Weill Cornell Medicine NewYork-Presbyterian

"Pilot Deprescribing N-of-1 Trials for Beta-blockers in HFpEF"

ID #: NCT04757584

PI: Parag Goyal, MD, MSc, FACC, FHFSA

Blank Informed Consent Form

Document Date: 17-Feb-2023

Weill Cornell Medicine

Informed Consent and HIPAA Authorization for Research

Project Title:	Pilot Deprescribing N-of-1 Trials for Beta-Blockers in HFpEF
Research Project/Protocol #:	19-10020922
Principal Investigator:	Parag Goyal, MD, MSc
Subject Name:	
Subject ID:	
MRN:	
Consent Date:	

Please note, are you currently or have been (within the last 6 months) a participant in any other research study at Weill Cornell Medicine, New York Presbyterian Hospital or elsewhere? If so, please inform the research team.

INSTITUTION: **Weill Cornell Medicine**

SPONSOR: **New York Community Trust**
National Institute on Aging
Weill Cornell Medical College

PRINCIPAL INVESTIGATOR: **Parag Goyal, MD, MSc**

INTRODUCTION

You are invited to participate in a research study. You were selected as a possible participant in this study because you have Heart Failure with Preserved Ejection Fraction (HFpEF) and currently take a beta-blocker for your heart. Please take your time to make your decision. It is important that you read and understand several general principles that apply to all who take part in our studies. The purpose and nature of the study, possible benefits, risks, and discomforts, other options, your rights as a participant, and other important information about the study are discussed below. Any new information discovered which might affect your decision to participate or remain in the study will be provided to you while you are a participant in this study. You are urged to ask any questions you have about this study with members of the research team. Please take whatever time you need to discuss the study with your physician and family. The decision to participate or not to participate is yours. The following page is designed to give you key information to help you decide whether to participate. Ask the research team questions. If you have questions later, the contact information for the research investigator in charge of the study is below.

New York Community Trust and the National Institute on Aging are providing research funds for this study. New York Community Trust and the National Institute on Aging will be referred to as the "Sponsor." The New York Community Trust and the National Instate on Aging are providing funds for different aspects of this trial. Dr. Parag Goyal is the primary investigator. The study will take place at Weill Cornell Medicine, where the investigator is a member of the medical staff. Remote monitoring and surveys will occur at your home.

If you decide to participate, please sign and date where indicated at the end of this form.

KEY INFORMATION ABOUT THIS RESEARCH STUDY

The following table is a concise and focused presentation of key information to assist you in understanding why you might or might not want to participate in this research study.

Purpose:	This is a research study to conduct N-of-1 trials, identify whether an N-of-1 protocol can increase your confidence regarding decisions with your medicines, and to evaluate the impact of beta-blockers on how you feel.
Experimental / Investigational	You will not receive any experimental drugs or procedures as part of this study.
Voluntary Participation	Your decision to be in this study is voluntary.
Withdrawal	If you decide to be in this study and then change your mind, you can leave the study at any time without penalty.
Length of Participation	Your participation can be about 2 years. During participation, you will have at least 3 study visits. The length of time you are in the study and number of study visits depends on if you are ready to make a decision about your beta-blocker after 2 periods. Each period can last up to 7 weeks. You can participate in as little as 2 and as many as 6 periods. After being an active participant, you will enter follow-up, which will last for 1 year.
Procedures	The main procedures in the study include: • Cardiopulmonary Exercise Test • Beta-Blocker Dose Modifications • Remote monitoring of vital signs • Questionnaires • Physician Function Tests including Cardiopulmonary Exercise Test
Benefits	There is no guarantee that you will benefit as a result of your participation in this study, however the study results may help people in the future. This study may allow you to determine, with your physician, if you should continue or discontinue beta-blockers as part of your continued care.
Costs / Reimbursement	The study sponsors will pay for the cost of procedures that are require only for this study. You will continue to obtain your beta-blocker in the same way you were before joining this study. At Dr. Goyal's discretion, reimbursements may also be provided for unanticipted fees, which may include travel expenses, such as parking, taxi fares and tolls.
Risks	Taking part in this research may expose you to risks. Not all risks are known at this time. There are risks from study procedures. Side effects may range from being mild to life-threatening and may go away with treatment or be permanent. The main risks of the decreasing/stopping your beta-blocker include: • Increased heart rate • Worsening blood pressure • Palpitations • Sweating • Shortness of breath

