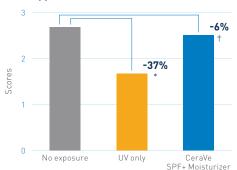
Our findings highlight that ceramide-containing topical formulations could add benefits to patients' daily skincare routine by strengthening the barrier and improving skin health overall against chronic sun exposure.<sup>1</sup>

#### References:

- 1. Dumbuya H, Yan X, Chen Y, et al. Efficacy of ceramidecontaining formulations on UV-induced skin surface barrier alterations. *J Drugs Dermatol*. 2021;20(4):s29-s35.
- 2. Bouez C, Haftek M. What's New in UV Research? Exploring the Impact of Sun Exposure on Skin Barrier [webinar]. March 11, 2021.

**FIGURE 1.** Appearance of normal differentiated single cells at day 14 (n = 6 healthy adults)

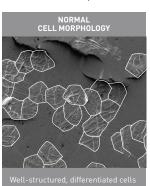
#### **Appearance of Differentiated Cells**



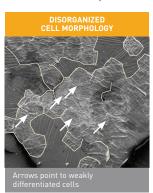
\*P<0.05. Statistically significant difference vs no exposure. †No significant difference vs no exposure.

**FIGURE 2.** Representative scanning electron images of superficial stratum corneum corneocytes obtained by tape stripping at day 14 post UV exposure

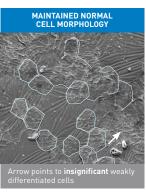
#### (A) No UV exposure



#### (B) UV Only



(C) UV + CeraVe SPF + CeraVe Moisturizer





### THE COMPLETE APPROACH

TO

# SUNCARE

A routine of **ceramide-containing sunscreen and skincare** is clinically tested to help protect against UV-induced skin barrier damage.<sup>1</sup>

#### **SUNSCREENS**

Protect, hydrate, and restore

#### **MOISTURIZERS**

Moisturize and help repair the skin barrier

#### **CLEANSERS**

Cleanse and help restore the skin barrier



CeraVe is available nationwide.

CeraVe suncare products are formulated with ceramides 1, 3, & 6-II to help maintain the skin's protective barrier.



Discover the impact of a real-life, daily dose of UV exposure in our 2-minute highlights video

To find solutions for your patients, visit CeraVe.com



Intensive Pigment Corrector

# THE NEW ALTERNATIVE





Cyspera® is an intensive pigment corrector formulated with cysteamine to improve the appearance of stubborn discoloration.





Baseline

Week 8

Week 16

#### **BENEFITS**

- Significant pigment correction
- Powerful anti-oxidant
- Well tolerated for long-term use
- Free of hydroquinone

92%

of subjects saw significant improvement in the appearance of brown patches<sup>1</sup>

67%

pigment correction in the appearance of stubborn discoloration<sup>1</sup>

scientis

For more information, visit www.cyspera.com

Scientis is a Swiss dermatology company dedicated to skin pigmentation. We strive at discovering, developing and bringing to people in need novel dermo-cosmetic products for skin pigmentation concerns.

Reference: 1. Mansouri et al (2015) British J. Dermatol. 173 (1) 209-217



# Cyspera®: Innovation for an Unmet Need

yperpigmentation can affect individuals across all skin types. Although sometimes dismissed as a cosmetic concern, it is now recognized to have a significant impact on an affected individual's emotional and psychological wellbeing.1 Hyperpigmentation accounts for up to 80 percent of dermatology visits for Hispanic women and 70 percent of visits for women of African descent.2

Management of hyperpigmentary disorders can be challenging. Effects of treatment can take a few weeks to become evident, due to the complex nature of melanin activation and deposition, as well as the skin cell turnover cycle. Furthermore, patients who continue UV exposure without proper sun protection, experience further inflammation, or have continued exposure to other contributary factors may experience hinderance of treatment.

Traditional treatments used to address hyperpigmentation present potential challenges. For example, hydroquinone can be safe when used properly under the direction of a physician; when misused, it can lead to lasting skin damage or toxicity. Other topical products show modest benefits at best. These include botanical ingredients, which have shown mixed results.

