frontiers in Immunology

CORRECTION
published: 09 September 2020
doi: 10.3389/fimmu.2020.02019

RETRACTED: Corrigendum: *Leishmania*-Specific Promiscuous Membrane Protein Tubulin Folding Cofactor D Divulges Th_1/Th_2 Polarization in the Host via ERK-1/2 and p38 MAPK Signaling Cascade

Edited and reviewed by:
Pedro A. Reche, Complutense University of Madrid, Spain

***Correspondence:**
Shubhankar K. Singh
shubhankar30@gmail.com
Swaleha Zubair
swalehazubair@yahoo.com
Mohammad Owais
mdowais2012@gmail.com

Specialty section:
This article was submitted to Vaccines and Molecular Therapeutics, a section of the journal Frontiers in Immunology

Received: 07 July 2020
Accepted: 24 July 2020
Published: 09 September 2020

Citation:
Jamal F, Singh MK, Hansa J, Pushpanjali, Ahmad G, Dikhit MR, Umar MS, Bimal S, Das P, Mujeeb AA, Singh SK, Zubair S and Owais M (2020) Corrigendum: Leishmania-Specific Promiscuous Membrane Protein Tubulin Folding Cofactor D Divulges Th_1/Th_2 Polarization in the Host via ERK-1/2 and p38 MAPK Signaling Cascade. Front. Immunol. 11:2019. doi: 10.3389/fimmu.2020.02019

Fauzia Jamal[1], Manish K. Singh[2], Jagadish Hansa[2], Pushpanjali[2], Ghufran Ahmad[2], Manas Ranjan Dikhit[3], Mohd Saad Umar[1], Sanjiva Bimal[4], Pradeep Das[5], Anzar Abdul Mujeeb[1], Shubhankar K. Singh[2], Swaleha Zubair[6]* and Mohammad Owais[1]**

[1] Interdesciplinary Biotechnology Unit, Aligarh Muslim University, Aligarh, India, [2] Department of Microbiology, Rajendra Memorial Research Institute of Medical Sciences, Patna, India, [3] Department of Bioinformatics, Rajendra Memorial Research Institute of Medical Sciences, Patna, India, [4] Department of Immunology, Rajendra Memorial Research Institute of Medical Sciences, Patna, India, [5] Department of Molecular Biology, Rajendra Memorial Research Institute of Medical Sciences, Patna, India, [6] Department of Computer Science, Aligarh Muslim University, Aligarh, India

Keywords: tubulin folding cofactor D, *Leishmania donovani*, immunoprophylaxis, Th_1 response, T-cell proliferation, MAPK signaling, peptide cocktail, humoral response

A Corrigendum on

***Leishmania*-Specific Promiscuous Membrane Protein Tubulin Folding Cofactor D Divulges Th_1/Th_2 Polarization in the Host via ERK-1/2 and p38 MAPK Signaling Cascade**

by Jamal, F., Singh, M. K., Hansa, J., Pushpanjali, Ahmad, G., Dikhit, M. R., et al. (2020). Front. Immunol. 11:817. doi: 10.3389/fimmu.2020.00817

In the original article, there was a error in **Figure 9C** as published. The flow panels were inadvertently misarranged. The corrected **Figure 9** appears below.

The authors apologize for this error and state that this does not change the scientific conclusions of the article in any way. The original article has been updated.

