

Informed Consent Form to Participate in Research

Wake Forest University Department of Health and Exercise Science and Wake Forest Baptist Health Weight Management Center

**Title: Weight Loss with Risedronate for Bone Health
(WE RISE)**

Principal Investigators: Kristen Beavers, PhD and Jamy Ard, MD

Participant Name: _____

INTRODUCTION

You are invited to be in a research study. Research studies are designed to gain scientific knowledge that may help other people in the future. You are being asked to take part in this study because you will undergo a vertical sleeve gastrectomy for weight loss. Your participation is voluntary. Please take your time in making your decision as to whether or not you wish to participate. Ask your study doctor or the study staff to explain any words or information contained in this informed consent document that you do not understand. You may also discuss the study with your friends and family.

WHY IS THIS STUDY BEING DONE?

The purpose of this research study is to examine the effect of a medication (Risedronate) on changes in bone density and quality against those not receiving the medication to see which is better. Risedronate is a medication that prevents bone breakdown and has been approved by the US Food and Drug Administration (FDA) for the prevention and treatment of osteoporosis in older men and women. However, **Risedronate has not been approved for the prevention of bone loss following vertical sleeve gastrectomy.**

In this study 6, once-a-month doses of 150 mg Risedronate will be compared to 6, once-a-month doses of placebo. A placebo is a substance, like a sugar pill, that is not thought to have any effect on your disease or condition. In this study you will either receive the active study medication, Risedronate, or a placebo which is not active. Placebos are used in research studies to see if the drug being studied really does have an effect.

How Many People Will Take Part in the Study?

A total of 24 people will take part in this study. To identify this number of participants, we may need to screen as many as 50 because some people will not qualify for the study.

WHAT IS INVOLVED IN THE STUDY?

If you agree to participate in this study by signing this consent form, you will be asked to participate in two, in-person baseline assessment visits [baseline visit 1 (BV1), baseline visit 2 (BV2)] occurring 1-6 weeks prior to surgery, and two, in-person follow up assessment visits [follow up visit 1 (FV1) and follow up visit 2 (FV2)] occurring in the month following your last medication date. During this period, you will also receive monthly medication dosage reminders and adverse event inquiries by phone. In addition, you will have the option to attend a two-part, 12-month follow up assessment visits (FV3 and FV4) following the study intervention that would occur within a month and a half of your surgical anniversary date. For convenience and if feasible, both of these visits could possibly be scheduled on the same day.

The details about all study visits and procedures are provided below. We will make every effort to follow the visit procedures in the order they are outlined below; however, it may be necessary at times to make changes to accommodate different schedules.

Screening/Baseline Visit 1 (BV1)/Follow-up Visit 2

This visit will take place at the Wake Forest University Human Performance Lab. After agreeing to participate in the study by signing this Informed Consent form, we will collect a baseline measure of your height and weight, have you complete forms asking about your social background and medical history (including likelihood of pregnancy) and take inventory of the medications that you use. This will take about an hour. If you report that you are pregnant, you will not be allowed to continue with the study.

If you meet the study eligibility requirements, we will have you undergo scans of your body that measure the amount of bone, muscle, and fat at that same visit. This scan uses a Dual Energy X-ray Absorptiometry (DXA) machine. This procedure is a type of x-ray that is painless, but involves a very low dose of radiation. This involves use of a scanner that will pass across your body while you are lying quietly on a padded table for the duration of each scan (5-10 minutes), for a total of up to 30 minutes. For the majority of the scan time, you will be lying down and will not be able to get up until the scan is complete. Radiation exposure information can be found in the risks section of this document below. If the DXA scan results show that you have osteoporosis (weakening bone structure) we will inform you and you will not be eligible to continue with the study. Your results will be sent to Dr. Jamy Ard who will offer to refer you to a bone evaluation clinic. If you are eligible to continue, we will schedule you for another DXA scan to take place after you complete the active part of the study. This entire first visit will take about two hours.