Cyspera® from Scientis is a safe and efficacious option in the management of hyperpigmentation disorders.<sup>3-6</sup>

#### **Get to Know Cyspera®**

Cyspera® is a novel pigment corrector, formulated with cysteamine, a naturally occurring, biological compound clinically proven to improve the appearance of stubborn skin discoloration. It has potent antioxidant activities that affect several pathways of melanogenesis. Cysteamine is shown to inhibit tyrosinase and peroxidase activity while increasing intracellular glutathione. Its use is associated with a reduction of melanin darkening in the stratum corneum.<sup>7</sup>

In a double-blind, randomized study, use of Cyspera® for four months was associated with improvements in Mexameter skin colorimetry, Melasma Area Severity Index (MASI) score, Investigator's Global Assessment (IGA), and patient questionnaires.3 At 16 weeks, Cyspera® was associated with a 67 percent reduction in pigment index, compared to controls, and a 58 percent reduction in MASI scores.

A second, double-blind, placebo-controlled trial found that at 16 weeks, use of Cyspera® was associated with significantly lower MASI scores, compared to placebo. IGA scores and patient assessments were significantly better for cysteamine compared to placebo.4

Cysteamine was shown to have comparable efficacy to hydroquinone for the management of melasma<sup>5</sup> and to pro**U** Cyspera® is a novel pigment corrector, formulated with cysteamine, a naturally occurring, biological compound clinically proven to improve the appearance of stubborn skin discoloration."

vide greater efficacy than modified Kligman's formulation (triple combination therapy) with better tolerability.<sup>6</sup> It was demonstrated to be effective when hydroquinone and triple combination therapy provided insufficient benefit.<sup>7,8</sup>

Cysteamine has been shown not to induce photosensitivity. It is non-cytotoxic, non-mutagenic, and non-carcinogenic. The Cyspera® formulation is well tolerated, with only mild irritation reported in some patients. Adherence to the application regimen is shown to mitigate the incidence of irritation.

#### The Cyspera® Experience

Cyspera® is administered with a unique short-contact application protocol. Patients apply a thin layer of Cyspera® to unwashed skin and leave it in place for 15 minutes. Cyspera® should then be washed off using a gentle skin cleanser. A moisturizer should be applied once the skin is dry, and patients are encouraged to keep the skin hydrated throughout the day and use proper sun protection (sunscreen, clothing, etc.). Especially during the first few weeks of use, some patients will experience a warming sensation or mild tingling upon application lasting up to 30 minutes.

Treatment is initiated with once-daily application for 16 weeks, followed by maintenance treatment with application once a day for two days a week. The favorable safety associated with Cyspera® means there is no long-term limitation to use.

#### **A True Innovation**

Given the emotional and psychological impact on patients and the challenges associated with historical treatment options, Cyspera® addresses an unmet need for innovation in the management of hyperpigmentation. It is a safe and tolerable option for the management of hyperpigmentation that is shown to offer similar or better efficacy. Cysteamine is a true innovation in care that is patient-friendly and well accepted by real-world users. ■

1. J Eur Acad Dermatol Venereol. 2020 Feb;34(2):392-399. 2. Data on file, Scientis. 3. J Drugs Dermatol. 2019 Nov 1;18(11):S1545961619P1156X 4. Br J Dermatol. 2015 Jul;173(1):209-17. 5. J Dermatolog Treat. 2018 Mar; 29(2):182-189 6. Australas J Dermatol. 2021 Feb; 62(1):e41-e46. 7. Skin Res Technol 2021 Jan;27(1):24-31. 8. J Cosmet Dermatol. 2021 Jan;20(1):204-206. 9. J Cosmet Dermatol. 2019



# BUILT BY NATURE. BACKED BY SCIENCE.

CLINICALLY PROVEN TO RESTORE SKIN BARRIER FUNCTION AND REDUCE ATOPIC DERMATITIS SYMPTOMS

50% fewer flare-ups<sup>3</sup> 33% less staph<sup>3</sup> 47% less itchiness<sup>4</sup>

than a competitive moisturizer after using a prescription treatment

Ceramide-enriched | Dermatologist-tested | Allergy-tested | Fragrance-free | Paraben-free | Non-comedogenic

REFERENCES: 1. Baldwin HE, Bhatia ND, Friedman A, Eng RM, Seité S. The role of cutaneous microbiota harmony in maintaining a functional skin barrier. *J Drugs Dermatol.* 2017;16(1):12-18. 2. Mahe YF, Perez MJ, Tacheau C, et al. A new Vitreoscilla filiformis extract grown on spa water-enriched medium activates endogenous cutaneous antioxidant and antimicrobial defenses through a potential toll-like receptor 2/protein kinase C, zeta transduction pathway. *Clin Cosmet Investig Dermatol.* 2013;6:191-196. 3. Seité S, Zelenkova H, Martin R. Clinical efficacy of emollients in atopic dermatitis patients-relationship with the skin microbiota modification. *Clin Cosmet Investig Dermatol.* 2017;10:25-33.

