

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

Abstract
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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 classify¹. Several CTCL subtypes exist, and Mycosis Fungoides (MF) and Sézary Syndrome (SS) comprised roughly 55% and 5% of CTCL, respectively²⁻³
- 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-staged patients⁴
- 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-being⁵⁻⁷. Meanwhile, the annual cost of CTCL patients was higher than any other skin disease patients⁸
- 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 patients⁵⁻¹⁰

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)

Patient Inclusion/Exclusion Criteria

Inclusion Criteria

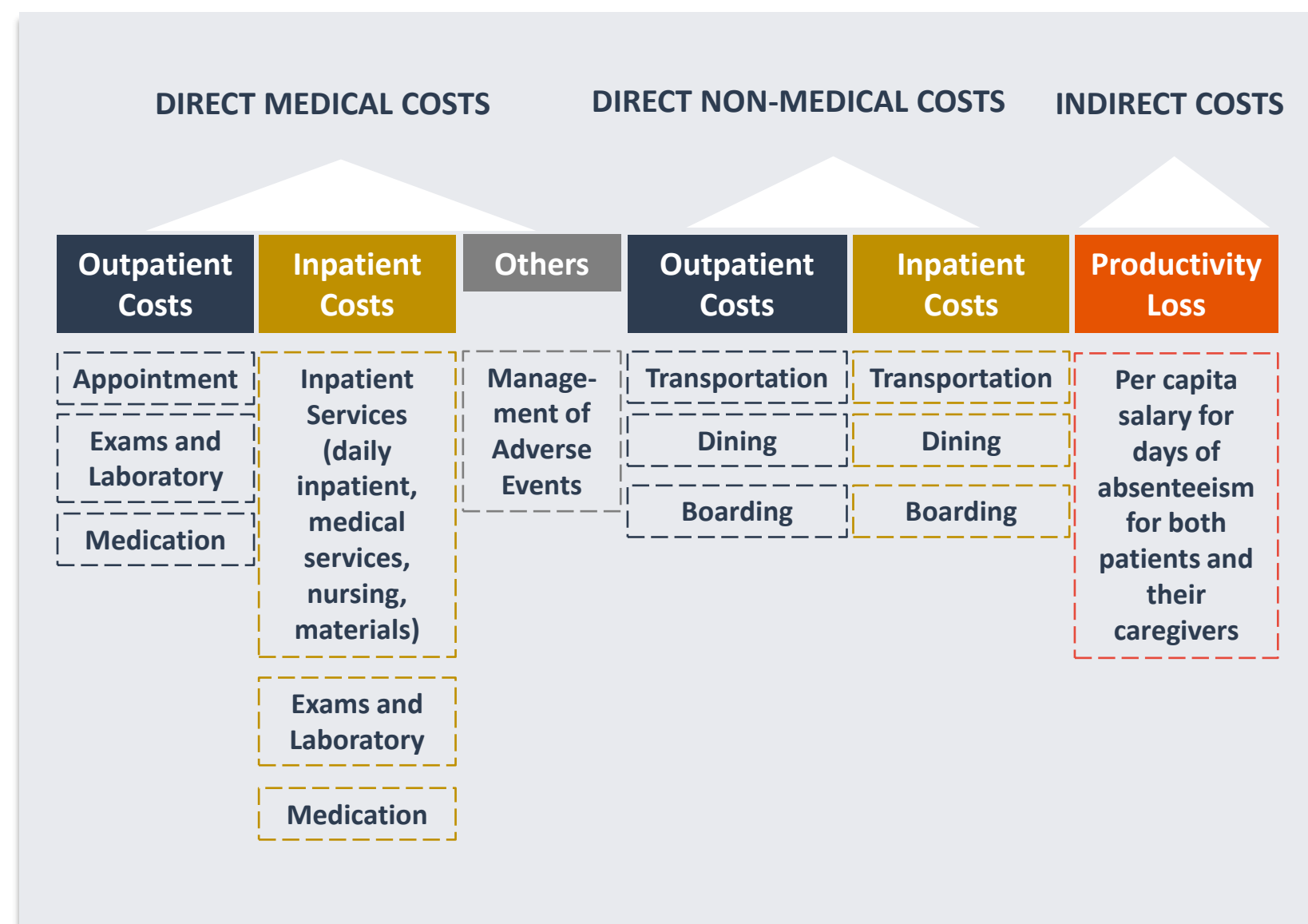
- Patients were clinically diagnosed with either MF or SS of CTCL
- Patients were aged 18 years or above
- Patients were currently receiving, or have received disease-related treatment in the past year

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 84,861/USD 11,881) was applied
- This model was to estimate the annual economics burden from the societal perspective



