Moderna_mRNA-1325-P101

Informed Consent Form

INFORMATION TO PARTICIPANTS

NAME OF STUDY:	A PHASE 1/2, RANDOMIZED, PLACEBO-CONTROLLED, DOSE-RANGING STUDY TO EVALUATE THE SAFETY AND IMMUNOGENICITY OF mRNA-1325 ZIKA VACCINE IN HEALTHY ADULTS IN A NON-ENDEMIC ZIKA REGION
STUDY NUMBER:	mRNA-1325-P101
STUDY SPONSOR:	Moderna Therapeutics, Inc. 320 Bent Street Cambridge, MA 02141
STUDY DOCTOR (INVESTIGATOR):	<<PI_FIRST_NAME>> <<PI_LAST_NAME>> <<DISPLAY_ADDRESS>> <<24_HOUR_NUMBER>>
INVESTIGATIONAL REVIEW BOARD (IRB):	PPD PPD PPD PPD PPD

Why are you receiving this information?
You are being asked to consider participating in a clinical research study. The following information describes the study and your role as a possible participant. Please read this information carefully and do not hesitate to ask your study doctor any questions that enable you to make an informed decision on whether to participate.

What is the purpose of this clinical research study?
The Zika virus (ZikaV) is transmitted to humans by mosquitos or via person-to-person contact through bodily fluids such as blood, saliva and semen. For most people infected by the ZikaV they are either asymptomatic (have no symptoms) or have a mild fever with a rash. However, some people infected with the ZikaV may develop symptoms which affect their central nervous system as well as may cause birth defects in infants born to mothers infected with the ZikaV early in their pregnancy. Currently there is no vaccine to protect against the ZikaV. The purpose of this study is to evaluate if an investigational vaccine named mRNA-1325 is safe and effective in its ability to induce an immune response able to prevent the ZikaV infection. An investigational drug is one that is not approved by the United States Food and Drug Administration (FDA). This study will be the first time mRNA-1325 is studied in humans and is expected to enroll about 90 subjects.

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What procedures are involved?

If you decide to participate in this study, you will be asked to make a total of 9-10 visits to the study clinic including a screening visit and will have 10 phone contacts over about 14 months. Each vaccination visit will take about 90 -120 minutes, each follow-up clinic visit will take about 30-90 minutes, and each phone contact will take about 15 minutes. There will be a total of 19-20 visits (clinic and phone contacts) as part of your participation in the trial. If the study is paused for any reason, and there is a delay in giving the 2nd dose of study vaccine (mRNA-1325 or placebo), you will be asked to continue with your regularly scheduled visits, except that you may not receive your 2nd dose. It is possible that you will not be given the 2nd dose at all, depending on how long the pause continues, but you will still need to complete all other visits and procedures. If you receive your 2nd dose after a pause, you may need to repeat at least one of these visits. If this does happen, your study doctor and nurse will give you details on what visits will need to be repeated at that time. You will be compensated for any repeated visits per the reimbursement schedule.

Information about the study product

The first three (3) subjects at each dose level (sentinel group) will always receive the mRNA-1325 vaccine. For the remaining subjects, you will be randomly assigned to either mRNA-1325 or placebo (a dummy treatment that contains no active ingredients) during Visit 1 and would receive the same treatment again at Visit 4. This random assignment would be at one of the following dosage strengths: 10 µg (microgram), 25µg, or 100 µg, or placebo. Your chances of receiving mRNA-1325 are 80% and placebo 20%. Neither you nor your study doctor will know which treatment you are taking.

At your first visit, considered the screening visit, the following procedures will be performed to determine if you are eligible to participate in the study:

- If you agree to participate in this study, you will be required to sign this Informed Consent Form.
- Your medical history will be reviewed
- Blood samples and urine for laboratory tests will be collected to assess your current health status including a test for hepatitis and HIV. As required by the study and if any person is exposed to your blood, you must have your blood tested for HIV. HIV is the virus that causes AIDS. If the HIV test is positive, a follow-up test will be done. If the follow-up test is also positive, you will be told in private and you will also be told about counseling. It may take weeks or months after being infected with HIV for the test to be positive. The HIV test is not always right. Positive test results may be required to be reported to the State Department of Health. If you have any questions about what information is required to be reported please ask the study doctor or study staff. Although this testing is supposed to be private, this cannot be guaranteed. For example, it is possible for a court of law to get health or study records without your permission.
- The study doctor or nurse may also need to obtain a blood sample to test you for West Nile Virus. West Nile Virus is closely related to Zika virus and a previous infection with West Nile virus may interfere with the blood antibody tests used in this study.
- Urine will be collected to perform a urine drug screen.
- If you are female and of childbearing potential, a pregnancy test will also be performed. You will not be able to take part in this study if you are pregnant, breast-feeding or plan to become pregnant during the course of the study. If you are a post-menopausal woman, a hormone blood test may be performed to confirm your post-menopausal status.