	• Worsening heart failure • Chest pain • Heart attack • Stroke • Arrhythmia • Hospitalization • Death The main risks associated with beta-blocker use include: • Bradycardia • Heart block • Low blood pressure • Dizziness • Fatigue • Depression • Confusion • Worsening heart failure • Stroke • Hospitalization • Death The main risks with the Cardiopulmonary Exercise Test include: • Muscle or bone injury • Arrythmias (abnormal heart rhythm) • Cardiovascular collapse • Acute coronary syndrome • Hemodynamic instability • Death The study doctor will explain the risks of this research to you before you decide whether or not you would like to participate.
What if you have questions, suggestions, or concerns?	The person in charge of the study is Dr. Parag Goyal. If you have questions, suggestions, or concerns regarding this study or you want to withdraw from the study, his contact information is: 646-962-7571. You can also reach out to our study team at nof1team@med.cornell.edu. If you have any questions, suggestions or concerns about your rights as a volunteer in this research, contact staff in the Weill Cornell Medicine Institutional Review Board (IRB) between the business hours of 9am and 5pm EST, Monday-Friday at 646-962-8200 or send an e-mail to irb@med.cornell.edu.

This overview does not include all the information you need to know before deciding whether to take part in the study. Much additional detail is given in the full consent document, which can be found on the pages that follow. Be sure to review the rest of this consent form before deciding about participation.

STUDY INFORMATION

Why is the study being done?

The purpose of this research study is to conduct N-of-1 trials and modify the N-of-1 study protocol based on the feedback of subjects. This will allow us to identify key features of a study protocol that can be studied in the future to determine whether an N-of-1 protocol can improve patient-centered care and patient-centered medication management.

We are also looking to study the impact of beta-blockers on your physical activities. This will help guide us on if your physical performance is better or worse when taking a beta blocker.

What is an N-of-1 Trial?

An N-of-1 trial is a study where different treatment options (in this case, being on and off a beta-blocker) are tested in a single patient at different times. This unique type of study can provide data about the benefits and risks of a medication (in this case, beta-blocker) by collecting data based on the actual patient experience when taking (On) and not taking (Off) a medication (in this case, beta-blocker). This can provide important information to guide decision making on whether to continue or stop a medication. The purpose of this research study is to conduct N-of-1 trials and modify the N-of-1 study protocol based on the feedback of subjects. This research is also looking to examine the impact of beta-blockers on your physical activities.

What are Beta-blockers?

Beta-blockers are a class of drugs given to patients with heart problems, such as heart failure. They work by blocking the effect of a hormone called epinephrine. Epinephrine is also known as adrenaline. Beta-blockers cause your heart to beat more slowly and with less force.

How many people will take part in the study?

Participants in the study are referred to as subjects.
About 16 subjects will take part in this study, and all will be recruited from Weill Cornell.

What happens if I agree to participate?

If you are interested in participating, we will go over this informed consent form with you. If you agree to consent, after signing this document you will be "randomized" into one of the study groups, which we will call Arms. Arm 1 will follow an On-Off-On-Off pattern. If you are randomly assigned into Arm 1, then you will begin the study "ON" beta-blocker. Then, you will crossover to OFF beta-blocker. You may possibly go back "ON" beta-blocker, and then go OFF again one final time.

The other group, Arm 2, will follow an Off-On-Off-On pattern. If you are randomly assigned to Arm 2, then you will begin the study going OFF beta-blocker. Then, you will crossover to ON beta-blocker. You may possibly go back OFF beta-blocker, and then go back ON beta-blocker one final time.
If you take part in this study, you will have the following tests and procedures:

- Physical exam
    - Will include vital signs such as blood pressure and heart rate.
- Central Blood Pressure Assessment
    - We may use a specialized device to measure extra blood pressure parameters that are not captured with a standard blood pressure device
- Electrocardiogram
    - This measures the electrical impulses of your heart; patches are placed on the outside of your chest.
- Medication inventory
    - We will ask you about which medications you are currently taking.

