

STATISTICAL ANALYSIS PLAN

FOR STUDY REPORTS AND INTERIM REPORTS FOR US-BASED,  
OBSERVATIONAL, DRUG REGISTRY OF VALCHLOR  
(MECHLORETHAMINE)

HELSINN THERAPEUTICS (US), INC.

**Valchlor PROVe: A PROspective, observational, US-based study assessing outcomes, adverse events, treatment patterns, and quality of life in patients diagnosed with mycosis fungoides cutaneous T-cell lymphoma and treated with Valchlor®**

**Protocol AC-079A501**

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This study was performed in compliance with Good Clinical Practice.

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# Statistical Analysis Plan Valchlor PROVe

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## AUTHORS SIGNATURES

### RESPONSIBLE STUDY PERSONNEL:

NAME (TITLE)	DATE	SIGNATURE
David Mink, Author/Study Biostatistician	<u>Dec 2, 2019</u>	<u>David Mink</u>
Michael Williams, Author/Study Programmer	<u>Dec 4, 2019</u>	<u>Michael Williams</u>
James T Angello Reviewer/Clinical Study Leader	<u>4-Dec-2019</u>	<u>James T Angello</u>

## LIST OF ABBREVIATIONS

Abbreviation	Description of abbreviations
AE	Adverse Event
BSA	Body Surface Area
CAILS	Composite Assessment of Index Lesion Severity
Cm	Centimeters
D/C	Discontinuation
eCRF	Electronic Case Report Form
EDC	Electronic Data Capture
EOS	End of Study
ER	Emergency Room
HCU	Health Care Utilization
ID	Identification
Kg	Kilograms
MedDRA	Medical Dictionary for Regulatory Activities
MF-CTCL	Mycosis fungoides cutaneous T-cell lymphoma
mSWAT	Modified Severity Weighted Assessment Tool
PGA	Physician's Global Assessment
ORR2	Overall Response Rate for at least 2 Consecutive Visits
ORR4	Overall Response Rate for at least 4 Consecutive Visits
PRO	Patient Reported Outcome
PROVe	<u>PRO</u> spective, observational, US-based study assessing outcomes, adverse events, treatment patterns, and quality of life in patients diagnosed with mycosis fungoides cutaneous T-cell lymphoma and treated with <u>Valchlor</u> ®
QOL	Quality of Life
SAE	Serious Adverse Event
SD	Standard Deviation
TNMB	Tumor Node Metastasis Blood
TTNT	Time to Next Treatment
VAS	Visual Analogue Scale

## INTRODUCTION

Prospective data on Valchlor are currently only available from the pivotal, randomized, controlled clinical trial with strict inclusion and exclusion criteria. Understanding real-world patient safety and tolerability, as well as compliance and discontinuation rates, will assist with the future management of Valchlor-treated MF-CTCL patients. PROVe will build on the data from the Valchlor clinical development program, increase the understanding of the use of Valchlor in patients with MF-CTCL and, while limited to patients treated with Valchlor, will represent the largest prospective study with any given MF-CTCL treatment.

This large, non-interventional observational study will provide information on how doctors use and prescribe Valchlor for their patients. It will increase understanding about MF-CTCL, including how it gets better or worse over time. Patients with MF-CTCL who are treated with Valchlor will be characterized (clinical characteristics, treatment patterns, outcomes, clinical status and healthcare utilization [MF-CTCL-related hospitalizations and emergency room visits]), and adverse events (AEs) will be collected. Additionally, a better understanding of the disease burden of MF-CTCL will be gained by collecting patient-completed symptoms and quality of life (QOL) questionnaires.

Additional study details can be found in the study protocol (AC-079A501).

## ANALYSIS OBJECTIVES

The objectives of the MF-CTCL prospective cohort study are:

- To describe clinical characteristics of patients treated with Valchlor at enrollment and during the 2 year study observation period.
- To describe treatment and response assessment patterns of patients with MF-CTCL treated with Valchlor at enrollment and during the study observation period.
- To assess outcomes (e.g., clinical status and rates of healthcare utilization [MF-CTCL-related hospitalizations and emergency room visits]) in patients with MF-CTCL treated with Valchlor during the study observation period.
- To collect and describe the incidence of AEs/SAEs in patients with MF-CTCL treated with Valchlor:
  - To estimate the incidence of dermatitis in patients using Valchlor during the study observation period.
  - To describe the management of dermatitis in patients using Valchlor at enrollment and during the study observation period.
- To collect patient-completed symptoms and QOL questionnaires.

## ANALYSIS POPULATIONS

This study will enroll approximately 300 MF-CTCL patients who are being treated (newly initiated or continuing treatment) with Valchlor from up to 50 participating university-affiliated hospitals, community hospitals, or community clinics in the United States.

Patients considered 'being treated with Valchlor' are composed of two distinct groups:

- 1) Patients who are newly initiating Valchlor treatment (i.e. patients who have initiated Valchlor within 30 days or fewer prior to enrollment) and,
- 2) Patients who are continuing treatment with Valchlor (i.e. patients who have been on Valchlor for more than 30 days prior to enrollment).

Patients in either group must be treated with Valchlor at enrollment to be eligible for the study.

All consecutive MF-CTCL patients who are receiving Valchlor at participating US centers are eligible for enrollment in the study, regardless of other MF-CTCL therapies received before or at the time of enrollment.

The primary efficacy endpoint will be the proportion of subjects who are responders to treatment at the 12-month timepoint using a  $\geq 50\%$  reduction from baseline in BSA as the definition of a responder in the group of patients who used mechlorethamine plus corticosteroids and possibly another treatment. Since PROVe did not require a specific visit schedule, the primary 12-month analysis will include patients with a post-baseline % BSA score that falls within a window of  $365 \pm 90$  days. Please note that in this observational trial, patients continued on study even if they permanently discontinued mechlorethamine gel for any reason and switched to new therapy. Given this, such patients (15-20%) will be excluded from the analysis at 12 months. A sensitivity analysis will be conducted for the primary analysis using the full dataset. We will compare this to the subset of patients who discontinued mechlorethamine gel (Table 21a).

The by-time analyses for each visit will provide supportive clinical and statistical mechlorethamine response data over the whole treatment period, before and after the 12 month results. Patient visits were variable throughout the study and no defined patient visits were required in PROVe. Given this construct, the By-Visit analyses of % BSA data, Pruritis VAS, Skin-Dex 29, and the MF/SS CTCL QOL instrument will be constructed from the respective change from baseline that occurred closest to each of the following timepoints 1, 3, 6, 9, 12, 15, 18, 21 and 24 months, and will include data that falls within  $\pm 45$  days of each designated timepoint.

Other secondary endpoints include:

- Overall Response Rate 2 (ORR2) Percent of patients with  $\geq 50\%$  reduction from baseline in % Body Surface Area of disease for at least two consecutive visits.
- Overall Response Rate 4 (ORR4) Percent of patients with  $\geq 50\%$  reduction from baseline in % Body Surface Area of disease for at least four consecutive visits.
- Time to Next Treatment (TTNT). TTNT is defined as the median number of days an individual patient stayed on a treatment before starting a new treatment or adding on an additional treatment.
- Rates of on Study Hospitalization
- Pruritis VAS
- SkinDex-29

- MF/SS CTCL – QOL Instrument

For each endpoint, separate analyses will be done for patients contributing data with IA and IB staging, all staged patients, and all patients regardless of staging. As PROVe is an observational study, an Intent-to-Treat (ITT) population analysis is not applicable. There are no cases where an intention to treat was prevented and therefore no potential for a selection bias in the analyses prespecified in this SAP. This results in a total of 51 analysis types as shown in the Figure 1 below.

Figure 1: Analysis Populations for the PROVe Study

	Patients Contributing Data			Totals:
	IA and IB Staging	All Staged	All Patients with and without Staging	
Primary Endpoint	1	1	1	3
9 By-Time Analyses	9	9	9	27
7 Other Secondary Endpoints	7	7	7	21
			Overall Total:	51

These analyses will be applied to following four (4) analysis populations:

1. Valchlor + corticosteroids + possibly another treatment (primary) (V+C+other)
2. Valchlor + phototherapy + possibly another treatment (V+P+other)
3. Valchlor + oral bexarotene + possibly another treatment (V+B+other)
4. Valchlor + any other treatment (V+other)

A minimum sample size threshold of N=20 subjects will be required to conduct a statistical analysis. This minimum is set to ensure that the effect size measurements for the various endpoints (typically using a within treatment change from baseline approach) are reasonable estimates of the true population values. Prior prospective publications that evaluated mechlorethamine clinical response have had similar sample sizes (Liner K. [Drug Des Devel Ther.](#) 2018 Jan 31;12:241-254). With this analysis filter in place the total number of analyses will be determined after the available sample size for each analysis is established. Summary statistics will be provided for endpoints with sample sizes that range from 10 to 19 patients, and no endpoint values will be provided for endpoints with sample sizes with less than 10 patients with the exception of sub-groups for the by-time analysis.

The primary data set from the pre-analysis sample size assessment was selected as patients who used mechlorethamine plus corticosteroids plus possibly another treatment. For all potential endpoints, there were not adequate numbers of mechlorethamine monotherapy treaters that exceeded the N=20 minimum sample size. The following analysis populations will be applied to the primary and secondary endpoints in the study:

1. Valchlor + corticosteroids + possibly another treatment (primary) (V+C+other)
2. Valchlor + phototherapy + possibly another treatment (V+P+other)
3. Valchlor + oral bexarotene + possibly another treatment (V+B+other)
4. Valchlor + any other treatment (V+other)

These groups were selected prior to conducting any analysis on the basis that there were at least 30 patients who received the concomitant MF-CTCL therapy in combination with Valchlor.

Based on discussions with the principle investigator the section II. and III. analyses will be excluded. The difference between continuing and new mechlorethamine users is on average only 3 months, so the new versus continuing comparisons are not clinically much different.

