

The Swiss HIV Cohort Study

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**SWISS
HIV
COHORT
STUDY**

The Swiss HIV Cohort Study has served the needs of people with HIV and severely ill patients with AIDS since its inception in 1988, accompanying over 19,000 people in this period. It is committed to provide ideal care for patients alongside the highest standards of research excellence.

Committed to the advancement of medicine

An experienced team of Infectious Disease specialists and other consultants has collaborated excellently within the Swiss HIV Cohort Study for many years now to expand their extensive expertise, to share insight around the world and to pass on their knowledge to younger colleagues. They are involved in what is today one of the most dynamic fields of medicine. The physicians work within a collaborative framework that includes also theoretical scientists from universities and technical universities to incorporate state-of-the-art methodologies into researching the HIV infection.

93 percent of the persons tested within the HIV Cohort study receive drug treatment. The outstanding medical care provided within the Swiss HIV Cohort Study has helped achieve an unprecedented antiretroviral therapy response rate of over 90 percent. Almost all patients manifest an ideal treatment response. The treatment has almost entirely eliminated the incidence of new Aids cases in Switzerland. Moreover, recent studies have shown a substantial reduction in the cases of HIV transmission to third parties.

The Cohort infrastructure permits rapid responses to new insight and the integration of other studies to ensure ongoing optimisation of treatment. Collaboration with other international teams enables vital research into co-morbidities such as hepatitis C or cardiovascular diseases.



Prof. Manuel Battegay: «We apply tailored treatment regimens within the Cohort to support our patients and to accompany them along their path of long-term treatment. Here, we select the most effective treatment option for each individual patient and work hard to detect any co-morbidities and to minimise their implications as quickly as possible. In this way, we create personalised treatment that blends an individual risk profile with information on virus genetics to deliver a maximum response rate accompanied by minimal side effects.»

How we research: Current studies

Smoking reduces life expectancy more than the HIV infection

Increasing numbers of HIV-positive people are dying of cardiovascular diseases and non-HIV-related cancer. A study was conducted on this basis to investigate personal lifestyles among HIV-positive persons. It revealed that patients receiving an orderly HIV therapy lose more years through smoking than they do as a result of the HIV infection.

Resistant viruses are transmitted by treated and untreated persons

The number of resistances transmitted by HIV-positive persons has not fallen, although modern HIV therapies suppress virus proliferation by virtually 100%. The transmission of resistance always drops when new classes of drugs are introduced. Nevertheless, there are far in excess of 100 mutations that lead to drug resistance in the HI virus. Treated and untreated patients transmit these resistances.

Co-infection with hepatitis C remains problematic

A study analysed the 17 % of Cohort participants co-infected with HIV and hepatitis C. A number of fatalities caused by a lack of treatment persisted until the end of 2013. The study shows that drug treatment of hepatitis C is insufficient on its own, and that additional somatic and mental disorders also require attention.

Adherence to treatment substantially impacts virus suppression and life expectancy

A study was conducted to investigate treatment adherence among persons during the first five years of antiretroviral therapy. The risk of treatment failure rose in line with the number of missed doses. Non-adherence even led to the death of some patients. In response, patients are now interviewed more thoroughly on their adherence to treatment in order to better eliminate risks.

In the service of people living with HIV and Aids

Patients benefit directly from knowledge acquired within the Swiss HIV Cohort Study. Participants of the Cohort can be certain that they will be treated according to the most recent methods. Hence, the patients themselves make a meaningful contribution to optimised diagnosis of the HIV infection and other relevant diseases.

The study places an important focus on reducing side effects and substantial progress has been achieved in this field already. Long-term care and support increasingly necessitate the inclusion of mental health and other factors. The eventual goal is to develop simpler treatment regimens that permit self-management.

Long-term treatment attaches particular importance to blood pressure and lipid levels in order to better control or prevent co-morbidities such as diabetes or dementia.



