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文章收录引用 检索证明

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委托日期: 2025 年 6 月 12 日

中华人民共和国教育部科技查新工作站(Z04)



检索词:

Si H;

First Hospital of Jilin University;

检索数据库和检索年代:

	序号	数据库	检索年代
收录	1	PubMed 数据库 (https://pubmed.ncbi.nlm.nih.gov)	2025 年

检索结果:

序号	数据库	收录(篇)
1	PubMed	1

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详细结果见附件

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2025 年 6 月 12 日

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附件:

PubMed 收录情况:

1. PLoS Negl Trop Dis. 2025 Jun 9;19(6):e0013170. doi: 10.1371/journal.pntd.0013170. Online ahead of print.
IL-18 favors Th2 responses in sporotrichosis caused by Sporothrix globosa, prolonging the course of the disease.
Si H(1), Cui Y(1), Zu J(1), Shi Y(1), Song Y(1), Zhen Y(1), Li S(1).
Author information:
(1)Department of Dermatology and Venereology, the First Hospital of Jilin University, Changchun, China.

BACKGROUND: Sporotrichosis is a subcutaneous mycosis caused by members of the

genus *Sporothrix*, among which *Sporothrix globosa* (*S. globosa*) is the predominant etiological agent in Asia. T cell immunity plays crucial roles in fungal infections, yet the local T cell immune profile in sporotrichosis lesions remains unclear. IL-18, a pleiotropic cytokine capable of modulating T cell responses, is also poorly understood in host defense against *S. globosa*. METHODOLOGY/PRINCIPAL FINDINGS: qPCR, western blot, and IHC/mIHC were employed to profile IL-18, IL-18 BP, caspase-1 and IL-18R axis, along with Th1, Th2, and Th17 cells and their specific cytokines in sporotrichosis lesions versus healthy skin. Cellular sources of IL-18 in the lesions were identified via mIHC, and IL-18 production from keratinocyte/PBMCs exposed to *S. globosa* in vitro was tested by qPCR and western blot. Flow cytometry was performed to evaluate the role of IL-18 in Th2 polarization in the PBMCs-*S. globosa* coculture system. Lesional skin exhibited hyperactivated IL-18 signaling, marked by upregulated IL-18, caspase-1, and IL-18R, alongside decreased IL-18 BP. IL-18 was primarily released by dermal dendritic cells and Langerhans cells, rather than keratinocytes. A mixed Th1/Th2/Th17 microenvironment with Th2 predominance correlated strongly with prolonged disease duration. Strikingly, IL-18 synergistically interacted with Th1-derived IL-2 to establish a self-reinforcing Th2 loop, as evidenced by the strong correlation between lesional IL-4 and IL-18 levels ($r = 0.70$) and the concomitant upregulation of IL-18/IL-2 during *S. globosa*-induced Th2 expansion in PBMCs—an effect reversed by IL-18/IL-2 neutralizing antibodies. Critically, this Th2 skewing was mechanistically dependent on NF- κ B signaling, as demonstrated through pharmacological pathway inhibition.

CONCLUSIONS/SIGNIFICANCE: This study unveils the dual role of IL-18 in human sporotrichosis caused by *S. globosa*-amplifying both Th1 and Th2 responses but ultimately driving pathogenic Th2 polarization through IL-2 cross-talk. Our work identifies IL-18/IL-2/NF- κ B axis as a key Th2-polarizing mechanism driving chronicity in this disease. Targeting this axis could recalibrate anti-fungal immunity, offering translational strategies for this subcutaneous disease. Copyright: © 2025 Si et al. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.
DOI: 10.1371/journal.pntd.0013170
PMID: 40489556
Conflict of interest statement: The authors have declared that no competing interests exist.

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Henan Si¹, Yan Cui¹, Jianjiao Zu¹, Ying Shi¹, Yang Song¹, Yu Zhen¹, Shanshan Li¹

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PMID: 40489556 DOI: 10.1371/journal.pntd.0013170

Online ahead of print

> PLoS Negl Trop Dis. 2025 Jun 9;19(6):e0013170. doi: 10.1371/journal.pntd.0013170.

