ROBERT KOCH INSTITUT

HIV-1 Seroconverter Study

Patient information and declaration of consent

Content

„HIV-1 Seroconverter Study“

Investigations on the course of the HIV infection in patients with known date of infection. Analysis of epidemiological, virological, immunological and clinical parameters with regard to the course of the disease.

Responsible for the study:

Robert Koch Institute Nordufer 20 13353 Berlin **Contact**: Dr Uwe Koppe Phone: +49 30-18754-2262 SerokonverterStudie.HIV@rki.de **Responsible for the retention and use of samples:** Dr Karolin Meixenberger Phone: +49 30-18754-2277 SerokonverterStudie.HIV@rki.de	**Your treating study centre (stamp):** **Contact:**

Data Protection Officer:

Robert Koch Institute Datenschutzbeauftragte Robert Koch-Institut z. Hd. d. Datenschutzbeauftragten Nordufer 20 13353 Berlin Phone: 030 18754 0 E-Mail: datenschutz@rki.de	**Your treating study centre (stamp):** *(name, contact)*

1. Patient information

Dear Patient,

we hereby invite you to participate on a voluntary basis in the HIV-1 Seroconverter Study of the Robert Koch Institute. Please take some time to read this information carefully and do not hesitate to ask any questions you might have. Your doctor or trained nursing staff will be happy to answer all of your questions about this Patient Information Sheet and on the HIV-1 Seroconverter Study. When you are sure that you have understood everything and agree to the participation, you will be asked to sign a consent form after an appropriate period for consideration.

1.1. Purpose of the Study

The infection with HIV is currently not curable and instead requires a lifelong treatment with medication. Within the scope of clinical studies, patients are often only monitored and examined over a certain timeframe. Little is known about the long-term course of the infection in people with HIV. This study serves the purpose of monitoring people with HIV over a longer period of time, which can help gain important knowledge about the course of the disease.

By now, there are many medications available that can inhibit the reproduction of the virus. Therapy guidelines recommend treatment with a combination of three of these drugs. Such a drug combination is called an antiretroviral therapy (ART). In the present day, a therapy is usually started directly upon the diagnosis. Your doctors will inform you when it is advisable to start with ART. The therapy must be continued throughout the life.

The treatment might not work anymore in some patients after some time, because the virus becomes resistant to the drugs that are used. This means that the drugs are not or only partially effective against the virus. Moreover, resistant viruses can be transmitted to other people. In this study, the type and frequencies of resistant viruses as well as the consequences of transmission of resistant viruses on the course of the disease and the therapy will be analysed. It is important to gather this information because the new infection with an already resistant virus can permanently impair a successful treatment and the antiretroviral treatment must then be adjusted to this. The resistance of the virus to the currently available drugs can be determined by an analysis of a blood sample.

The HIV-1 Seroconverter Study currently includes about 3,400 patients and facilitates a better understanding of specific differences in the progression of the disease. Within the scope of this study, we are examining the course of treatment and health parameters, which arise in the course of your treatment (including e.g. drugs, lab values or diagnoses, which are made in the course of your HIV treatment). Moreover, different factors are examined, which can influence the course of the HIV infection. This includes information about the condition of the immune system and the quantity and resistance characteristics of the existing virus. In this context, also the HIV subtype that causes your infection is of interest. Furthermore, additional important co-infections such as hepatitis B and C, syphilis or the novel coronavirus SARS-CoV-2 are included in the study. These analyses are conducted firstly based on data routinely arising in the course of your medical treatment at your doctor's office. Secondly,

the blood samples can be also analysed as to the occurrence of certain infections. This way, important insights can be gained regarding the long-term treatment and the courses of disease in people with HIV.

There are indications that also human genes have an important influence on the transmissibility of HIV and the control of the HIV infection. In order to analyse the influence of known or unknown host markers on the trajectory of the HIV disease and therapy, genetic analyses with DNA or RNA from human blood cells can be conducted within the framework of the study (e.g. to analyse single nucleotide polymorphisms, genome-wide association studies, HLA typing, transcriptome analyses). The results can help to develop strategies to optimise therapies and eradicate the virus.