II. Continuing Mechlorethamine Patients

1. Valchlor + corticosteroids + possibly another treatment (primary)
2. Valchlor + phototherapy + possibly another treatment
3. Valchlor + oral bexarotene + possibly another treatment
4. Valchlor + any other treatment

III. New Mechlorethamine Patients

1. Valchlor + corticosteroids + possibly another treatment (primary)
2. Valchlor + phototherapy + possibly another treatment
3. Valchlor + oral bexarotene + possibly another treatment
4. Valchlor + any other treatment

## ASSESSMENT SCHEDULE

Demographics, medical history, current and historical MF-CTCL treatments, clinical status by physician, clinical status assessments, the Visual Analogue Scale (VAS) for pruritus, the Skindex-29, and ongoing adverse events (AEs) and serious adverse events (SAEs) related to Valchlor are collected at the enrollment visit, per routine clinic visits. Any data that is not collected at enrollment or present in the historical patient information will be indicated as not assessed, not applicable or not done, as appropriate. In addition, to appropriately construct change from baseline analyses all baseline data must be verified as such. For example, if a % BSA score is provided at enrollment, it may not represent a baseline disease score if a subject was already using mechlorethamine prior to the collection of that score. The same handling should apply to the PRO questionnaires.

Change in TNMB classification, change in medical history, change in medications with Valchlor and other MF-CTCL treatments, HCU, clinical status by physician, clinical status assessments, VAS for pruritus, the Skindex-29, reports of secondary exposure, and all AEs and SAEs related and unrelated during Valchlor use and >30 days after Valchlor discontinued are collected at follow-up visits during the observation period, as recorded during the routine clinic visit. These visits occur at the physician's discretion (i.e., they are not scheduled per protocol); consequently, the number of follow-up visits will vary across patients. Additionally, the data collected during the visits will be dependent upon routine clinic practice, and thus not all data may be available.

**Table 1 eCRF Data Collection**

Variables	Enrollment visit	Post-enrollment follow-up visits
<b>Demographics</b>		
Age, gender, race/ethnicity, height	X	
Weight*	X	
<b>Relevant Medical History</b>		
Age at diagnosis of MF-CTCL	X	
Date of MF-CTCL diagnosis	X	
Method of diagnosis	X	
MF-CTCL TNMB classification*	X	
MF-CTCL TNMB classification change		X
MF-CTCL histology	X	
Malignancies and secondary malignancies	X	
Non-melanoma skin cancers	X	
Prior viral infections	X	
Atopic disorders	X	
Psoriasis	X	
Urticaria	X	
Mental disorders	X	
Family medical history	X	
Other relevant medical history	X	
Changes in medical history		X
<b>Targeted MF-CTCL Treatments (Medication Use and Dosing)*<sup>1</sup></b>		
Valchlor	X	X
Other MF-CTCL treatments	X	X

Variables	Enrollment visit	Post-enrollment follow-up visits
<b>Healthcare utilization related to MF-CTCL (as assessed by physician)</b>		
Hospital admissions <sup>‡</sup>		X
Emergency room visits		X
<b>Clinical Status (as assessed by physician)</b>	X	X
<b>Clinical Status Assessments*</b>		
Composite Assessment of Index Lesion Severity	X	X
Modified Severity Weighted Assessment Tool	X	X
Physician's Global Assessment	X	X
Body Surface Area of disease	X	X
<b>Patient-Completed Questionnaires<sup>§</sup></b>		
Visual Analogue Scale for pruritus	X	X
Skindex-29	X	X
<b>Safety Measures**</b>		
AEs and SAEs	X*	X
Reports of secondary exposures		X <sup>†</sup>

\*Included in pre-treatment data collection, which is performed at enrollment. All data must be completed as available.

†Includes collection of start and stop dates for each medication, including reasons for starting and stopping medications. Start and stop dates are also collected for Valchlor, including short gaps in treatment, such as drug holidays.

‡For each hospital admission, length of stay and primary admission and discharge diagnoses will be collected.

§To be completed by patients who can read and understand English and are able to self-complete the questionnaires based on the investigator's assessment. Patients who are unable to self-complete the questionnaires will not be excluded from the study.

\*\*Safety measures, which include AEs and SAEs, will be collected from the informed consent date and prospectively at every visit during the study and up to 30-days post-discontinuation of Valchlor during the study. Ongoing AE and SAE data will be collected through the end of study, regardless of Valchlor use. New AEs and SAEs that occur more than 30 days after discontinuation of Valchlor will be reported to Actelion US Drug Safety if investigator feels there is a possible causal relationship with Valchlor.

## ANALYSIS VARIABLE DEFINITIONS

This section describes the source of analysis variables and, where derivation is required, the derived variable algorithm. Many analysis variables are either directly reported by sites on the MedNet study database eCRF or are calculated automatically by the MedNet EDC system based on source variables entered by sites. Algorithms for derivation of these variables will not be included.

### Demographics and clinical characteristics at enrollment

Demographic information is reported on the Enrollment eCRF and will include age (at time of enrollment), gender, and race. Clinical characteristics are primarily collected on the Enrollment eCRF and will include height (in), weight (lbs), disease history (collected on the eCRF at enrollment), post-treatment response assessments, treatment history, pre-treatment (Valchlor) data, relevant medical history, safety information, and patient completed questionnaires (at enrollment).

### **Medical history at enrollment**

Relevant medical history categories at enrollment will be reported. The data are collected first as categories on the enrollment eCRF and then as a specific condition on the Relevant Medical History Log, as applicable. Medical history categorized as 'other' will be reported together as a separate category. The following categories will be reported:

- Secondary malignancies
- Non-melanoma skin cancer
- Prior viral infections
- Atopic disorders
- Psoriasis
- Urticaria
- Mental disorders
- Relevant family history (like lymphoma)
- Other malignancies specified
- Other relevant medical history

### **Other MF-CTCL Treatments**

Other MF-CTCL medications will be categorized by specific therapies (skin-directed therapies, systemic therapies and other) and identified by comparing the start/stop dates of the various medications/therapies recorded on the Other MF-CTCL Treatments Log with the date of enrollment from the Enrollment eCRF. A table summarizing pre-treatments and therapies that were stopped prior to enrollment will be included, as well.

Patients will be considered to be on other medications/therapies (specific for MF-CTCL). The data will include the medication/therapy start date either on the day of enrollment or before the day of enrollment and have either continued or stopped taking the medication after the day of enrollment. By this algorithm, patients who start a medication on the day of enrollment will be considered to be on that medication at enrollment, patients who start and stop a medication on the day of enrollment will be considered to be on that medication at enrollment, but patients who stop a medication on the day of enrollment will not.

### **Valchlor dosing regimens**

Valchlor dosing information (number of tubes per month) will be determined by using the data collected on the Valchlor Treatment Log. Sites will also record start and stop dates, reason for initiating therapy and reason for stopping. The number of tubes of Valchlor therapy dosed following initiation will be counted and the tubes per month will be computed as the total number of tubes divided by the months on Valchlor per the start and stop date. A sustained number of tubes will be defined with no change for 90 days.

### **Healthcare Resource Utilization**

Hospitalizations and ER visits that occur during the course of the study will be reported in a table summarizing the rate of hospitalizations and the rate of ER visits will be presented. Data will come from the Healthcare Resource Utilization module on the eCRF. The denominator will be based on the sum of follow-up time available for all subjects. Only hospitalizations and ER visits that occur post-enrollment will be included in the numerator. These will be reported separated as continuing Valchlor versus newly initiated Valchlor patients.

## **Patient Disposition and Reason for Discontinuation**

The number and percentage of patients discontinuing from the study, along with the number and percentages of the reasons for discontinuation will be presented in a table. In addition, a listing of all patient disposition, including completed patients and discontinued patients, will be provided.

## **Clinical Status Assessments / Response**

In order to capture the variety of response assessment methods (ie practice patterns) no individual method of determining response, either at enrollment or at follow-up, is mandated. A subjective categorical assessment of response will be included in addition to quantitative measures of response, but assessments that do occur must be captured during follow-up. Additionally, it is important to capture which methods were used at pre-treatment (prior to Valchlor) and post-treatment (after initiating Valchlor) to review the physicians evaluation for each patient treatment.. The possible methods for assessing response recorded on the eCRF are given below:

- Clinical Status (as assessed by physician) will be collected in one of 5 categories: complete response, partial response, stable disease, progressive disease, and relapse. A selection of Complete Response or Partial Response will be considered a response.
- Composite Assessment of Index Lesion severity (CAILS) score of 50% or more will be considered a response.
- Modified Severity Weighted Assessment Tool (mSWAT) score of 50% or more will be considered a response.
- Body Surface Area in Disease (BSA) score of 50% or more will be considered a response.
- Physician's Global Assessment (PGA) will be collected in one of 7 categories: completely clear, almost clear, marked improvement, moderate improvement, slight improvement, no change, worse. A rating of Moderate Improvement or better will be considered a response.
- Other (to be specified by physician on the eCRFs)

In cases where multiple clinical assessment / response measures are available for a particular patient-visit, the patient will be considered a responder if at least one of the measures indicates response.

## **Missing versus No Assessment**

For patients who do not have any assessments reported on the eCRF for a completed visit, the negative response for the assessment is required and collected to document the absence of the assessment. In addition, for patients that do not have at least 1 clinic visit during a quarter, an affirmative response that the patient is still under care by the site will be requested quarterly. Thus, missing data is not anticipated due to the eCRF requirements for responses and the absence of reported assessments can be interpreted the same as the absence of actual assessments.

## **Skindex-29 Questionnaire**

The Skindex-29 will be administered based on the questions and scoring algorithm found in Appendix A and Appendix B of the protocol. Each patient at each visit during the study will be asked to complete the Skindex-29 which comprises results in three scales; emotions,

symptoms, and functioning. No scale score will be computed if more than 25% of the items in the scale are missing.

### **VAS for Pruritus**

The VAS for pruritus is a single item and defined in the protocol Appendix C.

### **Exposure Definitions and Measures**

Start of observation is defined as date of enrollment.

End of observation is defined as End Of Study (EOS), which includes, adverse event, patient withdrew consent, patient lost to follow-up, physician's decision to withdraw or study completion, whichever occurs first.

Total exposure time is defined as the date of first Valchlor exposure to the date of last Valchlor exposure.

Total on-study Valchlor exposure time is defined as the first day of Valchlor use to last day of Valchlor use during the observation period. If the patient was using Valchlor at the end of observation, the last on-study day of Valchlor use is equal to the end date of observation period.