Baseline Visit 2 (BV2)/Follow-up Visit 2

Within a 1-2 week period of the BV1 visit, you will be scheduled for a fasting blood draw and computed tomography (CT) scan of your abdomen and upper thigh before you begin the WE RISE study intervention. These visits will take place at the Clinical Research Unit (CRU) and Outpatient Radiology clinic, both located at Wake Forest Baptist Medical Center. For the blood test, you will be asked to go to the CRU in the morning between 7 and 9 am. You will be asked to fast (not eat or drink anything but water) for at least 12-hours prior to this visit. There, the study nurse will draw

about 2 teaspoons of blood from a vein in your arm. The total amount of blood withdrawn during the study will be approximately 4 teaspoons. This blood will be tested to measure two markers of bone metabolism. After this, you will be offered a light snack.

The CT scan is painless and will help us to determine the quality and strength of your spine and hip bones (more details provided in the Risks Section of this form). For this test you will lie on a narrow, motorized table that slides through the opening into a tunnel. Straps and pillows may be used to help you stay in position. While the table moves you into the scanner, detectors and the X-ray tube rotate around you. You may hear buzzing, clicking and whirring noises. The whole procedure typically takes about 30 minutes but the visit itself will last about 1 hour to complete. We will schedule you for one more blood draw and CT scan to take place after completing the active part of the study. After this you will be asked to complete a Participant Satisfaction Survey to see how satisfied you were with the study procedures.

Optional One-year Follow-up Visits 3 and 4 (FV3 and FV4)

These final two testing visits are optional. If you agree to participate you will be asked to return 12 months after the 6-month medication intervention has ended to undergo similar procedures as in the Follow-up Visits 1 and 2 except that all procedures may take place on the same day. These follow-up assessments will occur at both the Wake Forest University Human Performance Lab on the Wake Forest University campus, and at the Outpatient Radiology clinic located at Wake Forest Baptist Medical Center. The blood draw for this visit may occur in the Clinical Research Unit (as done previously) or it may take place at the Wake Forest University Human Performance Lab.. Refusing to participate will not result in any penalty or loss of benefits to which you are entitled.

Do you wish to participate in the One-Year Follow-up Visits 3 and 4?

Yes No _____ **Initials**

Randomization and Intervention

After you have completed the two, baseline testing visits, you will be randomized into one of the study groups described below. Randomization means that you are put into a group by chance. It is like flipping a coin. You will have an equal chance of being placed in either group. Based on your randomized group assignment, either to the Risedronate group or placebo group, you will be asked to take one, 150 mg oral dose of encapsulated Risedronate or a placebo capsule every month for 6 months (a total of 6 doses). Under the direction of the study doctor, one bottle containing 6 pills will be provided to you prior to surgery. Also, you will be provided a written schedule of the dates when these doses are due to be taken over the course of the 6-month intervention. In addition, you will receive a monthly reminder call when each dose is due. At this time you will be asked to report any side effects that you may be experiencing and if of child-bearing potential, asked if you are pregnant. If you report that you are pregnant, you will not be allowed to continue with the study.

Neither you nor the investigator nor study staff will know which study drug you are receiving. This is done so that a fair evaluation of results can be made. This information is available to the researchers if needed in an emergency.

Storage of Biological Tissue

If you agree to participate in this study, we will draw 2-3 teaspoons of the blood to use for future research. This sample will be kept and may be used in future research to learn more about other diseases. Your sample will be obtained in the Clinical Research Unit at Wake Forest University Baptist Medical Center. The sample will be stored at the Pepper Center Repository of the Biogerontology Laboratory under the supervision of Barbara Nicklas, PhD and it will be given only to researchers approved by Dr. Kristen Beavers. An Institutional Review Board (IRB) must also approve any future research study using your tissue sample. In order to participate in this study, you must be willing to provide this sample for future research.

Your blood sample will be stored with a unique identifier and will not include any identifiable information about you such as your name, address, telephone number, social security number, medical record number or any of the identifiers outlined in the HIPAA Privacy Rule. The unique identifier will be a randomly assigned number and only the principal investigator will have access to the code that links the unique identifier to you. Your name, address, social security number, etc., will never be disclosed to future researchers and neither will the code that links your identifiers to the sample.

In the future, people who do research may need to know more about your health. While the study investigator may give reports about your health, he/she will NOT be given your name, address, phone number, or any other identifying information about who you are, unless you agree to be contacted in the future.