HRQoL Instruments

EQ-5D-5L	FACT-G	Skindex-29
<ul style="list-style-type: none"> Five dimensions - mobility (MO), self-care (SC), usual activities (UA), pain/discomfort (PD), anxiety/depression (AD) Utility values were mapped using China time-trade-off value set 	<ul style="list-style-type: none"> Four domains - physical well-being (PWB), social/family well-being (SWB), emotional well-being (EWB), functional well-being (FWB) Higher score indicates better HRQoL, range from 0-108, with PWB/SWB 0-28, EWB 0-24, FWB 0-28 	<ul style="list-style-type: none"> Three domains - symptoms, emotions and function Lower score indicates better HRQoL, range from 0-100

RESULTS

Patient Characteristics

Patient Distribution

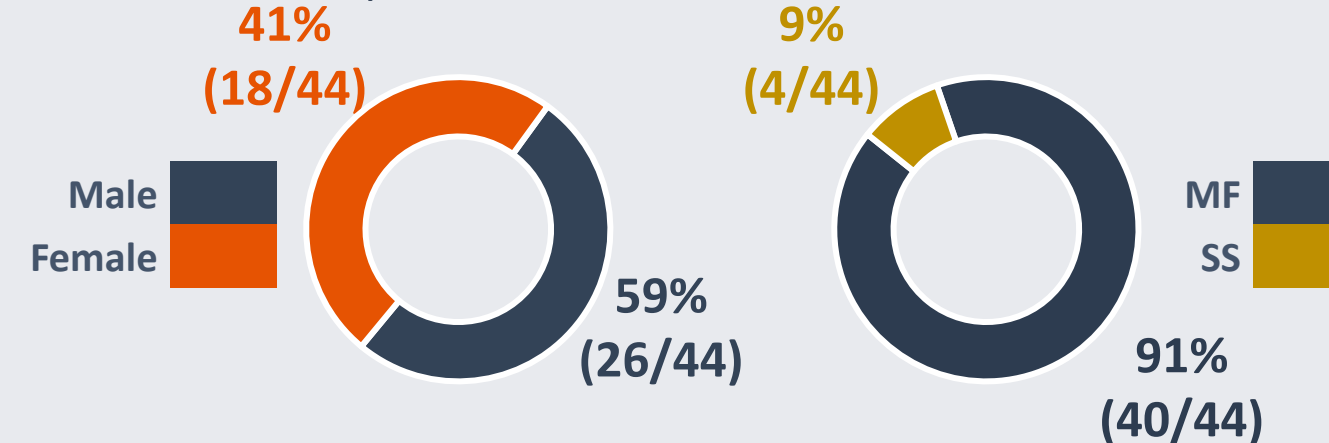
44 patients were recruited from 19 provinces in China

Region	Number of patients
East	17
South-Central	12
North	7
Northeast	2
Southwest	5
Northwest	1

*East China includes: Shanghai, Jiangsu, Zhejiang, Anhui, Fujian, Shandong; South-Central includes: Henan, Hubei, Hunan, Guangdong; North China includes: Beijing, Tianjin, Shanxi, Hebei; Northeast China includes: Liaoning, Heilongjiang; Southwest China includes: Sichuan, Chongqing; Northwest China includes: Shaanxi