Patients may discontinue Valchlor while on study. In this case, the last day of Valchlor exposure will be when the patient discontinues Valchlor (as reported on the Valchlor treatment log). Patients who restart Valchlor after discontinuing will then begin adding Valchlor exposure days once Valchlor is restarted through the end of the study. For the patients that restart Valchlor during the study, the Total on-study Valchlor exposure will be a sum of all days in which Valchlor was dosed during the study, as reported on the Valchlor treatment log.

## **Summary of Primary and Secondary Analyses**

**Primary Efficacy Endpoint:** Percent of patients with  $\geq 50\%$  reduction from baseline in % Body Surface Area of disease at 12 months, using the “patients contributing data with clinical staging IA and IB and using mechlorethamine (continuing and new) plus corticosteroids + possibly another treatment” analysis population.

### **Secondary Analyses will include:**

- Percent of patients with  $\geq 50\%$  reduction from baseline in % Body Surface Area of disease at each visit preceding and following the 12 month visit
- Overall Response Rate 2 (ORR2) Percent of patients with  $\geq 50\%$  reduction from baseline in % Body Surface Area of disease for at least two consecutive visits.
- Overall Response Rate 4 (ORR4) Percent of patients with  $\geq 50\%$  reduction from baseline in % Body Surface Area of disease for at least four consecutive visits. Further description of the ORR4 endpoint is shown in [Prince et al 2017].
- Time to Next Treatment (TTNT). Further description of the TTNT endpoint is shown in [Hughes and Prince 2014].
- Rates of on-study hospitalization

- Change from baseline in PRO questionnaires:
  - a. Pruritis VAS
  - b. SkinDex-29
  - c. MF/SS CTCL QOL instrument

## STATISTICAL METHODS

Unless otherwise specified, statistical summaries and analyses will be performed using all patients in the analysis population.

Demographics and clinical characteristics at enrollment will be reported overall. Means +/- SDs will be reported for continuous variables while counts and percentages will be reported for categorical variables. P-values comparing the two groups will be computed using either the Student T-test (continuous) or the chi-square test/Fisher's exact test (categorical), as appropriate.

The two-sided p-values presented will be for descriptive purposes only. No adjustments will be made for multiple comparisons. Due to the large number of p-values generated, each individual p-value will be assessed with caution.

Pre-treatment response, enrollment visit response, and last ongoing visit response will be limited to patients for whom the specific measure is reported as completed (See Tables 6a-6c). We anticipate that there will be a wide range in terms for describing clinical status assessment tool is used. A frequency of the clinical status assessment tool used along with a summary of the values of each tool will be reported. A patient will be considered a responder if an assessment using any one of the available measures (i.e. VAS and Skindex-29) results in defining the patient as a responder.

Rates of hospitalization and emergency room visits will be computed as the ratio of utilization counts divided by on-study days.

The PRO measures of the VAS for pruritus and the Skindex-29 will be summarized at enrollment and then quarterly stratified by Continued versus New Valchlor, by response versus non-response, and by those who discontinued Valchlor. Patients could contribute more than 1 PRO result per quarter depending on their follow-up visit frequency. They could also contribute both to the responder and non-responder categories in a given quarter depending on their clinical status in multiple follow-up visits within a quarter.

The frequency and percentage of patients experiencing any AEs or SAEs will be summarized by system organ class and preferred MedDRA terminology. SAEs resulting in death will be provided in patient listing.

## METHODS FOR HANDLING MISSING DATA

Because this is an observational study, data that are not present at a particular assessment will generally reflect clinical practice rather than a data quality issue. As data are not expected to be missing at random, no plan exists to impute missing data or utilize models which

assume data are missing at random. For any results considered for external dissemination (e.g. publication), additional analyses will need to be conducted to compare the patients who did and did not contribute data to the analysis to assess the potential for bias.

Type of Date	Date is incomplete	Date is completely missing
Date of Valchlor start or discontinuation	Valchlor start: If the month and year is present but the date is missing then impute the 15th day of that month. Valchlor discontinuation: If day of Valchlor discontinuation is missing and month and year are present, day is replaced by the 15 <sup>th</sup> .	Valchlor start: No replacement Valchlor discontinuation: If observation period under Valchlor is stopped due to adverse event or loss to follow-up, but no Valchlor discontinuation date is provided, the Valchlor discontinuation date is respectively the date of adverse event reported on the Termination CRF or last treatment information date available (for lost to follow-up) or withdrew consent or physician decision to withdraw.
Date of start event leading to reason for Valchlor prescription	If year is known then impute 30 <sup>th</sup> June of that year. If year and month is known then impute 15 <sup>th</sup> of that month and year. If imputed day (using rules above) is after date of enrollment, then impute enrollment date – 1 day.	No replacement
Date of medication start/stop date	If year is known then impute 30 <sup>th</sup> June of that year. If year and month is known then impute 15 <sup>th</sup> of that month and year. If imputed day (using rules above) is before start date of Valchlor, then impute start date of Valchlor + 1 day. Year & month present, day missing: If month and year is the same as data cut then use the data cut. If month and year is before the data cut then use 15 <sup>th</sup> of that month. Year present, Month missing: If year is the same as the data cut the use the data cut. If the year is before the data cut then use 30 <sup>th</sup> of June of that year.	No replacement

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## **REFERENCES**

All data analyses will be generated using SAS software, Version 9.4 of the SAS System for Windows or higher. Copyright ©2013 SAS Institute Inc.

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Table 1. Enrollment Demographics

Characteristic	V+C+	V+P+	V+OB+	V+
	Other	Other	Other	Other
	n=	n=	n=	n=
Gender				
n, (% Female)	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Missing	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Age at Enrollment				
Min				
Max				
mean +/- SD	xx.x +/- xx.x	xx.x +/- xx.x	xx.x +/- xx.x	xx.x +/- xx.x
Missing	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Race, n(%)				
White	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Hispanic or Latino	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Black	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Native Hawaiian or other Pacific Islander	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Asian	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Native American - Alaskan Native	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Unknown or two or more races/ethnicities	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Not Disclosed	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Missing	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Weight in Pounds				
mean +/- SD	xx.x +/- xx.x	xx.x +/- xx.x	xx.x +/- xx.x	xx.x +/- xx.x
Missing	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Height in Inches				
mean +/- SD	xx.x +/- xx.x	xx.x +/- xx.x	xx.x +/- xx.x	xx.x +/- xx.x
Missing	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Pregnant,				
n, (%Yes out of all females)	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Missing	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)

a. P-value based on student t-test for continuous variables and the chi-square test for categorical variables. For descriptive purposes only.

Run Date: ddMMMyyyy

Date of Data Extraction: ddMMMyyyy

Table 1A. Number of Person Months on Study

Number of person months on study	
N	x
Sum	x.x (%)
Min	x.x (%)
Max	x.x (%)
Mean	x.x(%)
Median	x.x (%)
Completing 3 months	N (%)
Completing 6 months	N (%)
Completing 9 months	N (%)
Completing 12 months	N (%)
Completing 15 months	N (%)
Completing 18 months	N (%)
Completing 21 months	N (%)
Completing 24 months	N (%)

Run Date: ddMMMyyyy

Date of Data Extraction: ddMMMyyyy

Helsinn Therapeutics (US), Inc.,  
 Protocol AC-079A501 (PROVe)  
 Table 1B. Completed Visits

Patient Count (n=x)	Enrollment	Ongoing	Early Termination
	x	Visit 1 = x (%)	x
		Visit 2 = x (%)	Patient Withdrew Consent = x (%)
		Visit 3 = x (%)	Patient Lost to Follow-Up = x (%)
		Visit 4 = x (%)	Adverse Event = x (%)
		Visit 5 = x (%)	Physician's Decision to Withdraw = x (%)
		Visit 6 = x (%)	Missing data = x (%)
		Visit 7 = x (%)	
		Visit 8 = x (%)	
		Visit 9 = x (%)	
		Visit 10 = x (%)	
		Visit 11 = x (%)	
		Visit 12 = x (%)	
		Visit > 12 = x (%)	

Run Date:  
 ddMMMyyyy  
 Date of Data Extraction: ddMMMyyyy

Table 1C. Exposure Duration to Valchlor and Other MF-CTCL Therapies

Patient Count = N Number of Patients x (%)	Number of Patients Received 3 months Treatment	Number of Patients Received 6 months Treatment	Number of Patients Received 9 months Treatment	Number of Patients Received 12 months Treatment	Number of Patients Received 15 months Treatment	Number of Patients Received 18 months Treatment	Number of Patients Received months Treatment
Valchlor							
SKIN DIRECTED THERAPIES:							
Phototherapy UVB							
Phototherapy nbUVB							
Phototherapy PUVA							
Radiation Therapy, local, localized electron beam radiation							
Radiation therapy, local TSEBT							
Chemotherapy, topical, Carmustine, topical (BICNU)							
Chemotherapy, topical Other							
Corticosteroids, topical							
Retinoids, Topical Bexarotene (Targretin)							
Retinoids, Topical, Tazarotene (Tazorac, others)							

Retinoids, Topical, Other							
Topical imiquimod (Aldara, others)							
Other topical: specified							
SYSTEMIC THERAPIES:							
Chemotherap y, systemic, Bortezomib (Velcade)							
Chemotherap y, systemic, Chlorambucil (Leukeran)							
Patient Count = N Number of Patients x (%)	Number of Patients Received 3 months Treatment	Number of Patients Received 6 months Treatment	Number of Patients Received 9 months Treatment	Number of Patients Received 12 months Treatment	Number of Patients Received 15 months Treatment	Number of Patients Received 18 months Treatment	Number of Patients Received months Treatment
Chemotherap y, systemic, Cyclophospha mide (Cytoxan, others)							
Chemotherap y, systemic, Doxorubicin, liposomal (Doxil)							
Chemotherap y, systemic, Etoposide (Etopophos, others)							
Chemotherap y, systemic, Gemcitabine (Gemzar)							
Chemotherap							

y, systemic, Methotrexate , oral (Trexall, others)							
Chemotherap y, systemic, Pentostatin (Nipent)							
Chemotherap y, systemic, Pralatrexate (Folotyn)							
Chemotherap y, systemic, Temozolomid e (Temodar)							
Chemotherap y, systemic, Other systemic chemotherap y							
Retinoids, systemic, Acitretin (Soriatane)							
Retinoids, systemic, All- trans retinoic acid (Tretinoin, others)							
Retinoids, systemic, Bexarotene (Targretin)							
Retinoids, systemic, Isotretinoin (Accutane, others)							
Retinoids, systemic, Other systemic retinoid							
Interferon, Interferon- alpha, (Intron-							

