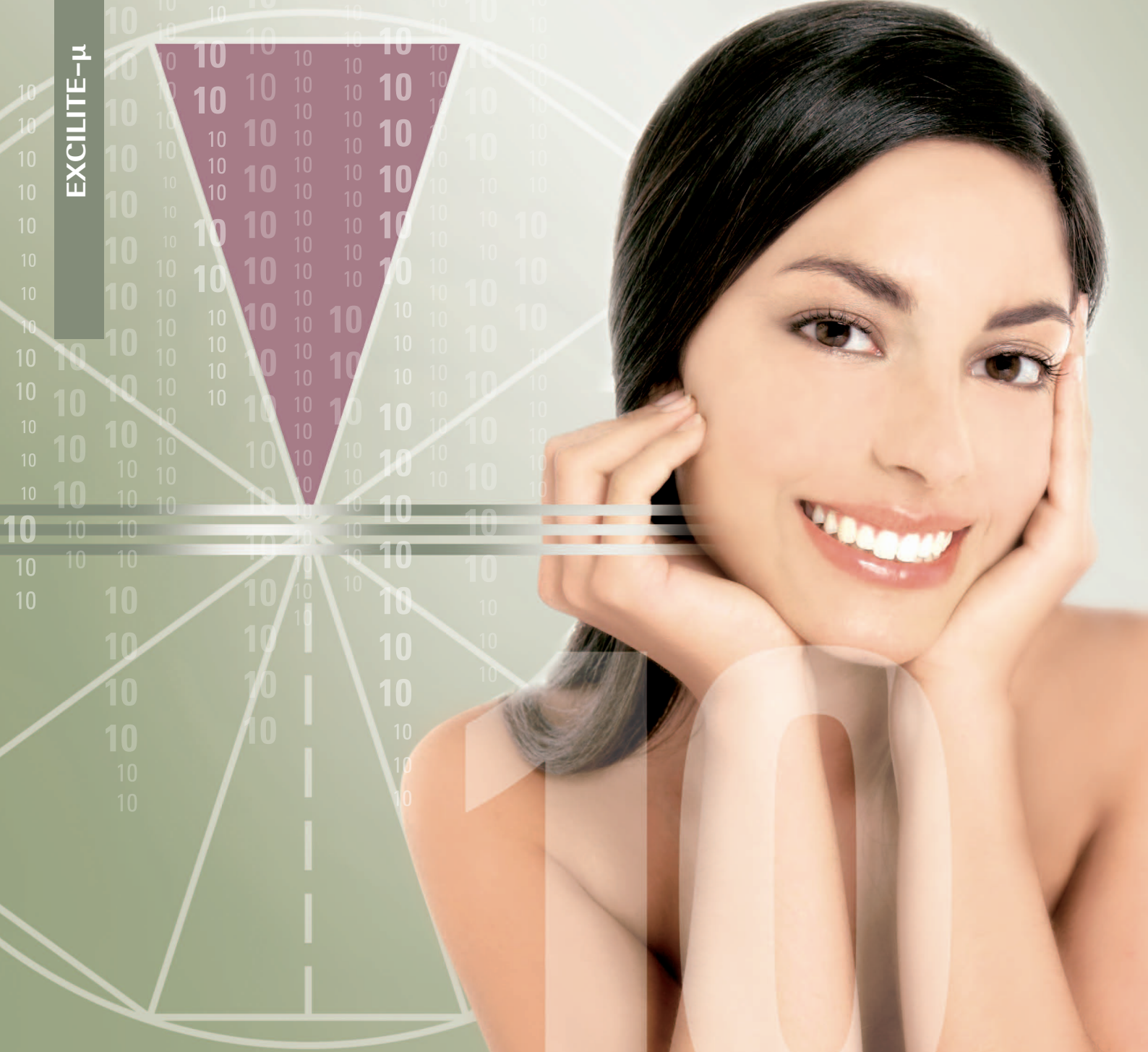


EXCILITE-μ



**MEDICINE AND AESTHETICS**

## **EXCILITE-μ**

**Vitiligo  
Psoriasis  
Atopic Dermatitis  
Alopecia Areata  
Mycosis Fungoides**

**Fast, Practical and Effective:  
a Complete System for Targeted  
and Selective Phototherapy**

**MEL@308 nm Source: the Advantages  
of Short and Effective Treatments**



The Code of Excellence

## EXCILITE-μ

**PROGRESSIVE ACTION TO COMBAT VITILIGO AND PSORIASIS:  
NO DRUGS, PAINLESS, RAPID.**

Vitiligo and psoriasis cause millions of people physical and psychological discomfort. Costly treatments which have to be repeated over time and serious side effects have dashed the hopes of many patients. Now the innovative Monochromatic Excimer Light (MEL@308 nm) of Excilite-μ offers a revolutionary way of treating vitiligo and psoriasis.

