**Economic Burden and Health-Related Quality of Life in Chinese Patients with Cutaneous T-Cell Lymphoma (CTCL) – Results from Interim Analysis**

Yuankai Shi1, Yang Wang2, Jianfang Sun1, Xiubin Xiao2, Huijing Sun3, Mingshi Zhang1, Zhiming Li4, Haifeng Zhao2, Linna Xie1, Wenrong Huang2, Xiaojing Yan1, Xwen Du5, Xiaojiao Li6, Hui Jin7

1 Department of Medical Oncology, National Cancer Center/National Clinical Research Center for Cancer/Cancer Hospital, Chinese Academy of Medical Sciences & Peking Union Medical College, Beijing Key Laboratory of Clinical Study on Anticancer Molecular Targeted Drug, Beijing, China
2 Department of Dermatology, The Fifth Medical Center, Chinese PLA General Hospital, Beijing, China
3 Department of Hematology, Ruijin Hospital, Shanghai Jiao Tong University, School of Medicine, Shanghai, China
4 Department of Medical Oncology, The First Affiliated Hospital of Zhengzhou University, Henan, China
5 Department of Hematology, Sun Yat-sen University Cancer Center, Guangzhou, China
6 Department of Hematology, Tianjin Medical University Cancer Institute and Hospital, Tianjin, China
7 Department of Hematology, Shandong Cancer Hospital and Institute, Shandong, China
8 Department of Hematology, Chinese PLA General Hospital, Beijing, China
9 Happy Life Tech Co., Ltd, Beijing, China
10 Kyowa Kirin China Pharmaceuticals Co., Ltd, Shanghai, China

**BACKGROUND**

- Cutaneous T-cell lymphoma (CTCL) is a rare type of non-Hodgkin lymphoma and represents a heterogeneous group of diseases which can be difficult to classify. Several CTCL subtypes exist, and Mycoses Fungoides (MF) and Sézary Syndrome (SS) comprised roughly 55% and 5% of CTCL, respectively.
- The symptoms and skin biopsy samples at early stages of CTCL mimic benign skin conditions, which may lead to the delay of distinctive diagnosis. The 10-year overall survival (OS) rates were 50-90% for patients with disease stage of IA or IB, and 15-53% for IIB and later patients, further indicating the poorer prognosis for late-stage patients.
- Patients diagnosed with CTCL were proven to have compromised quality of life and increased economic burden. Frequently reported symptoms from CTCL patients are pain, itching, scaling, and skin redness, which can have negative impact on their health-related quality of life (HRQoL) with regard to functioning, emotional and social well-being1-4. Meanwhile, the annual cost of CTCL patients was higher than any other skin disease patients.
- Although there were studies regarding the HRQoL and economic implications of CTCL, they were conducted in western countries and results did not adequately represent Chinese patients1-10.

**OBJECTIVES**

- To measure the overall economic burden and HRQoL of CTCL patients with MF and SS subtypes in China

**METHODS**

**Methodology**

A cross-sectional quantitative survey was conducted from 21 July 2022 to 18 August 2022 across China, and data collected through the survey were patient-reported outcome measures (PROM).

**Inclusion Criteria**

- Patients were clinically diagnosed with either MF or SS of CTCL
- Patients were aged 18 years or above
- Patients were currently receiving, or have received disease-related treatment in the past year

**Exclusion Criterion**

- Patients refused to sign the informed consent form, or did not understand the content of survey

**Economic Burden Model**

- Economics Burden of CTCL Patients = Direct Medical Costs + Direct Non-Medical Costs + Indirect Costs
- For productivity loss calculated in indirect costs, per capita annual salary in 2021 (CNY 94,861/USD 11,881) was applied
- This model was to estimate the annual economic burdens from the societal perspective

**HRQoL Instruments**

- **FACT-G**
  - Four domains - physical well-being (PWB), emotional/family well-being (EWB), social/family well-being (SWB), and functional well-being (FWB)
  - Higher scores indicate better HRQoL, range from 0 to 100

**RESULTS**

**Patient Distribution**

44 patients were recruited from 19 provinces in China

**Patient Characteristics**

- 59% of the patients were male, and 41% of them were female
- 91% of the patients were MF, and 9% of them were SS

**Patient Demographic and Subtypes**

<table>
<thead>
<tr>
<th>Gender</th>
<th>MF (%)</th>
<th>SS (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>55%</td>
<td>41%</td>
</tr>
<tr>
<td>Female</td>
<td>45%</td>
<td>59%</td>
</tr>
</tbody>
</table>

**Economic Burden**

- The average annual income cost for CTCL patients was USD 10,880 (CNY 77,712), greatly exceeding the annual disposable income in 2021 (CNY 35,128, equals USD 4,920)10

**HRQoL**

- **CO-5D** China trade-offs was 0.76 (SD 0.18) vs. 0.96 (healthy population)
- The overall score for FACT-G was 60.6 (SD 11.8)
- The overall score for Skindex-29 was 47.7 (SD 29.4)

**CONCLUSION**

These findings suggested that CTCL has compromised patients’ quality of life and posed a substantial economic burden, further undermining the potential societal benefits of effective disease management measures. Moreover, comparing with lymphoma patients in general, the mean EQ-5D index scores or FACT-G score was lower for CTCL patients, which demonstrated that CTCL patients suffered from worse quality of life.