- The study doctor will also perform a physical exam and discuss any medications you are taking or have recently taken.
- Vitals (temperature, blood pressure, heart rate and respiratory rate) will also be collected.

Visit 1 (in-clinic visit)

This visit will occur after the study doctor has had a chance to review your medical history and laboratory reports from the screening visit and confirmed you are eligible to participate in the study. During this visit, the following procedures will be completed:

- Blood samples and urine will be collected for labs as well as to perform a urine drug screen.
- If you are female and of childbearing potential, a pregnancy test will also be performed. You will not be able to take part in this study if you are pregnant.
- The study doctor will perform a physical exam.
- Vitals (temperature, blood pressure, heart rate and respiratory rate) will also be collected before and after your vaccination.
- You will be randomly assigned, like a flip of a coin, to one of the four treatment groups for the study. You will either receive two doses separated over 28 days of either the mRNA-1325 vaccine or placebo (a dummy treatment that contains no active ingredients) at two time points during the study (Visit 1 and Visit 4).
- You will receive an injection of the study drug (mRNA-1325) or placebo in the upper part of one of your arms.
- The study staff will provide you with a memory aid card to be completed starting the day of your vaccination for a total of 28 days to record any changes in your health.
- The study staff will also ask you about your current medications and any changes in your health since the last visit.

Visit 2 (in-clinic visit)

This visit will occur about 7 days after Visit 1 and will include the following procedures:

- The study doctor will perform a physical exam.
- Vitals (temperature, blood pressure, heart rate and respiratory rate) will also be collected.
- Blood samples and urine will be collected for labs.
- Your memory aid provided during your last visit will be reviewed.
- The study staff will also ask you about your current medications and any changes in your health since the last visit.

Visit 3 (in-clinic visit)

This visit will occur about 17 days after Visit 1 and will include the following procedures:

- Blood samples will be collected for labs.
- The study staff will also ask you about your current medications and any changes in your health since the last visit.

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Visit 3a (in-clinic visit – sentinel group ONLY)

This visit will occur about 21 days after Visit 1 and will include the following procedures:

- The study doctor will perform a physical exam.
- Vitals (temperature, blood pressure, heart rate and respiratory rate) will also be collected.
- Blood samples will be collected for labs.
- Your memory aid provided during your last visit will be reviewed.
- The study staff will also ask you about your current medications and any changes in your health since the last visit.

Visit 4 (in-clinic visit; second vaccination)

This visit will occur about 28 days after Visit 1 and will include the following procedures:

- Blood samples and urine will be collected for labs.
- If you are female and of childbearing potential, a pregnancy test will also be performed. You will not be able to take part in this study if you are pregnant.
- The study doctor will perform a physical exam.
- Vitals (temperature, blood pressure, heart rate and respiratory rate) will also be collected before and after your vaccination.
- You will receive your second vaccination in the same arm as the previous vaccination received at Visit 1.
- Your memory aid provided during your last visit will be reviewed and collected.
- You will be provided with a new memory aid to take home and record any changes in health for the next 28 days.
- The study staff will also ask you about your current medications and any changes in your health since the last visit.

Visit 5 (in-clinic visit)

This visit will occur about 7 days after Visit 4 and will include the following procedures:

- The study doctor will perform a physical exam.
- Vitals (temperature, blood pressure, heart rate and respiratory rate) will also be collected.
- Blood samples and urine will be collected for labs.
- Your memory aid provided during your last visit will be reviewed.
- The study staff will also ask you about your current medications and any changes in your health since the last visit.

Visit 6 (in-clinic visit)

This visit will occur about 17 days after Visit 4 and will include the following procedures:

- Blood samples will be collected for labs.
- The study staff will also ask you about your current medications and any changes in your health since the last visit.