The introduction of the MEL@308 nm source for Targeted Phototherapy marks a decisive breakthrough on traditional treatments with NB UVB sources. This new technology, developed and launched on the market by DEKA, helps reduce undesirable side effects, especially in the long term.

*"Excilite-μ has proved to be extremely practical and versatile, and is now an indispensable device for outpatient dermatological treatment. This simple, innovative technology encourages daily use and all its functions can be easily and rapidly mastered. The monochromatic excimer source of Excilite-μ has unique features that guarantee real improvement and concrete results for my patients. I can now operate in a targeted and selective manner on various skin pathologies on small areas and larger surfaces with much shorter treatment times. From a practical point of view too, Excilite-μ is the ideal work instrument, compact and easy to move and carry. Maintenance is reduced to a minimum which makes a major contribution to an excellent cost-benefit ratio, an extremely important factor for physicians like me who are constantly treating psoriasis and vitiligo."*

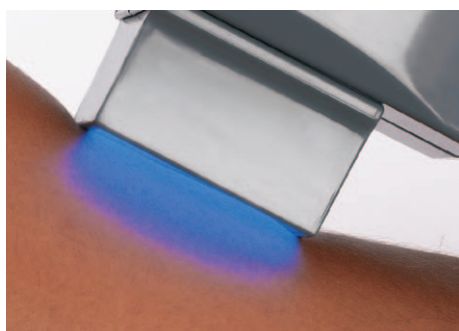
**Giovanni Leone, MD**

*Head of the Phototherapy Department  
Dermatological Institute San Gallicano IRCCS – Rome, Italy*

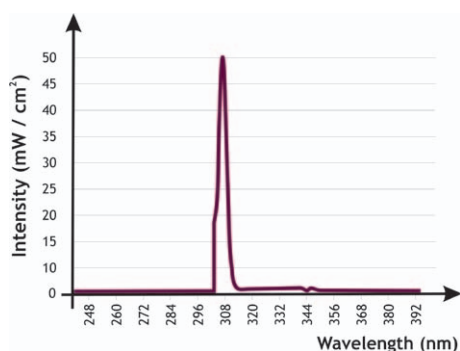
## MEDICINE AND AESTHETICS

# EXCILITE- $\mu$

### TARGETED PHOTOTHERAPY WITH EXCILITE- $\mu$ : REAL BENEFITS IN TREATING VITILIGO AND PSORIASIS



The special Excilite- $\mu$  handpiece means that even very large areas (up to 30 cm<sup>2</sup>) can be treated in a rapid and uniform manner.



The emission spectrum of the MEL@308 nm source illustrates the monochromaticity (308 nm) and high intensity (50 mW/cm<sup>2</sup>) of the emission.

**Vitiligo** and **psoriasis** are common disorders, affecting 2-3% of the world population. Studies on the quality of life confirm that they are among the most psychologically devastating diseases, with dramatic effects on the patient's social life. Excilite- $\mu$  is the ideal solution for restoring well-being in just a few sessions.

#### Targeted and Selective Phototherapy: Advantages for Patients and Physicians Alike

Excilite- $\mu$  offers a number of important advantages for treating vitiligo and psoriasis:

- Compared to NB UVB phototherapy it requires fewer sessions. Compared to laser, the sessions are shorter with Excilite- $\mu$ . Both benefits enhance the patient's quality of life without compromising social and work activities.
- The special handpiece makes it possible to select the shape and size of the irradiation area. Phototherapy is therefore *targeted* and treats only the lesions even when very small, without involving the healthy perilesional skin. Compared to NB UVB, this enables a drastic reduction in the cumulative dose administered to the patient.
- The wavelength (308 nm) *selectivity* also enables intervention on the more delicate areas, such as the face, minimising side effects such as erythema and burns.
- Unlike PUVA, Excilite- $\mu$  does not require the use of drugs. Successful clinical cases also demonstrate that the MEL@308 nm source of Excilite- $\mu$  is efficacious in treating patients who have previously undergone NB UVB phototherapy without satisfactory results.
- In the treatment of vitiligo, the re-pigmentation process is faster than with NB UVB. Moreover, partial re-pigmentation can also be achieved in areas where NB UVB usually fails, such as hands, elbows, and knees.

**2001**

DEKA invented the first MEL@308 nm system in the world for treating psoriasis.

**Over 5000**

The number of treatments performed using a single source in line with the protocols recommended by DEKA.

**30 cm<sup>2</sup>**

Excilite- $\mu$  acts with high intensity on large treatment areas.

