

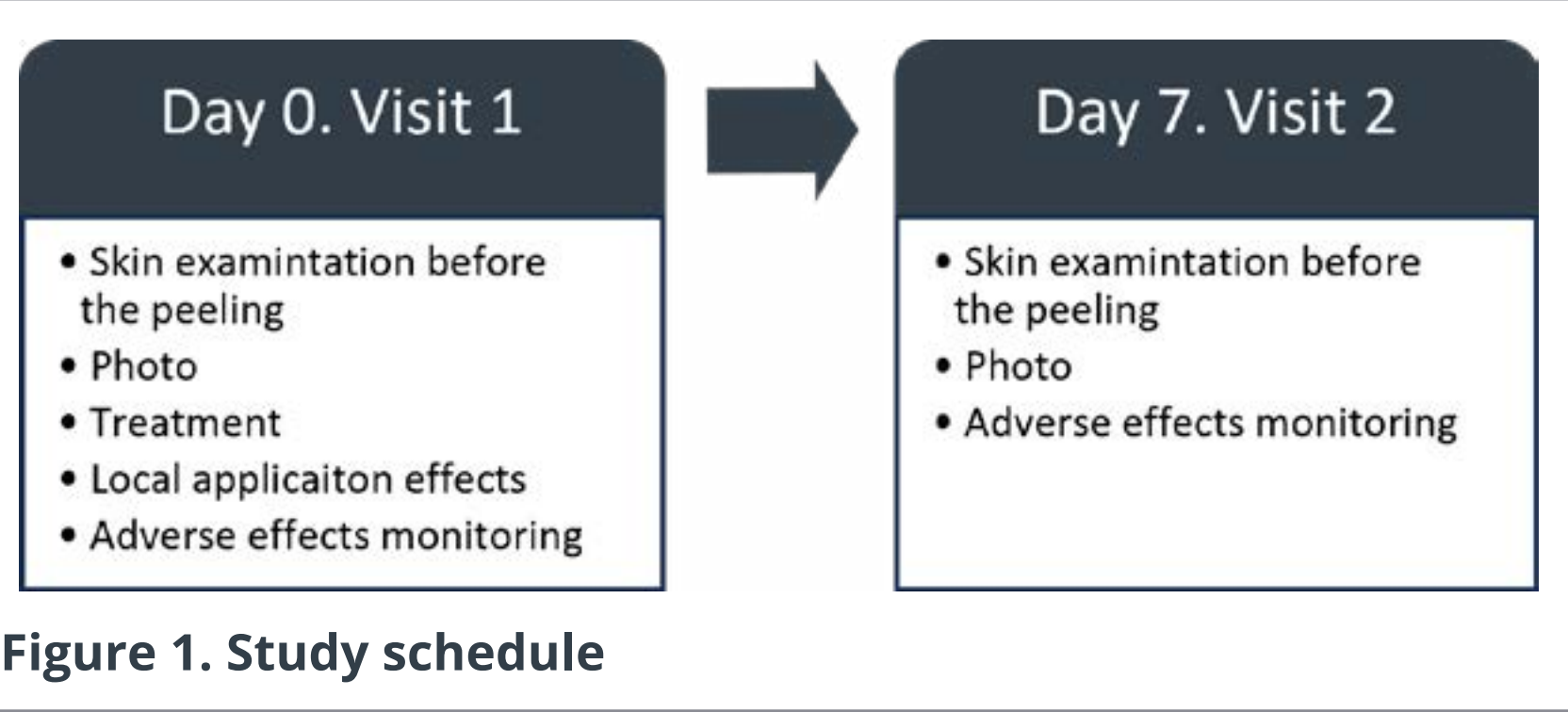
Trichloroacetic acid based chemical peeling treatment of Fitzpatrick IV-VI skin phototypes: specifics and outcomes

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BACKGROUND
Approximately 25% of the global population have Fitzpatrick IV-VI skin phototypes⁽¹⁾, characterised by increased amount of melanin content in the epidermis due to structural differences of melanosomes comparing with low skin phototypes. There are important considerations to take when performing chemical peels for medical and aesthetic indications on individuals with high phototypes.

