



Correction to: The pathogenicity of Th17 cells in autoimmune diseases

Keiko Yasuda^{1,2} · Yusuke Takeuchi^{1,3} · Keiji Hirota¹

Published online: 29 April 2019
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Correction to: *Seminars in Immunopathology* <https://doi.org/10.1007/s00281-019-00733-8>

Unfortunately, an error occurred in the following passus of the article. The word “receptor” was missing in the sentence “Because T cells do not express GM-CSF receptor [41], GM-CSF affects non-T cells.”

The corrected text is given below.

GM-CSF, a key pathogenic cytokine in autoimmune tissue inflammation

GM-CSF is recently highlighted as the pathogenic cytokine of Th17 cells. The role of GM-CSF in EAE model was first reported in 2001, in which blockade of GM-CSF showed resistance to the EAE induction, but the critical source of GM-CSF in immune cells was not investigated in detail [50]. There was the first report that among Th subsets infiltrating into the CNS after EAE induction, some of Th cells showed IL-17A+ GM-CSF+ double-positive producer [51]. The critical func-

tion of IL-23 signaling directing encephalitogenic Th17 cells has been reported to drive GM-CSF production, which causes local tissue inflammation [41, 52]. Because T cells do not express GM-CSF receptor [41], GM-CSF affects non-T cells. GM-CSF first acts on CNS-infiltrating myeloid cells such as dendritic cells (DCs), monocytes, and macrophages which in turn secrete pro-inflammatory cytokines such as IL-6 and IL-23, both of which upregulate IL-23R expression, amplifying IL-23-mediated pathogenic circuit to directly cause neurological pathogenicity and establishing local tissue inflammation by recruiting inflammatory macrophages in the CNS [51, 53]. GM-CSF also activates CCR2+ monocytes, monocyte-derived DCs, and microglia in the brain to produce IL-1 β [54, 55]. Since microglia have a potential to produce IL-23, they could participate in the IL-23-IL-17 immune axis in Th17 cell-mediated tissue inflammation [56].

The original article has been corrected.

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The online version of the original article can be found at <https://doi.org/10.1007/s00281-019-00733-8>

✉ Keiji Hirota
hkeiji@infront.kyoto-u.ac.jp

¹ Laboratory of Integrative Biological Science, Institute for Frontier Life and Medical Sciences, Kyoto University, Kyoto 606-8507, Japan

² Department of Nephrology, Graduate School of Medicine, Osaka University, Osaka, Japan

³ Department of Rheumatology and Clinical Immunology, Graduate School of Medicine, Kyoto University, Kyoto, Japan