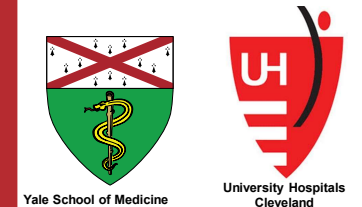




Response to Extracorporeal Photopheresis in Patients with Cutaneous T-cell Lymphoma: A Retrospective Medical Chart Review

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INTRODUCTION

- Extracorporeal photopheresis (ECP) is an immunomodulatory therapy that has been used in the treatment of cutaneous T-cell lymphoma (CTCL) for over 30 years.^{1,2}
- Clinical trials of newer agents for the treatment of CTCL have shown overall response rates of approximately 30% in heterogeneous patient populations.³⁻⁴

AIM

- The objective of this study was to assess the effectiveness of ECP in the treatment of CTCL patients in real-world clinical practice.

METHODS

Study Design

- This was a retrospective, observational study using medical chart data extracted by physician investigators at 5 clinical sites in the United States.
- Data from CTCL diagnosis to 18 months post-initiation of ECP were uploaded to an electronic case report form.
- The study was granted a waiver for ethics review by the WCG Institutional Review Board (IRB), and when required, by the local IRB at each site.

Study Patients

- Patients with a confirmed diagnosis of CTCL who initiated ECP between January 1, 2017, and February 28, 2019
- Patients must have initiated ECP at age ≥ 18 years with no ECP treatment received within the year prior to data collection
- Received at least 3 months of ECP treatment, and have response data available in the patient chart

METHODS (CONTINUED)

Study Outcomes

- Body surface area (BSA) affected
- Appearance of new skin lesions
- Physician-rated Clinical Global Impression-Improvement (CGI-I) scores
- Overall response to ECP was defined as $>50\%$ reduction in BSA affected at any point during the follow-up period, consisting of the time from ECP initiation through the time of data collection.⁵

Statistical Analysis

- Summary statistics were used to describe patient characteristics and clinical outcomes.

RESULTS

Patient Characteristics (Table 1)

- A total of 52 patients diagnosed with CTCL and initiating ECP were included.
- Half of the study patients were female; median age at ECP initiation was 69 years; most (84.6%) were Caucasian and 53.8% had Medicare coverage.
- Most patients were diagnosed with Sézary syndrome (50%) or mycosis fungoides (36.5%).
- Median BSA involvement with plaques/patches at diagnosis was 77.5%.

Clinical Outcomes

- Overall response rate was (36.5%) (Table 2).
- Median time to response was 6.5 months.
- Among those with available data, the percentage of patients rated as improved (minimally, much, or very much) on the CGI-I improved from 52.9% at 3 months to 80% at 18 months (Figure 1).

RESULTS (CONTINUED)

Table 1. Patient Demographics and Clinical Characteristics

	N = 52 n (%)
Male, N (%)	26 (50.0%)
Current age (years), mean (SD)	69.35 (13.88)
Race, N (%)	
White/Caucasian	44 (84.6%)
Black/African	7 (13.5%)
Unknown/Not documented	1 (1.9%)
Body mass index, mean (SD)	28.2 (6.1)
Charlson comorbidity index, N (%)	
0	41 (78.8%)
≥ 1	11 (21.2%)
Disease stage at diagnosis, N (%)	
IA	3 (5.8%)
IB	11 (21.2%)
IIA	2 (3.8%)
IIB	2 (3.8%)
III	8 (15.4%)
IVA	16 (30.8%)
IVB	5 (9.6%)
Unknown	5 (9.6%)
Subtype, N (%)	
Sézary syndrome	26 (50.0%)
Mycosis fungoides	19 (36.5%)
Other	7 (13.5%)
Lymph node involvement at diagnosis, N (%)	17 (32.7%)
Extent of body surface area covered with plaque/patches at diagnosis (%), median (Q1-Q3)	77.5 (25.0 to 90.0)

Q1, first quartile; Q3, third quartile SD, standard deviation

Table 2. Response Characteristics

	N = 52 n (%)
At least 50% reduction in BSA affected, N (%)	19 (36.5%)
Time to response (months), median (Q1-Q3)	6.5 (2.9 to 9.6)
Appearance of new skin lesions, N (%)	13 (25.0%)
Time to appearance of new skin lesions (months), median (Q1-Q3)	5.9 (3.6 to 10.1)

BSA, body surface area; Q1, first quartile; Q3, third quartile

RESULTS (CONTINUED)

Figure 1. Proportion of Patients with Improvement in CGI-I Score



CONCLUSIONS

- This retrospective observational study describes patient characteristics and clinical outcomes among CTCL-diagnosed patients initiating therapy with ECP.
- Despite the population treated with ECP in real-world practice being older and having more advanced-stage disease compared to recent clinical trials, overall response rate was comparable.³⁻⁴

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