

Clinical Cancer Research in Switzerland

DOI: 10.36000/hbT.OH.2022.13.0xx
Vetter M. Clinical Cancer Research in Switzerland.
healthbook TIMES Onco Hema. 2022;13(3)



PD Dr Marcus Vetter
Head of Oncology and Hematology
Medical University Clinic
Cantonal Hospital Baselland (KSBL)
Liestal, Switzerland

In Switzerland, cancer patients are treated according to the latest scientific findings and several new targeted therapies are currently available due to remarkable progress in the field of precision oncology. In addition to the approved indication, off-label use can also be requested if the drug is available and corresponding data provide higher-grade evidence.

The development of novel treatments and biomarkers for various cancers is largely based on research. The breakthrough discovery of cytotoxic T-lymphocyte associated protein 4 (CTLA-4) and programmed death cell protein 1 (PD-1) by two researchers, James P. Allison and Tasuku Honjo, revolutionized cancer treatment and forged modern immunotherapy that was previously unimaginable in many areas of oncology.¹ Clinical data further indicate that a combination of anti-CTLA-4 and anti-PD-1 therapy can be more effective and might enable a cure even in metastasized tumor stages, as shown in malignant melanoma.²

Biomedical research has a long tradition in Switzerland. Alongside several large and medium-sized research-based pharmaceutical companies, we have world-renowned public universities and private research institutes. For many years, I have had the privilege of working with Prof. Dr Nicola Aceto, a chair of Molecular Oncology at ETH Zurich. His research interest mainly includes molecular mechanisms of cancer and metastatic progression, with a special focus on circulating tumor cells. Indeed, research in this area is progressing in leaps and bounds and novel therapeutic agents are being investigated that block the pathways mediating metastasis to prevent disease progression.

What do the next 10–20 years hold for oncology and hematology? Extensive research, increasingly devoted to cancer genetics and epigenetics, will likely result in many new targeted drugs that not only attack the tumor itself but also its microenvironment to modulate the immune system or its blood supply. In this context, the morphology or the localization of a tumor disease will probably no longer be essential. I believe that Switzerland as a research location will play a major role in these developments.

I hope you enjoy reading the current issue of the *healthbook TIMES Oncology Hematology*,

PD Dr Marcus Vetter
Co-Editor-in-Chief
eic@healthbook.org

1. Huang PW, Chang JW. Immune checkpoint inhibitors win the 2018 Nobel Prize. *Biomed J.* 2019; 42(5):299-306. doi:10.1016/j.bj.2019.09.002

2. Willsmore ZN, Coumbe BGT, Crescioli S, et al. Combined anti-PD-1 and anti-CTLA-4 checkpoint blockade: Treatment of melanoma and immune mechanisms of action. *Eur J Immunol.* 2021;51(3):544-556. doi:10.1002/eji.202048747