PARTICIPANT INFORMATION and CONSENT FORM

The BCC3 Cohort presents:

(BC CARMA-CHIWOS Collaboration)

~ REDOSE 2.0 Sub-Study ~

ReEvaluating antiretroviral Drug cOncentrations and Side Effects in individuals living with HIV

REDOSE 2.0 Principal Investigator: Dr Elizabeth King MD
Assistant Professor, Health Sciences, SFU
604 875 2212

BCC3 Principal Investigator: Dr Melanie Murray MD, PhD
Clinical Associate Professor, Infectious Diseases, Medicine, UBC
604 875 2212

Co-Investigators

Dr Hélène Côté, PhD Pathology & Lab Medicine University of British Columbia (UBC)	Dr. Mark Hull Clinical Assistant Professor, AIDS Division Medicine, UBC
Stacey Tkachuk Oak Tree Clinic Pharmacist Clinical Instructor University of British Columbia (UBC)	Alice Tseng, PhD Associate Professor University of Toronto
Chanson Brumme Assistant Director, BC Centre for Excellence in HIV/AIDS	

SPONSOR: The Canadian Institutes of Health Research (CIHR)

Non-Emergency Contact Number - Franceska Dnestrianschii, Research Coordinator

604-868-5075

1. INVITATION

You are being invited to take part in this research study because you are living with HIV and are age 19 or older. This study is being conducted by the team listed above as well as women and men living with HIV with diverse lived experiences and expertise who are trained to work with research. This team is trying to better understand bictegravir (BIC) drug concentrations and side effects in women and men living with HIV. We are investigating whether the level of bictegravir in your bloodstream might be different depending on your sex and age. REDOSE 2.0 is a sub-study of British Columbia CARMA-CHIWOS Collaboration (BCC3). The BCC3 project is a collaboration of two projects that have each been running for a decade or longer that study healthy aging for people living with HIV.

2. YOUR PARTICIPATION IS VOLUNTARY

Your participation is voluntary. You have the right to refuse to participate in this study. If you decide to participate, you may still choose to withdraw from the study at any time without any negative consequences to the medical care, education, or other services to which you are entitled or are presently receiving.

You should be aware that there is a difference for both you and your primary care provider between being a patient and being a research participant. As a patient, all medical procedures and treatments are carried out for your benefit only according to standard accepted practice. As a research participant, you and your primary care provider also must take into account the requirements for the research study. These may include procedures and treatments that are not part of standard practice or are not yet proven. This consent form describes the diagnostic procedures that are being carried out for research purposes. Please review the consent document carefully when deciding whether or not you wish to be part of the research and sign this consent only if you accept being a research participant.

If you wish to participate in this study, you will be asked to sign this form.

Please take time to read the following information carefully and to discuss it with your family, friends, and/or primary care provider before you decide.

3. WHO IS CONDUCTING THE STUDY?

This study is funded by the Canadian Institutes of Health Research (CIHR). A team of doctors, researchers and community members are conducting this study.

4. BACKGROUND

HIV is a chronic condition managed with lifelong daily medication: antiretroviral (ARV) therapy. People can experience side effects from ARVs, which impacts their quality of life, however, very little is known about what puts people at highest risk for having side effects. Bictegravir (BIC) was approved by Health Canada in 2018 and is given in combination with two other ARVs. Since its approval, it has become the most common base ARV in BC. With its broad uptake, some people have noticed side effects to BIC which can include effects on mood, sleep, or weight gain. Some studies have shown that these side effects might be more frequent for certain

groups, such as older adults and women, although more research is needed to confirm this. There are also known to be differences in how medications are processed for women compared to men and younger individuals compared to older adults, which may result in higher levels of drug in the body for certain groups and may impact side effects. This study seeks to look at drug concentrations of BIC in different groups to see if certain groups are predisposed to higher drug concentrations. We will also look at experiences of side effects to see whether this might vary in different groups.

