

CLAIMS

1. A method for treating HIV-1 infection and regulating immune system function by lessening systemic inflammation and augmenting immune activation in a subject, comprising administering to the subject a combination comprising a) one or more antiretroviral agents and b) N-carbamimidoyl-5-(1-methylpyrazol-4-yl)naphthalene-2-carboxamide or a pharmaceutically acceptable salt thereof.
2. The method according to claim 1, wherein administration of the combination alters HIV-induced immune dysregulation.
3. The method according to claim 1, wherein the systemic inflammation is myeloid and/or monocyte inflammation.
4. The method according to claim 1, wherein administration of the combination unmasks HIV-1 infected cells.
5. The method according to claim 1, wherein the immune system is the innate immune system.
6. The method according to claim 1, wherein administration of the combination increases the number of NK cells compared to administration of the one or more antiretroviral agents alone.
7. The method according to claim 1, wherein administration of the combination increases the level of IL-21 in plasma compared to administration of the one or more antiretroviral agents alone.
8. The method according to claim 1, wherein administration of the combination increases the number of CD4⁺ T cells compared to administration of the one or more antiretroviral agents alone.
9. The method according to claim 1, wherein administration of the combination increases the number of CD8⁺ T cells compared to administration of the one or more antiretroviral agents alone.

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10. The method according to claim 1, wherein administration of the combination reduces the level of sCD163 in plasma compared to administration of the one or more antiretroviral agents alone.
11. The method according to claim 1, wherein administration of the combination reduces downregulation of CD28 expression on CD4+ T cells infected with HIV-1 compared to administration of the one or more antiretroviral agents alone.
12. The method according to claim 1, wherein administration of the combination reduces downregulation of CCR7 expression on CD4+ T cells infected with HIV-1 compared to administration of the one or more antiretroviral agents alone.
13. The method according to claim 1, wherein administration of the combination reduces downregulation of CD80 expression on monocyte-derived macrophages infected with HIV-1 compared to administration of the one or more antiretroviral agents alone.
14. The method according to claim 1, wherein administration of the combination reduces downregulation of CD86 expression on monocyte-derived macrophages infected with HIV-1 compared to administration of the one or more antiretroviral agents alone.
15. The method according to claim 1, wherein the one or more the antiretroviral agents comprise a non-nucleoside reverse transcriptase inhibitor (NNRTI).
16. The method according to claim 15, wherein the NNRTI is efavirenz
17. The method according to claim 1, wherein the one or more antiretroviral agents comprise a nucleoside reverse transcriptase inhibitor (NRTI).
18. The method according to claim 17, wherein the NRTI is emtricitabine or tenofovir disoproxil fumarate (tenofovir DF).
19. The method according to claim 1 wherein the one or more the antiretroviral agents comprise efavirenz, emtricitabine and tenofovir DF.
20. Use of a) one or more antiretroviral agents and b) N-carbamimidoyl-5-(1-methylpyrazol-4-yl)naphthalene-2-carboxamide or a pharmaceutically acceptable salt

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thereof, for the manufacture of a medicament for treating HIV-1 infection and regulating immune system function by lessening systemic inflammation and augmenting immune activation in a subject.