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(71) Applicant: ALBERT-LUDWIGS-UNIVERSITÄT
FREIBURG [DE/DE]; Friedrichstrasse 39, 79098 Freiburg
(DE).

(72) Inventors: ZEISER, Robert; Lise Meitner Str. 10, 79100
Freiburg (DE). APOSTOLOVA, Petya; Hugstetterstr 50,
79106 Freiburg (DE). DUYSER, Justus; Tennenbacher
Str. 9, 79106 Freiburg (DE).

(74) Agent: HERTIN UND PARTNER RECHTS- UND
PATENTANWÄLTE; Kurfürstendamm 54/55, 10707
Berlin (DE).

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(54) Title: METHOD FOR GENERATING IMMUNOREGULATORY CELLS IN A BLOOD-DERIVED SAMPLE

(57) Abstract: The present invention relates to 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, which preferably generates immunoregulatory NK cells in said sample. In embodiments, the photosensitizing agent is 8-methoxypsoralen and/or the irradiation is UVA irradiation. In another aspect, the invention relates to 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. Furthermore, the invention encompasses immunoregulatory NK cells for use in the treatment and/or prevention of irAE in a subject that has received a checkpoint-inhibitor therapy.



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