5. WHAT IS THE PURPOSE OF THE STUDY?

Research has shown increased risk of side effects for several types of ARVs for women compared to men. For example, women have been reported to experience more rashes, gastrointestinal intolerance, weight gain, and sleep/mood effects than men on certain ARVs. Older adults also have a higher risk of short and long-term ARV side effects. These effects, in turn, may result in higher rates of stopping one's ARVs, increased chronic health conditions such as bone disease and metabolic effects, and decreased quality of life. Despite rising concerns over these side effects, we do not understand what causes them.

The goal of this study is to better understand the impact of age and sex on ARV levels in the bloodstream and determine whether high ARV levels are linked to more side effects. This knowledge will help to understand and improve any ARV-related health issues, such as side effects, experienced by women and older adults. New knowledge gained from this study will help to guide future care that will allow for a more personalized approach to HIV treatments.

This study is taking place in British Columbia, from 2025 to 2027, and will include 80 participants split into four subgroups (20 per group) Based on sex (cisgender women and men living with HIV) and age (50 years or older, or 60 years or older).

6. WHO CAN PARTICIPATE IN THE STUDY?

You may be able to participate in this study if:

a. You are able to communicate in English.

b. You are an adult living with HIV aged 19 years or older but younger than 50 years, or 60 years or older.

c. You have an undetectable viral load (viral load less than 50 copies per milliliter) at your last blood draw.

d. You are on a regimen containing 50 mg daily of BIC for at least two weeks.

e. You are able to attend a study visit at a study site (no need to be a clinic client).

f. You are not currently pregnant or breastfeeding.

7. WHAT DOES THE STUDY INVOLVE?

As part of the study procedure, you will first be asked to provide your consent. However, it is important to note that providing consent does **not** automatically guarantee eligibility for the study. We will need to confirm certain conditions before final eligibility is determined, including whether any other medications you are taking might impact the testing of drug concentrations,

whether your HIV viral load is undetectable, and whether you meet the criteria for a body mass index (BMI) greater than 18 but less than 35.To confirm some of these criteria, we will require access to your health records to review your eligibility for this study. If you do not meet the study criteria, we will contact you to let you know that study participation is not possible at this time. On the day of the study, we will also ask that you come fasted, have not taken your ARVs that day and have not missed doses of ARVs in the four days before the study. If you have not met these requirements, then your study visit will need to be either cancelled or rescheduled.

SUMMARY OF REDOSE 2.0 STUDY VISITS

There are two parts of the study which will happen on two consecutive days. The total amount of time you are being asked to commit to the study is approximately 9 hours. Study part 1 is designed to accommodate four to eight participants with eight blood draws taking place during the following intervals: 0, 1h, 2h, 3h, 4h, 6h, 8h. Study part 2 involves a single blood draw at the 24-hour mark.

It is important to note that this study takes place in a group setting. Although surveys will be conducted privately, there is the possibility that other participants may make inferences about your HIV status. If you are not comfortable with this, this study is not for you. The information you share will be saved on a secure online database. Your name, contact information and other personal information that can identify you will be kept separate from your answers to the survey. Therefore, it is not possible to connect you to the answers you have shared.

If you agree to take part in this study, the visit and sample collection schedule you can expect are outlined below. Each participant will have a slightly differing schedule for research activities during study part 1 to allow for staggering, with activities according to the following steps.

REDOSE 2.0 STUDY PART 1: (8hrs)

This portion of the visit must occur first and will take place at the clinical location site.

a. If not already done, one of the study research staff will meet with you and review the study consent form, answer any questions you may have and obtain your signature on the consent form
b. Introduction to the study team, breakfast is served
c. A phlebotomist will insert an IV catheter for blood draw access
d. Blood draw **0** hour (Baseline)
e. Biktarvy medication administration
f. Blood draw at **1** hour
g. Completion of survey with a member of our research team (Demographics (e.g, age, gender) and background, medical and HIV history, substance use, experiences of medication side effects)
h. Measurement of your height, weight, waist circumference and walking speed
i. Blood draw at **2** hour
j. Blood draw at **3** hour
k. Time to get lunch (meal voucher will be given)
l. Blood draw at **4** hour

m. Free time
n. Knowledge translation event/ presentation
o. Blood draw at **6** hours
p. Blood draw at **8** hours