- Dose modification
    - In order to maintain safety, we will modify the dose of your beta-blocker each week. If you are in the "Off Arm", the principal investigator will reduce the dose of your beta-blocker each week until you are completely off of the drug or at the lowest dose you can safely tolerate. If you are in the "On Arm", the principal investigator will increase the dose of your beta-blocker until you are at the dose that was previously prescribed to you by your physician.
- Step count via a Garmin wearable device.
    - You will be provided a Garmin wearable device to wear on your wrist during the study period. This watch will record your health activity while you wear it. You will return the device to us at the end of the research intervention phase.
- Remote monitoring
    - You will be provided with a blood pressure cuff, which will measure your blood pressure and heart rate. These devices will then automatically send this data to the Study Team through the internet. The study team will review this information weekly. If you have any concerning readings on any of these devices, the study team will call you to discuss this. The blood pressure cuff will be returned to the study team at the end of research intervention phase of the trial.
- Questionnaires that ask about self-reported health
    - We will provide you with an internet-ready tablet. Every week, we will ask you to answer questions that relate to your health using the tablet or via survey links sent to you via email. These questionnaires will be sent to the study team and stored in a secure, Weill Cornell Medicine approved, electronic database, called REDCap. These will be reviewed by the study team. The tablet will be returned to the study team at the end of the research intervention phase of the trial.
- Questionnaires about decision making outcomes
    - We will ask you some questions about your confidence and involvement in decision making related to beta-blocker use at the beginning of the study and then again at the end of the study. These questionnaires will be sent to the study team and stored in a secure, Weill Cornell Medicine approved, electronic database, called REDCap. These will be reviewed by the study team.
- Questions about health literacy
    - These questions will help us understand how you process and understand basic medical information.
- Questions about number literacy
    - These questions will help us understand how you work with numbers.
- Questions about typology
    - These questions will help us understand how you feel about medications and making decisions about them.
- Questions about short graph literacy
    - These questions will help us understand how you understand information shown in graphs.
- Questions about Data Preferences
    - This will help us determine which aspects of your health are most important to you.
- Interviews
    - We will ask you for your thoughts and feelings about tests and procedures, and materials you use throughout the study. If your caregiver is with you, they will be given the chance to provide additional information during the interview. To make sure that no important information is lost, we will audio-record these interviews.
- Six-minute walk test
    - This test tells doctors how good you are at doing exercise. The study team will ask you to walk up and down a flat corridor for 6 minutes. The distance you walked will be recorded. Before doing the test, you will be asked, based on your opinion, to provide the main reason you feel limits with your ability to do exercise. After the test

you will be asked to rate your shortness of breath. You will perform the 6-minute walk test at your first visit, as well as at the end of each research intervention period.

- Blood draw for Troponin & NT-proBNP
    - We will collect a blood sample for Troponin and a blood sample for NT-proBNP. These will be collected at the baseline visit and at the end of each research intervention period.
        - Troponin: this is a protein in the heart muscle. When elevated it may mean there is injury to the heart muscle.
        - NT-proBNP: this is a hormone in the blood. When elevated it may indicate heart failure.
- Cardiopulmonary exercise test (CPET)
    - A cardiopulmonary exercise test studies your heart and lungs. We will connect you to an electrocardiogram to monitor your heart during the test. A device will go on your finger to monitor your oxygen. Your blood pressure will also be monitored. You will then be asked to walk on a treadmill or bicycle. The treadmill or bicycle will become harder each minute of the test. We will ask you to walk until you are too tired to continue. In addition to the Troponin and NT-proBNP that we collect regularly, we may collect these again right after you finish the CPET. This will occur at the end of periods 1 & 2.
- Telephone contact
    - We will call you on the day before each dose modification, the day of the dose modification and the day following the modification (3 days total for each dose modification). During these calls we will remind you about the dose modification schedule and ask if you are experiencing adverse events or unwanted side effects. If we are unable to reach you over the phone, we may send you an email. We will contact you at six, nine-, and twelve-months post-end of intervention to discuss medical history, emergency department, and hospital admissions, and ask you how you have been. We will also ask you to complete questionnaires for this follow-up period.
- Self-Reported outcomes assessment
    - These assessments will examine the impact of beta blockers on various aspects of your life such as sexual function, cognitive function, and quality of life. We will provide you with a link to complete these assessments weekly on a tablet or via email.
- Short physical performance battery
    - This is made up of three tests that help us measure your physical functioning. The components are as follows:
        - Gait Speed Test will help us determine your mobility. We will ask you to walk 4 meters at your usual speed. We will time you as you do this.
        - Chair Rise Test will help us determine your core strength. We will ask you to sit in a chair and stand up 5 times without using your arms. You will do this by folding your arms across your chest. We will time you as you stand and sit as fast as you can.
        - Balance Test will help us determine your ability to stand without a walker or cane. We will ask you to maintain your balance in different positions, without holding onto anything. First, we will ask you to stand with one foot next to the other foot. If you can hold this position for 10 seconds, we will then ask you to stand with the side of the heel of one foot touching the big toe of the other foot. If you are able to hold for 10 seconds, we will ask you to stand with one foot in front of the other. We will stop if you feel unsafe, uncomfortable or when you are unable to hold a position for 10 seconds.
- Decision about continuing beta blocker
    - At the end of each research intervention cycle of the study (after each ON-OFF/OFF-ON cycle has ended) we will ask you if you would like to continue or stop taking your beta blocker.