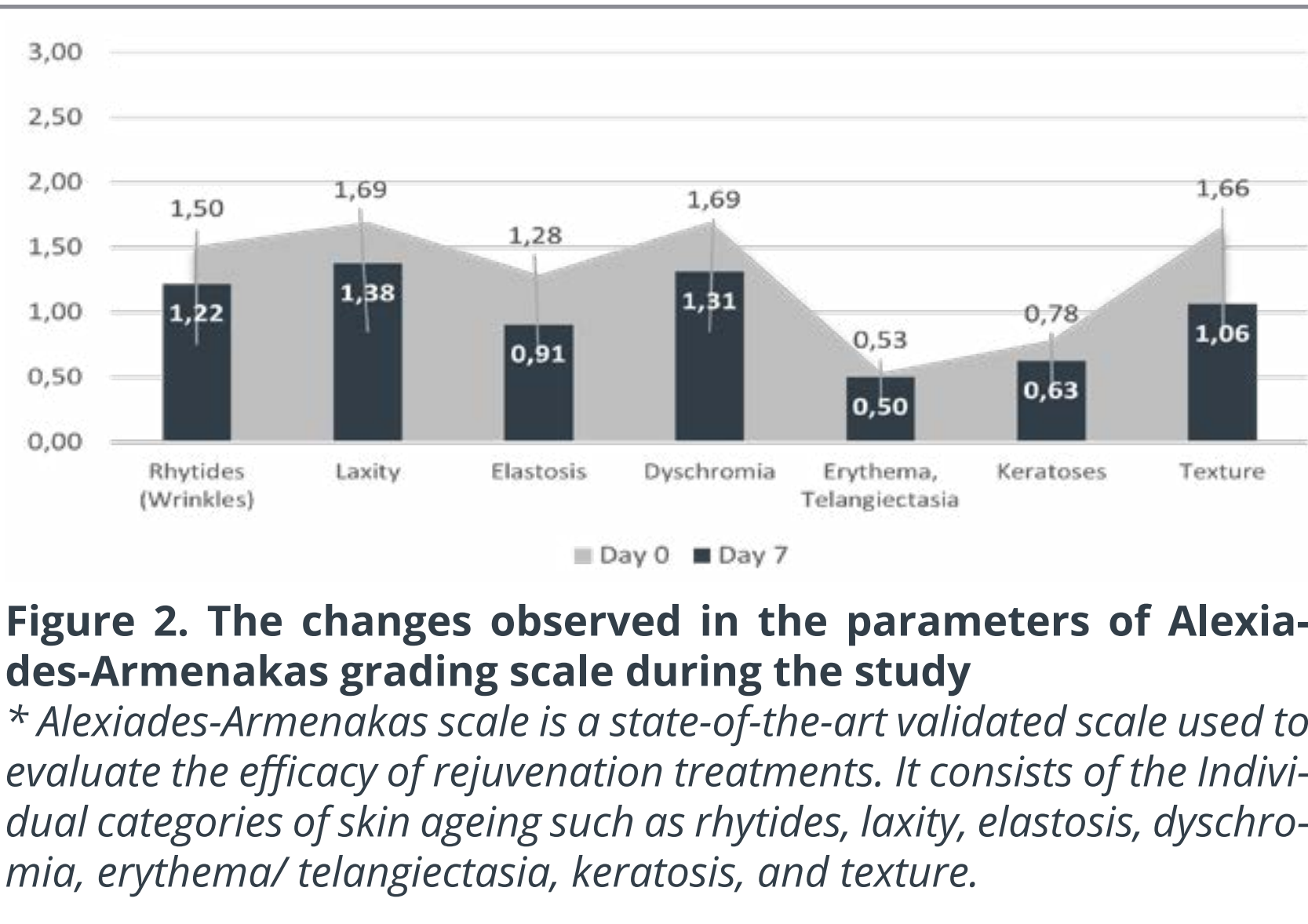
OBJECTIVE
Targeted evaluation of the efficacy and safety profile of the Trichloroacetic acid-based chemical peeling - Skin Tech® Easy TCA® (CE-marked Medical Device Class IIa containing 15% TCA in Base Solution, Ex-tempora mixture) in patients with facial skin photoaging, pigmentation disorders and high skin phototypes was conducted in UK and South Africa. The study was part of the post-market surveillance of the product.

METHOD
Multicenter, open, single-arm, before-after study was performed in July-November 2023 in 3 study centers in United Kingdom and South Africa. Patients received a single full-face treatment with 15% TCA-based chemical peeling - Skin Tech® Easy TCA® - according to the Instructions for Use. The solution was applied in 2-3 coats to reach the peelings depth 3-4 according to Deprez's classification⁽²⁾. Sun avoidance during the study was strictly recommended. Skin photoaging clinical signs were tracked before (Day0) and after the treatment (Day7) using validated Alexiades-Armenakas scale⁽³⁾. The assessment of overall treatment outcomes utilised the Global Aesthetic Improvement Scale⁽⁴⁾ (GAIS) for both patients and physicians, and Quartile Improvement Scale for pigmentation⁽⁵⁾ (QIS) as assessed by physicians.