IL-18 favors Th2 responses in sporotrichosis caused by Sporothrix globosa, prolonging the course of the disease

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刊源证明

委托单位: 吉林大学

委 托 人: 司鹤南

委托日期: 2025 年 6 月 12 日

中华人民共和国教育部科技查新工作站(Z04)



检索词：

PLOS NEGLECTED TROPICAL DISEASES

ISSN / eISSN: 1935-2735

IL-18 favors Th2 responses in sporotrichosis caused by Sporothrix globosa, prolonging the course of the disease

数据来源：

序号	数据来源
1	Science Citation Index Expanded, 简称 SCIE
2	Master Journal List http://mjl.clarivate.com/
3	Journal Impact Factor, 简称 JIF
4	JCR 分区：数据基于 Journal Impact Factor
5	《中国科学院文献情报中心期刊分区表(升级版)》，简称“中科院分区(升级版)”

检索结果：

经检索，期刊《PLOS NEGLECTED TROPICAL DISEASES》(ISSN / eISSN: 1935-2735)为 SCIE 刊源^[见附件一]，目前该刊被 SCIE 收录入到 2025 年 6 月 19 卷 6 期^[见附件二]，其 2023 年影响因子:3.4, JCR 分区为 PARASITOLOGY: Q1, TROPICAL MEDICINE: Q1; 2023 年中科院分区为医学(大类): 2 区, TROPICAL MEDICINE 热带医学(小类): 1 区^[见附件三]，PARASITOLOGY 寄生虫学(小类): 2 区。委托人司鹤南在该刊发表的论文“IL-18 favors Th2 responses in sporotrichosis caused by Sporothrix globosa, prolonging the course of the disease ” (DOI: 10.1371/journal.pntd.0013170)暂未被 SCIE 收录。

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(2)该证明不能作为吉林大学博士学位授予依据。

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详细结果见附件

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2025 年 6 月 12 日

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附件一：SCIE 刊源列表查询结果

PLOS NEGLECTED TROPICAL DISEASES

Publisher: PUBLIC LIBRARY SCIENCE , 1160 BATTERY STREET, STE 100, SAN FRANCISCO, USA, CA, 94111

ISSN / eISSN: 1935-2735

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Enriched Cited References

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JIF 和 JCR 分区(2023):

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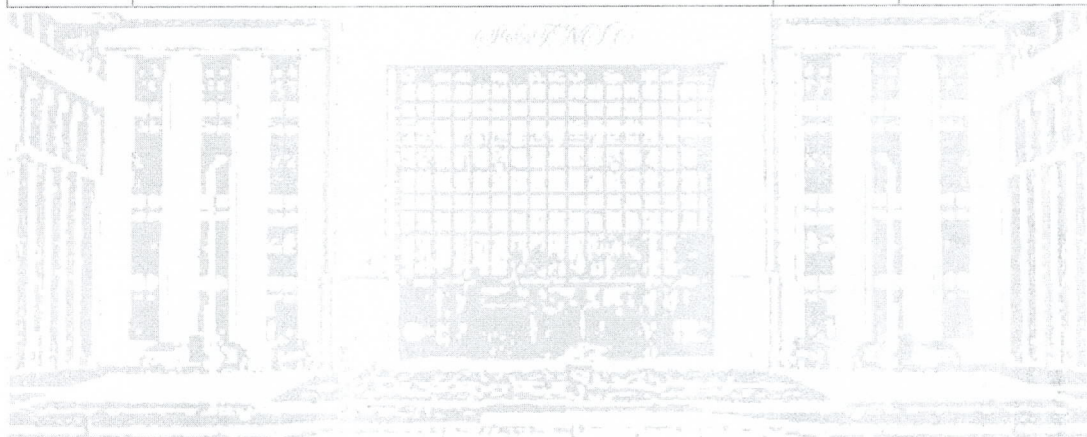
Five Year

JCR Category	Category Rank	Category Quartile
PARASITOLOGY <i>in SCIE edition</i>	9/45	Q1
TROPICAL MEDICINE <i>in SCIE edition</i>	5/28	Q1

Source: Journal Citation Reports 2023. [Learn more](#)

中科院分区(升级版):

刊名	PLoS Neglected Tropical Diseases		
年份	2025		
ISSN / EISSN	1935-2735 / 1935-2735		
Review	否		
OA Journal Index (OAJ)	是		
Open Access	是		
Web of Science	SCIE		
	学科	分区	Top期刊
大类	医学	2	否
小类	TROPICAL MEDICINE 热带医学	1	-
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