YES you may contact for future research studies

NO I do not want to be contacted regarding future research studies.

HOW LONG WILL I BE IN THE STUDY?

If you agree to participate in the 6-month study, you will be in the study for about 7-8 months until the final study testing is complete. If you agree to participate in the optional 12-month assessment visit you would be in the study for approximately 10.5-13.5 months.

You can stop participating at any time. If you decide to stop participating in the study we encourage you to talk to the investigators or study staff first to learn about any potential health or safety consequences.

WHAT ARE THE RISKS OF THE STUDY?

Being in this study involves some risk to you. You should discuss the risk of being in this study with the study staff. Risks and side effects related to the procedures or medication we are studying include:

Blood draw

Blood tests are done 2 times for the 6-month study and 3 times if participating in the 12-month

assessment visit. Blood tests can sometimes cause bruising, bleeding, and pain where the needle goes in. Sometimes, some people become dizzy, lightheaded or feel faint. Infection may occur on rare occasions. Frequent donation of blood can result in low iron in your blood (iron deficient anemia).

Body measurements and radiation

Health risks of the 6-month assessment procedures include exposure to radiation from the two DXA and two CT scans. If participating in the additional 12-month assessment visit this number will increase to three DXA and three CT scans. The amount of radiation that you will receive from these procedures is small and is similar to that received from clinical x-ray and nuclear medicine studies. The amount of radiation exposure that you will receive from the 6-month study is equivalent to a uniform whole body exposure of 966 millirem which is equal to 3.22 times the amount of natural background radiation that the average person in the United States receives each year (300 millirem). If you decide to also participate in the additional 12-month assessment the amount of exposure would increase to 1449 millirem or 4.83 times the amount of annual background radiation that the average person in the United States receives.

If the baseline DXA scan reveals that you have osteoporosis (weakening bone structure) in one or more regions of your body, you will be excluded from study participation and referred to Dr. Jamy Ard to offer referral to a bone evaluation clinic.

Please be aware that this radiation exposure is necessary for this research study only and is not essential for your medical care. Wake Forest Baptist Health's Radiation Safety Committee, a group of experts on radiation matters, has reviewed the use of radiation in this research study and has approved this use as being necessary to obtain the research information desired. The potential long-term risk from these radiation doses is uncertain, but these doses have never been associated with any definite adverse effects. Thus, the risk to you, if any, is estimated to be slight. The scans are being conducted only for the purpose of research. It is a different test than what is used in the clinical setting to detect or discover medical conditions. It is not a substitute for a clinical scan. Research personnel will analyze the scan only for the specified research findings. If we should happen to see an abnormal finding that may be harmful to your health, we will notify you. Unexpected findings on the limited research scan will occasionally allow early discovery of a medical condition (such as osteoporosis) for which you may need treatment. They may also cause undue worry or result in additional testing, sometimes costly, which may or may not benefit your health. If you participate in this study, you will be exposed to amounts of radiation above what you would normally receive in daily life. To be sure that you do not receive an unhealthy amount of radiation from your participation in this study, you should let your study doctor know if you have had, or are going to have, any other scans or x-rays as part of your medical or dental care. It is very important that you let the study doctor know if you already are participating in, or plan to participate in, any other research study that involves radiation exposure.

Medication Intervention

The medication being evaluated as a part of this study has known common side effects, such as skin rash (7.9%), mild stomach pain or upset stomach (2.9% to 12.2%), flu-like symptoms (up to 9.8%), muscle pain (5.9% to 28%), nausea (3.6% to 3.9%), diarrhea (4.9% to 10.8%), or constipation (2.9% to 12.9%). Potentially serious side effects associated with the medication are abnormal heart beat

(men 2%), arm and leg swelling (8.2%), bone pain (5.3%), kidney stones (3%), osteonecrosis of the jaw. You will be contacted by phone on a monthly basis in order to track these possible adverse effects. Additionally, we will review your medical record, including routine lab work performed at the Weight Management Center's post-operative follow-up visits, to monitor medication safety. To minimize potential risk of gastrointestinal irritation from the study medication, persons with a prior history of severe reflux will be excluded from study participation and all active participants will be instructed to swallow the medication with 6 to 8 ounces of water at least 30 minutes prior to the first food or drink of the day while in an upright position. Participants will be further instructed not to lie down for at least 30 minutes after taking the drug and avoid taking vitamins, mineral supplements, or antacids at the same time.