A, others)							
Patient Count = N Number of Patients x (%)	Number of Patients Received 3 months Treatment	Number of Patients Received 6 months Treatment	Number of Patients Received 9 months Treatment	Number of Patients Received 12 months Treatment	Number of Patients Received 15 months Treatment	Number of Patients Received 18 months Treatment	Number of Patients Received months Treatment
Interferon, Interferon-gamma, (Actimmune)							
Monoclonal antibodies, Alemtuzumab (Campath)							
Monoclonal antibodies, Denileukin diftitox (Ontak)							
Monoclonal antibodies, Other monoclonal antibody							
HDAC inhibitors, Vorinostat (Zolinza)							
HDAC inhibitors, Romidepsin (Istodax)							
Extracorporeal photopheresis							
Other systemic: specified							
OTHER							
Other Therapy Specified							

Run Date: ddMMMyyyy  
 Date of Data Extraction: ddMMMyyyy

Helsinn Therapeutics (US), Inc.,  
Protocol AC-079A501 (PROVe)  
Table 2. Enrollment Clinical Characteristics  
Disease History

Characteristic	V+C+	V+P+	V+OB+	V+
	Other	Other	Other	Other
	n=		n=	n=
Duration of MF-CTCL (yrs)	xx.x +/-		xx.x	xx.x +/-
mean +/- SD	xx.x		xx.x	xx.x
min / max				
Time since MF-CTCL Diagnosis			xx.x	
mean +/- SD	xx.x +/-		+/-	xx.x +/-
min / max	xx.x		xx.x	xx.x
Age at MF-CTCL diagnosis				
mean +/- SD			xx.x	
min / max	xx.x +/-		+/-	xx.x +/-
	xx.x		xx.x	xx.x
Diagnosis Method, n(%)				
Physical Exam	xx (xx.x)		xx (xx.x)	xx (xx.x)
CBC with Sezary			xx	xx
Screen	xx (xx.x)		xx (xx.x)	xx (xx.x)
Peripheral Blood Smear	xx (xx.x)		xx (xx.x)	xx (xx.x)
Skin Biopsy of Suspicious Sites				
Sites	xx (xx.x)		xx (xx.x)	xx (xx.x)
Lymph Node Biopsy	xx (xx.x)		xx (xx.x)	xx (xx.x)
Immunophenotyping	xx (xx.x)		xx (xx.x)	xx (xx.x)
TCR Gene Rearrangement	xx (xx.x)		xx (xx.x)	xx (xx.x)
Flow Cytometry	xx (xx.x)		xx (xx.x)	xx (xx.x)
Not Available	xx (xx.x)		xx (xx.x)	xx (xx.x)
Missing data	xx (xx.x)		xx (xx.x)	xx (xx.x)

categorical variables. For descriptive purposes only.

Statistical Analysis Plan

Valchlor PROVe

November 2019

Version Number: 3.0

Run Date: ddMMMyyyy

Date of Data Extraction: ddMMMyyyy



Helsinn Therapeutics (US), Inc.,  
 Protocol AC-079A501 (PROVe)  
 Table 3. Enrollment Clinical Characteristics  
 Stage (TNMB Classification) at Diagnosis

Characteristic	V+C+	V+P+	V+OB+	V+
	Other	Other	Other	Other
TNMB Classification, n(%)	n=	n=	n=	n=
Not Available <sup>b</sup>	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
1A	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
1B	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
IIA	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
IIB	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
IIIA	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
IIIB	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
IVA1	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
IVA2	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
IVB	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Missing	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Skin Stage, n(%)				
T1	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
T2	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
T3	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
T4	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Missing	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Node Stage, n(%)				
NX	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
N0	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
N1	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
N1a	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)

	xx		
N1b	(xx.x)	xx (xx.x)	xx (xx.x)
	xx		
N2	(xx.x)	xx (xx.x)	xx (xx.x)
	xx		
N2a	(xx.x)	xx (xx.x)	xx (xx.x)
	xx		
N2b	(xx.x)	xx (xx.x)	xx (xx.x)
	xx		
N3	(xx.x)	xx (xx.x)	xx (xx.x)
	xx		
Nx	(xx.x)	xx (xx.x)	xx (xx.x)
	xx		
Missing	(xx.x)	xx (xx.x)	xx (xx.x)

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- a. P-value based on student t-test for continuous variables and the chi-square test for categorical variables. For descriptive purposes only.
- b. If TNMB Classification is 'Not Available' then Skin Stage, Node Stage, Visceral Stage, and Peripheral Blood Inv. are not asked.

Run Date: ddMMMyyyy  
 Date of Data Extraction: ddMMMyyyy

Helsinn Therapeutics (US), Inc.,  
 Protocol AC-079A501 (PROVe)  
 Table 3. Enrollment Clinical Characteristics  
 Stage (TNMB Classification) at Diagnosis (continued)

Characteristic	V+C+	V+P+	V+OB+	V+
	Other	Other	Other	Other
	n=	n=	n=	n=
Visceral Stage, n(%)				
M0	xx (xx.x)	xx (xx.x)		xx (xx.x)
M1	xx (xx.x)	xx (xx.x)		xx (xx.x)
Missing				
Peripheral Blood Inv., n(%)				
B0	xx (xx.x)	xx (xx.x)		xx (xx.x)
B0a	xx (xx.x)	xx (xx.x)		xx (xx.x)
B0b	xx (xx.x)	xx (xx.x)		xx (xx.x)
B1	xx (xx.x)	xx (xx.x)		xx (xx.x)
B1a	xx (xx.x)	xx (xx.x)		xx (xx.x)
B1b	xx (xx.x)	xx (xx.x)		xx (xx.x)
B2	xx			
Missing	(xx.x)	xx (xx.x)		xx (xx.x)

a. P-value based on student t-test for continuous variables and the chi-square test for categorical variables. For descriptive purposes only.

Run Date: ddMMMyyyy  
 Date of Data Extraction: ddMMMyyyy

Helsinn Therapeutics (US), Inc.,  
Protocol AC-079A501 (PROVe)  
Table 4. Disease History and Clinical  
Characteristics (pre-Valchlor)

Characteristic	V+C+	V+P+	V+OB+	V+
	Other	Other	Other	Other
	n=	n=	n=	n=
<b>Histologic Features, n(%)</b>				
Larger Intraepidermal				
Lymphosites	xx (xx.x)	xx (xx.x)		xx (xx.x)
Pautrier's Microabscesses	xx (xx.x)	xx (xx.x)		xx (xx.x)
Disproportionate intrae-				
pidermal lymphocytes	xx (xx.x)	xx (xx.x)		xx (xx.x)
Basilar Lymphocytes	xx (xx.x)	xx (xx.x)		xx (xx.x)
Pagetoid Pattern	xx (xx.x)	xx (xx.x)		xx (xx.x)
Convolutated Lymphocytes	xx (xx.x)	xx (xx.x)		xx (xx.x)
Convolutated Nuclei	xx (xx.x)	xx (xx.x)		xx (xx.x)
Haloed Lymphocytes	xx (xx.x)	xx (xx.x)		xx (xx.x)
Papillary Dermal Fibrosis	xx (xx.x)	xx (xx.x)		xx (xx.x)
Other Ancillary Features	xx (xx.x)	xx (xx.x)		xx (xx.x)
<b>Relevant Medical History, n(%)</b>				
Secondary Malignancies	xx (xx.x)	xx (xx.x)		xx (xx.x)
Non-Melanoma Skin Cancer	xx (xx.x)	xx (xx.x)		xx (xx.x)
Prior Viral Infections	xx (xx.x)	xx (xx.x)		xx (xx.x)
Atopic Disorders	xx (xx.x)	xx (xx.x)		xx (xx.x)
Psoriasis	xx (xx.x)	xx (xx.x)		xx (xx.x)
Urticaria	xx (xx.x)	xx (xx.x)		xx (xx.x)
Mental Disorders	xx (xx.x)	xx (xx.x)		xx (xx.x)
Family History: Lymphoma	xx (xx.x)	xx (xx.x)		xx (xx.x)
Other Malignancies	xx (xx.x)	xx (xx.x)		xx (xx.x)
Other Relevant Med. History	xx (xx.x)	xx (xx.x)		xx (xx.x)

a. P-value based on student t-test for continuous variables and the chi-square test for categorical variables. For descriptive purposes only.