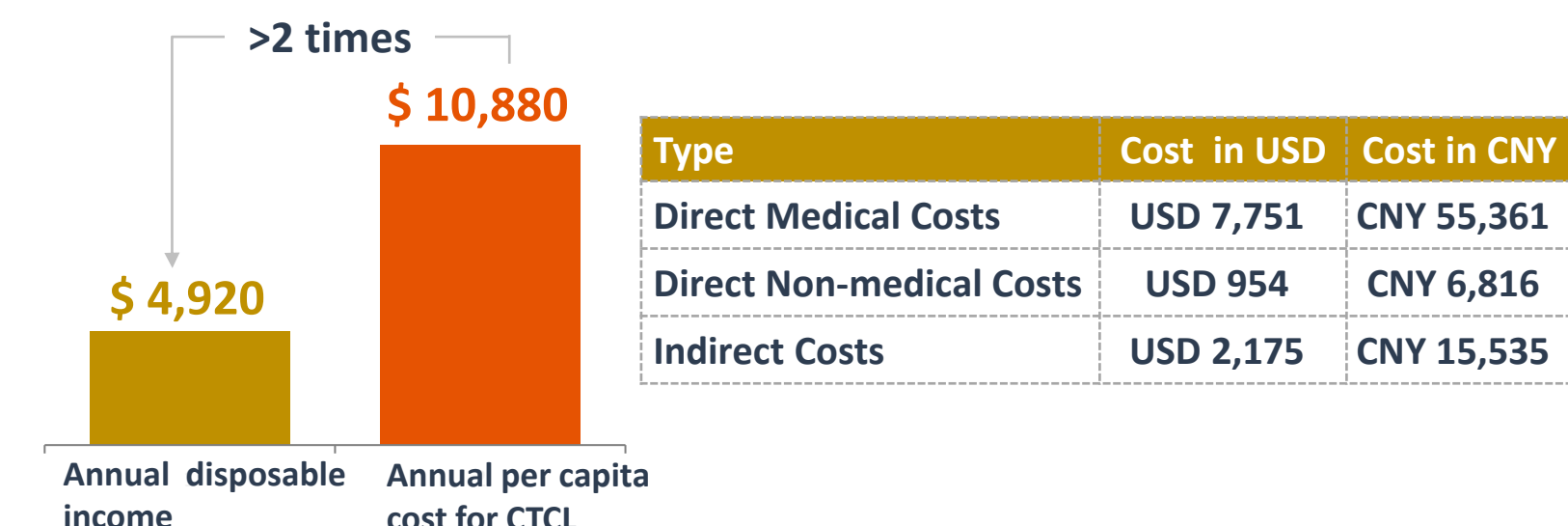
Patient Demographic and Subtypes

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



Economic Burden

- The annual per capita 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**) *



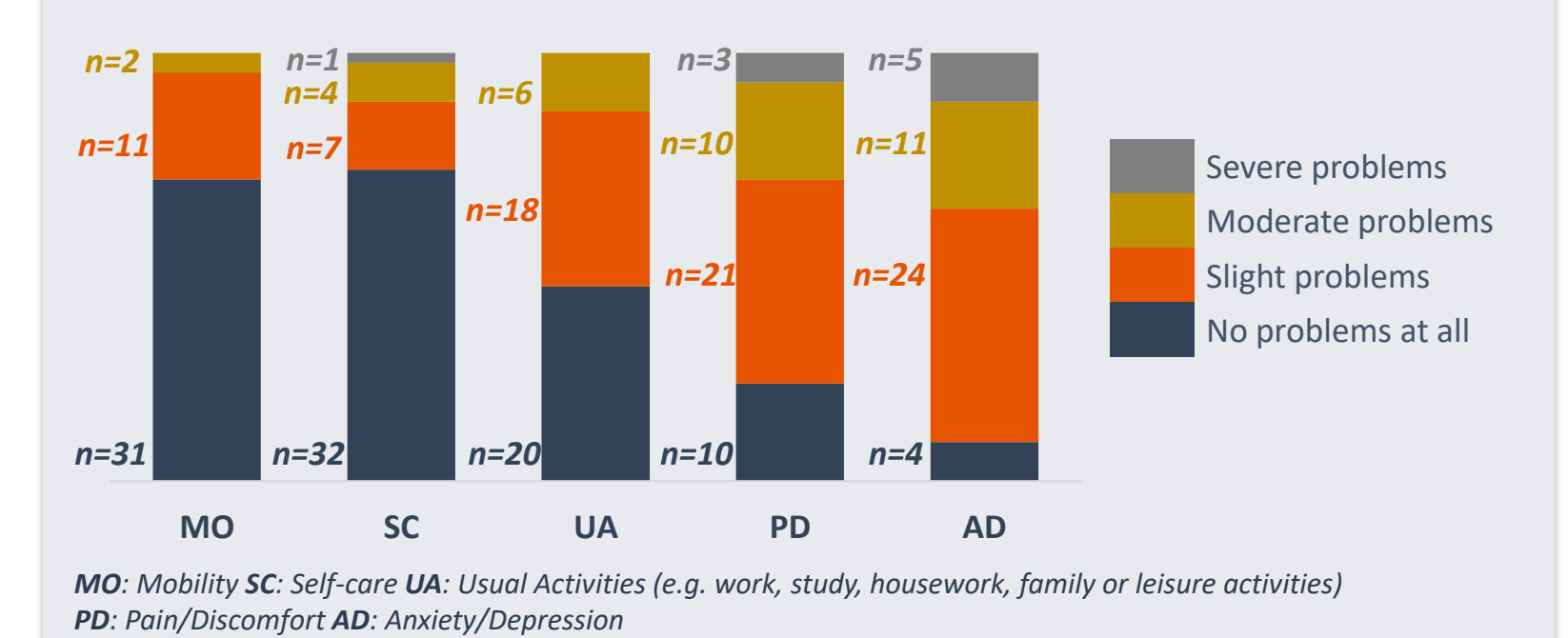
*CNY 1 = 0.14 USD, the exchange rate was determined at the day of calculation

HRQoL

- EQ-5D China time 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)

Instrument	EQ-5D-5L (n=44)	FACT-G (n=44)	Skindex-29 (n=44)
Results	0.76	60.6	47.7

Number of patients chose each level for EQ-5D instrument



Domain scores for FACT-G instrument

FACT-G Domain	PWB	SWB	EWB	FWB
Mean (SD)	17.73 (7.49)	18.25 (5.84)	10.18 (5.12)	14.41 (6.42)

PWB: physical well-being SWB: social/family well-being EWB: emotional well-being (EWB) FWB: functional well-being

CONCLUSION

These findings suggested that CTCL has compromised patients' quality of life and posed a substantial economic burden, further underscoring the potential societal benefit 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 worsen quality of life.