## Supplementary information

Additional file 1: Figure S1. Gating strategy and example of flow cytometric analysis of purified CD1c (BDCA-1)<sup>+</sup> / CD141 (BDCA-3)<sup>+</sup> myDCs. The gating strategy is explained in the materials and methods section. Abbreviations: 7-AAD: 7-Aminoactinomycin D; CD: cluster of differentiation; FSC: forward scatter; SCC: sideward scatter

Additional file 2: Table S1. Leukapheresis purified cell fractions after volume reduction.

Additional file 3: Table S2. Number of injections, type of injected lesions, response in injected lesions, and overall response per study patient.

Additional file 4: Figure S2. A Plot of eosinophil counts in the blood throughout the time of study treatment. This patient with stage IV-M1a melanoma who achieved a complete remission upon study treatment developed an asymptomatic grade 3 blood eosinophilia. B Hematoxylin eosin staining of a biopsy taken at the location where the tumor initially located of the same patient showed infiltrating eosinophils. The white circles highlight eosinophils present in the tissue section. C Photograph of a purpuric rash developing two days after injection of the CD1c (BDCA-1)<sup>+</sup> myDCs that resolved completely after approximately 7 days without any therapeutic intervention in a stage IIIC melanoma patient who obtained a complete remission of metastatic intransit lesions.