

Press Release

SAKK honours Swiss cancer research with awards

The Swiss Group for Clinical Cancer Research (SAKK) is committed to independent clinical cancer research at the highest level in Switzerland. At this year's semi-annual meeting in Interlaken, seven SAKK awards were presented to established and up-and-coming researchers.

What it is all about:

- At its semi-annual meeting held in the Congress Kursaal Interlaken, SAKK bestowed seven awards worth a total of CHF 210,000 to particularly promising studies in the field of clinical cancer research.
- SAKK offers scientists an ideal platform for their trial projects through collaboration with industry and research partners. This includes financial, conceptual, and technical support. This creates optimal conditions for independent clinical cancer research.
- SAKK and its partners are thus making a valuable contribution to the promotion of young talent in oncology and haematology in Switzerland at an outstanding international level.

The SAKK Awards recognise researchers for special achievements in various fields of cancer treatment research. Seven awards were bestowed at the awards ceremony. Partners from the pharmaceutical industry support the prize money.

SAKK/AbbVie Digital Innovation Award: an atlas for better biomarkers in prostate cancer

The precise prediction of impending disease progression and indications of response to possible treatment based on biomarkers are very valuable in the medical care of cancer patients. However, molecular biomarkers are only used to a limited extent in the field of prostate cancer. The Prostate Cancer Gene Expression Atlas (<https://prostatecanceratlas.org>) collects RNA sequencing data from patients with prostate cancer. These data can be used to make precise statements about the expression of target molecules or the activation of certain signalling pathways. **Dr Giuseppe Salfi**, together with Dr Jean-Philippe Theurillat from the *Institute of Oncology Research* (IOR), Bellinzona, would like to integrate clinical data into this atlas and generate a user-friendly web tool. To do this, models based on artificial intelligence will correlate certain patterns with a clinically defined patient population. The aim is to identify and validate new biomarkers for disease progression or response to modern therapies. This *open-access* web tool is designed to help researchers worldwide discover new biomarkers for progression and treatment response in prostate cancer.



SAKK/Astellas GU-Oncology Award: a coagulation factor as a new therapeutic target in prostate cancer

An increased tendency of the blood to clot is often associated with cancer. Until now, however, the extent to which the coagulation factors involved had an impact on tumour growth was not known. **Dr Bianca Cali** from the *Institute of Oncology Research (IOR)*, Bellinzona, and her team have now been able to investigate the environment of castration-resistant prostate cancer (CRPC) in a mouse model using single-cell RNA sequencing and found that certain immunosuppressive cells are an important source of coagulation factor X (FX). Activation of FX promotes androgen-independent tumour growth by activating various signalling pathways. Genetic and pharmacological inhibition of FX, however, reduced tumour growth and showed synergistic effects with enzalutamide treatment. The researchers were also able to show that increased levels of FX or molecules from the signalling pathways activated by FX are associated with a poorer outcome in CRPC patients. The study shows possibilities for potential additional therapeutic approaches in the treatment of prostate cancer, which should be investigated further.

SAKK/BMS HEM Pioneer Grant: risk evaluation before CAR T-cell therapy

CAR T-cell therapy is the standard treatment for relapsed or refractory B-cell non-Hodgkin lymphoma. This form of immunotherapy offers good efficacy, but in some cases second primary T-cell lymphomas (TCL) or second primary myeloid neoplasms (SPMN) occur. The incidence of SPMN after CAR T-cell therapy was 3-5% in retrospective studies, but the characteristics of this disease have not yet been investigated.

Dr Guido Ghilardi from the *Instituto Oncologico della Svizzera Italiana*, Bellinzona, is researching the biological properties of SPMNs after CAR-T cell treatment. His assumption is that the characteristics of the SPMNs do not differ from clones that may have been present before immunotherapy and that develop into an SPMN after CAR-T infusion. If this hypothesis is confirmed, it would be possible in clinical practice to identify patients with a higher risk of developing SPMNs after treatment even before CAR-T cell therapy.

SAKK/Gilead Expanding Horizons in Oncology Award: can more breast cancer patients benefit from foregoing surgical axillary treatment?

Axillary lymph node metastases are an important prognostic factor in breast cancer. The standard method for staging clinically node-negative patients is sentinel lymph node (SLN) biopsy. In clinically node-negative, SLN biopsy-positive patients, axillary lymph node dissection (ALND) can be dispensed with, as various clinical studies have shown. **Dr Nadia Maggi's** goal at University Hospital Basel is to use her research to identify further patient populations who could benefit from de-escalation of surgical axillary treatment. For this purpose, data from an international prospective study are consulted and analysed with a focus on patients with extracapsular extension or non-palpable suspicious lymph nodes. Outcomes that have the potential to change practice could reduce the arm morbidity associated with ALND for more breast cancer patients without worsening their prognosis.