Data visualizations will be shared when there is potential for decision-making about continuing or stopping your beta-blocker based on patient/physician preference/request (anticipated at the ends of periods 2, 3 and 4).

Step count, remote monitoring, questionnaires about decision-making, questionnaires about self-reported health, six-minute walk test, cardiopulmonary exercise test, and short physical performance battery are all being done for purposes of the study.

Please advise the researchers of any medications you are taking. In addition, if you are taking any over-the counter drugs or herbal supplements, which you have obtained from the drug store, grocery store, etc., you should advise the researchers.

Results from the following procedures will be for research purposes only and will not be disclosed unless explicitly asked for by you or deemed necessary by the PI and study team: Cardiopulmonary exercise test, blood test, 6-minute walk test, short physical performance battery test, and EKG. Receiving your results will also be dependent on the processing time for each. Patient reportable outcomes, or PROs, will be available to you to assist you in your decision in either continuing or stopping your beta-blocker. These include questionnaires about your self-reported health outcomes and decisions making outcomes.

The following table will detail all aspects of the trial and when they will occur.	Baseline	Research Intervention Phase				Post Intervention Phase			
		Daily	Weekly	Biweekly	End of Periods 1-3	End of Intervention Phase (Period 4)	6 Month Follow-up	9 Month Follow-up	12 Month Follow-up
Informed Consent									
Randomization									
Demographics									
Medication Inventory									
Baseline Beta-blocker use									
Physical Exam									
Central Blood Pressure Assessment[3]									
Electrocardiogram									
Cardiopulmonary Exercise Test[1]									
Blood Draw for Troponin & NT-proBNP									
Blood Draw for Future Research[2]									
Six-Minute Walk Test									
Short Physical Performance Battery									
Qualitative Interview							☎	☎	☎
Typology Question									
Health Literacy									
Number Literacy									
Short Graph Literacy									
Data Preferences									
EQ5d-VAS									

1 Cardiopulmonary Test to occur only at the end of Period 1 and Period 2. Cardiopulmonary test to be accompanied by a blood draw for NT-proBNP and Troponin.
2 Optional component of this study. Blood will be drawn at the baseline visit, at the end of Period 1 and at the end of Period 2.
3 Central Blood Pressure may or may not be conducted at study visits.

	Baseline	Research Intervention Phase					Post Intervention Phase		
		Daily	Weekly	Biweekly	End of Periods 1-3	End of Intervention Phase (Period 4)	6 Month Follow-up	9 Month Follow-up	12 Month Follow-up
PROMIS-29							☎	☎	☎
PROMIS-SF 6A							☎	☎	☎
PROMIS-Sexual Function							☎	☎	☎
KCCQ-12							☎	☎	☎
Decision Making Outcomes Questionnaires									
Dose Modification			☎						
Telephone Call[3]			☎						
Step Count Collection									
Remote Monitoring									
Interim Events History			☎				☎	☎	☎
Assessment of Beta-blocker Usage							☎	☎	☎

Legend	
	In-office visit
	Conducted remotely
☎	Conducted over the telephone
	Collected via Garmin wearable device

3 Telephone calls will occur the day prior to changing your dose, the day of the scheduled dose change and the day after you have changed your dose. Telephone calls may be eliminated during the last 2 weeks of each period.

How long will I be in this study?

