

Long-term Follow Up of ALA 10% Gel and Red-Light Photodynamic Therapy for the Treatment of Squamous Cell Carcinoma In Situ

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Synopsis

We have previously demonstrated that aminolevulinic acid (ALA) 10% gel with red-light PDT is safe and effective for the treatment of squamous cell carcinoma in situ (SCCis) of the trunk and extremities.¹ We performed a follow-up study in which nine of the original twelve patients in our pilot study returned 29 – 40 months after their last PDT treatment. All patients were clinically clear of disease and only one of seven patients biopsied had residual disease. Our data supports that 10% ALA gel with red-light PDT can achieve long-term clinical and histopathologic disease clearance and is a viable alternative to surgery for select SCCis.

Objective

To determine the long-term efficacy of ALA 10% gel with red-light PDT for the treatment of SCCis of the trunk and extremities in immuno-competent patients.

Methods

- Nine out of the original twelve patients in the pilot study returned for evaluation at least one year after their last PDT treatment
- Clinical assessment and possible punch biopsy were performed to evaluate clinical and histopathologic recurrence of SCCis
- Cosmetic outcomes (rated 1-4) per the patient and investigator as well as patient satisfaction with PDT treatment were evaluated

Results

- All patients were clinically clear of disease
- Seven of the eight patients* who underwent a biopsy were clear of disease, indicating a long-term clearance rate of 88%
- Lesions that recurred were initially > 2 cm
- Cosmetic assessment evaluated by the patient was congruent with that of the investigator, which was good to excellent
- Seven out of nine patients were satisfied with PDT

* one of the patients that declined biopsy had a previous negative biopsy performed 6 months after last PDT

Conclusion

ALA 10% gel with red-light PDT is effective to treat and induce long-term remission of SCCis of the trunk and extremities.

Patient	Age (yr)	Sex	Follow-up time (mo)	Lesion Location	Clinically Clear?	Biopsy Results	Cosmetic Assessment (Investigator and Subject)	Patient Satisfaction
1	69	M	40	Left Distal Medial Shin	Yes	DERMAL SCAR	3	Yes
2	89	F	38	Left Elbow	Yes	DERMAL SCAR	3	Yes
3	80	M	38	Mid Back	Yes	DERMAL SCAR	4	Yes
4	71	M	40	Right Forearm	Yes	DERMAL SCAR	3	Yes
5	79	F	39	Left Distal Shin	Yes	N/A	3	Yes
6	70	F	36	Right Knee	Yes	Residual SCCis	4	Yes
7	71	M	29	Left Dorsal Wrist	Yes	DERMAL SCAR	4	Yes
8	64	M	29	Left Superior Lateral	Yes	N/A	3	No
9	91	M	31	Left Antecubital	Yes	DERMAL SCAR	3	No