RESULTS
Patients (n=16; 75% women, 25% men; aged 36-55 years; Fitzpatrick skin phototype III till VI) presenting photoaging of predominantly mild grade showed improvement in wrinkles, skin laxity, elastosis, dyschromia, erythema, telangiectasia, keratoses and texture.
The photoaging grade demonstrated an average improvement of 23% compared to baseline measurements, achieving a 100% success rate.

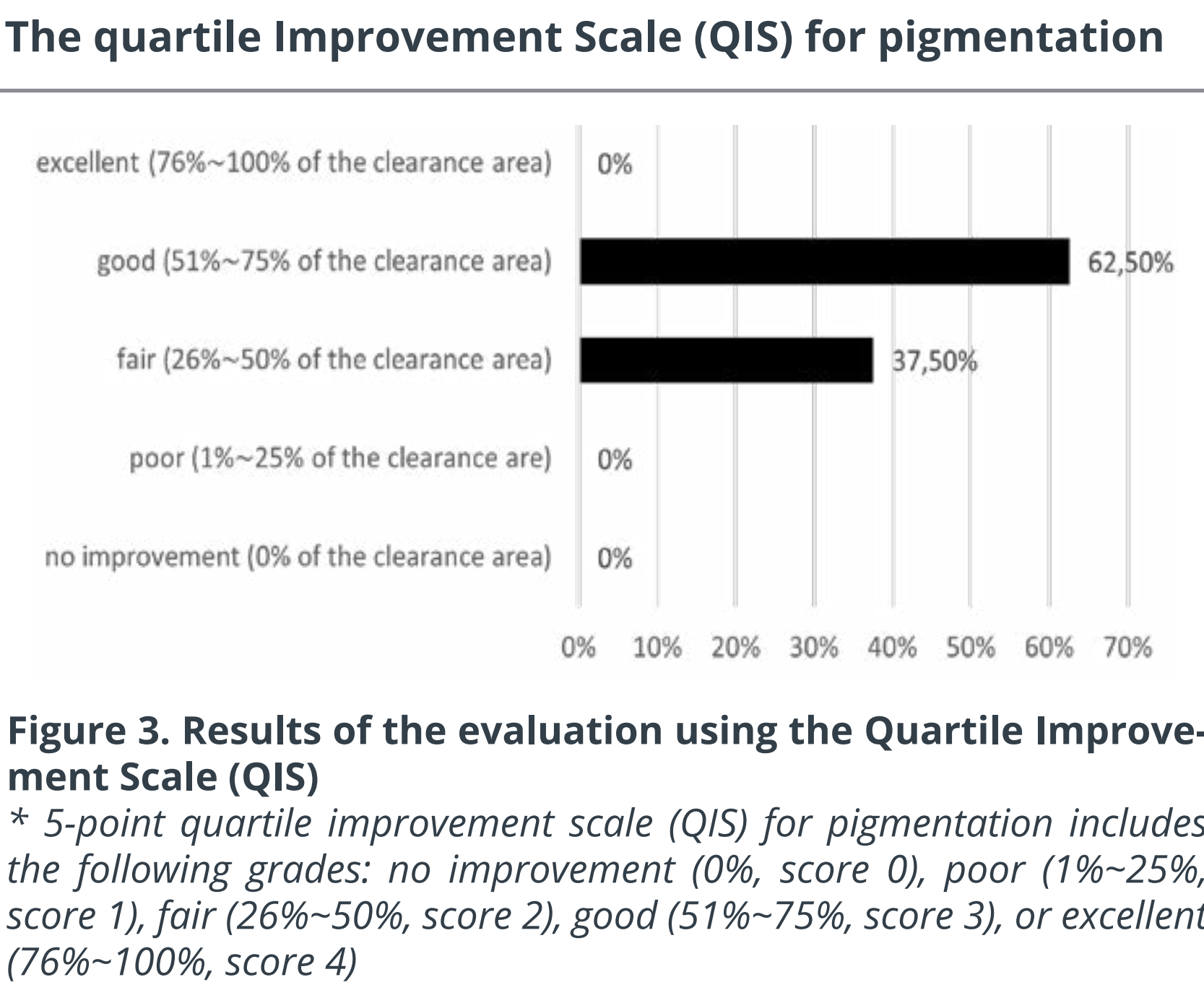
Alexiades-Armenakas grading scale evaluation
The overall improvement according to the grading scale was measured as the reduction in the degree of photoaging for 23% with a 100% success rate.