Besides the medical data, we also want to conduct studies on the health-related quality of life. Your doctor will give you questionnaires at regular intervals (in the form of paper questionnaires or via online links) in which we ask you questions about your quality of life and potential factors of influence, e.g. psychological well-being, satisfaction with the treatment, and experiences of discrimination. We want to examine this way how well people can live with their HIV disease in Germany and what factors might be concomitant with a limited quality of life. Of course, you have the right to forego filling out this questionnaire without any disadvantages thereby being caused for you in the study participation or your treatment.

1.2. Terms of participation

People with HIV can be included, who (i) are at least 18 years of age and (ii) have previously had one negative HIV test at most three years before the positive HIV test or whose infection is recent (laboratory confirmation of the ongoing seroconversion).

1.3. Data processing

By your signature on the consent declaration, you grant your consent that your physician may gather and process your personal data for the purpose of the aforementioned study. Personal data means, e.g. your birth month and year, your gender, your country of origin, and so-called special personal data describing your sexual orientation and data on your health, as well as data on the conducted laboratory analyses. Your physician will take a blood sample from you for this purpose and complete one or more questionnaires.

Your physician will forward the gathered data in pseudonymised form to the Robert Koch Institute. The forwarded data contain neither your name nor your address. Instead, the treating physician will assign a code number to your personal data (case-specific encryption of the data). Only your physician and his/her employees have access to the code key, which lets them relate the study data to you.

Your physician will also give you a questionnaire at regular intervals about the topic of quality of life, which will be personally completed by you. For this purpose, you will get a questionnaire on paper with your study pseudonym and a return envelope with postage prepaid as one alternative. In this case, once you have filled out the questionnaire, you can send it directly to the Robert Koch Institute, without anyone in your physician's office being able to see your answers. As another alternative, your doctor

can also give you a card with a link to the online questionnaire and your study pseudonym. This way, you can answer the questionnaire online. The data will be stored directly at the Robert Koch Institute. In both cases, your name and address will remain unknown to us.

The Robert Koch Institute will use your encrypted personal data for the purposes of managing and conducting the aforementioned study. The summarised study results will be shared with participating study centres and published in specialist literature, but your personal identity will always stay anonymous. Your physician can receive information from the RKI on subtypes of the virus and on possible drug resistances, which have been found in the course of the blood analysis. The data reported personally by you to the RKI, e.g. on health-related quality of life, will not be passed on to your doctor.

The data of the HIV-1 Seroconverter Study will be stored at the RKI in an access-protected database. Access to the database is granted only to employees of the research group.

For certain research questions, the Robert Koch Institute cooperates with scientific partners at home and abroad. Collaborations like these can create a larger dataset for scientific analyses by linking data from several patient cohorts. Researchers can examine phenomena this way when a single cohort does not deliver enough data material for researching them. If you consent thereto, your data and blood samples can also be transmitted for certain research questions to foreign laboratories and/or study centres and be analysed there, and the attained research results will be published in anonymised form. The published results are thus not allowing to draw conclusions on individual persons. Your samples and data will always be transferred without your pseudonym. Your identity is protected just as strictly as in the transfer and analysis of data and blood samples in Germany.

You can find more information on data protection and your rights in the data protection statement of the study.

1.4. Procedure

If you decide to participate in the study, we will proceed as follows:

(i) Your doctor or the nursing staff will complete a questionnaire together with you, which will take about 10 to 15 minutes. Data on your person and information about your current condition, the type of infection and the test results will be gathered.

(ii) Then you will give a blood sample of 20-30 ml. Besides the initial blood sample of 30 ml, another 20 ml blood will be taken annually for follow-up exams. Depending on the situation, blood samples can also be sent more frequently to the RKI (e.g. quarterly for specific studies).

(iii) The blood samples will be examined at the RKI (drug resistance testing, subtype determination, tests for co-infections, analysis of genetic characteristics) and sample components will also be stored for the long term (plasma, DNA). The sample components are given a new number once again for this purpose. This doubly encrypts your genetic material. The genetic analysis covers the objectives described above. For this, your blood samples might be analysed several times if necessary.

(iv) There might be new scientific questions in the future in the course and during the therapy of the HIV infection, which may be answered by means of your samples. The samples will be stored

for this for purpose for at most 10 years after the end of the study. At present, the study is perpetuated and continued permanently.

