

PEER-REVIEW REPORT

Name of journal: World Journal of Immunology

Manuscript NO: 85467

Title: Stem cell-like memory T cells: Role in Viral Infections and Autoimmunity

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 00503405

Position: Editorial Board

Academic degree: MD, PhD

Professional title: Senior Lecturer, Senior Scientist

Reviewer's Country/Territory: Hungary

Author's Country/Territory: India

Manuscript submission date: 2023-04-28

Reviewer chosen by: AI Technique

Reviewer accepted review: 2023-04-28 16:00

Reviewer performed review: 2023-05-01 14:52

Review time: 2 Days and 22 Hours

| | [] Grade A: Excellent [] Grade B: Very good [Y] Grade C: |
|---|---|
| Scientific quality | Good |
| | [] Grade D: Fair [] Grade E: Do not publish |
| Novelty of this manuscript | [] Grade A: Excellent [] Grade B: Good [Y] Grade C: Fair [] Grade D: No novelty |
| Creativity or innovation of this manuscript | [] Grade A: Excellent [] Grade B: Good [Y] Grade C: Fair [] Grade D: No creativity or innovation |



| Scientific significance of the conclusion in this manuscript | [] Grade A: Excellent [] Grade B: Good [Y] Grade C: Fair [] Grade D: No scientific significance |
|--|---|
| Language quality | [] Grade A: Priority publishing [Y] Grade B: Minor language polishing [] Grade C: A great deal of language polishing [] Grade D: Rejection |
| Conclusion | [] Accept (High priority) [] Accept (General priority) [] Minor revision [Y] Major revision [] Rejection |
| Re-review | [Y]Yes []No |
| Peer-reviewer statements | Peer-Review: [Y] Anonymous [] Onymous Conflicts-of-Interest: [] Yes [Y] No |

SPECIFIC COMMENTS TO AUTHORS

The authors of the minireview summarized the characteristics of stem cell-like memory T cells and their role in viral infections and autoimmune diseases based on recent literature data. The facts described are basically correct, understandable, and summarize the available data on the subject. However, one important aspect needs to be further elaborated: what are the antiviral and immunotherapeutic (including CAR-based) potentials of Tscm cells?



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Peer-review model: Single blind

Reviewer's code: 05426937

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor, Professor

Reviewer's Country/Territory: China

Author's Country/Territory: India

Manuscript submission date: 2023-04-28

Reviewer chosen by: Geng-Long Liu

Reviewer accepted review: 2023-05-19 05:38

Reviewer performed review: 2023-05-27 07:30

Review time: 8 Days and 1 Hour

| | [] Grade A: Excellent [Y] Grade B: Very good [] Grade C: |
|---|--|
| Scientific quality | Good |
| | [] Grade D: Fair [] Grade E: Do not publish |
| Novelty of this manuscript | [] Grade A: Excellent [Y] Grade B: Good [] Grade C: Fair [] Grade D: No novelty |
| Creativity or innovation of this manuscript | [] Grade A: Excellent [Y] Grade B: Good [] Grade C: Fair [] Grade D: No creativity or innovation |



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| Re-review | [Y]Yes []No |
| Peer-reviewer statements | Peer-Review: [Y] Anonymous [] Onymous Conflicts-of-Interest: [] Yes [Y] No |

SPECIFIC COMMENTS TO AUTHORS

This article discusses the contrasting roles of stem cell-like memory T (TSCM) cells during chronic viral infections and autoimmune diseases. During chronic viral infections, such as HIV-1, the TSCM cells serve as reservoirs for latent viruses, which can be activated to make them susceptible to cytotoxic T cell responses. However, during acute viral infections, the TSCM cells have the ability to replenish the diminished effector T cell population. In autoimmune diseases, like type-1 diabetes, these cells contribute to the disease pathogenesis by persistent generation of autoreactive effector T cells. A better understanding of the key signaling pathways and mediators regulating TSCM cells could lead to novel approaches to target or manipulate these cells for immunotherapeutic applications. The content of this manuscript is interesting. We believe this manuscript is valuable for all the researchers who are interested in the contrasting roles of stem cell-like memory T (TSCM) cells during chronic viral infections and autoimmune diseases. This study focuses on current research hot spots and frontiers, which is very important for subsequent research. The article also puts forward the current problems and future research directions. Therefore, I recommend accepting and



publishing this manuscript.

RE-REVIEW REPORT OF REVISED MANUSCRIPT

Name of journal: World Journal of Immunology Manuscript NO: 85467 Title: Stem cell-like memory T cells: Role in viral infections and autoimmunity Provenance and peer review: Invited Manuscript; Externally peer reviewed Peer-review model: Single blind **Reviewer's code:** 00503405 **Position:** Editorial Board Academic degree: MD, PhD Professional title: Senior Lecturer, Senior Scientist Reviewer's Country/Territory: Hungary Author's Country/Territory: India Manuscript submission date: 2023-04-28 Reviewer chosen by: Yu-Lu Chen Reviewer accepted review: 2023-07-07 03:04 Reviewer performed review: 2023-07-08 12:44 Review time: 1 Day and 9 Hours [Y] Grade A: Excellent [] Grade B: Very good [] Grade C: Good Scientific quality [] Grade D: Fair [] Grade E: Do not publish [V] Crade A. Priority publishing [] Crade B. Minor language polishing

| Language quality | [] Grade C: A great deal of language polishing [] Grade D: Rejection |
|------------------|---|
| Conclusion | [] Accept (High priority) [Y] Accept (General priority) [] Minor revision [] Major revision [] Rejection |



| Peer-reviewer | Peer-Review: [Y] Anonymous [] Onymous |
|---------------|---------------------------------------|
| statements | Conflicts-of-Interest: [] Yes [Y] No |

SPECIFIC COMMENTS TO AUTHORS

The authors provide a correct revision according to the given suggestions. The revised version of the manuscript is acceptable for publication.