Romy M., HIV-positive since 1986, says: «I have received antiretroviral therapy since 1996 and will most likely continue to take the drugs for a long time to come. This is among the main reasons why I want to know what this will mean for my body in the long term. I am taking part in the HIV Cohort because my medical data help to create additional scientific understanding of HIV treatment. I am a woman over 50 and so my bone density concerns me. My Cohort physician gave me this advice. His understanding of the latest treatment options and specific side effects is always up-to-date. So, we can adapt and optimise the combination I receive whenever the needs arise.»

Research goals: A vaccine and a cure

The successful story of antiretroviral therapy poses new challenges: Due to the increased life expectancy, the administered drugs must be coordinated to consider possible other diseases. Besides reducing side effects, research also focuses on the development of simpler treatment regimens. Taking the drugs just once weekly or monthly would represent substantial progress.

Co-infection with hepatitis C is an additional field of intense medical research, which is aimed at eliminating the hepatitis C virus. Another milestone within pathophysiology would be to acquire greater understanding of the causes for HIV-related illnesses and hence to draw suitable conclusions for their treatment.

Nevertheless, the most important objectives remain to develop a vaccine and a cure for HIV infection. But this will require substantial ongoing efforts designed to achieve greater understanding of HIV biology.

These challenges can only be overcome if the unique research network united within the Swiss HIV Cohort Study is preserved. The Swiss National Science Foundation is currently the principal funder of new studies. There remains a need for increased support by other sponsors.



Prof. Huldrych Günthard: «Over the course of many years now, we, our colleagues and the study nurses in the Swiss HIV treatment centres, have built a wealth of experience in the long-term care of our patients. The main focus in the treatment of younger patients is to prevent co-morbidities and long-term repercussions. In contrast, older patients frequently require monitoring to avoid opportunistic diseases and co-infections such as hepatitis C. In this way, our patients help develop new treatment regimens that will benefit everyone concerned further down the line.»

Our objectives and tasks

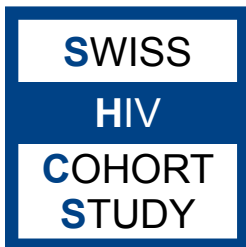
The Swiss HIV Cohort Study

- operates a care and research network that is unprecedented worldwide; its 950 publications assure the organisation an important position within international HIV research
- continuously improves the standard of care provided to people in Switzerland with HIV
- develops meaningful research projects, for instance, to create individualised therapy or to advance understanding of interactions between the HI virus and the human organism
- provides the necessary research infrastructure to implement research projects within an efficient setting
- itself initiates 20–30 research projects each year and participates in other international projects.

Visit www.shcs.ch for further information on the HIV Cohort study.

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The Swiss HIV Cohort Study needs your support!

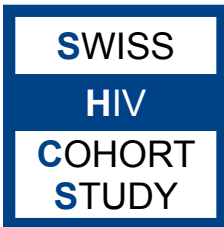
Although the Swiss HIV Cohort Study has yielded outstanding results and has helped 19,000 people with HIV and Aids since 1988, its future is by no means secure. The Swiss National Science Foundation has provided research funding to finance the Cohort Study since 2000. However, the Swiss HIV Cohort Study finances roughly 20–30 new long-term projects every year, which means that these funds are not sufficient to cover the entire research budget.

It follows, therefore, that we need to recruit broader support if we wish to achieve greater financial security. We will only succeed if we manage to source a larger volume of donations from private sponsors in addition to the funds we receive from the public sector. Every donation is welcome. Your gift will flow directly into HIV research. Please be assured of our gratitude for your generosity.

How you can support us

There are a number of different ways in which you can support the Swiss HIV Cohort Study:

- By making a financial contribution directly to our donations account:
Bank Julius Bär & Co AG, Rue Pierre-Fatio 7, 1211 Geneva 3, account
IBAN: CH40 0851 5030 4061 0200 1
- Birthday donations: instead of receiving gifts, you can ask your guests to make a donation to the Swiss HIV Cohort.
- Legacy: you can also consider the Swiss HIV Cohort with a legacy in your will if you would like to make a more lasting contribution.
- Donations using the enclosed payment slip.



Swiss HIV Cohort Research Foundation

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Your donation is eligible for tax deduction in accordance with cantonal regulations.

We are grateful for your valuable support.

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