Run Date: ddMMMyyyy

Date of Data Extraction: ddMMMyyyy

Helsinn Therapeutics (US), Inc.,  
 Protocol AC-079A501 (PROVe)

Table 5. Discontinued Treatments and Therapies

Characteristic	V+C+ Other	V+P+ Other	V+OB+ Other	V+ Other
	n=		n=	n=
Treatments/Therapies Stopped n(%)				
Valchlor	xx (xx.x)		xx (xx.x)	xx (xx.x)
SKIN DIRECTED THERAPIES:				
Phototherapy UVB				
Phototherapy nbUVB				
Phototherapy PUVA				
Radiation Therapy, local, localized electron beam radiation				
Radiation therapy, local TSEBT				
Chemotherapy, topical, Carmustine, topical (BICNU)				
Chemotherapy, topical Other				
Corticosteroids, topical				
Retinoids, Topical Bexarotene (Targretin)				
Retinoids, Topical, Tazarotene (Tazorac, others)				
Retinoids, Topical, Other				
Topical imiquimod (Aldara, others)				
Other topical: specified				
SYSTEMIC THERAPIES:				
Chemotherapy, systemic, Bortezomib (Velcade)				
Chemotherapy, systemic, Chlorambucil (Leukeran)				
Chemotherapy, systemic, Cyclophosphamide (Cytoxan, others)				
Chemotherapy, systemic, Doxorubicin, liposomal (Doxil)				
Chemotherapy, systemic, Etoposide (Etopophos, others)				
Chemotherapy, systemic, Gemcitabine (Gemzar)				
Chemotherapy, systemic, Methotrexate, oral (Trexall, others)				
Chemotherapy, systemic, Pentostatin (Nipent)				
Chemotherapy, systemic, Pralatrexate (Folotyn)				
Chemotherapy, systemic,				

Temozolomide (Temodar)  
Chemotherapy, systemic, Other  
systemic chemotherapy  
Retinoids, systemic, Acitretin  
(Soriatane)  
Retinoids, systemic, All-trans retinoic  
acid (Tretinoin, others)  
Retinoids, systemic, Bexarotene  
(Targretin)  
Retinoids, systemic, Isotretinoin  
(Accutane, others)  
Retinoids, systemic, Other systemic  
retinoid  
Interferon, Interferon-alpha, (Intron-A,  
others)  
Interferon, Interferon-gamma,  
(Actimmune)  
Monoclonal antibodies, Alemtuzumab  
(Campath)  
Monoclonal antibodies, Denileukin  
diftitox (Ontak)  
Monoclonal antibodies, Other  
monoclonal antibody  
HDAC inhibitors, Vorinostat (Zolinza)  
HDAC inhibitors, Romidepsin (Istodax)  
Extracorporeal photopheresis  
Other systemic: specified  
OTHER  
Other Therapy Specified  
Valchlor  
SKIN DIRECTED THERAPIES:  
Phototherapy UVB  
Phototherapy nbUVB  
Phototherapy PUVA  
Radiation Therapy, local, localized  
electron beam radiation  
Radiation therapy, local TSEBT  
Chemotherapy, topical, Carmustine,  
topical (BICNU)  
Chemotherapy, topical Other

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a. P-value based on student t-test for continuous variables and the chi-square test for  
categorical variables. For descriptive purposes only.

Run Date: ddMMMyyyy

Date of Data Extraction: ddMMMyyyy

Helsinn Therapeutics (US), Inc.,  
 Protocol AC-079A501 (PROVe)

Table 6a. Pre-Treatment Response (Prior to Valchlor Initiation)

Characteristic	V+C+	V+P+	V+OB+	V+
	Other	Other	Other	Other
	n=	n=	n=	
Method of Assessment, n(%)				
Physician Assessed	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
CAILS	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
mSWAT	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
BSA of Disease	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
PGA	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Other: specified	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Physician Assessed Clinical Status, n(%)				
Complete Response	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Partial Response	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Stable Disease	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Progressive Disease	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Relapse	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Not Evaluable	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
CAILS Score				
mean +/- SD	xx.x +/- xx.x	xx.x +/- xx.x	xx.x +/- xx.x	xx.x +/- xx.x
mSWAT Score				
mean +/- SD	xx.x +/- xx.x	xx.x +/- xx.x	xx.x +/- xx.x	xx.x +/- xx.x
Missing	xx.x +/- xx.x	xx.x +/- xx.x	xx.x +/- xx.x	xx.x +/- xx.x

a. P-value based on student t-test for continuous variables and the chi-square test for categorical variables. For descriptive purposes only.

Run Date: ddMMMyyyy

Date of Data Extraction: ddMMMyyyy

Helsinn Therapeutics (US), Inc.,  
 Protocol AC-079A501 (PROVe)  
 Table 6a. Pre-Treatment Response (Prior to Valchlor Initiation) (cont.)

Characteristic	V+C+ Other	V+P+ Other	V+OB+ Other	V+ Other
	n=		n=	n=
BSA % Involvement				
mean +/- SD	xx.x +/- xx.x		xx.x +/- xx.x	xx.x +/- xx.x
PGA rating				
Completely Clear	xx (xx.x)		xx (xx.x)	xx (xx.x)
Almost Clear	xx (xx.x)		xx (xx.x)	xx (xx.x)
Marked Improvement	xx (xx.x)		xx (xx.x)	xx (xx.x)
Moderate Improvement	xx (xx.x)		xx (xx.x)	xx (xx.x)
Slight Improvement	xx (xx.x)		xx (xx.x)	xx (xx.x)
No Change	xx (xx.x)		xx (xx.x)	xx (xx.x)
Worse	xx (xx.x)		xx (xx.x)	xx (xx.x)
Other				
mean +/- SD	xx (xx.x)		xx (xx.x)	xx (xx.x)
Missing	xx (xx.x)		xx (xx.x)	xx (xx.x)

a. P-value based on student t-test for continuous variables and the chi-square test for categorical variables. For descriptive purposes only.

Run Date: ddMMMyyyy

Date of Data Extraction: ddMMMyyyy

Helsinn Therapeutics (US), Inc.,  
 Protocol AC-079A501 (PROVe)

Table 6b. Post Treatment Response/Enrollment Visit Response

Characteristic	V+C+	V+P+	V+OB+	V+
	Other	Other	Other	Other
	n=		n=	n=
Method of Assessment, n(%)				
Physician Assessed	xx (xx.x)		xx (xx.x)	xx (xx.x)
CAILS	xx (xx.x)		xx (xx.x)	xx (xx.x)
mSWAT	xx (xx.x)		xx (xx.x)	xx (xx.x)
BSA of Disease	xx (xx.x)		xx (xx.x)	xx (xx.x)
PGA	xx (xx.x)		xx (xx.x)	xx (xx.x)
Other: specified				
Missing	xx (xx.x)		xx (xx.x)	xx (xx.x)
Physician Assessed Clinical Status, n(%)				
Complete Response	xx (xx.x)		xx (xx.x)	xx (xx.x)
Partial Response	xx (xx.x)		xx (xx.x)	xx (xx.x)
Stable Disease	xx (xx.x)		xx (xx.x)	xx (xx.x)
Progressive Disease	xx (xx.x)		xx (xx.x)	xx (xx.x)
Relapse	xx (xx.x)		xx (xx.x)	xx (xx.x)
Not Evaluable	xx (xx.x)		xx (xx.x)	xx (xx.x)
CAILS Score				
mean +/- SD	xx.x +/- xx.x		xx.x +/- xx.x	xx.x +/- xx.x
mSWAT Score				
mean +/- SD	xx.x +/- xx.x		xx.x +/- xx.x	xx.x +/- xx.x
Missing	xx.x +/- xx.x		xx.x +/- xx.x	xx.x +/- xx.x

a. P-value based on student t-test for continuous variables and the chi-square test for categorical variables. For descriptive purposes only.

Run Date: ddMMMyyyy

Date of Data Extraction: ddMMMyyyy

Helsinn Therapeutics (US), Inc.,  
 Protocol AC-079A501 (PROVe)

Table 6b. Post Treatment/Enrollment Visit Response (cont.)

Characteristic	V+C+	V+P+	V+OB+	V+
	Other	Other	Other	Other
	n=		n=	n=
BSA % Involvement				
mean +/- SD	xx.x +/- xx.x		xx.x +/- xx.x	xx.x +/- xx.x
PGA rating				
Completely Clear	xx (xx.x)		xx (xx.x)	xx (xx.x)
Almost Clear	xx (xx.x)		xx (xx.x)	xx (xx.x)
Marked Improvement	xx (xx.x)		xx (xx.x)	xx (xx.x)
Moderate Improvement	xx (xx.x)		xx (xx.x)	xx (xx.x)
Slight Improvement	xx (xx.x)		xx (xx.x)	xx (xx.x)
No Change	xx (xx.x)		xx (xx.x)	xx (xx.x)
Worse	xx (xx.x)		xx (xx.x)	xx (xx.x)
Other				
mean +/- SD	xx (xx.x)		xx (xx.x)	xx (xx.x)
Missing	xx (xx.x)		xx (xx.x)	xx (xx.x)

a. P-value based on student t-test for continuous variables and the chi-square test for categorical variables. For descriptive purposes only.

Run Date: ddMMMyyyy

Date of Data Extraction: ddMMMyyyy

Protocol AC-079A501 (PROVe)  
Table 6c. Post Treatment/Last Ongoing Visit Response

Characteristic	V+C+	V+P+	V+OB+	V+
	Other	Other	Other	Other
	n=	n=	n=	n=
<b>Method of Assessment, n(%)</b>				
Physician Assessed	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
CAILS	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
mSWAT	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
BSA of Disease	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
PGA	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Other: specified	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
<b>Physician Assessed Clinical Status, n(%)</b>				
Complete Response	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Partial Response	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Stable Disease	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Progressive Disease	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Relapse	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Not Evaluable	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
<b>CAILS Score</b>				
mean +/- SD	xx.x +/- xx.x	xx.x +/- xx.x	xx.x +/- xx.x	xx.x +/- xx.x
<b>mSWAT Score</b>				
mean +/- SD	xx.x +/- xx.x	xx.x +/- xx.x	xx.x +/- xx.x	xx.x +/- xx.x
Missing	xx.x +/- xx.x	xx.x +/- xx.x	xx.x +/- xx.x	xx.x +/- xx.x

a. P-value based on student t-test for continuous variables and the chi-square test for categorical variables. For descriptive purposes only.

Run Date: ddMMMyyyy

Date of Data Extraction: ddMMMyyyy

Table 6c. Post Treatment/Last Ongoing Visit Response (cont.)

Characteristic	V+C+	V+P+	V+OB+	V+
	Other	Other	Other	Other
	n=		n=	n=
BSA % Involvement				
mean +/- SD	xx.x +/- xx.x	xx.x +/- xx.x	xx.x +/- xx.x	xx.x +/- xx.x
PGA rating				
Completely Clear	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Almost Clear	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Marked Improvement	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Moderate Improvement	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Slight Improvement	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
No Change	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Worse	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Other				
mean +/- SD	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
Missing	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)

a. P-value based on student t-test for continuous variables and the chi-square test for categorical variables. For descriptive purposes only.