Visit 7 (in-clinic visit)

This visit will occur about 28 days after Visit 4 and will include the following procedures:

- The study doctor will perform a physical exam.
- Vitals (temperature, blood pressure, heart rate and respiratory rate) will also be collected.
- Blood samples will be collected for labs.
- Your memory aid provided during your last visit will be reviewed and collected.
- The study staff will also ask you about your current medications and any changes in your health since the last visit.

Visits 8-11 and Visits 13-18 (phone contacts)

These phone contacts will occur at about 56, 84, 112, 140, 196, 224, 252, 280, 308 and 336 days after Visit 4 and will include the following:

- The study staff will ask you about your current medications and any changes in your health since the last visit.

Visit 12 (in-clinic visit)

This visit will occur about 168 days after Visit 4 and will include the following procedures:

- Blood samples will be collected for labs.
- The study staff will also ask you about your current medications and any changes in your health since the last visit.

Visit 19/End of Study (in-clinic visit)

This visit will occur about 364 days after Visit 4 (day of second dose of vaccine or placebo), or if you decide to discontinue from the study early and will include the following procedures:

- Blood samples will be collected for labs.
- The study staff will also ask you about your current medications and any changes in your health since the last visit.

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If you are not familiar with any of these procedures, please ask your study doctor to explain how they are performed.

Blood samples collected during the course of this clinical trial will be sent to the Sponsor or external laboratories for further testing for both safety laboratories (kidney, liver, hematology and chemistry assessments) as well as for the immune response (how your body reacts to foreign substances) to vaccination against zika or other flaviviruses. Surplus serum will be retained and may be used for future research to investigate immune responses across arbovirus species (e.g. Dengue, Yellow Fever, West Nile Virus, Chikungunya), activation of additional T-cell responses (An immune response that is triggered and helps protect your body), or to aid in the further development of assays to better define the immune response to flaviviruses. There will also be samples taken that will be tested directly at the study site. Lab reports from the collected samples will be provided to the study doctor for review and further follow-up if needed. The Sponsor as well as third parties that are working with the Sponsor will investigate your samples only for the purposes specified in this clinical trial.

Blood samples will be collected for HIV (the virus that causes AIDS), hepatitis B and hepatitis C testing. If your test results show that you have HIV, hepatitis B or hepatitis C, the result(s) of your test may be disclosed (made known) to authorities according to local law. You may need to have a follow-up blood sample (approximately 5 mL or about 0.3 tbsp) if your study doctor requests one.

About 326.0 mL (about 22 tablespoons) of blood will be collected during the entire course of the study.

What is expected from you?
When deciding whether to participate, consider whether you are able and willing:

- To follow the study rules
- To commit the time required to keep appointments
- To tell the study doctor truthfully about your complete medical history
- To promptly report any new problems, illnesses, or changes in medication during the study
- Complete your memory aid in full and return the completed memory aid to the study staff after completion at your next scheduled visit.

What will happen at the end of the study?
After the study drug is stopped, you will be discharged from the study at the discretion of the study doctor.

What are the potential risks and discomforts?
The investigational product mRNA-1325 is being tested for the first time in humans. Therefore, possible side effects of the vaccine are not fully known. In the pre-clinical animal studies there was some microscopic damage seen in the livers of animals who received the vaccine. These changes were minimal and were seen with doses that are 4-72 times higher than the doses that you could receive. In two ongoing human studies, with similar mRNA-based vaccines, changes in liver blood tests were observed. These changes returned to normal on their own and were not associated with any symptoms. If your liver blood test results are abnormally elevated at screening, you will not be allowed to participate in the study. You will be monitored for the risks and side effects throughout your participation in the study. You should contact the study doctor if you think you are having side effects or experiencing a change in your medical condition.

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Following injectable vaccines, redness, swelling, pain, tenderness, and/or fever, may occur. These reactions normally last no more than 48 hours. Headache and malaise (general discomfort or illness), muscle aches, joint aches, chills, and feeling tired have also been reported in ongoing studies with similar vaccines. Blood drawing may be associated with temporary discomfort, light-headedness, or a bruise at the needle site. Infection may occur at the needle stick site where blood is drawn, but this is very rare.

As with any vaccine or drug, you may experience an allergic reaction or may have reactions, which have not been seen before. If you have a very serious allergic reaction, you may be at risk of death.

