

**33<sup>rd</sup> EADV Congress. Amsterdam, 25<sup>th</sup>-28<sup>th</sup> September 2024**

Submission Deadline: April 24, 2024

Maximum length: 3,000 characters (without spaces) – currently: 2,310 characters

**Enhancement of sun-damaged skin qualities with tirbanibulin (SunDamage Study)****Authors:** Daisy Kopera<sup>1</sup>**Affiliations:** <sup>1</sup>Medical University Graz, Graz, Austria

**Introduction & Objectives:** Actinic keratosis (AK) is caused by photo damage, distinctly by ultraviolet (UV) radiation. Subclinical stages of AK are present in epidermal layers before becoming clinically visible. The objectives were to assess efficacy and safety of the treatment with tirbanibulin, and the quality of sun-damaged skin before, immediately after and 2 months after the treatment by standardized VISIA® photography.

**Materials & Methods:** “SunDamage” is an interventional, monocentric, national, single-arm, uncontrolled, open, prospective phase IV study. Adult patients diagnosed with sun-damaged skin on the face applied tirbanibulin every night for 5 consecutive days. Disease specific skin parameters (AK lesions, subclinical lesions, sun damage, local skin reactions [LSRs] and other changes of the skin, including those not clinically relevant) were assessed both according to clinical routine and by VISIA® UV imaging (Figure 1)<sup>1</sup> at baseline, Day 8 (±2) and Day 57 (±7). Safety was analyzed by means of adverse events (AEs). LSRs were recorded and graded separately.

**Results:** A total of 26 patients completed the study (average age: 68 years; female: 58%). All patients presented sun-damaged skin, but no visible AKs. At Day 7, VISIA® measurements of the erythematous skin revealed higher values of redness by 8% points and roughness of the skin of 7% points. Thus, representing the mild LSR to tirbanibulin unmasking very early stages of subclinical AK as a symptom of sun damage (Figure 2). At Day 57, VISIA® measurements revealed improvement in all qualities of the skin in measured percentage points: spots: + 1.8, UV-damage +4.0, brown pigmentation +3.2, redness +2.8, wrinkles +2.6, evenness +4.5, coarse pores +1.3, porphyrins +2.7, revealing enhancement of sun-damaged-skin qualities. All patients developed mild erythema after application of tirbanibulin being visible on Day 7. At Day 57 there was no visible erythema. No safety concerns were observed.

**Conclusions:** These results confirm tirbanibulin to be effective, safe, and well tolerated in adult patients with facial sun damage. Moreover, tirbanibulin showed enhancement of 8 skin qualities measured by the VISIA system: spots, UV-damage, brown pigmentation, redness, wrinkles, evenness, coarse pores, and porphyrins. VISIA® can contribute to the characterization of sun damage severity and the monitoring of tirbanibulin treatment.

<sup>1</sup>Canfield Scientific. VISIA: Redefining the Vision of Skin Care 2022. Available at: <https://www.canfieldsci.com/imaging-systems/visia-complexion-analysis/> Accessed January, 2024.

Figure 1 Description of VISIA® system

**33<sup>rd</sup> EADV Congress. Amsterdam, 25<sup>th</sup>-28<sup>th</sup> September 2024**

Submission Deadline: April 24, 2024

Maximum length: 3,000 characters (without spaces) – currently: 2,310 characters

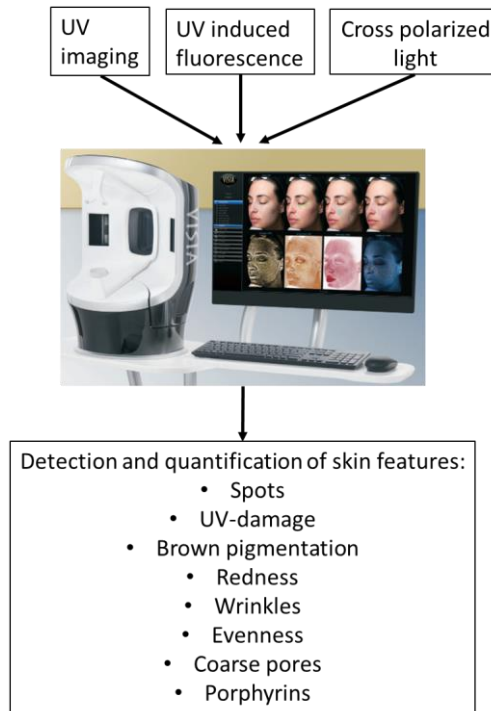
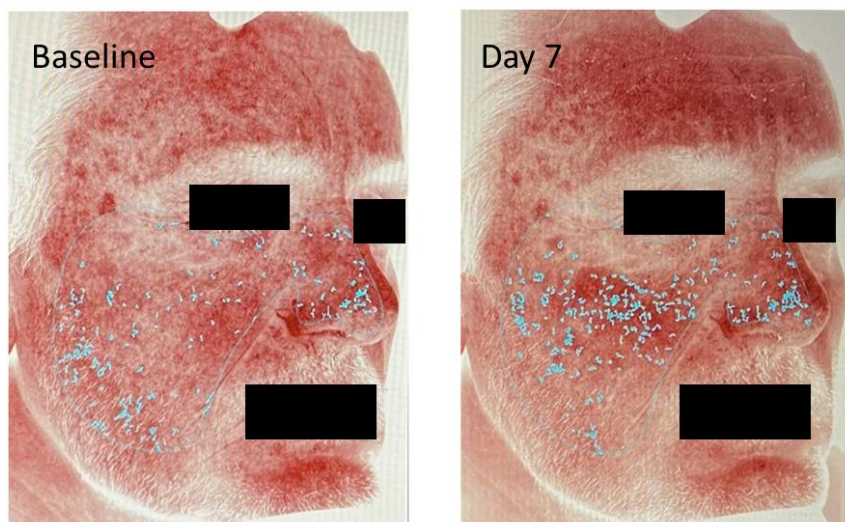


Figure 2 VISIA® measurements of erythema at baseline and at Day 7



**33<sup>rd</sup> EADV Congress. Amsterdam, 25<sup>th</sup>-28<sup>th</sup> September 2024**  
Submission Deadline: April 24, 2024  
Maximum length: 3,000 characters (without spaces) – currently: 2,310 characters

**Acknowledgements:** This study was funded by Almirall SA.

**Conflict of interests:** The author has no conflicts of interests to declare.

**Section:** Topical and systemic therapy

**Kind of presentation:** ePoster presentation only, oral presentation only, or indifferent.

- Kommentiert [IM1]: The Tirbanibulin abstracts were sent to EADV2023 choosing this section. Please confirm if you agree.
- Kommentiert [DK2R1]: Ok with me
- Kommentiert [IM3]: Please indicate what kind of presentation do you prefer.
- Kommentiert [DK4R3]: I prefer oral (in order to trigger some discussion)