**INTRODUCTION**

In patients with moderate to severe photodamage, the hydroquinone/tretinoin system offers multiple significant clinical benefits compared with standard skin care; however, the role of the cleanser, toner, and exfoliant in this system is not well defined. Together, the cleanser, toner, and exfoliant may help improve the permeability of the stratum corneum, and a sunscreen (to protect against further photodamage). In order to optimize clinical outcomes and patient satisfaction, it is important to understand the role of each component in the system. The purpose of this study was to evaluate the efficacy and tolerability of the hydroquinone/tretinoin system with and without the use of these additional components.

**METHODS**

**Study design**

- Multicenter, investigator-masked, parallel-group design.
- Skin care system
- Standard skin care system (SSCS) includes cleanser, toner, and exfoliant.
- Hydroquinone/tretinoin system (HQT) includes cleanser, toner, exfoliant, hydroquinone, and tretinoin.

**Skin care regimen**

- Standard skin care
- Hydroquinone/tretinoin

**Adverse events**

- Erythema
- Peeling
- Burning

**Efficacy - investigator assessments**

- Improvement in facial laxity was evaluated using a 5-point scale: none, mild, moderate, severe, and extreme.
- Improvement in hyperpigmentation and fine lines/wrinkles was evaluated using a 3-point scale: none, mild, and moderate.

**Efficacy - patient assessments**

- Patient evaluation of facial appearance compared to age.
- Notice of positive change in facial appearance by peers.
- Considered their study treatment further enhanced facial appearance after their latest treatment.
- Considered their facial appearance improved compared to age.
- Mean scores for hyperpigmentation and fine lines/wrinkles were significantly lower with the hydroquinone/tretinoin treatment than with standard skin care as early as day 30 and persisted to day 120.

**RESULTS**

- Between-group differences in mean laxity scores did not persist to day 120.
- Between-group differences in mean scores for hyperpigmentation and fine lines/wrinkles persisted to day 120.
- The hydroquinone/tretinoin system offers greater patient satisfaction and a high proportion of patients in the hydroquinone/tretinoin group who:
  - Considered their study treatment further enhanced facial appearance after their latest treatment.
  - Considered their facial appearance improved compared to age.

**DISCUSSION**

The hydroquinone/tretinoin system offers greater patient satisfaction and a high proportion of patients in the hydroquinone/tretinoin group who:

- Considered their study treatment further enhanced facial appearance after their latest treatment.
- Considered their facial appearance improved compared to age.

**CONCLUSIONS**

- The hydroquinone/tretinoin system offers greater patient satisfaction and a high proportion of patients in the hydroquinone/tretinoin group who:
  - Considered their study treatment further enhanced facial appearance after their latest treatment.
  - Considered their facial appearance improved compared to age.