**Over 40**

Scientific publications demonstrating DEKA's leadership and excellence.

## EXCILITE-μ: THE ADVANTAGES OF A COMPACT SYSTEM WITH EXCLUSIVE TECHNOLOGY



The Color Touch Screen makes it very easy to use: after the test to determine the MED (Minimum Erythema Dose) simply set the emission time in line with DEKA's treatment protocols.

Excilite-μ combines the advantages of advanced technology with a practical and functional design.

Like laser, Excilite-μ has a monochromatic emission with the same wavelength of 308 nm and high intensity (50 mW/cm<sup>2</sup>).

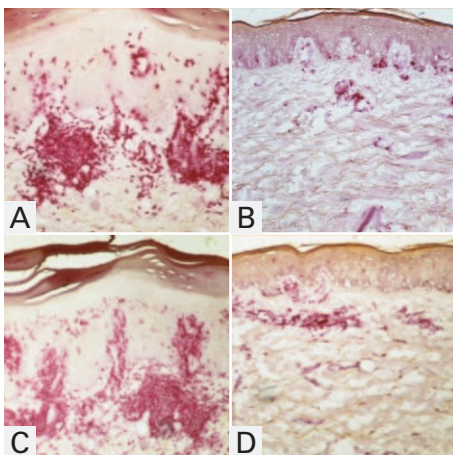
However, compared to excimer laser sources, Excilite-μ offers significant advantages:

- It can treat much larger areas (30 cm<sup>2</sup>) in a uniform manner, thanks to a larger handpiece. This means that treatment times can be significantly reduced.
- Thanks to the sealed source, the costly or complex maintenance operations required with traditional lasers are no longer necessary.

Its action is far more rapid and selective than any other type of traditional phototherapy, including NB UVB and PUVA treatments. In fact, while these may guarantee low costs, they are not as efficacious and offer no protection for the healthy skin.

*Targeted Phototherapy* with MEL@308 nm is revolutionary: Excilite-μ combines the advantages of laser phototherapy and broad-spectrum laser while eliminating their disadvantages.

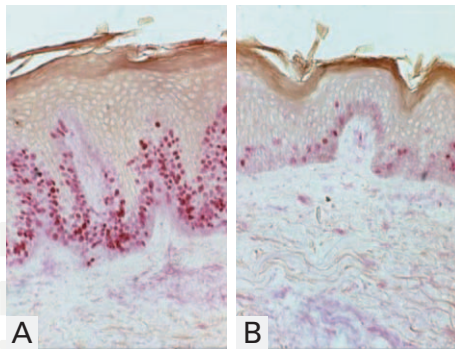
## STUDIES AND ANALYSES



Immunohistochemical analysis (cells CD3+ top; CD4+ bottom) of untreated psoriasis (A and C) and 48 hours after (B and D) a single treatment with MEL@308 nm. A significant reduction of the lymphocytary infiltrate can be observed.

Molecular biology and immunohistochemical studies\* have been conducted to verify the mechanisms underlying the healing of psoriatic lesions, validating the clinical results obtained. These studies have demonstrated how irradiation of the skin with MEL@308 nm causes a precocious reduction of the T lymphocytes of the infiltrate in 24 to 48 hours at both epidermal and dermal level, and after only one irradiation. This suggests that the light can penetrate the skin and directly affect the cellular infiltrate, a phenomenon that is further demonstrated by the drastic reduction in the expression of the inflammatory cytokines involved in the pathogenic mechanism of psoriasis.

\*: Bianchi B, Campolmi P, Mavilia L, Danesi A, Rossi R, Cappugi P. Monochromatic excimer light (308 nm): an immunohistochemical study of cutaneous T cells and apoptosis-related molecules in psoriasis. *JEADV*; 2003: 17:408-13.



The rapid modifications of the inflammatory infiltrate also involve several other molecules such as p53, mediator of the apoptotic process, the expression of which rapidly increases after treatment, while the antiapoptotic protein Bcl-2 shows a reduced expression. Ki-67, the protein that determines the cellular proliferation index which usually increases in the case of psoriasis (A), already shows a reduced expression 48 hours after a single treatment (B).

## EXCILITE-μ: A POLYVALENT TECHNOLOGY FOR TREATING SKIN PATHOLOGIES

Beyond the treatment of Psoriasis and Vitiligo, Excilite-μ has also proved to be an innovative and functional instrument in the treatment of other skin pathologies: studies and applications on Atopic Dermatitis, Alopecia Areata, Mycosis Fungoides and Palmoplantar Eczema have guaranteed extremely satisfactory results for physicians and researchers.