4. Data on file. L'Oréal. Evaluation of tolerance and efficacy of a new moisturizer in children with atopic dermatitis.



# Skin of Color Update: Daily Sunscreen Use Can Prevent and Improve Discoloration

mong both men and women<sup>1</sup> with skin of color, concerns about skin dyschromias are common.<sup>2</sup> Dyschromias warrant treatment by the dermatologist and should not be dismissed as cosmetic concerns,<sup>3</sup> because affected individuals may experience a substantial impact on health-related quality of life.4 Dyschromias can be challenging to treat, therefore, emphasis has been placed on prevention, with UV avoidance and the use of SPF as primary strategies.

But what if a cosmetically acceptable, daily-use, broadspectrum sunscreen formulation could both prevent and improve the appearance of dyschromia in at-risk individuals? It may be possible.5

#### **Compelling Evidence**

To assess the benefits of daily use of a sunscreen formulation with SPF 30/PPD 20, researchers undertook a study of healthy, Hispanic women between the ages of 45-65 who had Fitzpatrick skin types IV-V with mild-to-moderate signs of photoaging and pigmentary concerns.<sup>5</sup> Subjects were provided sunscreen and instructed to apply the formulation to the face, neck, and hands daily for 12 months. At three, six, nine, and 12 months, subjects were evaluated for signs of aging and dyschromia. Age- and phototype-matched subjects known to use sunscreen inconsistently were recruited as controls.

Developed by formulation scientists at La Roche-Posay, the studied broad-spectrum product contained UV filters avobenzone (3%), homosalate (12%), octisalate (5%), octocrylene (1.7%), and oxybenzone (3%).

Daily use of the sunscreen was associated with significant improvements in clinical signs of skin dyschromia over time. Investigator assessment of skin tone, hyperpigmentation, and dark spots all improved compared to baseline and controls. Additionally, signs of skin aging, including fine lines, skin smoothness, and overall skin quality, improved with daily sunscreen use, based on investigator assessment, compared to baseline and controls. Objective measures (Chromameter and Mexameter) showed an increase in brightness and a reduction in melanin, over time.

#### **A Daily Strategy**

Dermatologists encourage UV avoidance strategies in all patients across all skin types, as recommendation of SPF and other skin cancer prevention strategies for all patients, regardless of ethnic background and socioeconomic status, has a positive impact on patient health.<sup>6</sup> Experts stress the importance of

#### WHO WEARS SUNSCREEN?

"Often or always use sunscreen"7

Whites: 37.6% • Asians: 29% • Hispanics: 26.5% • Blacks: 13.1%

#### Odds of sunscreen use<sup>7</sup> are higher for:

Female sex; Bachelor's degree or higher; Household income of \$30,000 or more; Moderate/high skin cancer risk; Frequently exercising; A doctor's visit within the past year

One international study<sup>8</sup> showed 87% of adults apply SPF to children under age 12: Participation in other habits was much lower:

Applying SPF to sun-exposed body parts: 59% Wearing sunglasses with UV filters: 59% Applying SPF to the face: 57% Seeking shade: 52%

photoprotection and other measures to reduce both the risk for skin cancer and for UV-associated skin pigmentation disorders in communities of color.<sup>6</sup> Data suggest, however, that gaps exist in sunscreen adoption in communities of color.7 (See sidebar)

Concerns about skin cancer at some point in the distant future may not motivate sunscreen use. However, patients with a history of skin dyschromias or with current pigmentary alterations may be motivated to adhere to regimens that will improve the appearance of their skin in the near-term. And a broad-spectrum, cosmetically acceptable sunscreen formulation that may both reduce the risk for skin cancer and discoloration and improve the appearance of signs of dyschromia and skin aging with daily use may be especially appealing.

La Roche-Posay offers a full range of broad-spectrum, daily use sunscreens formulated with organic and inorganic UV filters. Inorganic filters may be particularly relevant for patients concerned about dyschromias. Evidence suggest that inorganic molecules filter visible light, which has been implicated in development of skin dyschromias.