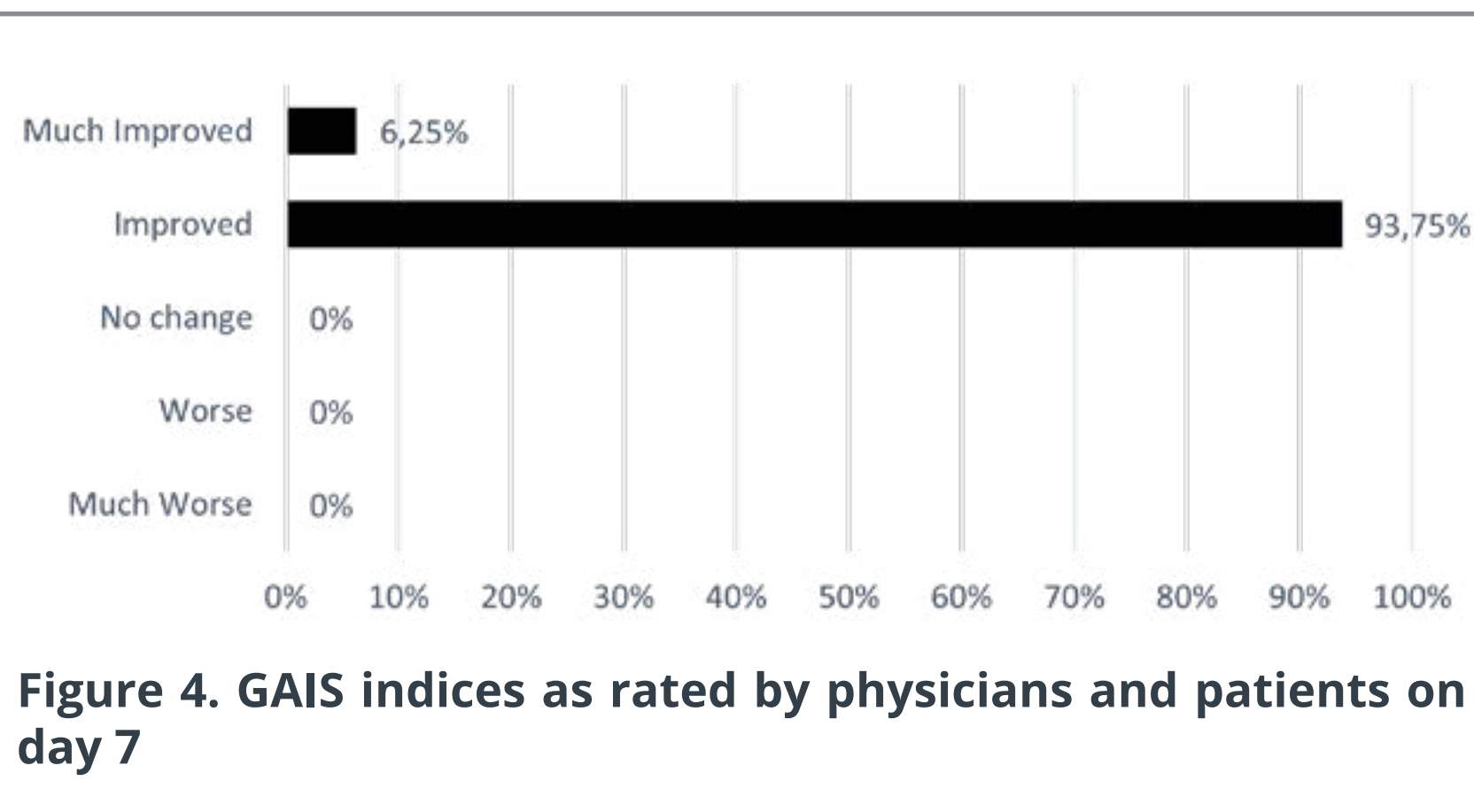
	D0	D7
Average	1.30	1.00
% of variation absolute respect to D0	-	-23%
% of subjects with improvement	-	100%

Table 1. Evaluation of photoaging by Alexiades- Armenakas grading scale

Uneven skin tone and lentigines were observed in 81% of the treated patients before the peeling application. In the QIS for pigmentation assessment, 62.5% of patients exhibited a clearance area ranging from 51-75% (good improvement), while 37.5% demonstrated a clearance area of 26-50% (fair improvement).



Global Aesthetic Improvement Scale (GAIS) evaluation
According to the GAIS evaluation, physicians observed 94% of patients as improved and 6% as much improved, aligning with patients' self-reported opinions of 37% improvement and 33% much improvement.