You will be in the study for up to two years. You have the option to complete as little as 2 periods to upwards of 6 periods. Your period length will be determined by your original beta-blocker dose and clinical profile. These could range from 2 weeks to 6 weeks per period. During these periods, you will be in the research intervention arm. After a decision is made about your medication, (minimum of 1 ON-OFF/OFF-ON cycles), you may enter follow-up, where you will no longer be an active participant, or you may enter an additional period. At 6, 9, and 12 months we will review your electronic health record to assess for any unwanted side effects and to determine if you are currently on a beta blocker. Follow-up will last for 1 year. We will also call you to ask you about side effects and to complete some of the questionnaires that you were asked throughout the study. We will conduct a qualitative interview similar to those done during the end of period visits. These interviews will be audio recorded. We will also ask for your consent to retrieve external medical records from other institutions during the period when you are no longer an active participant, if applicable.

You can stop participating at any time. However, if you decide to stop participating in the study, we encourage you to talk to the research team and your regular doctor first. If you choose to leave the study, your regular care will not be affected, nor will you lose any benefits to which you are entitled. In addition, your relations with WCMC, New York-Presbyterian Hospitals, your physicians, or other personnel will not be affected.

Withdrawal by investigator, physician, or sponsor

The investigators, physicians or sponsors may stop the study or take you out of the study at any time if they feel it is in your best interest, if you experience a study-related injury, if you need additional or different medication, or if you do not follow the study plan. They may take you out of the study for various other administrative and medical reasons. They can do this without your consent.

What are the risks of participating in this study?

For research studies involving medications, there may be risks. We will discuss these risks with you. Risks and side effects related to this study include:

From decreasing/stopping your beta- blocker	The following may occur but are **rare:** increased heart rate, worsening blood pressure, palpitations, sweating, shortness of breath, worsening heart failure, chest pain, heart attack, stroke, arrhythmia (abnormal heart rhythm), hospitalization, death
From increasing/taking your beta-blocker	The following may occur but are **rare**: Slowed heart rate, worsening blood pressure, heart block, worsening heart failure, chest pain, heart attack, stroke, hospitalization, death
From using a Garmin wearable device	The following may occur but are **rare:** Local skin irritation, wrist pain
From interviews	The following may occur but are **rare:** Emotional distress related to answering interview questions, breach of confidentiality
From the short physical performance battery (gait speed, balance test, chair rise)	The following may occur but are **rare:** Falling, muscle injury
From cardiopulmonary exercise test	The following may occur but are **rare:** Falling, muscle injury, increased heart rate, low blood pressure, heart attack, shock, death.
From the 6-minute walk test	The following is **possible:** Increased heart rate, dizziness
From the blood draw:	The follow is **possible:** Pain or bruising, dizziness, infection at the site of the blood draw.

There may also be side effects, other than listed above that we cannot predict. Other drugs may be given to make side effects that occur less serious and less uncomfortable.

Are there any risks regarding privacy and the use of a Garmin wearable device?
We do not anticipate any risks regarding privacy while using the Garmin wearable device. Garmin will not sell, nor share, your personal data. The health data collected on the Garmin will be transferred to and stored on our Weill Cornell Medicine server at each study visit.

If you call Garmin because you need technical support, Garmin may request you provide them with information such as your name and email address, that will directly identify you.

Are there any benefits to taking part in the study?
We cannot guarantee that you will receive any benefits from this study. We hope that participating in this study will allow you to determine, with your physician, if you should continue or discontinue beta-blockers as part of your continued care. We also hope the information learned from this study will benefit other patients with heart failure with preserved ejection fraction in the future.

What other options are there?
Instead of being in this study, you have the following option:
You may continue your medication regimen under the care of your physician and not participate in this study.

What about confidentiality?
Efforts will be made to protect your medical records and other personal information to the extent allowed by law. However, we cannot guarantee absolute confidentiality. Records of study participants are stored and kept according to legal requirements and may be part of your medical record. You will not be identified personally in any reports or publications resulting from this study. Organizations that may request to inspect and/or copy your research and medical records for quality assurance and data analysis include groups such as:

- Weill Cornell Medicine
- The WCMC Institutional Review Board (IRB)
- The Office of Human Research Protection (OHRP)
- Department of Health and Human Services
- National Institutes of Health
- The Food and Drug Administration (FDA) and/or their representatives

By signing this consent form, you authorize access to this confidential information. You also authorize the release of your medical records to Weill Cornell Medicine by any other hospitals or institutions where you might receive medical care of any kind while you are participating in this study.