(v) If a significantly changed scientific question is to be studied in the future by means of your samples, an opinion of the competent ethics committee will be obtained first. You will be informed of further studies and, if applicable, your consent will be requested should there not be a legal bases for the further research.

(vi) With your consent, you transfer the ownership of your blood samples to the Robert Koch Institute. The rights to use the blood samples and the data are therefore held by the Robert Koch Institute. Nonetheless, you have the right at any time to object to the use of your data and blood samples or demand the destruction if these contain a reference to your personal identity. Any data already gathered will also remain in the study after destruction of the blood samples.

1.5. Your benefit from this study

Participation in the study will not result in a direct benefit for your therapy or another benefit for your health. The information derived from this study is, however, of great scientific value and might potentially be of use to you and other people with HIV later on.

1.6. Voluntary participation

Participation in the study takes place exclusively on a voluntary basis. You have the right not to participate without a statement of reason or revoke your consent at any time with effect for the future, without this having any influence on your treatment or causing any other disadvantages for you. This means that the processing that has taken place up until your revocation will stay legitimate. The same applies in the case of an objection to the further processing of your data and samples where this has a legal basis. This will likewise not exclude you from a later participation in other studies as a consequence.

1.7. Confidentiality / Data privacy

Your participation in this study will be treated as strictly confidential. To protect your privacy, all information that is stored without your name in the database of the Robert Koch Institute and used for scientific purposes is stored in encrypted form.

If you have a complaint regarding data protection, you have the right to lodge complaint with the data protection officer of the Robert Koch Institute (Datenschutzbeauftragte, Robert Koch-Institut, z. Hd. d. Datenschutzbeauftragten, Nordufer 20, 13353 Berlin, Phone: 030 18754 0, E-Mail: datenschutz@rki.de) or a supervisory authority (for contact information on supervisory authorities of the RKI and the study centre please refer to chapter 2.6, page 12).

1.8. Medical risk

Blood samples will be taken from you for the study. In many cases, no additional vein puncture will be necessary, as blood has to be taken from you anyway. Still, you should know that the following complications might result in very rare cases in connection with vein punctures: effusion, injury of an

artery with strong bleeding, injury to nerves (potentially permanent) with subsequent loss of feeling (and possibly also a loss of mobility) in this region, inflammation.

1.9. Insurance cover

Within the scope of this study, no insurance cover will be concluded for you. Possible liability claims that might result from culpable action by your doctor are covered by his or her public liability insurance policy. For other damages that can result as a consequence of taking the blood samples for this study, a statutory accident insurance exists (§ 2 Abs. 1 Nr. 13 b) SGB VII). The statutory accident insurance includes accidents on the direct way to or from the study centre for the purpose of taking blood samples for the study. The responsibility for the statutory accident insurance is with the “Unfallversicherung Bund und Bahn (UVB)”.

1.10. More information

If you would like to receive additional information or if you have problems or questions of any kind about the study, you can always ask your doctor or the trained nursing staff. In case of further questions about the study in general, you are also welcome to contact the study team at the Robert Koch Institute (Dr Uwe Koppe, phone +49 30-18754–2262, Dr Karolin Meixenberger, phone +49 30-18754-2277). If you do so, please do not state your name so not to imperil your pseudonymity. If you should want to exercise your rights under data protection regulations, please contact your study centre directly. The contact details can be found in the data privacy statement.

Thank you for your participation in the study!

2. Information on Data Protection

In the following, you will receive the legally mandatory information regarding data protection for the study “HIV-1 Seroconverter Study.” This statement describes how the provided personal data will be processed in the course of the participation in the study. By your participation in the study, you declare your consent to the processing described here. Please read this Information on data protection carefully.

Jointly responsible for the processing of your data are the Robert Koch Institute (RKI) and your treating study centre:

Robert Koch Institute Nordufer 20 13353 Berlin SerokonverterStudie.HIV@rki.de www.rki.de	Your treating study centre: *(Name, address, stamp if applicable)*

The Robert Koch Institute (RKI) and your treating study centre work in accordance with the regulations of the EU General Data Protection Regulation (EU GDPR) and all other regulations of data protection law applicable in Germany.