Notably, La Roche-Posay offers formulations with SPFs of 50, 60, and 100—well above the SPF 30 studied. Additionally, the company's exclusive Cell-Ox Shield® technology incorporates antioxidants to address free-radical damage that may result from UV exposure. ■

1. Dermatol Surg. 2017 Nov; 43 Suppl 2:S140-S150. 2. Am J Clin Dermatol. 2011 Apr 1;12(2):87-99. 3. J Drugs Dermatol. 2009 Sep;8(9):879-82. 4. Semin Cutan Med Surg. 2009 Jun;28(2):77-85. 5. J Drugs Dermatol. 2020 Mar 1;19(3):236-242. 6. J Am Acad Dermatol. 2014 Apr;70(4):748-762. 7. Prev Med Rep. 2018 Dec 28;13:346-353. 8. Poster: An International Survey On Sun Exposure and Skin Cancer Prevention

# A BREAKTHROUGH IN MELANOMA DETECTION



Skin cancer is one of the most common cancers diagnosed in the US, and every hour of every day more than one American dies from melanoma.¹ But the prevalence of melanoma exists in a paradox—melanoma is both highly preventable and the deadliest of skin cancers. With rates of melanoma rising,² early detection and treatment are critical to improving survivability rates. Significant barriers, such as lack of skin checks and some patients' fear of biopsies, must be addressed to combat this preventable disease.

#### **Early detection for earlier intervention**

The DermTech Melanoma Test is a revolutionary test that identifies the presence of genomic markers highly correlated with melanoma, frequently before these changes can be detected by histopathology, enabling earlier detection and intervention. This non-invasive test is performed using the DermTech Smart Sticker™ which is pressed onto a suspicious lesion, then lifted off to capture the patient's skin cells from the lesion's surface. These cells contain genomic material representative of the entire lesion.

#### **Precision genomics testing**

The DermTech Melanoma Test is comprised of 2 assays: the Pigmented Lesion Assay (PLA), which detects expression levels of 2 RNA biomarkers, LINC00518 and PRAME, and the TERT add-on assay, which detects the

DNA TERT promoter mutations. The combined assays (LINC00518, PRAME, and TERT) have a sensitivity of 97%, and with a Negative Predictive Value of >99%, the DermTech Melanoma Test has a <1% probability of missing melanoma.<sup>3,4</sup> In comparison, traditional biopsies and histopathology can miss up to 17% of early-stage melanomas<sup>5</sup> due to subjectivity of visual assessment and the inherent limitations of tissue processing and histopathologic evaluation.

#### Easy to administer and collect

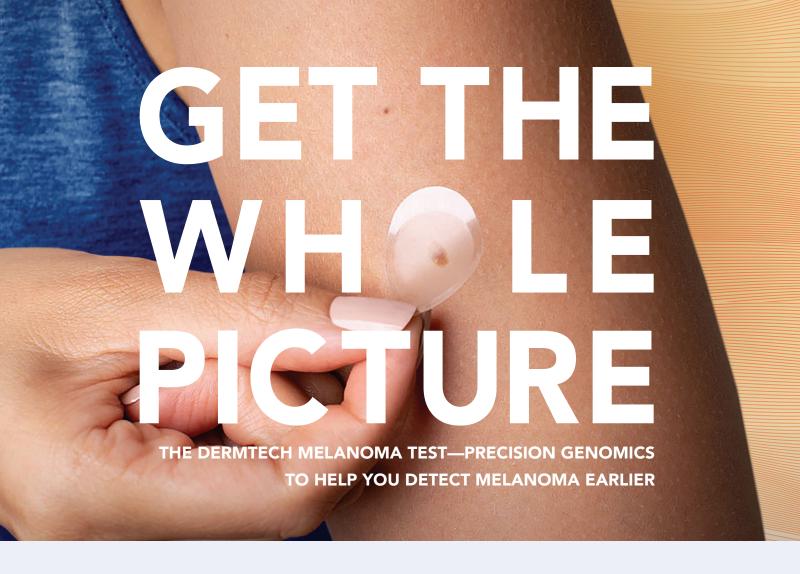
The technology of the Smart Sticker transports cellular material to the DermTech Gene Lab, and the results are sent back to the physician to share with the patient. The Smart Sticker can be administered by the healthcare provider or ancillary staff and takes under 5 minutes to complete. The DermTech Smart Sticker can be used in the physician's office or via remote collection at the patient's home under physician supervision. The test is simple and convenient to implement and can be seamlessly incorporated into daily practice as an additional method to help detect melanoma.