If information about your participation in this study is stored in a computer, we will take the following precautions to protect it from unauthorized disclosure, tampering, or damage by requiring a unique ID and password to log into the database: Your personal data will be stored on a password-protected computer and on a secure network, both are which are Weill Cornell Medicine Information Technology Services approved. In addition, only personnel who are associated with the study will have access to the study specific records in the database.

A description of this clinical trial is available on http://www.ClinicalTrials.gov, as required by U.S. Law. This website will not include information that can identify you. At most, the website will include a summary of the results. You can search this website at any time.

HIPAA AUTHORIZATION TO USE or DISCLOSE PROTECTED HEALTH INFORMATION FOR RESEARCH

Purposes for Using or Sharing Protected Health Information: If you decide to join this study, Weill Cornell Medicine researchers need your permission to use your protected health information. If you give permission, Weill Cornell Medicine researchers may use your information or share (disclose) information about you for their research that is considered to be protected health information.

Voluntary Choice: The choice to give Weill Cornell Medicine researcher's permission to use or share your protected health information for their research is voluntary. It is completely up to you. No one can force you to give permission. However, you must give permission for Weill Cornell Medicine researchers to use or share your protected health information if you want to participate in the study. If you decline to sign this form, you cannot participate in this study, because the researchers will not be able to obtain and/or use the information they need to conduct their research. Refusing to give permission will not affect your ability to get usual treatment, or health care from Weill Cornell Medicine.

Protected Health Information to Be Used or Shared: Government rules require that researchers get your permission (authorization) to use or share your protected health information. Your medical information may be disclosed to authorized public health or government officials for public health activities when required or authorized by law. If you give permission, the researchers could use or share with the entities identified above any protected health information related to this research study from your medical records and from any test results, which includes:

- Physical Exam
- Central Blood Pressure monitoring
- Medication inventory
- Dose Modifications
- Step count via Garmin wearable device
- Remote Monitoring
- Self-reported outcomes
- Questionnaires about decision making
- Cardiopulmonary Exercise Test
- Lab draws
- Short physical performance battery
- Adverse Events
- Vital status
- Assessment of beta-blocker usage

Other Use and Sharing of Protected Health Information: If you give permission, the researchers could also use your protected health information to develop new procedures or commercial products. They could share your protected health information with the study sponsor, the WCMC Institutional Review Board, inspectors who check the research, government agencies and research study staff. We will store the audio recordings obtained from the interviews one year after data analysis completion. These recordings will then be erased permanently. If given permission, the study team could access external medical records from other health institutions during the follow-up phase, at 6 months, 9 months, and 12 months after the end of the intervention phase. When we access these records, we will only analyze your interim events history, such as hospitalizations, emergency room visits, and new prescriptions.

The information that may be shared with the sponsor and/or government agencies could include your medical record and your research record related to this study. They may not be considered covered entities under the Privacy Rule and your information would not be subject to protections under the Privacy Rule.

CERTIFICATE OF CONFIDENTIALITY

A Certificate of Confidentiality has been granted by the National Institutes of Health. This certificate will protect the researchers from being forced to release any research information, documents or samples that may identify you, even under a court order or subpoena. This protection is not absolute. It does it stop reporting that federal, state, or local laws require. Some examples are laws that require reporting of child or elder abuse, some communicable diseases, and threats to harm yourself or others.

Researchers may release information about you when you say it is ok. For example, you may give them permission to release information to insurers, medical providers or any other persons not connected with the research. The Certificate of Confidentiality does not stop you from willingly releasing information about your involvement in this research.

BLOOD FOR RESEARCH

Test Purpose

We would like to collect 2 additional tubes of blood at the baseline visit, as well as at the end of Period 1 and end of Period 2 visits. This would add about 1 minute to these 3 study visits. Genetic material, including DNA and RNA, may be obtained from this sample, stored, and used for evaluation. Your blood sample will be immediately processed, frozen and stored. Clinical information, genetic data, and samples will be collected and stored for ongoing, unspecified research. This research will aim to improve diagnosis, prognosis, and treatment of cardiovascular diseases in the future and may improve the lives of future patients. Genetic testing on these blood samples may occur if you give consent to this optional part of the study. The tests are unspecified and will occur in the future under discretion of the Principal Investigator.