2.1. Aim and purpose of the study

The HIV-1 Seroconverter Study researches important questions, which have been not sufficiently answered. This includes questions regarding the long-term course of the HIV infection, potential consequences of the continuous treatment with the antiretroviral therapy, development and distribution of drug resistances to the HIV therapy, influence of viral properties on the course of the disease, occurrence and development of co-morbidities and co-infections, development of the quality of life in people who live with HIV, and the evaluation of new therapy strategies for a future viral eradication and cure.

Within the scope of the HIV-1 Seroconverter Study, data on the health and general condition of people with HIV are gathered over a longer period and studied with regard to these questions. Some of these data are gathered routinely by your treating physician in the course of your HIV treatment, while other data can be reported directly by you to the RKI. In addition, a blood sample of you will be sent to the RKI once per year. Your data are stored at the RKI under a pseudonym without exception – your true identity is not disclosed to the RKI.

2.2. Categories of processed data

The following data are transmitted and processed under a pseudonym by your doctor for the HIV-1 Seroconverter Study. Your actual identity is not disclosed to the RKI.

- Personal master data: Pseudonym, month and year of birth, gender, the first three numbers of your postal code, the federal state of your residence, country of origin
- Health data: Information on the last negative and first positive HIV test result, information on the HIV infection risk, pregnancy status, further clinical diagnoses, lab data, information about the HIV therapy, information on hepatitis B and hepatitis C vaccinations and infections including therapy, information on SARS-COV-2 infection and vaccination status including diagnosis, symptoms, treatment and courses of disease, tuberculosis vaccination status
- Bio samples: Storing and analysis of blood samples

Moreover, further data of you can be processed for the study of health-related quality of life if you report such data to us in the course of separate queries. Providing this information is voluntary and you can leave individual or all points unanswered. The data will be transmitted to us under a pseudonym – your actual identity will not be disclosed to the RKI.

- Patient reported quality of life: Information regarding HIV-related and general (including psychological) health status
- Socioeconomic data: school education, employment status, residential situation, income
- Information on the social environment/behaviour: Information on experiences of discrimination, data on the sex life, data on the consumption of substances (e.g. alcohol, tobacco)

2.3. Voluntary nature of the participation

Your participation in this scientific research project is voluntary and based on a written consent declaration to be signed by you at your treating doctor's office. It also includes the consent to the linking of blood samples with the pseudonymised information from the questionnaires. If you do not participate in this study, no disadvantages will result for you. **You can revoke your consent to participate at any time.** The revocation will be effective for the future and not affect the legitimacy of the data processing actions having taken place before then on the basis of this consent.

The ownership of the blood samples is simultaneously transferred to the RKI by consenting to the taking, storing and scientific use of your blood samples. Your samples will not be sold. Your right to determine the processing of your personal data yourself remains unaffected by the transfer of ownership. **In spite of the transfer of ownership, you can revoke your consent to the data processing at any time and demand the destruction of your blood samples.**

We appeal to you to contribute to the success of this important scientific study by your participation.

2.4. Handling and deletion of data

In this statement, the data controllers assure you that the personal data will always be treated as strictly confidential. The legal basis for the participation in the study and the data processing is your written consent (Art. 6 (1) sent. 1, lit. a), Art. 9 (2) lit. a) General Data Protection Regulation (GDPR)). The

following principles apply to the handling of personal data and the information arising in the course of the participation in the study:

- The data gathered in the course of the participation in the study will be used and stored under pseudonyms (continuous participant numbers without a reference to your personal identity and a code of name components, which can be attributed only by your treating physician and their staff), exclusively linked under these pseudonyms and in accordance with Guideline 17 of the "Guidelines on the Securing of Good Scientific Practice" of Deutsche Forschungsgemeinschaft [German Research Association] (status: September 2019) for at most up to 10 years after the end of the study for the purpose of research at the RKI to study the long-term course of the HIV infection, effects of the continuous treatment with antiretroviral therapy, development and distribution of drug resistances to the HIV therapy, influence of further viral factors on the course of the disease, for the occurrence and development of co-morbidities and co-infections, development of the quality of life in people living with HIV and the evaluation of new therapy strategies for a future virus eradication and cure. Use for commercial purposes is excluded. Your treating doctor can receive pseudonymised results of resistance and subtype testing from the RKI.
- The results of the study will be documented for scientific analyses. All evaluations and analyses will be prepared without reference to your name, address or your applied pseudonym and the information obtained will be presented and transmitted to participating study centres and (national and international) collaboration projects, where applicable, exclusively in anonymised form.
- If you consent to this, study data may also be transmitted to national and international partner projects. In the case that data and samples are shared, the corresponding partnership agreements including contracts under data protection regulations will be concluded, which regulate, among other, the compliance with the German data protection regulations. Your samples and data will always be transferred without your pseudonym.
- The joint data controllers have determined the rights and duties of their collaboration in a corresponding agreement according to Art. 26 GDPR. The data processing within the scope of the study will take place as described in the following.