The placebo medication used in the study has no known consequences; however, if you are not randomized to the active medication group, it is possible that you will not see any improvement in the quality and strength of your bones over the study period.

To minimize risks related to study tests, all study tests will be conducted by trained and certified staff. Safety precautions will be taken during all testing. When there are medically relevant findings, you will be informed and advised to consult your physician. We can send copies of your test results to your personal physician. Even if you do not wish to have any of your medical information sent to your physician, you can still participate in this research study.

Do you request that we send important medical findings from your study tests/exams to your personal physician?

Yes No _____ **Initials**

If you decide to stop participating in the study treatment intervention for any reason, there will be no consequences other than the possibility that you may not see any change in your bone quality or strength.

There also may be other side effects that we cannot predict. You should tell the research staff about all the medications, vitamins and supplements you take and any medical conditions you have. This may help avoid side effects, interactions and other risks. Taking part in this research study may involve providing information that you consider confidential or private. Efforts, such as coding research records, keeping research records secure and allowing only authorized people to have access to research records, will be made to keep your information safe.

Reproductive Risks and other Issues to Participating in Research

Due to unknown risks and potential harm to the unborn fetus, sexually active women of childbearing potential must use a reliable method of birth control while participating in this study. Reliable methods of birth control are: abstinence (not having sex), oral contraceptives, intrauterine device (IUD), DepoProvera, tubal ligation, or vasectomy of the partner (with confirmed negative sperm counts) in a monogamous relationship (same partner). An acceptable, although less reliable, method involves the careful use of condoms and spermicidal foam or gel

and/or a cervical cap or sponge. We encourage you to discuss this issue further with your physicians if you have any questions.

Contraceptive Measures for Male

Your participation in this research study may damage your sperm, which could cause harm to a child that you may father while on this study. Such harm may be currently unforeseeable. If you are sexually active, you must agree to use a medically acceptable form of birth control in order to be in this study and for an undetermined period of time following the study. There are currently no data on potential damage to sperm in humans taking Risendronate. Medically acceptable contraceptives include: (1) surgical sterilization (such as a vasectomy), or (2) a condom used with a spermicide. Contraceptive measures such as Plan B (TM), sold for emergency use after unprotected sex, are not acceptable methods for routine use. You should inform your partner of the potential for harm to an unborn child. She should know that if pregnancy occurs, you will need to report it to the study doctor, and she should also promptly notify her doctor.

ARE THERE BENEFITS TO TAKING PART IN THE STUDY?

If you agree to take part in this study, there may or may not be direct benefit to you. We hope the information learned from this study will benefit other people in the future. The benefits of participating in this study may be a reduction in bone loss during active weight loss, which may be critical in reducing long-term fracture risk in bariatric surgery patients. Because individuals respond differently to therapy, no one can know in advance if it will be helpful in your particular case. In addition, you will be paid \$50 for completing both baseline testing visits and an additional \$150 for completing all follow-up testing visits (\$50 for the 6 month follow up assessments, and \$100 for the 12 month follow up assessments).”

WHAT OTHER CHOICES ARE THERE?

This is not a treatment study. Your alternative is not to participate.

WHAT ARE THE COSTS?

All study costs, including the study medications and procedures related directly to the study, will be paid for by the study. Costs for your regular medical care, which are not related to this study, will be your own responsibility.

WILL YOUR RESEARCH RECORDS BE CONFIDENTIAL?

The results of this research study may be presented at scientific or medical meetings or published in scientific journals. Your identity and/or your personal health information will not be disclosed unless it is authorized by you, required by law, or necessary to protect the safety of yourself or others. There is always some risk that even de-identified information might be re-identified. Participant information may also be provided to Federal and other regulatory agencies as required. The Food and Drug Administration (FDA), for example, may inspect research records

and learn your identity if this study falls within its jurisdiction. The purpose of this research study is to obtain data or information on the safety and/or effectiveness of Risedronate; the results will be provided to the sponsor, the Food and Drug Administration and other federal and regulatory agencies as required.