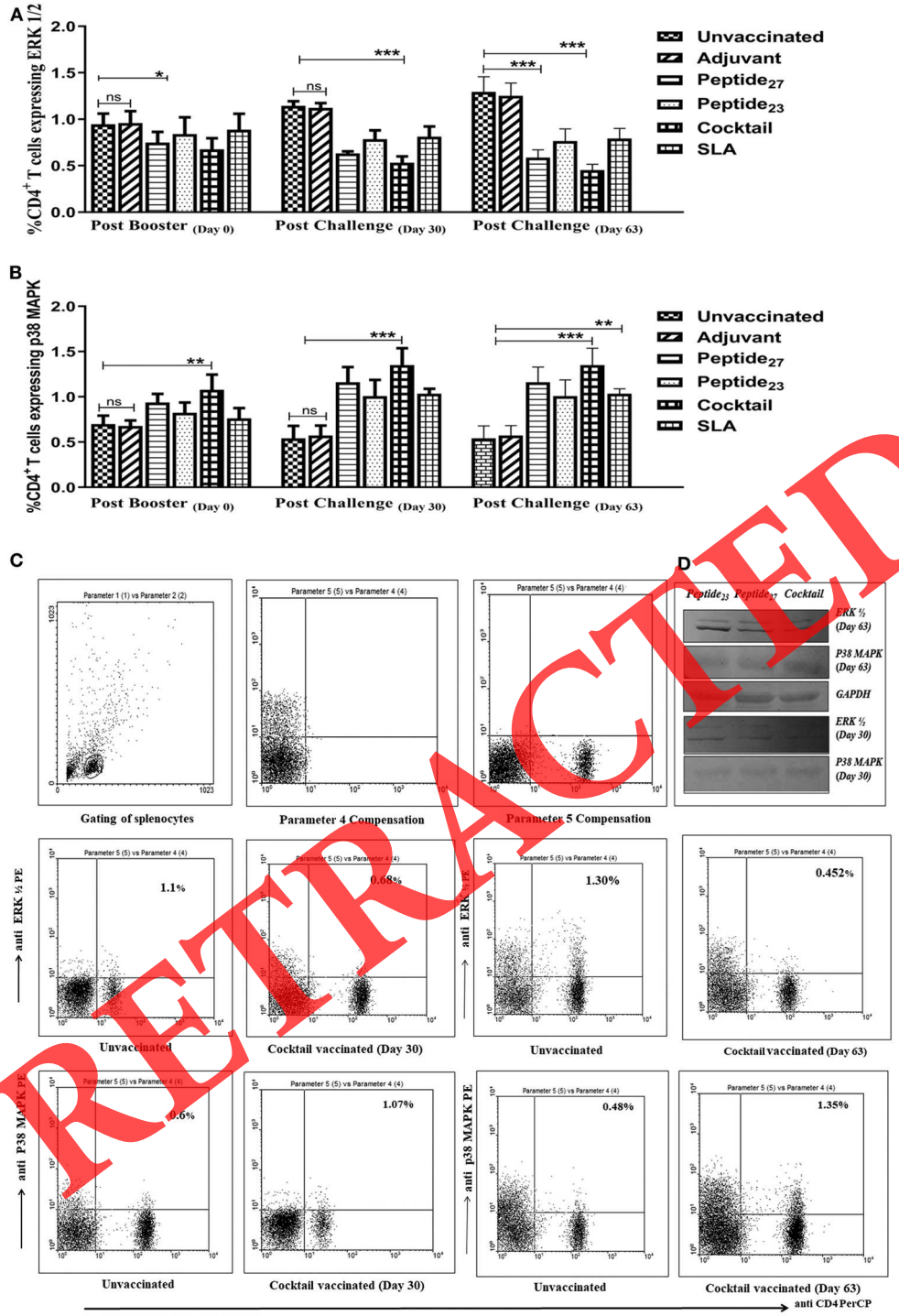

FIGURE 9 | Vaccine-mediated modulation of MAPK signaling cascade as revealed by the estimation of expressed phosphorylated ERK-1/2 and p38 MAPK in $CD4^+$ T-cells belonging to various groups of animals immunized with peptide-based vaccines. **(A)** Percentage of $CD4^+$ T-cells co-expressing phosphorylated ERK-1/2 in various groups of immunized animals. **(B)** Percentage of $CD4^+$ T-cells expressing phosphorylated p38 MAPK in $CD4^+$ T-cells belonging to various groups of immunized animals. **(C)** Dot plot showing the mean percentage of $CD4^+$ T-cell expressing phosphorylated ERK-1/2 and p38 MAPK on day 30 and 63 in various groups of animals immunized with a peptide-based vaccine. **(D)** Western blot showing the down-regulation of ERK-1/2 and the up-regulation of p38 MAPK in the immune cells of immunized mice. The cell lysate was subjected to SDS-PAGE, followed by blotting to nitrocellulose paper. The blot was probed with specific primary antibodies and horseradish peroxidase-conjugated secondary antibodies at 1:500 and 1:1,000 dilutions, respectively. Each experiment was performed thrice and a value ≤ 0.05 was considered to be significant ($^*p \leq 0.05$, $^{**}p \leq 0.005$, $^{***}p \leq 0.001$).