#### **Enhanced decision-making**

Through precision genomics, noninvasive technology, and the flexibility of office or remote collection, DermTech ensures peace of mind with accurate and early detection of melanoma.

This test is a physician-ordered laboratory-developed test (LDT) and is regulated under the Clinical Laboratory Improvement Amendments (CLIA). DermTech's laboratory is qualified to perform high complexity testing, developed and analytically validated the LDT in accordance with CLIA standards, and is also accredited by the College of American Pathologists and New York Dept. of Health. The test is not reviewed or approved by the FDA.

References: 1. Skin Cancer Facts & Statistics. Skin Cancer Foundation. Updated January 13, 2021. Accessed June 16, 2021. https://www.skincancer.org/skin-cancer-information/skin-cancer-facts 2. About Melanoma. Melanoma Research Alliance. Accessed June 16, 2021. https://www.curemelanoma.org/about-melanoma 3. Jackson SR, et al. J of SKIN. 2020;4(2):124-129. 4. Gerami P, et al. J Am Acad Dermatol. 2017;76(1):114-120.e2. 5. Rivers JK, et al. Skin Therapy Letter. 2019;14(1):4-6.



Collects genomic material from the entire lesion to measure gene expression.







**Non-invasive** 



Sensitivity<sup>2</sup>

The DermTech Melanoma Test is intended for use on pigmented lesions suspicious of melanoma that meet one or more of the ABCDE criteria.

<sup>a</sup>Negative predictive value.



#### To learn more about the DermTech Melanoma Test visit **dermtech.com**

This test is a physician-ordered laboratory-developed test (LDT) and is regulated under the Clinical Laboratory Improvement Amendments (CLIA). DermTech's laboratory is qualified to perform high complexity testing, developed and analytically validated the LDT in accordance with CLIA standards, and is also accredited by the College of American Pathologists and New York Dept. of Health. The test is not reviewed or approved by the FDA.

References: 1. Gerami P, et al. J Am Acad Dermatol. 2017;76(1):114-120. 2. Jackson SR, et al. J Cutan Med Surg. 2020;4(2):105-110. 3. Data on File. DermTech, Inc. March 2021.

#### **Derm**Tech







# aerolase® laser skin health

## Improve Skin Concerns in a Whole New Way

WE HELP YOU DELIVER SIMPLIFIED, REPEATABLE, IMPACTFUL RESULTS AND EXPERIENCES WITH LIGHT-BASED DEVICES.

We improve what's working for you, fix what isn't, and even give you the ability to address concerns you may not currently be treating. The outcome is a modern patient-provider experience that is more personalized and more enjoyable with incomparable results.

Join the Aerolase community and let's better address skin health together. We've developed our light-based devices to remove limits, so you can advance good results to great results for whoever needs it, wherever it's needed.

"The Aerolase Neo Elite was the first device I invested in when starting my practice. It offers my patients everything they need to prevent aging within a population where looks matter and their treatment experience with me means everything to keep them coming back."



**Roberta Del Campo, MD**Dermatologist
Del Campo Dermatology & Laser Institute

"I have no issue getting my medical patients on Aerolase Neo Elite treatments. The only issue I have is them not wanting to stop treatment. We've never had such a response like this before."



**Jeff Weinberg, MD**Dermatologist





Photos of Acne, Acne Scars, Rosacea, Post-Inflammatory Hyperpigmentation, PFB, Traumatic Scars, Skin Rejuvenation, Hair Reduction, Psoriasis, Melasma, and Skin Resurfacing courtesy of the following Aerolase Community Members: Fran Cook-Bolden, MD, DermBar MD, Michael Gold, MD, Jason Emer, MD, Let's Face It, Mark Nestor, MD, PhD, Cheryl Burgess, MD, and Dr. Arusha Campbell-Chambers.



"I work at several dermatology practices with the Aerolase Neo. Each time we introduce it to a new one we call it the 'multiplier effect.' A teen acne-patient gets their parent hooked on rejuvenation, a parent-patient gets their teen hooked on acne treatments, a teen tells a friend or a parent tells another family member. In no time, our schedule is full. The results and comfort with Aerolase is unmatched."