Run Date: ddMMMyyyy

Date of Data Extraction: ddMMMyyyy

Helsinn Therapeutics (US), Inc.,  
Protocol AC-079A501 (PROVe)  
Table 7. Overall Assessment Method Frequency  
PATIENT N=x

Assessment Method	Pre-Tx N = X (Patients)	Post-Tx N = X
CAILs	X	X
mSWAT	X	X
PGA	X	X
BSA	X	X
Other: Specified	X	X
Missing	X	X

Run Date:  
ddMMMyyyy  
Date of data extraction: ddMMMyyyy

Helsinn Therapeutics (US), Inc.,  
Protocol AC-079A501 (PROVe)  
Table 8. Enrollment Discontinued Treatments Patient N=X

	Discontinued Treatments N=X (%)	Discontinued skin-directed therapy	Discontinued systemic therapy	Discontinued other therapy
	X (xx.xx%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Missing	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)

Run Date: ddMMMyyyy  
Date of Data Extraction: ddMMMyyyy

Helsinn Therapeutics (US), Inc.,  
Protocol AC-079A501 (PROVe)

Table 9. Ongoing Discontinued Treatments Patient N=X

	Discontinued Treatments N=X (%)	Discontinued skin-directed therapy	Discontinued systemic therapy	Discontinued other therapy
	X (xx.xx%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Missing	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)

Run Date: ddMMMyyyy

Date of Data Extraction: ddMMMyyyy

Helsinn Therapeutics (US), Inc.,  
 Protocol AC-079A501 (PROVe)  
 Table 10. Enrollment Skin-directed Therapies N=X

Skin-directed therapy Class/Type	Number of Patients (N=x)	% of skin-directed therapy records (n=xx)	% of all "Other MF-CTCL treatment" records (n=xx)
Number of Patients Received at Least One Therapy	Xx (%)	x.x%	x.x%
Chemotherapy, topical	x (%)	x.x%	x.x%
Chemotherapy, topical, Other	x (%)	x.x%	x.x%
Corticosteroids, topical	x (%)	x.x%	x.x%
Other topical	x (%)	x.x%	x.x%
Phototherapy			
Phototherapy PUVA	x (%)	x.x%	x.x%
Phototherapy UVB	x (%)	x.x%	x.x%
Phototherapy nbUVB	x (%)	x.x%	x.x%
Radiation			
Radiation therapy, local TSEBT	x (%)	x.x%	x.x%
Radiation therapy, local, Localized electron beam radiation	x (%)	x.x%	x.x%
Retinoids, Topical			
Retinoids, Topical, Bexarotene (TARGRETIN)	x	x.x%	x.x%
Missing	x	x.x%	x.x%

Patient counted once with multiple treatments

Run Date: ddMMMyyyy

Date of Data Extraction: ddMMMyyyy

Helsinn Therapeutics (US), Inc.,  
Protocol AC-079A501 (PROVe)  
Table 11. Ongoing Skin-directed Therapies N=X

Skin-directed therapy Class/Type	Number of Patients (N=x)	% of skin-directed therapy records (n=xx)	% of all "Other MF-CTCL treatment" records (n=xx)
Number of Patients Received at Least One Therapy	x (%)	x.x%	x.x%
Chemotherapy, topical	x (%)	x.x%	x.x%
Chemotherapy, topical, Other	x (%)	x.x%	x.x%
Corticosteroids, topical	x (%)	x.x%	x.x%
Other topical	x (%)	x.x%	x.x%
Phototherapy			
Phototherapy PUVA	x (%)	x.x%	x.x%
Phototherapy UVB	x (%)	x.x%	x.x%
Phototherapy nbUVB	x (%)	x.x%	x.x%
Radiation			
Radiation therapy, local TSEBT	x (%)	x.x%	x.x%
Radiation therapy, local, Localized electron beam radiation	x (%)	x.x%	x.x%
Retinoids, Topical	x (%)	x.x%	x.x%
Retinoids, Topical, Bexarotene (TARGRETIN)	x (%)	x.x%	x.x%
Retinoids, Topical, Tazarotene (TAZORAC, others)	x (%)	x.x%	x.x%
Topical imiquimod (ALDARA, others)	x (%)	x.x%	x.x%
Missing	x (%)	x.x%	x.x%

Patient counted once with multiple treatments  
Run Date: ddMMMyyyy  
Date of Data Extraction: ddMMMyyyy

Helsinn Therapeutics (US), Inc.,  
Protocol AC-079A501 (PROVe)  
Table 12. Enrollment Systemic Therapies N=X

Systemic therapy type Class/Type	Frequency count	% of systemic therapy records (n=xx)	% of all "Other MF- CTCL treatment" records (n=xx)
Chemotherapy, systemic,	x	x	x
Chemotherapy, systemic, Methotrexate, oral (Trexall, others)	x	x.x%	x.x%
Chemotherapy, systemic, Pralatrexate (Folotyn)	x	x.x%	x.x%
Extracorporeal photopheresis	x	x.x%	x.x%
HDAC inhibitors, Romidepsin (Istodax)	x	x.x%	x.x%
HDAC inhibitors, Vorinostat (Zolinza)	x	x.x%	x.x%
Interferon, Interferon-alpha (Intron-A, others)	x	x.x%	x.x%
Other systemic	x	x.x%	x.x%
Retinoids, systemic	x		
Retinoids, systemic, Acitretin (Soriatane)	x	x.x%	x.x%
Retinoids, systemic, Bexarotene (Targretin)	x	x.x%	x.x%
Missing	x	x.x%	x.x%

Run Date:  
ddMMMyyyy  
Date of data extraction: ddMMMyyyy

Helsinn Therapeutics (US), Inc.,  
 Protocol AC-079A501 (PROVe)

Table 13. Ongoing Systemic Therapies N=X

Systemic therapy type Class/Type	Frequency count	% of systemic therapy records (n=xx)	% of all "Other MF- CTCL treatment" records (n=xx)
Chemotherapy, systemic,	x	x	x
Chemotherapy, systemic, Methotrexate, oral (Trexall, others)	x	x.x%	x.x%
Chemotherapy, systemic, Pralatrexate (Folotyn)	x	x.x%	x.x%
Extracorporeal photopheresis	x	x.x%	x.x%
HDAC inhibitors, Romidepsin (Istodax)	x	x.x%	x.x%
HDAC inhibitors, Vorinostat (Zolinza)	x	x.x%	x.x%
Interferon, Interferon-alpha (Intron-A, others)	x	x.x%	x.x%
Other systemic	x	x.x%	x.x%
Retinoids, systemic	x	x.x%	x.x%
Retinoids, systemic, Acitretin (Soriatane)	x	x.x%	x.x%
Retinoids, systemic, Bexarotene (Targretin)	x	x.x%	x.x%
Missing	x	x.x%	x.x%

Run Date:

ddMMMyyyy

Date of data extraction: ddMMMyyyy

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Table 14. TNMB Counts At Ongoing Visits

Patient Count N=X		
All Ongoing Visits	Stage (TNMB classification):	Patient Visits n (%)
Ongoing Visits 1 N=X	N/A	x (xx.xx)
	IA	x (xx.xx)
	IB	x (xx.xx)
	IIB	x (xx.xx)
	IVA1	x (xx.xx)
Ongoing Visits 2 n=X	...	x (xx.xx)
Ongoing Visits 3 n=X	...	x (xx.xx)
Ongoing Visits 4 n=X		
Ongoing Visits 5 n=X		
Ongoing Visits 6 n=X		x (xx.xx)
	...	x (xx.xx)
Ongoing Visits 7 n=X		
Ongoing Visits 8 n=X		
Ongoing Visits 9 n=X		
Ongoing Visits 10 n=X		
Ongoing Visits 11 n=X		
Ongoing Visits 12 n=X		
Ongoing Visits >12 n=X		

Run Date: ddMMMyyyy  
 Date of Data Extraction: ddMMMyyyy

Helsinn Therapeutics (US), Inc.,  
 Protocol AC-079A501 (PROVe)  
 Table15. Disease Progression

Baseline	Status at Last Ongoing Visit (N=X)							
	IA	IB	IIA	IIB	IIIA	IIIB	IVA1	Missing
IA	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)
IB	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)
IIA	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)
IIB	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)
IIIA	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)
IIIB	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)
IVA1	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)
Missing	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)	Xx (%)

Run Date: ddMMMyyyy

Date of Data Extraction: ddMMMyyyy

Protocol AC-079A501 (PROVe)

Table 16. Rate of Hospitalizations and ER Visits per Day on Study

Characteristic	V+C+ Other	V+P+ Other	V+OB+ Other	V+ Other
	n=		n=	n=
Rate of Hospitalizations mean +/- SD	xx (xx.x)		xx (xx.x)	xx (xx.x)
Rate of Hospitalizations Due to MF-CTCL mean +/- SD	xx.x +/- xx.x		xx.x +/- xx.x	xx.x +/- xx.x
Rate of ER Visits mean +/- SD	xx (xx.x)		xx (xx.x)	xx (xx.x)
Rate of ER Visits Due to MF-CTCL mean +/- SD	xx.x +/- xx.x		xx.x +/- xx.x	xx.x +/- xx.x

a. P-value based on student t-test for continuous variables and the chi-square test for categorical variables. For descriptive purposes only.