WILL YOU BE PAID FOR PARTICIPATING?

You will be paid \$50 after completing the two baseline screening visits and another \$50 after completing the two, 6 month follow-up testing visits. If you agree to participate in both parts of the one-year follow-up testing, you will be paid an additional \$100. All reimbursements are made by a check mailed to your home.

To receive payment, you must provide your social security number, name and address so that we can comply with IRS (Internal Revenue Service) reporting requirements. When payments are reported to the IRS we do not let them know what the payment is for, only that you have been paid. If you do not wish to provide this information you can still take part in this study but you will not be paid.

WHO IS SPONSORING THIS STUDY?

This study is being sponsored by the Center for Diabetes, Obesity, and Metabolism at Wake Forest School of Medicine, the Wake Forest University Health Sciences Weight Management Center, and the Wake Forest University Department of Health and Exercise Science. The sponsors are providing money or other support to help conduct this study. The researchers do not, however, hold a direct financial interest in the sponsor or the product being studied.

WHAT HAPPENS IF YOU EXPERIENCE AN INJURY OR ILLNESS AS A RESULT OF PARTICIPATING IN THIS STUDY?

Should you experience a physical injury or illness as a direct result of your participation in this study, Wake Forest University School of Medicine maintains limited research insurance coverage for the usual and customary medical fees for reasonable and necessary treatment of such injuries or illnesses. To the extent research insurance coverage is available under this policy the reasonable costs of these necessary medical services will be paid, up to a maximum of \$25,000. Wake Forest University Baptist Medical Center holds the insurance policy for this coverage. It provides a maximum of \$25,000 coverage for each claim and is limited to a total of \$250,000 for all claims in any one year. The Wake Forest University School of Medicine, and the North Carolina Baptist Hospitals, Incorporated do not assume responsibility to pay for these medical services or to provide any other compensation for such injury or illness. Additional information may be obtained from the Medical Center's Director of Risk and Insurance Management, at [REDACTED].

If you are injured, the insurer may require information such as your name, social security number, and date of birth in order to pay for your care. This is because the insurer is required by law to report any payments made to cover the care of any persons who are members of a government insurance plan to the Department of Health and Human Services.

You do not give up any legal rights as a research participant by signing this consent form. For

more information on medical treatment for research related injuries or to report a study related illness, adverse event, or injury you should you should call Dr. Kristen Beavers at [REDACTED] [REDACTED] Department of Health and Exercise Science, Wake Forest University, or Dr. Jamy Ard, MD, Weight Management Center at [REDACTED] [REDACTED]. After hours call [REDACTED] [REDACTED].

What About My Health Information?

In this research study, any new information we collect from you and/or information we get from your medical records or other facilities about your health or behaviors is considered Protected Health Information. The information we will collect for this research study includes: personal demographic data, race, social and health information, and bone health assessment data.

We will make every effort to keep your Protected Health Information private. We will store records of your Protected Health Information in a cabinet in a locked office or on a password protected computer. Your personal health information and information that identifies you (“your health information”) may be given to others during and after the study. This is for reasons such as to carry out the study, to determine the results of the study, to make sure the study is being done correctly, to provide required reports and to get approval for new products.

Some of the people, agencies and businesses that may receive and use your health information are the research sponsor; representatives of the sponsor assisting with the research; investigators at other sites who are assisting with the research; central laboratories, reading centers or analysis centers; the Institutional Review Board; representatives of Wake Forest University Health Sciences and North Carolina Baptist Hospital; representatives from government agencies such as the Food and Drug Administration (FDA), the Department of Health and Human Services (DHHS) and similar agencies in other countries.

Some of these people, agencies and businesses may further disclose your health information. If disclosed by them, your health information may no longer be covered by federal or state privacy regulations. Your health information may be disclosed if required by law. Your health information may be used to create information that does not directly identify you. This information may be used by other researchers. You will not be directly identified in any publication or presentation that may result from this study unless there are photographs or recorded media which are identifiable.