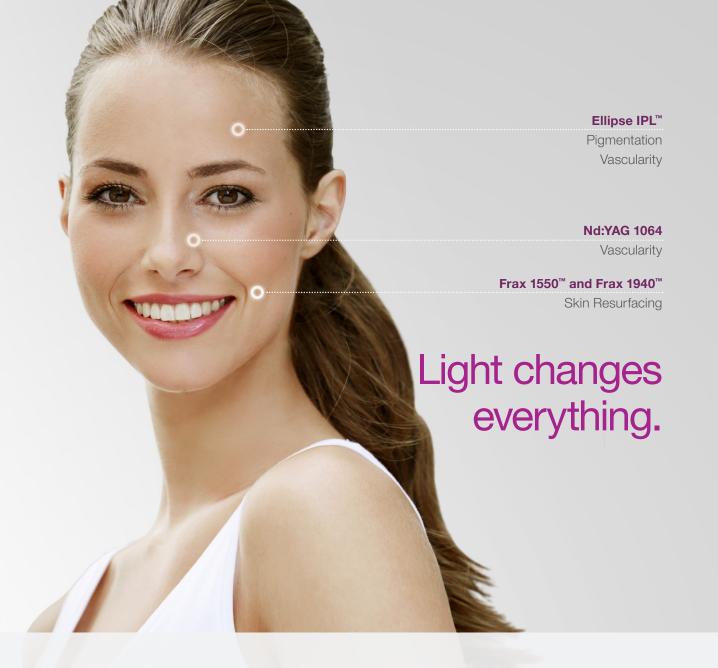


### LEARN HOW AEROLASE CAN BENEFIT YOUR PRACTICE AND PATIENTS.

914.345.8300

information@aerolase.com

aerolase.com



#### Nordlys™



Not just any light. The right light. Nordlys' Ellipse IPL technology with narrowband wavelengths, delivers targeted, controlled, filtered light - eliminating potentially harmful wavelengths above 950nm¹. Compared to broadband wavelength devices, Ellipse IPL technology produces results in photodamaged skin with:

- Half the fluence
- No active cooling requirement
- Fewer treatments<sup>2</sup>

The Nordlys system also includes the powerful light of Nd:YAG 1064 for vascularity, and non-ablative Frax 1550 and Frax 1940 for skin resurfacing without expensive consumables.

Visit candelamedical.com/NordlysLight and discover how light changes everything.



Offer your patients the new skin illuminating treatment available exclusively on the Nordlys platform.



# Honing-in on Rejuvenation

Energy-based devices are known for their targeted approach to rejuvenation. Pinpointing targets or chromophores (including pigment, melanin within hair follicles and skin, or hemoglobin for vascular treatments), these devices are typically designed to maximize absorption efficacy at the target and minimize any

potential negative impact of delivering excess energy to the target or nearby skin structures.

Some energy-based system innovations go farther to focus energy and optimize safety design considerations. One such device is the Nordlys™ multi-application platform, the only available multi-application system with narrowband intense pulsed light (IPL) and two

non-ablative laser resurfacing applicators.<sup>1-4,5</sup> Together with a powerful Nd:YAG laser, these technologies create a flexible, risk-minimizing platform with 21 FDA-cleared indications, including benign pigmented and vascular lesions, and permanent hair reduction in both lighter and darker skin types.<sup>1-4</sup>

#### **Innovations in IPL**

#### The Nature of Intense Pulsed Light (IPL)

By nature, intense pulsed light is polychromatic, non-coherent and unfocused.<sup>5</sup> Early generation IPL systems, with wavelengths up to 1400nm<sup>6</sup>, increased risk to skin by delivering unfocused broadband light, elevating skin thermal impact.<sup>5</sup> While effective and eventually mainstreamed, the devices were also known for their risk of burns, blisters, and hypo- or hyperpigmentation.<sup>11</sup>

#### **Narrowing Light Delivery**

Recent narrowband technology reigns in unfocused IPL. Narrowband IPL used in the Nordlys system (patented Ellipse IPL™), focuses light wavelengths. The eight Ellipse IPL applicators have narrow wavelength range, creating a more "laser-like" light band for targeting chromophores, while reducing heat delivery and treatment risk. TWith water filters in each handpiece and light filtered on both ends of the spectrum, the dual-filtering (water and light) technology eliminates wavelengths above 950nm, a striking innovation relative to earlier generation broadband light systems with manually changeable light filters and more thermal delivery of broadband light up to 1400nm. <sup>6,7</sup>