Around 16 ml (1 tablespoon) of blood will be collected. HIV-related health information will be extracted from your clinical record, if available. Your biospecimens (samples), collected as part of this study, will be tested for the following:

- drug levels of antiretrovirals;
- some common chemistry and hematology tests, including blood counts, kidney and liver function
- HIV viral load

REDOSE 2.0 STUDY PART 2: Blood draw at 24 hour mark (30 min -1 hr)
This portion of the visit must occur directly after Part 1 the next day, at the Oak Tree Clinic located in the BC Women's Hospital.
Study part 2 involves a single blood draw at the 24-hour mark.

a. Blood draw at **24** hour
b. Honorarium payment

NOTIFYING YOU and/or YOUR PRIMARY CARE PROVIDER OF YOUR TEST RESULTS
As part of this study, we will be doing some biochemistry labs to look at different markers of health in your blood. Some of these tests will be done in a regular hospital lab and, if abnormal or outside of normal range, the results of these tests can be made available to you or your primary care provider. Other tests are done at a research lab where reference ranges or "normal" values may be unknown. In this case, we will contact you if the study physician feels that the results may be important for your health, and we will recommend for you to follow up with a care provider.

Please indicate, by checking the applicable box, whether you would like us to notify you, your primary care provider(s) or both of you about the lab test results done as part of this study. This is not a consent to release of medical information.

- Yes, I would like the study investigator to notify ONLY my primary care provider(s) about my lab test results done as part of this study.

- I would like the study investigator to notify BOTH me and my primary care provider(s) about my lab test results.

- I would like the study investigator to notify ONLY me about my lab test results.

Primary care provider(s) name(s): _____

Phone number: _____

Clinic Name: _____

My phone number is: _____

Alternate phone number and name/relationship: _____

My email address is: _____

8. DATA STORAGE AND SECURITY

Signed consent forms will be stored securely in a locked filing cabinet in a locked office on the secure premises of the BC Women's Hospital + Health Centre. If consent forms are signed off site, they will be securely stored at that site using the same measures as described and will be transported in a locked file folder with one of our research staff to BC Women's for filing. Survey data will be captured using the survey feature within an online database called REDCap (https://projectredcap.org). Any information that can identify you (i.e. name, contact details) will be entered and stored in a separate password-protected BCC3-REDOSE 2.0 Study Master File. No data will remain on the tablet/computer used to conduct the interview. Only the Research Staff will have access to the consent forms and the BCC3-REDOSE 2.0 Study Master File. Study investigators will only have access to de-identified data, stripped of any information that could identify you. Your biospecimens and data will be identified using a unique study ID only and will not contain any personally identifying information such as your name or date of birth. Testing results and health data collected as part of this study will be kept for a maximum of 25 years after the study is finished. Samples will be destroyed after testing has been performed and analyses finalized, or after 3 years.

9. WHAT ARE THE POSSIBLE HARMS AND DISCOMFORTS?

The study will take place in a group setting. While surveys and other activities will be conducted privately, there is a possibility that other participants may make inferences about your HIV status based on the nature of the study. This could lead to feelings of discomfort or concerns about privacy and disclosure.

During the study, participants will undergo more frequent blood draws, which may involve the use of an indwelling IV or butterfly needle. While blood draws are generally safe, they may cause some discomfort, bleeding, or bruising at the site where the needle enters the body. It is also possible that a small blood clot may form, or swelling may occur in the area where the needle or IV site was inserted. In rare cases, some participants may experience fainting or a

local infection at the puncture site. The research team will monitor participants closely for any adverse effects and take steps to manage any discomfort or complications that may arise.