Monitors, auditors, IRB or other regulatory agencies will be granted direct access to the participant’s original medical record for verification of clinical trial procedures or data, without violating confidentiality of the participant and to the extent permitted by other applicable laws.

If required by law or court order, we might also have to share your Protected Health Information with a judge, law enforcement officer, government agencies, or others. If your Protected Health Information is shared with any of these groups it may no longer be protected by federal or state privacy rules.

Any Protected Health Information collected from you in this study that is maintained in the research records will be kept for at least six years after the study is finished. At that time any research information not already in your medical record will either be destroyed or it will be de-identified. You will not be able to obtain a copy of your Protected Health Information in the research records until all activities in the study are completely finished.

You can tell Dr. Kristen Beavers or Dr. Jamy Ard that you want to take away your permission to use and share your Protected Health Information at any time by sending a letter to either of these addresses:

Kristen Beavers, PhD

[Redacted address for Kristen Beavers, PhD]

Jamy Ard, MD

[Redacted address for Jamy Ard, MD]

However, if you take away permission to use your Protected Health Information you will not be able to be in the study any longer. We will stop collecting any more information about you, but any information we have already collected can still be used for the purposes of the research study.

By signing this form you give us permission to use your Protected Health Information for this study.

If you choose to participate in this study, your medical record at Wake Forest University Baptist Medical Center will indicate that you are enrolled in a clinical trial. Information about the research and any medications or devices you are being given as a participant may also be included in your medical record. This part of the medical record will only be available to people who have authorized access to your medical record. If you are not a patient at this Medical Center, a medical record will be created for you anyway to ensure that this important information is available to doctors in case of an emergency.

A description of this clinical trial will be 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 Web site at any time.

Laboratory test results and other medical reports created as a result of your participation in the research study may be entered into the computer systems of Wake Forest University Health Sciences and North Carolina Baptist Hospital. These will be kept secure, with access to this information limited to individuals with proper authority, but who may not be directly involved with this research study.

A North Carolina Baptist Hospital (NCBH) medical record will be created for all study

participants. Information about your participation in the study will be placed in the NCBH medical record, along with any routine medical test results that were obtained at NCBH as part of this study.

WHAT ARE MY RIGHTS AS A RESEARCH STUDY PARTICIPANT?

Taking part in this study is voluntary. You may choose not to take part or you may leave the study at any time. Refusing to participate or leaving the study will not result in any penalty or loss of benefits to which you are entitled. If you decide to stop participating in the study we encourage you to talk to the investigators or study staff first to learn about any potential health or safety consequences. The investigators also have the right to stop your participation in the study at any time. This could be because it is in your best medical interest, your condition worsened, new information becomes available, you had an unexpected reaction, you failed to follow instructions, or because the entire study has been stopped. You will be given any new information we become aware of that would affect your willingness to continue to participate in the study.

WHOM DO I CALL IF I HAVE QUESTIONS OR PROBLEMS?

For questions about the study or in the event of a research-related injury, contact the study investigator, call Dr. Kristen Beavers at [REDACTED], Department of Health and Exercise Science, Wake Forest University, or Dr. Jamy Ard, MD, Weight Management Center at [REDACTED]. After hours call [REDACTED].

The Institutional Review Board (IRB) is a group of people who review the research to protect your rights. If you have a question about your rights as a research participant, or you would like to discuss problems or concerns, have questions or want to offer input, or you want to obtain additional information, you should contact the Chairman of the IRB at [REDACTED]. You will be given a copy of this signed consent form.

SIGNATURES

I agree to take part in this study. I authorize the use and disclosure of my health information as described in this consent and authorization form. If I have not already received a copy of the Privacy Notice, I may request one or one will be made available to me. I have had a chance to ask questions about being in this study and have those questions answered. By signing this consent and authorization form, I am not releasing or agreeing to release the investigator, the sponsor, the institution or its agents from liability for negligence.

Subject Name (Printed): _____

Subject Signature: _____ Date: _____ Time: _____ am pm

Person Obtaining Consent (Printed): _____

Person Obtaining Consent: _____ Date: _____ Time: _____ am pm