#### **Minimizing Number of Treatments**

A clinical study of the treatment of telangiectasias with Ellipse IPL VL 555 (555-950 nm) and PR 530 (530-750nm) handpieces demonstrates that use of the more narrowband PR applicator compared to the slightly broader band VL 555 applicator, reduces the number of treatment sessions needed.<sup>8</sup>

#### Reducing Fluence Demand by over 50%

Because non-specific skin heating is minimized using targeted wavelengths and dual-mode filtering, Ellipse IPL treats with less than half the fluence of broadband IPL.<sup>12</sup> Excessive IPL fluence is a major determinant of IPL risk, therefore

minimizing fluence reduces risks such as scarring and hypo- and hyper pigmentation.<sup>7,9</sup> Additionally, using less fluence has the advantage of patient comfort<sup>12</sup> as well as elimination of the need for an external cooling device.<sup>7</sup>

The unique sub-millisecond pulse delivery capability on the Nordlys system provides

further IPL improvement, allowing treatment of small vascular lesions and diffuse redness.<sup>1,4,7</sup>

#### Innovations in Fractional, Non-Ablative Resurfacing Maximizing Wavelength Accuracy

The Nordlys system is the only multi-application platform with two fractional, non-ablative laser resurfacing technologies – addressing both shallow (Frax  $1940^{\text{TM}}$ ) and deeper (Frax  $1550^{\text{TM}}$ ) resurfacing needs. <sup>1-4</sup> With the only 1940nm wavelength available in aesthetics, the Frax  $1940^{\text{TM}}$  is the closest wavelength to the peak of water absorption at ~1935nm, delivering maximum accuracy to the target compared to 1927nm thulium devices. <sup>13</sup>

#### **Improving Treatment Reach**

Both Frax 1550™ (1550nm laser) and Frax 1940™ applicators have adjustable treatment widths and pulse duration modification capability for customized treatment.<sup>7</sup> In contrast to the leading competitive fractional device with fixed treatment widths and a bulky thulium umbilical, the Frax diode laser applicators allow ease of treatment reach to the patient and to more tricky treatment areas, notably around the nose and eyes.<sup>5,7</sup>

#### **Transforming Practice Costs**

For maximum practice savings, the replaceable roller on the Frax 1550/Frax 1940 applicators allows high return-on-investment (ROI) treatments at a low-cost of ~\$26/ treatment, significantly lower than earlier generation fractional non-ablative devices.<sup>5,7</sup>

#### Platform Innovations

An integrated database helps guide treatment settings and retrievable patient history data simplifies treatment planning, while whisper quiet operation makes a calming experience for both practitioners and patients.<sup>5</sup>

References 1. Ellipse Nordlys 510(k) clearance (K150907), July 2015. 2. Ellipse Frax 1550 510(k) clearance (K161162), Sept. 2016. 3. Ellipse Ydun Frax 1550 510(k) clearance (K180406), March 2018. 4. Ellipse Frax 1940 510(k) clearance (K192951), March 2020. 5. Data on File, Candela, 2021 6. Scitton BBL Herro specification, https://sciton.com/phasicians/bbl/ 7. Nordlys User Manual, 2020. 8. Bjerring P, et al. Lasers Surg Med. 2004;34(2):120-126. 9. Thaysen-Petersen, et al., Lasers Surg. Med., 49: 88-96. https://doi.org/10.1002/sm.22566 10. WebMD: https://www.webmd.com/peaulty/intense-pulsed-light-treatment-overview#2 11. Philipp Babilas, MD, PhD,\* et al., Lasers in Surgery and Medicine 42:93—104 (2010). 12. P Bjerring, et al., J Cosnetic & Laser Ther 2003; 5: 7-13#, J Cosnetic & Laser Ther. 13. Adapted from: D. M. Wieliczka and S. Weng and M. R. Querry, "Wedge shaped cell for highly absorbent liquids: infrared optical constants of water," Appl. Opt., 28, 1714—1719, (1989). PUDI18 14EN-VAP, Rev. A

50%

less fluence demand

than broadband IPL12