Predictable events (tolerable burning sensation during the treatment, pain and itching during application, short-term erythema) were observed and recorded as mild and moderate. No serious adverse events were observed.

CONCLUSIONS
Use of the 15% TCA-based chemical peeling - Skin Tech® Easy TCA® - in patients with skin photoaging and high phototypes provides desired results maintaining advanced safety and high efficacy.
Minimization of potential risks is achieved through choosing the right peel's depths, proper application strictly following instructions for use, and professional supervision of the patient before and after the treatment.

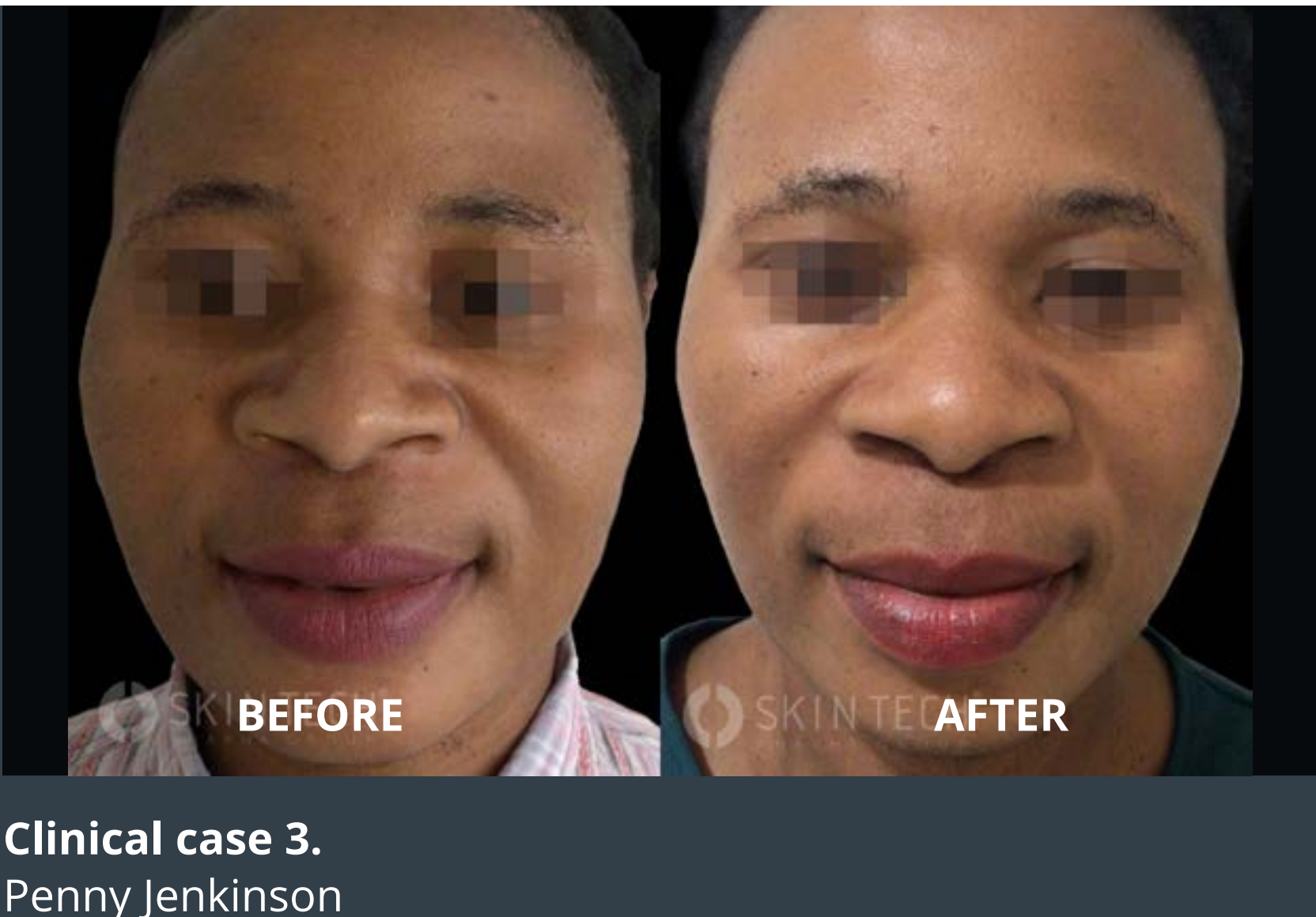
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Clinical case 1.
Dr. Javed Hussain



Clinical case 2.
Dr. Javed Hussain



Clinical case 3.
Penny Jenkinson