2.5. Who receives your data and what happens with them

The data gathered by your doctor on your person (including your health data) will be transmitted in a questionnaire on paper to the RKI and be transferred there to a server operated at the RKI in a secure manner. The data provided directly by you can be either sent in questionnaire on paper to the RKI or be stored directly on an RKI server via an online survey. The processing of the questionnaires, in the same way as the processing of the blood samples, will be performed by specially trained employees in strict observation of the requirements for data protection according to the GDPR and the German Federal Data Protection Act (BDSG). The study staff of the RKI meanwhile cannot reverse the pseudonymisation, as your name can be attributed to your data only by your physician. The RKI study staff is furthermore subject to a non-disclosure obligation and obligated to observe the requirements of data protection regulations. For the scientific analysis, the frequencies and correlations are not presented on an individual level, but they are always only analysed and presented by groups of participants with statistical methods. The published results therefore do not permit any conclusions as to individuals.

The blood samples are analysed in the laboratories of the RKI. Of the data derived from your samples, solely the results of resistance and subtype testing will be transmitted in pseudonymised form to your treating physician. The anonymised study data will be transmitted to the participating study centres.

For certain research questions, the Robert Koch Institute cooperates with scientific partners at home and abroad. Collaborations like these can create a larger dataset for scientific analyses by linking data from several patient cohorts. Researchers can examine phenomena this way when a single cohort does not deliver enough data material for researching them. If you consent, your data and blood samples can also be transmitted for certain research question to foreign laboratories and/or study centres and analysed there, and the attained research results will be published in anonymised form. Your questionnaires will be transmitted in anonymised form in these cases. Also your blood samples will be transmitted without information as to your identity, but there is always the risk with blood samples that indications as to your personal identity can be gathered from these genetic data. This risk is increased, if you yourself have published information on your genetic material or other health information, e.g. for genealogy research on the internet. Your identity is protected by the foreign laboratories/study centres just as strictly as in the transfer and analysis of data and blood samples in Germany.

2.6. Your rights

You can revoke your consent to the storing of your personal data and/or storing of the blood samples at any time in full or in part, with or without a statement of reasons and without any this resulting in any negative consequences for you or your health. A revocation has effect for the future, i.e. any processing up to the time of the revocation will remain unaffected by it. For the protection of your rights, you may request information and a free of charge copy of the personal data, which are processed, and the deletion, restriction of processing, completion or correction of certain data and their transfer into a structured, common and machine-readable format to yourself or a third party, and you can lodge complaint with a supervisory authority (legal bases: Art. 15 to 18 and 20, Art. 77 (1) GDPR). The contact information of supervisory authorities can be found on the next page.

Please direct requests relating to data protection to your study centre using the following contract data:

(Name, address, stamp if applicable)

You can also direct your inquiries about the study or assertion of your rights directly to the RKI. However, please notice that your identity will be disclosed to the RKI in this case.

Regulatory Data Protection Officer of the RKI

Datenschutzbeauftragte, Robert Koch-Institut, z. Hd. d. Datenschutzbeauftragten, Nordufer 20, 13353 Berlin, Phone: 030 18754 0, E-Mail: datenschutz@rki.de

Data protection officer of the study centre:

(Name, address, stamp if applicable)

Possibility to lodge complaint with the supervisory authority

You have the right to lodge complaint with a supervisory authority. The
supervisory authority competent for the RKI is:
Federal Commissioner for Data Protection and Freedom of Information, Graurheindorfer Str. 153, 53117 Bonn (https://www.bfdi.bund.de/kontakt).
Central phone number: 0228/997799-0, central email address: poststelle@bfdi.bund.de

The supervisory authority competent for the study centre is:

(contact details of the supervisory authority)

3. Declaration of Consent

I have been informed of the content, meaning and conditions of the “HIV-1 Seroconverter Study”, I have received and taken notice of the written and comprehensible study information for this study. I have had sufficient opportunity to clarify my questions with my treating physician or the study team.