SAKK/Incyte HERo in Science Award: TerbinaPro – an antifungal agent for more tolerable therapy in recurrent prostate cancer

In about 20-50% of patients who have completed treatment for localised prostate cancer, a recurrence occurs within 10 years. This is usually characterised by rising PSA values. Treatment options for recurrent prostate cancer include androgen deprivation therapy (ADT) or androgen receptor pathway inhibitors (ARPI), which are effective but also associated with neurocognitive and metabolic side effects and high costs. Patients therefore often want to delay these forms of therapy and still actively combat the disease. The antimycotic terbinafine could offer a tolerable and cost-effective solution here. It inhibits a factor in cholesterol synthesis (squalene epoxidase, SQLE), which is overexpressed in advanced prostate cancer as well as in various other types of cancer cells and is necessary for growth. Population-based data from Sweden and various preclinical studies already indicate a benefit of SQLE inhibition in this setting. In the TerbinaPro phase II study, **Dr Stefanie Fischer** from HOCH Health Eastern Switzerland would, therefore, like to further investigate the effect of terbinafine in advanced or recurrent prostate cancer. In this multi-centre SAKK study, patients receive either 250 mg or 500 mg of terbinafine for 12 months. The primary endpoint is the reduction of the PSA value by at least 50% after 12 weeks (PSA50) and secondary endpoints are progression-free survival, adverse effects and ADT-free survival. If the study results are positive, terbinafine could represent a tolerable treatment option for prostate cancer patients with biochemical recurrence and thus substantially improve their quality of life. Patients with metastatic hormone-sensitive or castration-resistant prostate cancer could also benefit.

SAKK/Novartis Together for Patients Award: personalised medicine for a better quality of life in head and neck squamous cell carcinoma

The quality of life of patients with head and neck squamous cell carcinoma (HNSCC) is severely restricted by the type and location of this tumour. Some of those affected have difficulty speaking, choke when eating, hear less well and suffer from pain or shortness of breath. In addition, the aesthetic and functional consequences of the disease often lead to isolation, anxiety and depression. As part of a longitudinal study, multidisciplinary monitoring of HNSCC patients was introduced at Geneva University Hospital (HUG) as early as 2023, with patients meeting all the specialists involved at the same place and on the same day. In addition, various clinical measurements are taken at the starting point, after 3 months and 12 months.

Based on the 116 patients enrolled to date, **Dr Nicolas Dulguerov** will investigate the effects of the disease and its treatment on the quality of life of those affected and also analyse the functional consequences of the disease. The impact of the treatment on the quality of life of those affected can be quantified while accounting for various factors such as tumour location and medical history. The project will also produce information brochures to support those affected and their families during treatment.

SAKK/Roche Young Investigator Award: using the “breath signature” to diagnose fungal infections

Fungal infections are problematic in patients with an impaired immune system, for example due to



haematological malignancies, neutropenia or transplants, and contribute to increased mortality. This is partly due to the difficulty of diagnosing fungal infections at an early stage. Established methods such as computed tomography in combination with the analysis of serum markers have clear limitations, so treatment is often prophylactic or empirical – at the expense of side effects, development of resistance and financial aspects. As a fast and reliable diagnostic tool for fungal infections, **Dr Kevin Hofer** from the University Hospital Zurich (USZ) is now investigating the breath of patients with acute myeloid leukaemia using gas chromatography-spectrometry in the REDEFINE study. Since infectious fungi such as *Candida* and *Aspergillus* excrete volatile substances, they may be detectable in the “breath signature”. The benefit: the method offers a short analysis time, has a broad coverage and can detect volatile molecules in high resolution, which also allows conclusions to be drawn about the pathophysiological mechanisms.

For questions and further information

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Further information on SAKK can be found on: www.sakk.ch

About the Swiss Group for Clinical Cancer Research SAKK

The Swiss Group for Clinical Cancer Research (SAKK) is the leading national competence centre for non-commercial, multi-centre cancer research. Since its establishment as an association in 1965, it has coordinated clinical trials in collaboration with all leading hospitals in Switzerland and international academic partners. The national SAKK network reaches almost all cancer patients in Switzerland and makes a significant contribution to the enhancement of existing therapies and research into new treatment options.

As a non-profit organization, SAKK is committed to the sustainable improvement of clinical care for oncology patients. In addition to academic studies, it also conducts research projects in cooperation with industry in order to accelerate access to innovative therapies.

The members of SAKK – clinical oncology centres at university, cantonal and private hospitals – work closely with other hospitals and doctors. The aim is to improve the chances of a cure and to advance research independently of commercial interests through national and international cooperation. SAKK is celebrating its 60th anniversary in 2025.