Run Date: ddMMMyyyy

Date of Data Extraction: ddMMMyyyy

Helsinn Therapeutics (US), Inc.,  
 Protocol AC-079A501 (PROVe)

Table 17aa. PROs Completed : VAS for Pruritus and Skindex-29 by Response by Cont./New Valchlor Patients completed 1 year study

Characteristic	<u>Responders</u>				
	V+C+ Other	V+P+ Other	V+OB+ Other	V+ Other	
<b>VAS for Pruritus</b>					
Baseline Completed [(mean +/- SD) (min, max)]	n= xx.x +/- xx.x (xx,xx)				
Baseline Not Done [(mean +/- SD) (min, max)]					
Follow-Up Completed					
Quarter 1 [(mean +/- SD) (min, max)]	n= xx.x +/- xx.x (xx,xx)				
Quarter 2 [(mean +/- SD) (min, max)]					
Quarter 3 [(mean +/- SD) (min, max)]					
Quarter 4 [(mean +/- SD) (min, max)]					
Follow-Up Not Done [(mean +/- SD) (min, max)]					
<b>Skindex-29 Emotions</b>					
Baseline Completed [(mean +/- SD) (min, max)]	n= xx.x +/- xx.x (xx,xx)				
Baseline Not Done [(mean +/- SD) (min, max)]					
	n=	n=	n=	n=	n=

Follow-Up Completed

Quarter 1 [(mean +/- SD) (min, max)]	xx.x +/- xx.x (xx,xx)				
Quarter 2 [(mean +/- SD) (min, max)]					
Quarter 3 [(mean +/- SD) (min, max)]					
Quarter 4 [(mean +/- SD) (min, max)]					
Follow-Up Not Done [(mean +/- SD) (min, max)]					

**Skindex-29 Symptoms**

Baseline Completed [(mean +/- SD) (min, max)]	n= xx.x +/- xx.x (xx,xx)				
Baseline Not Done [(mean +/- SD) (min, max)]					

Follow-Up Completed	n=	n=	n=	n=	n=
Quarter 1 [(mean +/- SD) (min, max)]	xx.x +/- xx.x (xx,xx)				
Quarter 2 [(mean +/- SD) (min, max)]					
Quarter 3 [(mean +/- SD) (min, max)]					
Quarter 4 [(mean +/- SD) (min, max)]					
Follow-Up Not Done [(mean +/- SD) (min, max)]					

**Skindex-29, Functioning**

Baseline Completed [(mean +/- SD) (min, max)]	n= xx.x +/- xx.x (xx,xx)				
Baseline Not Done [(mean +/- SD) (min, max)]					
Follow-Up Completed					
Quarter 1 [(mean +/- SD) (min, max)]	n= xx.x +/- xx.x (xx,xx)				
Quarter 2 [(mean +/- SD) (min, max)]					
Quarter 3 [(mean +/- SD) (min, max)]					
Quarter 4 [(mean +/- SD) (min, max)]					
Follow-Up Not Done [(mean +/- SD) (min, max)]					

- 
- a. Patients can contribute multiple visits to a quarter during the follow-up period. These visits could be categorized as response or non-response for the same patient within a quarter.

Characteristic	V+C+ Other	V+P+ Other	V+OB+ Other	V+ Other
<b>VAS for Pruritus</b>				
Baseline Completed [(mean +/- SD) (min, max)]	n= xx.x +/- xx.x (xx,xx)	n= xx.x +/- xx.x (xx,xx)	n= xx.x +/- xx.x (xx,xx)	n= xx.x +/- xx.x (xx,xx)
Baseline Not Done [(mean +/- SD) (min, max)]				
Follow-Up Completed				
Quarter 1 [(mean +/- SD) (min, max)]	n= xx.x +/- xx.x (xx,xx)	n= xx.x +/- xx.x (xx,xx)	n= xx.x +/- xx.x (xx,xx)	n= xx.x +/- xx.x (xx,xx)
Quarter 2 [(mean +/- SD) (min, max)]				
Quarter 3 [(mean +/- SD) (min, max)]				
Quarter 4 [(mean +/- SD) (min, max)]				
Follow-Up Not Done [(mean +/- SD) (min, max)]				
<b>Skindex-29 Emotions</b>				
Baseline Completed [(mean +/- SD) (min, max)]	n= xx.x +/- xx.x (xx,xx)	n= xx.x +/- xx.x (xx,xx)	n= xx.x +/- xx.x (xx,xx)	n= xx.x +/- xx.x (xx,xx)
Baseline Not Done [(mean +/- SD) (min, max)]				
Follow-Up Completed				
Quarter 1 [(mean +/- SD) (min, max)]	n= xx.x +/- xx.x (xx,xx)	n= xx.x +/- xx.x (xx,xx)	n= xx.x +/- xx.x (xx,xx)	n= xx.x +/- xx.x (xx,xx)
Quarter 2 [(mean +/- SD) (min, max)]				

Quarter 3 [(mean +/- SD) (min, max)]

Quarter 4 [(mean +/- SD) (min, max)]

Follow-Up Not Done [(mean +/- SD) (min, max)]

**Skindex-29 Symptoms**

Baseline Completed [(mean +/- SD) (min, max)]	n= xx.x +/- xx.x (xx,xx)				
Baseline Not Done [(mean +/- SD) (min, max)]					

Follow-Up Completed					
Quarter 1 [(mean +/- SD) (min, max)]	n= xx.x +/- xx.x (xx,xx)				
Quarter 2 [(mean +/- SD) (min, max)]					
Quarter 3 [(mean +/- SD) (min, max)]					
Quarter 4 [(mean +/- SD) (min, max)]					
Follow-Up Not Done [(mean +/- SD) (min, max)]					

**Skindex-29, Functioning**

Baseline Completed [(mean +/- SD) (min, max)]	n= xx.x +/- xx.x (xx,xx)				
Baseline Not Done [(mean +/- SD) (min, max)]					



	n=	n=	n=	n=	n=
Follow-Up Completed					
Quarter 1 [(mean +/- SD) (min, max)]	xx.x +/- xx.x (xx,xx)				
Quarter 2 [(mean +/- SD) (min, max)]					
Quarter 3 [(mean +/- SD) (min, max)]					
Quarter 4 [(mean +/- SD) (min, max)]					
Follow-Up Not Done [(mean +/- SD) (min, max)]					

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Patients can contribute multiple visits to a quarter during the follow-up period. These visits could be categorized as response or non-response for the same patient within a quarter.

Run Date: ddMMMyyyy

Date of Data Extraction: ddMMMyyyy

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Table 17b. VAS for Pruritus and Skindex-29 by Response and by Valchlor Discontinuation (D/C) Early Termination

Responders <sup>a</sup>		Non-Responders	
D/C Due	D/C Due to Other	D/C Due	D/C Due to Other

Characteristic	All Patients	to AEs Patients	Reasons Patients	to AEs Patients	Reasons Patients
<b>VAS for Pruritus</b>					
Baseline Completed [(mean +/- SD) (min, max)]	n= xx.x +/- xx.x (xx,xx)				
Baseline Not Done [(mean +/- SD) (min, max)]					
Follow-Up Completed					
Quarter 1 [(mean +/- SD) (min, max)]	n= xx.x +/- xx.x (xx,xx)				
Quarter 2 [(mean +/- SD) (min, max)]					
Quarter 3 [(mean +/- SD) (min, max)]					
Quarter 4 [(mean +/- SD) (min, max)]					
Follow-Up Not Done [(mean +/- SD) (min, max)]					
<b>Skindex-29 Emotions</b>					
Baseline Completed [(mean +/- SD) (min, max)]	n= xx.x +/- xx.x (xx,xx)				
Baseline Not Done [(mean +/- SD) (min, max)]					
Follow-Up Completed					
Quarter 1 [(mean +/- SD) (min, max)]	n= xx.x +/- xx.x (xx,xx)				
Quarter 2 [(mean +/- SD) (min, max)]					
Quarter 3 [(mean +/- SD) (min, max)]					

Quarter 4 [(mean +/- SD) (min, max)]  
 Follow-Up Not Done [(mean +/- SD) (min, max)]

**Skindex-29 Symptoms**

Baseline Completed [(mean +/- SD) (min, max)]	n= xx.x +/- xx.x (xx,xx)				
Baseline Not Done [(mean +/- SD) (min, max)]					

Follow-Up Completed					
Quarter 1 [(mean +/- SD) (min, max)]	n= xx.x +/- xx.x (xx,xx)				
Quarter 2 [(mean +/- SD) (min, max)]					
Quarter 3 [(mean +/- SD) (min, max)]					
Quarter 4 [(mean +/- SD) (min, max)]					
Follow-Up Not Done [(mean +/- SD) (min, max)]					

**Skindex-29, Functioning**

Baseline Completed [(mean +/- SD) (min, max)]	n= xx.x +/- xx.x (xx,xx)				
Baseline Not Done [(mean +/- SD) (min, max)]					

Follow-Up Completed	n=	n=	n=	n=	n=
---------------------	----	----	----	----	----

Quarter 1 [(mean +/- SD) (min, max)]	xx.x +/- xx.x (xx,xx)				
Quarter 2 [(mean +/- SD) (min, max)]					
Quarter 3 [(mean +/- SD) (min, max)]					
Quarter 4 [(mean +/- SD) (min, max)]					
Follow-Up Not Done [(mean +/- SD) (min, max)]					

- 
- a. Patients can contribute multiple visits to a quarter. These visits could be categorized as response or non-response for the same patient within a quarter.

Run Date: ddMMMyyyy

Date of Data Extraction: ddMMMyyyy

Helsinn Therapeutics (US),  
 Inc., Protocol AC-079A501  
 (PROVe)

Table 18. Adverse Events

Characteristic	V+C+ Other	V+P+ Other	V+OB+ Other	V+ Other
	n=		n=	n=
Overall <sup>a</sup>	xx (xx.x)		xx (xx.x)	xx (xx.x)
System Organ Class 1				
Preferred Term A				
Preferred Term B	xx.x +/- xx.x		xx.x +/- xx.x	xx.x +/- xx.x
...				
System Organ Class 2				
Preferred Term C	xx (xx.x)		xx (xx.x)	xx (xx.x)
...				
...				

---

Note: Number of subjects and % of subjects are shown

a. Overall refers to any recorded AE, including AEs reported as ongoing at the time of enrollment

Run Date: ddMMMyyyy

Date of Data Extraction: ddMMMyyyy

Helsinn Therapeutics (US), Inc.,  
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 Table 19. Serious Adverse Events

Characteristic	V+C+ Other	V+P+ Other	V+OB+ Other	V+ Other
	n= xx (xx.x)	n= xx (xx.x)	n= xx (xx.x)	n= xx (xx.x)
Overall <sup>a</sup>				
System Organ Class 1				
Preferred Term A				
Preferred Term B	xx.x +/- xx.x	xx.x +/- xx.x	xx.x +/- xx.x	xx.x +/- xx.x
...				
System Organ Class 2				
Preferred Term C	xx (xx.x)	xx (xx.x)	xx (xx.x)	xx (xx.x)
...				
...				