Some of the survey questions are personal. They might bring up feelings like discomfort, sadness, grief, stress, or anger. Again, you do not have to answer any question that makes you feel uncomfortable, and you are welcome to skip questions, skip survey sections, or to stop the interview at any time.

The study visit day is long and you may feel tired and bored throughout the day. We recommend bringing personal materials to keep your mind occupied and you will also be able to leave the space during breaks in study procedures as you prefer.

We will make every effort to protect your privacy and confidentiality during the study; however, it is possible that people may learn you are participating in this study, and this may make you uncomfortable. The chances that research data would be accidentally released are estimated to be exceedingly small.

10. WHAT ARE THE POTENTIAL BENEFITS OF PARTICIPATING?

The blood tests done in the regular hospital lab may be used by your primary care provider as part of your care and treatment. Apart from this, you may not receive any further individual benefit from participating in this study. However, knowledge gained from this study may, in the future, help healthcare providers and caregivers better understand how to optimize the health of people living with HIV.

11. WHAT IF NEW INFORMATION BECOMES AVAILABLE THAT MAY AFFECT MY DECISION TO PARTICIPATE?

You will be told of any new information learned during the course of the study that might cause you to change your mind about staying in the study.

12. WHAT HAPPENS IF I DECIDE TO WITHDRAW MY CONSENT TO PARTICIPATE?

Your participation in this research is entirely voluntary. You are under no obligation to be included in this study. You may withdraw from this study at any time without giving reasons. If you decide to enter the study and to withdraw at any time in the future, there will be no penalty or loss of benefits to which you are otherwise entitled, and your future medical care will not be affected.

You have the right to request the withdrawal of your information collected during the study, and the destruction of any specimen collected during the study. This request will be respected to the extent possible. Please note however that there may be exceptions where the data will not be able to be withdrawn for example where the data is no longer identifiable (meaning it cannot be linked in any way back to your identity) or where the data has been merged with other data. Similarly, if a specimen has already been used, we can only delete data obtained from it. If you would like to request the withdrawal of your data, please contact Dr. Elizabeth King, Principal Investigator, at 604 875 2212.

13. HOW WILL MY TAKING PART IN THIS STUDY BE KEPT CONFIDENTIAL?

Your confidentiality will be respected. However, research records and health or other source records identifying you may be inspected in the presence of the Investigator or his or her designate by representatives of the Sponsor, UBC Children's and Women's Research Ethics Board, Simon Fraser University Research Ethics Board and any other entity as required by law for the purpose of monitoring the research. No information or records that disclose your identity will be published without your consent, nor will any information or records that disclose your identity be removed or released without your consent, unless required by law.

You will be assigned a unique study number as a participant in this study. This number will not include any personal information that could identify you (e.g., it will not include your Personal Health Number, SIN, or your initials, etc.). Only this number will be used on any research-related information collected about you during the course of this study, so that your identity will be kept confidential. Information that contains your identity will remain only with the Principal Investigator and/or designate. The list that matches your name to the unique study number that is used on your research-related information will not be removed or released without your consent unless required by law.

Your rights to privacy are legally protected by federal and provincial laws that require safeguards to ensure that your privacy is respected. You also have the legal right of access to the information about you that has been provided to the sponsor and, if need be, an opportunity to correct any errors in this information. Further details about these laws are available on request to your study doctor.

Disclosure of Race/Ethnicity

Studies involving humans now routinely collect information on race and ethnic origin as well as other characteristics of individuals because these characteristics may influence how people respond to different medications. Providing information on your race or ethnic origin is voluntary.

14. WHAT HAPPENS IF SOMETHING GOES WRONG?

By signing this form, you do not give up any of your legal rights and you do not release the sponsor, study doctor, participating institutions, or anyone else from their legal and professional duties. If you become ill or physically injured as a result of participation in this study, medical treatment will be provided by your provincial medical plan.