Weill Cornell Medical College (WCMC) requires your written, informed consent to perform genetic testing for this optional component. Genetic material contains information about many different traits, like a personal diary. The traits being tested are heritable, which means that they may be passed on from generation to generation within families. By signing this consent, you agree to give these samples to WCMC for research purposes.

Policies and Procedures to Protect Your Confidentiality

Your information will be kept confidential in accordance with State and Federal law. The results obtained from this will not be shared with you. If results are shared with other researchers, all your protected health information will be removed. Therefore, the samples will be permanently stripped of information that could identify you.

Disclosure of Test Results

To the extent permitted by law, under no circumstances will any information linking you to specific test results be disclosed to any individual or organization without your written consent. The results from the genetic tests may be disclosed to the study team.

A new Federal law, called the Genetic Information Nondiscrimination Act (GINA), generally makes it illegal for health insurance companies, group health plans, and most employers to discriminate against you based on your genetic information. This law generally will protect you in the following ways:

- Health insurance companies and group health plans may not request your genetic information that we get from this research.
- Health insurance companies and group health plans may not use your genetic information when making decisions regarding your eligibility or premiums.
- Employers with 15 or more employees may not use your genetic information that we get from this research when making a decision to hire, promote, or fire you or when setting the terms of your employment.

Be aware that this new Federal law does not protect you against genetic discrimination by companies that sell life insurance, disability insurance, or long-term care insurance. Nor does this Federal law prohibit discrimination on the basis of an already manifested genetic disease or disorder.

Participation in this component of the study is optional.

☐ Yes, I agree to participate in the optional component of the research study. I understand that 6 additional tubes of blood will be stored for future unspecified research.
☐ No, I do not wish to participate in this component of the study.

_____	_____	_____
Subject Initials	Initials of person obtaining consent	Date

CANCELING AUTHORIZATION

Canceling Permission: If you give the Weill Cornell Medicine researchers permission to use or share your protected health information, you have the right to cancel your permission whenever you want. However, canceling your permission will not apply to information that the researchers have already used or shared.

If you wish to cancel your permission, you may do so at any time by writing to:

Privacy Office
1300 York Avenue, Box 303
New York, NY 10065
Email: privacy@med.cornell.edu

If you have questions about this and would like to discuss, call (646) 962-6930.

End of Permission: Unless you cancel it, permission for Weill Cornell Medicine researchers to use or share your protected health information for their research will never end.

ACCESS TO RESEARCH RECORDS

During this study, **you will have access** to see or copy your protected health information as described in this authorization form in accordance with Weill Cornell Medicine policies. During your participation in this study, you will have access to your research record and any study information that is part of that record.

What are the costs?

The costs of all medications (including beta-blocker) and their administration during this study will be charged to you or your insurance provider. The sponsor will pay for all study related procedures that are not considered standard care for patients with your disease. These include step count via Garmin wearable device, remote monitoring, self-reported outcome assessment via tablets, questionnaires about decision-making, six-minute walk test, cardiopulmonary exercise test, and short physical performance battery.

Any other standard of care clinical procedures, including standard laboratory tests, will be billed to you or your insurance provider in the same manner as if you were not part of this research study. Therefore, you or your insurance provider will need to assume responsibility for these costs. You will be billed for all costs or co-payments that are not paid by your insurance provider.

Policy/Procedures for research related injury

The Policy and Procedure for the New York Community Trust are as follows:
If you suffer a research related injury, the Sponsor will not pay for medically necessary items or services for the diagnosis and treatment of the Research Related Injury.

The Policy and Procedure for Weill Cornell Medicine are as follows:
We are obligated to inform you about Weill Cornell Medicine's policy in the event injury occurs. If, as a result of your participation, you experience injury from known or unknown risks of the research procedures as described, immediate medical care and treatment, including hospitalization, if necessary, will be available at the usual charge for such treatment. No monetary compensation is available from Weill Cornell Medicine or New York Presbyterian Hospital. Further information can be obtained by calling the Institutional Review Board at (646) 962-8200.