I hereby declare

_____	_____	_____,
First name of participant	Last name of participant	Address

That I volunteer for participation in the study on my own free will.

The participation involves that 20-30 ml blood will be taken from me for the initial examination and the annual check-ups, respectively, and that, within the scope of this study, my doctor will send the information on my person gathered from me in pseudonymised form to the Robert Koch Institute for the purpose of this study. Depending on the situation, questionnaires and blood samples can also be transmitted from the monitoring of the course of the disease more frequently to the Robert Koch Institute, e.g. for specific studies.

The data relating to me, which are gathered in the course of the Robert Koch Institute and stored there on electronic data carriers in databases. The blood samples will be sent to the Robert Koch Institute, investigated there again in pseudonymised form and stored for the purpose described in detail in the Patient Information. Only the results of the HIV-1 drug resistance and subtype determination from my blood sample can be transmitted to my treating physician. The study results that are received from the study will be transmitted in anonymised form, not permitting any conclusion as to my identity, to the participating physicians and study centres. A part of the blood samples may be delivered to national and international study partners at a later point in time for further lab analyses on the course and therapy of HIV infections, as well as important co-infections, on the condition that compliance with the German data protection guidelines is assured.

The study results will be published in anonymised form.

You can find more information in the Patient Information and Information on Data Protection.

I have the following rights to data protection pursuant to Art. 15 to 20 and Art. 77 (1) GDPR:

- The right to request information on which data have been stored of me, and request in case the data are incorrect, their correction, completion or deletion, or the restriction of their processing, and the right to receive the data provided by me in a structured, commonly used and machine readable format.
  I can assert the rights beyond the right to obtain confirmation for as long as the data can be attributed to my person.

- The right to revoke my consent at any time without a statement of reasons and with effect for the future and to terminate the participation in this study prematurely, without any negative consequences resulting from this for me.

- The right to lodge complaint with the data protection officer of the data controller (see above) or with a supervisory authority (supervisory authority competent for the RKI: Federal Commissioner for Data Protection and Freedom of Information (BfDI), Graurheindorfer Straße 153, 53117 Bonn, +49 228-997799-0, the supervisory authority competent for the study centre: [contact details see the Information on Data Protection page 11).

Moreover, I have the

- right to demand the destruction of my sample(s) at any time, without a statement of reasons and with effect for the future, without this resulting in any negative consequences for me. I can claim this right for as long as the sample(s) can be attributed to my person.

I consent that

- my personal data as described in the Patient Information, which are required for the purpose of the HIV-1 Seroconverter Study, in particular the health data, genetic data and data on my sexual life, will be linked with each other and with the data gathered in the course of the study in pseudonymised form, analysed or processed further forms, including on electronic data carriers, and be stored up to at most 10 years after the end of the study. Only pseudonymised resistance results and virus subtypes will be returned my treating doctor. The ownership of the blood samples is transferred to the Robert Koch Institute as the same time as I grant my consent to the scientific use of my blood samples.

- My right to decide personally on the processing of my personal data remains unaffected by the transfer ownership. **In spite of the transfer of ownership, I can revoke my consent to the data processing at any time and demand the destruction of my blood samples.** Commercial use is excluded at the same time.

Optional:

Yes [ ] No [ ]

I consent that some of the blood samples can be used at a later point in time by national and international cooperation partners for further laboratory testing on the course and therapy of HIV infections and important co-infections. I consent that my data and blood samples will be sent for analysis to national and international study partners on the condition that an appropriate level of data protection is assured. The samples will be stored for a maximum of 10 years after the end of the study. The study is currently made permanent and is continued permanently.

I assure that I am 18 years of age or older on the signing date. I have received a copy of this dated and signed Declaration of Consent as well as the patient information and information on data protection.

_____ _____

Place and date Signature of participant

To be completed only by the treating physician:
I hereby declare that I have provided verbal and written information about the objectives of the study, the course of the study and compliance with data protection and that I have answered all questions in this regard.

(Place, date) (First and last name of physician in printed letters) (Signature of physician)

Thank you very much for your participation!