Note: Number of subjects and % of subjects are shown

a. Overall refers to any recorded AE, including AEs reported as ongoing at the time of enrollment

Run Date: ddMMMyyyy

Date of Data Extraction: ddMMMyyyy

Table 20. Continuous vs. Non-Continuous Exposure

Characteristic	Overall	Continuous Exposure (n=xx)	Non-Continuous Exposure (n=xx)
Total days of exposure, mean (SD)	xx.x (xx.x)	xx.x (xx.x)	xx.x (xx.x)
Days of longest continuous exposure, mean (SD)	xx.x (xx.x)	xx.x (xx.x)	xx.x (xx.x)

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Table 21. Percent of patients with  $\geq 50\%$  reduction from baseline in % Body Surface Area of disease at 12 months ( $365 \pm 90$  days)

	IA and IB Staging	All Staged	All patients with and without Staging
	N=	N=	N=
V+C+Other			
V+P+Other			
V+OB+Other			
V+C+P+Other			
V+C+P			
V+Other			

Table 21a. Percent of patients with  $\geq 50\%$  reduction from baseline in % Body Surface Area of disease in 12 months – All Patients

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Table 22. Percent of patients with  $\geq 50\%$  reduction from baseline in % Body Surface Area of disease at each visit preceding and following the 12 month visit, including months 1, 3, 6, 9, 12, 15, 18, 21 and 24  $\pm$  45 days.

	IA and IB Staging	All Staged	All patients with and without Staging
Month 1	N=	N=	N=
V+C+Other			
V+P+Other			
V+OB+Other			
V+C+P+Other			
V+C+P			
V+Other			
Month 3	N=	N=	N=
V+C+Other			
V+P+Other			
V+OB+Other			
V+C+P+Other			
V+C+P			
V+Other			
Month 6	N=	N=	N=
V+C+Other			
V+P+Other			
V+OB+Other			
V+C+P+Other			
V+C+P			
V+Other			
Month 9	N=	N=	N=
V+C+Other			
V+P+Other			
V+OB+Other			
V+C+P+Other			
V+C+P			
V+Other			
Month 12	N=	N=	N=
V+C+Other			
V+P+Other			
V+OB+Other			
V+C+P+Other			

V+C+P			
V+Other			
Month 15	N=	N=	N=
V+C+Other			
V+P+Other			
V+OB+Other			
V+C+P+Other			
V+C+P			
V+Other			
Month 18	N=	N=	N=
V+C+Other			
V+P+Other			
V+OB+Other			
V+C+P+Other			
V+C+P			
V+Other			
Month 21	N=	N=	N=
V+C+Other			
V+P+Other			
V+OB+Other			
V+C+P+Other			
V+C+P			
V+Other			
Month 24	N=	N=	N=
V+C+Other			
V+P+Other			
V+OB+Other			
V+C+P+Other			
V+C+P			
V+Other			

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Table 23. Overall Response Rate 2 (ORR2) Percent of patients with  $\geq 50\%$  reduction from baseline in % Body Surface Area of disease for at least two consecutive visits

	Patients Contributing Data		
	IA and IB Staging	All Staged	All patients with and without Staging
	N=	N=	N=
V+C+Other			
V+P+Other			
V+OB+Other			
V+C+P+Other			
V+C+P			
V+Other			

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Table 24. Overall Response Rate 4 (ORR4) Percent of patients with  $\geq 50\%$  reduction from baseline in % Body Surface Area of disease for at least four consecutive visits

	Patients Contributing Data		
	IA and IB Staging	All Staged	All patients with and without Staging
	N=	N=	N=
V+C+Other			
V+P+Other			
V+OB+Other			
V+C+P+Other			
V+C+P			
V+Other			

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Table 25. Time to Next Treatment (TTNT)

	Patients Contributing Data		
	IA and IB Staging	All Staged	All patients with and without Staging
<b>Median TTNT (mo)</b>	<b>N=</b>	<b>N=</b>	<b>N=</b>
V+C+Other			
V+P+Other			
V+OB+Other			
V+C+P+Other			
V+C+P			
V+Other			
<b>TTNT 95% CI (mo)</b>	<b>N=</b>	<b>N=</b>	<b>N=</b>
V+C+Other			
V+P+Other			
V+OB+Other			
V+C+P+Other			
V+C+P			
V+Other			
<b>6mo free from further treatment (%)</b>	<b>N=</b>	<b>N=</b>	<b>N=</b>
V+C+Other			
V+P+Other			
V+OB+Other			
V+C+P+Other			
V+C+P			
V+Other			
<b>1-y free from further treatment (%)</b>	<b>N=</b>	<b>N=</b>	<b>N=</b>
V+C+Other			
V+P+Other			
V+OB+Other			
V+C+P+Other			
V+C+P			
V+Other			
<b>18mo free from further treatment (%)</b>	<b>N=</b>	<b>N=</b>	<b>N=</b>
V+C+Other			
V+P+Other			
V+OB+Other			
V+C+P+Other			
V+C+P			
V+Other			

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2-y free from further treatment (%)	N=	N=	N=
V+C+Other			
V+P+Other			
V+OB+Other			
V+C+P+Other			
V+C+P			
V+Other			

Statistical Analysis Plan  
 Valchlor PROVe  
 November 2019  
 Version Number: 3.0

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Table 26. Rates of on-study hospitalization



	Patients Contributing Data		
	IA and IB Staging	All Staged	All patients with and without Staging
	N=	N=	N=
V+C+Other			
V+P+Other			
V+OB+Other			
V+C+P+Other			
V+C+P			
V+Other			

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Table 27a. Change from baseline at each timepoint in PRO questionnaires: Pruritis VAS

	Patients Contributing Data		
	IA and IB Staging	All Staged	All patients with and without Staging
Month 1	N=	N=	N=
V+C+Other			
V+P+Other			
V+OB+Other			
V+C+P+Other			
V+C+P			
V+Other			
Month 3	N=	N=	N=
V+C+Other			
V+P+Other			
V+OB+Other			
V+C+P+Other			
V+C+P			
V+Other			
Month 6	N=	N=	N=
V+C+Other			
V+P+Other			
V+OB+Other			
V+C+P+Other			
V+C+P			
V+Other			
Month 9	N=	N=	N=
V+C+Other			
V+P+Other			
V+OB+Other			
V+C+P+Other			
V+C+P			
V+Other			
Month 12	N=	N=	N=
V+C+Other			
V+P+Other			
V+OB+Other			
V+C+P+Other			

V+C+P			
V+Other			
Month 15	N=	N=	N=
V+C+Other			
V+P+Other			
V+OB+Other			
V+C+P+Other			
V+C+P			
V+Other			
Month 18	N=	N=	N=
V+C+Other			
V+P+Other			
V+OB+Other			
V+C+P+Other			
V+C+P			
V+Other			
Month 21	N=	N=	N=
V+C+Other			
V+P+Other			
V+OB+Other			
V+C+P+Other			
V+C+P			
V+Other			
Month 24	N=	N=	N=
V+C+Other			
V+P+Other			
V+OB+Other			
V+C+P+Other			
V+C+P			
V+Other			

Table 27b. Change from baseline at each timepoint in PRO questionnaires: SkinDex-29

Table 27c. Change from baseline at each timepoint in PRO questionnaires: MF/SS CTCL QOL instrument

Table 28. Other Treatments for MF-CTCL

<b>Therapy</b>	<b>Prior to Mechlorethamine Treatment (N=289) (N/%)</b>	<b>During Mechlorethamine Treatment (N=289) (N/%)</b>	<b>Mean Treatment Duration During PROVe Study</b>
<b>Skin-directed therapy, n (%)</b>	226 (78)	125 (43)	
Phototherapy	143 (49.5)	33 (11)	
UVB/Narrow Band-UVB			
PUVA/UVA-1			
ECP – Therakos (extracorporeal photopheresis)			
Radiation therapy (TSEB)	38 (13)	16 (5.5)	
Chemotherapy (topical) Name the 1 agent	4 (1)	1 (<1)	
Corticosteroids (topical)	165 (57)	88 (30)	
See full list below for reference only			
Retinoid (topical)	39 (13.5)	9 (3)	
Bexarotene			
tazarotene			
adapalene			
Imiquimod (topical)	18 (6)	7 (2)	
<b>Systemic therapy, n (%)</b>	83 (29)	47 (16)	
Chemotherapy (systemic)	18 (6)	11 (4)	
methotrexate			
CHOP (cyclophosphamide + vincristine + Adriamycin + prednisone)			
Liposomal doxorubicin			
gemcitabine			
pentostatin			
Monoclonal Antibodies			
Brentuximab			
Alemtuzamab			
Mogamulizumab			

Interferon			
Retinoids (systemic)	59 (20)	36 (12.5)	
Bexarotene			
HDAC Inhibitors	20 (7)	6 (2)	
Vorinostat			
Remetinostat			
Romidepsin			
Panobinostat			

Listing 1: Serious Adverse Events

Patient ID, AE Date, System Organ Class, Preferred Term, Verbatim Term, Completed/Discontinued, Reason for Discontinuation

Listing 2: Serious Adverse Events Resulting in Death

Patient ID, AE Date, System Organ Class, Preferred Term, Verbatim Term

Listing 3: Adverse Events

Patient ID, AE Date, System Organ Class, Preferred Term, Verbatim Term

Listing 4: Pregnancy

Patient ID, Age, Sex/Gender, Positive Pregnancy Confirmation

Listing 5: Secondary Exposures

Patient ID, Age, Sex/Gender, Positive Secondary Exposure

Listing 6: Patient Disposition

Patient ID, D/C Date, Reason for D/C

Listing 7: Demographic and Baseline Characteristics by Subject and Treatment Group

Patient ID, Age, Gender, Race, MF Stage, Date of First Diag, CAILS, SWAT, %BSA

Listing 8: Efficacy Data (CAILS, SWAT Scores and % Body Surface Area with Response Assessment) by Subject and Treatment Group

Patient ID, Age/Gender/Race MF Stage, Visit Dt, CAILS, CAILS Change, CAILS Response, SWAT, SWAT Change, SWAT Response, %BSA, %BSA Change, %BSA Response

Listing 9: Subjects Who Reported Adverse Events

Patient ID, Age/Gender/Race, MF Stage, AE PT, Onset Dt, Duration, Serious, Rel to Med, Intensity, Action Taken