Compensation for participation
You will receive compensation for participating in this study. You will receive $50 at the time of enrollment. You will receive an additional $50 at the end of each intervention phase visit. You will receive an additional $50 for compliance with all the study tests and procedures. You will therefore receive a total of up to $300 for participating in this study. Compliance means that you have attended 100% of your study appointments with us and have completed at least 90% of the assessments during the study. At the discretion of Dr. Goyal, reimbursements may also be processed for unanticipated fees, which may include travel expenses, such as parking, taxi fares and tolls.

These will be given to you in the form of a ClinCard. ClinCard can be used as a credit or debit card and funds will be available to you within 5 business days after you complete your study visit. Please also review the ClinCard Frequently Asked Questions provided to you by the study team.

Commercial interest
Materials or data obtained from you in this research may be used for educational or commercial purposes. It is the policy of Weill Cornell Medicine and the New York Community Trust not to provide financial compensation to you should this occur.

- Licensing of materials: Any data and samples you donate which is used in research may result in new products, tests, or discoveries. In some instances, these may have potential commercial value and may be developed and owned by the researchers, Weill Cornell Medicine and/or others (e.g., private companies). However, donors of tissues do not retain any property rights to the materials. Therefore, you would not share in any financial benefits from these products, tests, or discoveries.

What are my rights as a participant?
Taking part in this study is voluntary. You may choose to not take part in the study or to leave the study at any time. If you choose to not participate in the study or to leave the study, your regular care will not be affected nor will your relations with Weill Cornell Medicine, your physicians, or other personnel. In addition, you will not lose any of the benefits to which you are entitled. We will tell you about new information that may affect your health, welfare, or participation in this study. A Data Safety and Monitoring Board, an independent group of experts, will be reviewing the data from this research throughout the study. We will tell you about the new information from this or other studies that may affect your health, welfare, or willingness to stay in this study.

Whom do I call if I have questions or problems?
For questions about the study, a research-related injury, any problems, unexpected physical or psychological discomforts, or if you think that something unusual or unexpected is happening, call Dr. Parag Goyal at 646-963-7571. If you are reaching out about an urgent medical emergency, please call 911.

If you have questions or concerns about the study, please call 646-962-3548. This phone number is only active during work hours. If more convenient, you may also send us an email at nof1team@med.cornell.edu. Please note, this phone number and email is intended for nonurgent communication with the study team.

If you have questions about your rights as a research participant, contact the WCMC IRB Office. Direct your questions to:

Institutional Review Board at:
(646) 962-8200
1300 York Avenue, Box 89
New York, New York 10065

Principal Investigator: Parag Goyal, MD, MSc
Study Title: Pilot Deprescribing N-of-1 Trials for Beta-Blockers in HFpEF

Researcher's statement
I have fully explained this study to the subject. As a representative of this study, I have explained the purpose, the procedures, the benefits, and risks that are involved in this research study. Any questions that have been raised have been answered to the individual's satisfaction.

_____	_____	_____
Signature of person obtaining the consent	Print Name of Person	Date

Subject's statement
I, the undersigned, have been informed about this study's purpose, procedures, possible benefits and risks, and I have received a copy of this consent. I have been given the opportunity to ask questions before I sign, and I have been told that I can ask other questions at any time. I voluntarily agree to participate in this study. I am free to withdraw from the study at any time without need to justify my decision. This withdrawal will not in any way affect my future treatment or medical management and I will not lose any benefits to which I otherwise am entitled. I agree to cooperate with Dr. Parag Goyal and the research staff and to inform them immediately if I experience any unexpected or unusual symptoms.

_____	_____	_____
Signature of Subject	Print Name of Subject	Date

Caregiver Consent
We would like to also ask your caregivers for feedback about their shared experience with you during your participation in this study. Do you give us your permission to speak to your caregiver during your enrollment in this study?

☐ Yes, I give the study team permission to ask my caregivers for feedback about my participation in this trial

☐ No, I do not give the study team permission to ask my caregivers for feedback about my participation in this trial.

_____ _____
Subject Initials Initials of person obtaining consent

Consent to contact your primary care doctor/primary cardiologist
Dr. Goyal would like to discuss this study with your primary care doctor. He will inform him/her of your participation in this study. Do you give Dr. Goyal permission to discuss this study with your primary care doctor or primary cardiologist?

☐Yes, I give Dr. Goyal permission to discuss my participation in this trial with my doctor.
☐No, I do not give Dr. Goyal permission to ask my caregivers for feedback about my participation in this trial.

_____ _____
Subject Initials Initials of person obtaining consent

END