### Palmoplantar Psoriasis

Courtesy of: SP. Nisticò, MD - R. Saraceno, MD  
Prof. S. Chimenti, MD.  
Department of Dermatology. "Tor Vergata" University of Rome - Italy.



### Psoriasis Vulgaris

Courtesy of: P. Campolmi, MD - L. Mavilia, MD - R. Rossi, MD  
Prof. P. Cappugi, MD.  
Department of Dermatology. University of Florence - Italy.



### Vitiligo

Courtesy of G. Leone, MD.  
Phototherapy Department. Dermatological Institute San Gallicano  
IRCCS - Rome, Italy.



### Vitiligo

Courtesy of G. Leone, MD.  
Phototherapy Department. Dermatological Institute San Gallicano  
IRCCS - Rome, Italy.



### Atopic Dermatitis

Courtesy of: P. Campolmi, MD - L. Mavilia, MD - R. Rossi, MD  
Prof. P. Cappugi, MD.  
Department of Dermatology. University of Florence - Italy.

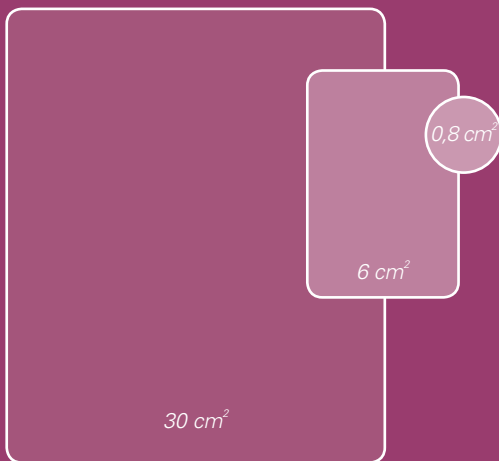


### Alopecia Areata

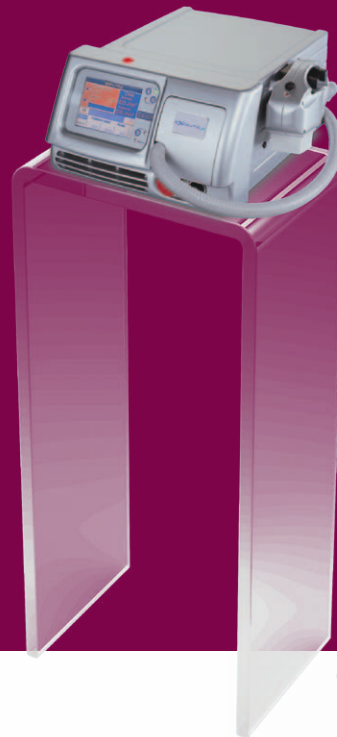
Courtesy of: F. Aubin, MD - C. Robert, MD - I. Cardon, MD  
P. Humbert, MD - Prof. R. Laurent, MD.  
Department of Dermatology. University Hospital of Besançon - France.

## TECHNICAL DATA

Type of Source	MEL@308, Excimer XeCl
Wavelength	308 nm
Power Density	50 mW / cm <sup>2</sup>
Emission	Continuous: 1-90 s
Treatment Surfaces	Rectangular: 30 cm <sup>2</sup> (5x6 cm) max. Rectangular: 6 cm <sup>2</sup> (2x3 cm) Circular: 0.8 cm <sup>2</sup> (ø 1 cm) min



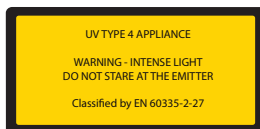
Control Panel	LCD Color Touch Screen
Electrical Requirements	230 Vac / 2.6 A (max.) / 50 - 60 Hz
Dimensions	24 cm (H) x 38 cm (W) x 50 cm (D)
Weight	19 Kg



VITILIGO - PSORIASIS - ATOPIC DERMATITIS  
ALOPECIA AREATA - MYCOSIS FUNGOIDES

EXCILITE μ

CE  
0459



The Code of Excellence

Dealer stamp



[www.dekalaser.com](http://www.dekalaser.com)

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**DEKA The Code of Excellence**  
A spin-off of the Ei.En. Group, DEKA is a world-class leader in the design and manufacture of lasers and light sources for applications in the medical field. DEKA markets its devices in more than 80 countries throughout an extensive network of international distributors as well as direct offices in Italy, France, Germany, Japan and USA. Excellence is the hallmark of DEKA's experience and recognition garnered in the sphere of R&D in over thirty years of activity. Quality, innovation and technological excellence place DEKA and its products in a unique and distinguished position in the global arena. DEKA manufactures laser devices in compliance with the specifications of Directive 93/42/EC and its quality assurance system, certified by  is in accordance with the ISO 9001 and ISO 13485 standards.