P–30; **ACTIVITY AND DISTRIBUTION OF CELLS INFILTRATING TC-1 TUMOURS AFTER CHEMOTHERAPY AND SUBSEQUENT IL-12 IMMUNOTHERAPY**

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Methods: Moderately immunogenic HPV-16-associated TC-1 tumour mimicking human HPV-16-associated neoplasms was used to examine the effect of local interleukin-12 gene therapy with a genetically modified tumour cell vaccine for the treatment of minimal residual tumour disease, obtained after cytoreductive chemotherapy (CMRTD) with ifosfamide derivative CBM-4A, on the distribution and activity of tumour-infiltrating cells.

Results: After chemotherapy, histological and immunohistological examinations showed a decrease or disappearance of $CD4^+$ and $CD8^+$ T cells as well as macrophages. The administration of the vaccine led to the abundance of macrophages and renewal of $CD8^+$ and $CD4^+$ cells in the tumour nodules. The FACS analysis of tumour-infiltrating cells showed a significant increase in $CD11c^+$ cells after chemotherapy and

subsequent immunotherapy. Moreover, $CD45^+$ tumour-infiltrating cells isolated from the treated animals exhibited, after short-term *in vitro* precultivation, renewed cytotoxic and proliferation potential.

Conclusion: These findings contribute to the relevance of the treatment of CMRTD with genetically modified cellular vaccines.

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