

Media release SAKK Trial Award 2024

SAKK Trial Award distinguishes innovative treatment approach for prostate cancer

In its capacity as a decentralized academic research institute, the SAKK is presenting this year's SAKK Trial Award with funding of CHF 1 million to Prof Dr med Christian Fankhauser from the Lucerne Cantonal Hospital for conducting a clinical phase II study to treat castration-resistant prostate cancer with a high dose of testosterone and a PARP1 inhibitor (ISOTONIC trial).

- Prof Dr med Christian Fankhauser, Lucerne Cantonal Hospital, receives the SAKK Trial Award, endowed with CHF 1 million, for conducting the clinical Phase II study ISOTONIC.
- This trial examines the effectiveness of high doses of testosterone (HAT) in combination with a PARP-1 inhibitor in metastatic castration-resistant prostate cancer.
- Due to the mechanisms of action of both therapeutic approaches in DNA repair, synergistic effects could arise. There is also a trick when it comes to side effects: while the PARP-1 inhibitor leads to anemia, testosterone increases the number of red blood cells, meaning that the undesirable effects could mitigate each other.

Hormone-sensitive prostate cancer is treated with androgen deprivation therapy (ADT) by means of surgical or medical castration. In the event of recurrence, treatment is intensified, and further medication is used. Over time, a (metastatic) castration-resistant prostate carcinoma can develop, which is associated with a low life expectancy of 1-2 years due to a limited response to the available therapies. Better tolerated and effective drugs or drug combinations are therefore urgently needed.

One of these new therapeutic options is the next generation of PARP inhibitors, which are in clinical development, specifically inhibit PARP1, and show fewer side effects than the existing non-specific PARP inhibitors currently used in metastatic castration-resistant prostate cancer. Another concept is bipolar androgen therapy, in which high doses of testosterone (HAT) are used. Various studies have shown that this treatment causes damage to the tumor genome and inhibits repair mechanisms in the cancer cells.

In the award-winning ISOTONIC trial, Prof Dr Christian Fankhauser and his team want to combine these two therapeutic approaches and treat prostate cancer patients with a high dose of testosterone and a PARP1 inhibitor. The rationale behind this: Both treatments target the DNA repair mechanism and could therefore have synergistic effects. It is also expected that important side effects will mitigate each other. While the PARP1 inhibitor can cause anemia, testosterone (as in doping) leads to an increased number



of red blood cells. The phase II trial is primarily investigating the efficacy in terms of disease progression but data on the side effects of the combination therapy are also collected.

In case of positive results, patients could potentially benefit from better tolerated treatment in the future and enjoy a better quality of life.

For questions and further information

Petra Streit, Communications +41 31 508 42 05, media@sakk.ch
You can find **further information** about SAKK at: www.sakk.ch

About the Swiss Group for Clinical Cancer Research (SAKK)

SAKK is the biggest competence center for clinical cancer research in Switzerland. The not-for-profit organization was established as an association in 1965. As a competence center, the objective of SAKK is to network its members, research cancer therapies, refine existing treatments and improve the chances of a cure for cancer patients. This is achieved through cooperation within Switzerland and with partners in other countries. Researching physicians are helped to develop and conduct multicenter and interdisciplinary trials independently of the pharmaceutical industry. The members of SAKK are the clinical oncology centers at university, cantonal and private hospitals. They work with other hospitals and physicians, and together form the SAKK network.