15. WHAT WILL THE STUDY COST ME?

All research-related activities that occur during your participation in this study will be at no cost to you.

Reimbursement

REDOSE 2.0 PART 1: You will be provided with breakfast and paid $20 in food vouchers to assist with the cost of lunch.

REDOSE 2.0 PART 2: You will be paid $250 for your time spent in completing the blood draws and survey following completion of the required blood draws. You will be paid at the time of your visit in cash, or if you would prefer by e-transfer or cheque; receipts are not required.

16. WHO DO I CONTACT IF I HAVE QUESTIONS ABOUT THE STUDY DURING MY PARTICIPATION?

If you have any questions or desire further information about this study before or during participation, you can contact Franceska Dnestrianschii (research coordinator) at 604-685-5075.

17. WHO DO I CONTACT IF I HAVE QUESTIONS OR CONCERNS ABOUT MY RIGHTS AS A PARTICIPANT?

If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research Participant Complaint Line in the University of British Columbia Office of Research Ethics by email at RSIL@ors.ubc.ca or by phone at 604-822-8598 (Toll Free: 1-877-822-8598). Please reference the study number (**H19-00896**) when contacting the Complaint Line so the staff can better assist you. You may also contact the Fraser Health Research Ethics Board Co-Chair by calling 604-587-4681 if you have any concerns about your rights as a research participant.

18. AFTER THE STUDY IS FINISHED

Please contact Franceska Dnestrianschii (research coordinator) at 604-685-5075, with any requests you may have about study updates or results. We will not be providing individual results from this study.

19. FUTURE SHARING of DATA

As per our Sponsor's (CIHR) policy, your **de-identified research data** (which means your name, birthdate, and other identifiers have been removed) may be deposited into a publicly accessible location at the time of publication. Please note that your de-identified data will be pooled so it can't be identified when it is released to the public. Making data publicly accessible can enhance the transparency of the research data and allows for external validation and fraud control, but it also allows others to access the data for re-analysis of this study or to do other kinds of analyses in the future beyond those you are consenting to in this study. Also, this future use of your data may not be subject to oversight by a research ethics board, and thus the data may be publicly shared and used in currently unknown ways. Once the data is made publicly available, you will not be able to withdraw your data. Even though the identifying information will be removed from the data it is possible that others may be able to find out who you are. The chance of this is currently thought to be extremely low.

20. FUTURE RESEARCH

We understand some people are interested in health issues and health research. Creation of a database of people who are interested in being involved in future research will allow us to inform them about upcoming studies for which they may be eligible.

The research team would like to ask you for permission to contact you in the future for opportunities related to this current project, and other research opportunities. If you agree to have your contact information kept on file, it does not mean you are obligated in any way to participate in any future research.

- ○ I AGREE that a member of Dr King's research team may contact me in the future to ask if I am interested in participating in other research studies not described in this form.

Phone: _____

Email: _____

● **See page 6**

Mailing address: _____

Other: _____

- ○ I DO NOT AGREE to have my contact information kept on file or to be contacted for future research.

REDOSE 2.0
(ReEvaluating antiretroviral Drug cOncentrations and Side Effects in individuals living with HIV)

REDOSE 2.0 Participant Consent and Signature Page

- I have read and understood the information in this consent form.
- I have had enough time to think about the information provided.
- I have been able to ask questions and have had satisfactory responses to my questions.
- I understand that all of the information collected will be kept confidential and that the results will only be used for scientific purposes.
- I understand that my participation in this study is voluntary.
- I understand that I am completely free at any time to refuse to participate or to withdraw from this study at any time, and that this will not change the quality of care that I receive.
- I authorize access to my health records as described in this consent form.
- I understand that I am not waiving any of my legal rights as a result of signing this consent form.
- I understand that this study will provide no direct benefit to me.

I will receive a signed copy of this consent form for my own records

I have read this form and I consent to my participation in this study

_____

Printed name and signature of **participant** Date

_____

Printed name and signature of **person obtaining consent** Date