
# Cemiplimab for advanced cutaneous squamous cell carcinoma in kidney transplant recipients.

T. Van Meerhaeghe[1], J.F. Baurain[2], O. Bechter[3], C. Orte Cano[4], V. Del Marmol[4], A. Devresse[5], P. Doubel[6], M. Hanssens[7], R. Hellemans[8], D. Lienard[4], A. Rutten[9], B. Sprangers[10], A. Le Moine[1], S. Aspeslagh[11]

[1] Department of Nephrology, Hôpital Erasme – ULB, Brussels, Belgium, [2] Department of Oncology, Clinique Universitaire Saint-Luc – UCLouvain, Brussels, Belgium, [3] Department of Oncology, UZ Leuven – KUL, Leuven, Belgium, [4] Department of Dermatology, Hôpital Erasme – ULB, Brussels, Belgium, [5] Department of Nephrology, Clinique Universitaire Saint-Luc – UCLouvain, Brussels, Belgium, [6] Department of Nephrology, AZ Groeninge, Kortrijk, Belgium, [7] Department of Oncology, AZ Groeninge, Kortrijk, Belgium, [8] Departement of Nephrology, UZ Antwerpen, Antwerpen, Belgium, [9] Department of Oncology, GasthuisZuster, Antwerpen, Belgium, [10] Department of Nephrology, UZ Leuven – KUL, Leuven, Belgium, [11] Department of Oncology, UZ Brussel – VUB, Brussels, Belgium

## Introduction

**Malignancy** is a significant adverse event in kidney transplant recipients.

- Overall risk: 2 - to - 4 fold higher than general population
- Some cancer types are overrepresented in KTR, especially non-melanoma skin cancer (**NMSC**) with an excess risk of approximately **250 times higher** than the general population.
- The most frequent NMSC encountered in KTR is **cutaneous squamous cell carcinoma (cSCC).**

**Cemiplimab,** a human monoclonal IgG4 antibody against anti-PD-1 has shown favorable overall survival and progression free survival in immunocompetent patients suffering from advanced cSCC. **Only few data in KTR.**

**Herein, we review the real-world experience with cemiplimab in KTR for advanced cSCC in Belgium.**

## Results

**Tumor response rate**

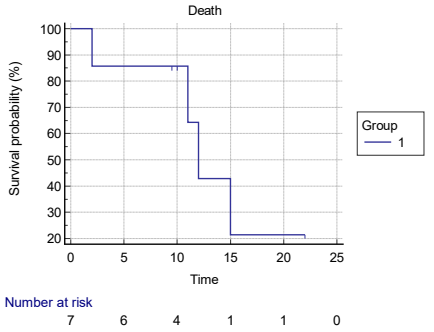
- Overall response rate (ORR) 42.8% (n = 3/7)
- Stable disease (SD) 14.3% (n = 1/7)
- Progressive disease (PD) in 42.8% (n = 3/7)
- Death due to tumoral progression was seen in 3 patients (42.8%).
- The median overall survival estimated by the Kaplan Meier was 12 months (95% CI of the median 2 – 15 months).

In patients with a CR or PR response to cemiplimab, 1 patient suffered from a difficult to treat eye localization, and 2 patients had lymph node and skin metastasis. There was no involvement of other organs or bone lesions. On the contrary 2 of the 3 patients with progressive disease (PD) had lung and/or bone lesions. Patients on monotherapy (CTC or TAC alone) tended to have a better tumoral response compared to patients with at least two immunosuppressive treatments.

**Safety of Cemiplimab**

- **Only one patient (14.3%) developed biopsy-proven acute T-cell mediated graft rejection (after 2 w).**
- IrAEs other than graft rejection occurred only in one patient of the entire cohort and consisted of a grade I-II skin toxicity, without need to withhold immunotherapy.

Figure 1: Overall survival of KTR on cemiplimab for advanced cSSC




## Conclusion

The present study shows that the use of cemiplimab in KTR with advanced cSCC who failed to respond to conventional treatment is associated with an ORR of 42.8% with minimal risk of graft rejection (14.3%) and good tolerance. Cemiplimab may therefore be a feasible treatment for KTR with advanced cSCC.