

CLAIMS

1. A method comprising the steps of
 - provision of a sample derived from a blood sample of a subject that has received a checkpoint-inhibitor therapy and is suspected of developing or has developed symptoms of immune-related adverse events (irAE),
 - adding a photosensitizing agent to the sample and
 - subjecting the sample to irradiation.
2. The method according to claim 1, wherein adding a photosensitizing agent to the sample and subjecting the sample to irradiation generates or induces (the formation of) immunoregulatory NK cells in said sample.
3. The method according to any one of the preceding claims, wherein the photosensitizing agent is 8-methoxypsoralen and/or the irradiation is UVA irradiation.
4. The method according to any one of the preceding claims, wherein the subject shows symptoms of or suffers from irAE.
5. The method according to any one of the preceding claims, wherein the checkpoint-inhibitor therapy was discontinued after symptoms and/or manifestation of irAE occurred in said subject, or wherein symptoms and/or manifestation of irAE occurred after the checkpoint-inhibitor therapy was discontinued, and/or wherein symptoms and/or manifestation of irAE were maintained after the checkpoint-inhibitor therapy was discontinued.
6. The method according to any one of the preceding claims, wherein the irAE comprise symptoms of an autoimmune disease and/or is caused by an autoimmune reaction.
7. The method according to any one of the preceding claims, wherein the irAE comprise autoimmune colitis.
8. The method according to any one of the preceding claims, wherein the subject suffers from cancer, such as malignant melanoma or another cancer treatable by checkpoint-inhibitor therapy.
9. The method according to any one of the preceding claims, wherein the subject is receiving immunosuppressive drugs, such as steroids, corticosteroid, cyclosporine and/or anti-TNF antibodies (for example infliximab) and/or is refractory to immunosuppressive drugs.
10. The method according to any one of the preceding claims, wherein the checkpoint-inhibitor therapy comprises administration of at least one of anti-CTLA4 antibodies and anti-PD-1 antibodies.
11. Immunoregulatory NK cells obtained from a method comprising the steps of
 - provision of a sample derived from an isolated blood sample of a subject,
 - adding a photosensitizing agent to the sample, and

- subjecting the sample to irradiation.
12. Immunoregulatory NK cells according to the preceding claim, wherein the blood sample is from a subject that has received a checkpoint-inhibitor therapy and is suspected of developing or has developed symptoms of immune-related adverse events (irAE).
 13. Immunoregulatory NK cells for use in the treatment and/or prevention of immune-related adverse events (irAE) in a subject that has received a checkpoint-inhibitor therapy.
 14. Immunoregulatory NK cells for use according to the preceding claim, wherein the immunoregulatory NK cells have been generated by adding a photosensitizing agent to a sample derived from a blood sample of a human subject and subjecting the sample to irradiation.
 15. Immunoregulatory NK cells for use according to any of claims 13 or 14, wherein the NK cells are autologous with respect to said subject, and/or wherein the NK cells are administered to the subject while checkpoint-inhibitor therapy is ongoing.