Avelumab treatment for patients with metastatic Merkel cell carcinoma can be safely stopped after one year and a PET/CT confirmed complete response.

Lisanne P. Zijlker, Sonja Levy, Wendy Wolters, Johannes V. van Thienen, Alexander C.J. van Akkooi, Margot E.T. Tesselaar*

NETHERLANDS CANCER INSTITUTE
ANTONI VAN LEEUWENHOEK

BACKGROUND

- Patients with metastasized Merkel cell carcinoma (mMCC) have a poor prognosis with overall survival rates for stage III and stage IV disease of 35% and 14%, prior to the introduction of immunotherapy[1].
- Immune checkpoint inhibitor (ICI) treatment with the anti-PDL1 inhibitor avelumab has achieved high response rates in patients with mMCC ranging from 33-73% and has significantly improved overall survival[2-5].
- The ideal duration of Avelumab treatment is however currently unknown.
- This study aims to evaluate if avelumab treatment for mMCC can be safely stopped after 1 year of treatment and confirmed complete response (CR) by FDG-PET/CT imaging.

METHODS

- In this retrospective cohort study, all patients treated with >1 dose of avelumab for metastatic MCC at the Netherlands Cancer Institute between 2017 and 2022 were included.
- Treatment was stopped per institutional protocol after a FDG-PET/CT confirmed complete response and 26 cycles (1 year) of treatment, disease progression, unacceptable toxicity or patient preference for discontinuation.
- Primary endpoint was recurrence free survival (RFS) defined as time from discontinuation of treatment until recurrence.
- Secondary outcome was duration of response (DOR) defined as time from first response until recurrence, progression of disease, death or last follow-up.
- Responses were reported according to the RECIST 1.1 criteria.

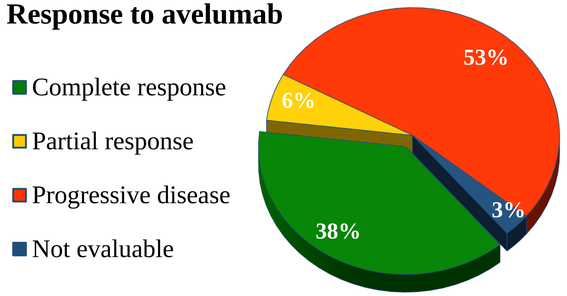
References
1. Harms et al. Ann Surg Oncol, 2016. 2. ‘d Angelo et al. J Immunother Cancer, 2021. 3. Bhatia et al. J Immunother Cancer, 2022. 4. Levy et al. J Immunother Cancer, 2020. 5. Walker et al. J Immunother Cancer, 2020.

RESULTS

Baseline characteristics

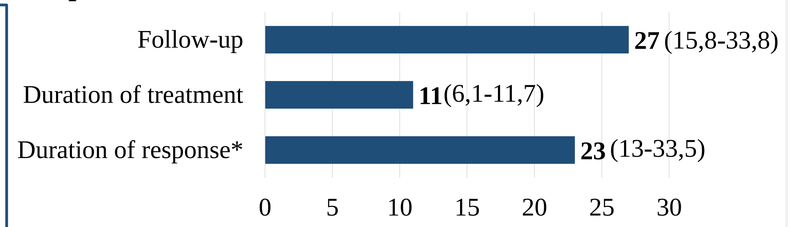
	N=65
Age at start treatment (median, IQR)	74 (68-80)
Gender, female	23 (65%)
Disease stage	
Locally advanced	15 (23%)
Distant disease	50 (77%)
Site of metastases	
Nodal or cutaneous	45 (69%)
Visceral	20 (31%)
MCV status	
Positive	21 (32%)
Unknown	36 (56%)
First line immunotherapy	58 (89%)

Response to avelumab



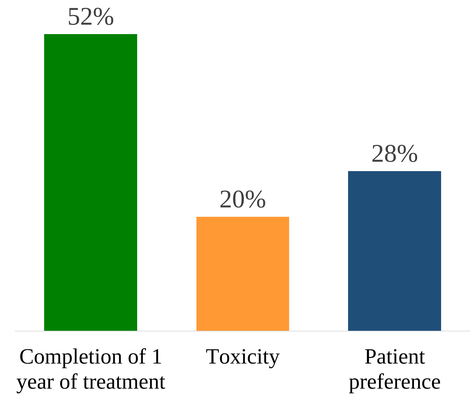
Outcomes after a complete response and discontinuation of avelumab

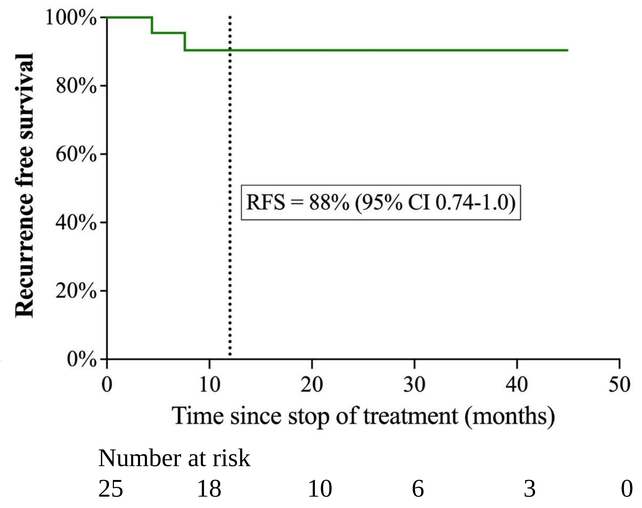
25 patients with mMCC (38%) had a FDG-PET/CT confirmed complete response and stopped treatment after a median of 26 cycles (IQR 11-26) of avelumab.



Months since start of treatment, median (IQR).
* Months since first response

Reasons for discontinuation of treatment





Recurrence characteristics

- N=2 patients (8%) experienced a recurrence at 4 and 7 months after stop of treatment.
- Both patients had stage IV disease, one had visceral metastases and one distant nodal metastases.
- Both received first line immunotherapy, both completed 1 year of avelumab treatment
- One patient had a positive MCV status, the other was unknown.

CONCLUSIONS

- **Avelumab treatment for patients with metastatic MCC can be safely discontinued after one year of treatment and a FDG-PET/CT confirmed complete response.**
- **Recurrences after discontinuation of treatment and a CR were rare, indicating a durable response to anti-PDL.**
- **Identifying patients who can safely discontinue treatment is important to reduce overtreatment, with a negative effect both on patient well-being and medical and financial resources.**

MADRID 2023 ESMO congress

The presenting author MET Tesselaar declares no competing interests.

FPN: 1149P

This poster was presented at annual ESMO congress (October 20-24th 2023)
Corresponding Author: m.tesselaar@nki.nl