Some symptoms of allergic reactions are:

- Rash
- Wheezing and difficulty breathing
- Dizziness and fainting
- Swelling around the mouth, throat or eyes
- A fast pulse
- Sweating

Please seek treatment immediately and tell the study doctor and study staff if you have any of these symptoms.

Are there any reproductive risks?
Women: It is not known if the study treatment may affect an unborn child or nursing infant. For this reason, if you are breast-feeding, pregnant or plan to become pregnant, you may not participate in this study. Female subjects must be either at least 1 year postmenopausal, surgically sterile [such as, hysterectomy (uterus removed), bilateral (both tubes) tubal ligation or bilateral oophorectomy (both ovaries removed)], or practicing a medically approved and highly effective method of contraception (defined as those which result in a low failure rate [such as, less than 1% per year] when used consistently and correctly) from at least 21 days of enrollment and through 3 months after the last vaccination with the study drug . Such methods include: condoms (male or female) with spermicide, diaphragm with spermicide, cervical cap with spermicide, intrauterine device (IUD), oral or patch contraceptives, Norplant, Depo-Provera, or other FDA-approved contraceptive method that is designed to protect against pregnancy.Periodic abstinence, declaration of abstinence for the duration of the study, and withdrawal are not acceptable methods of contraception. You should discuss with the study doctor your chosen method of birth control to determine if it is acceptable for your participation in this study.

Pregnancy: If you become pregnant during your participation in the trial, your participation in the study may be stopped. However, data information about your pregnancy may be collected. It is important that you tell the study doctor immediately if you or your partner becomes pregnant during the study. The doctor will talk with you about what you should do.

Men: It is not known if the study treatment may affect your sperm or an unborn child. For this reason, you must use an acceptable method of birth control from the time of first vaccination until 3 months following the last vaccination. In addition you must agree to refrain from donation of sperm from the time of first vaccination until 3 months following the last vaccination. Periodic abstinence, declaration of abstinence, and withdrawal are not acceptable methods of contraception.

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What are the advantages and disadvantages of participation in the study?
It is possible that you may not personally benefit from your participation in this study. However, by taking part, you will provide new information that may benefit other patients in the future.

Are there any alternative treatments?
Since this is not a treatment study, your alternative is to not participate.

Will you be informed if new information becomes available during the study?
Your study doctor will inform you in a timely manner of any new information learned during the study that may affect your willingness to continue your participation in this study.

Who can you contact with further questions?
You may ask questions about this consent form or the study at any time (before or during the course of the study). If you have additional questions, or experience a research-related injury, contact the study doctor using the details provided in the table on the first page of this information sheet.

If you have a complaint or question about your rights as a research subject, you may contact the PPD IRB in writing or by phone using the details provided in the table on the first page of this information sheet. This is a group of scientific and non-scientific individuals who review research studies with the safety and welfare of research subjects in mind to help protect the rights of research subjects.

What happens if you change your mind?
Your participation in this study is voluntary. You do not have to take part, and you may stop your involvement at any time without penalty or loss of benefits to which you are otherwise entitled. If you decide to leave the study before the last study visit, tell the study doctor and follow instructions. It may be helpful if you could explain your reasons. You may receive standard treatment and no prejudice will be shown towards you for medical care or participation in future research.

In addition, your study doctor or the sponsor may withdraw you from the study without your consent, even if you wish to continue to participate, for example:

- If you experience a severe adverse reaction
- If you do not follow the study rules
- If it is discovered that you do not meet the study requirements;
- If the study is cancelled; or
- For administrative reasons, including competitive enrolment - the target number of subjects has entered the study.

If your participation in the study is stopped early, you may be asked to complete end of study procedures (such as a final medical examination and laboratory tests) for your own safety.

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Are there any costs if you decide to participate?
The study drugs will be made available to you at no charge and you will not be required to pay for any study procedures. You or your insurance company may be billed for any standard medical care that is not required for the research study.

Is there a payment if you decide to participate?
<<Site Specific Compensation language>>

Will you receive compensation if you are injured as a result of the study?
If you are injured because of your participation in this study, treatment for the injury will be made available through the study investigator and study site listed on page one of this informed consent. The sponsor will pay the costs of this treatment not paid by your medical insurance. No other payment is available from the sponsor or the study doctor in the event of injury. You are not waiving any legal rights or release the Sponsor, the Investigator, the study staff, or study site from liability for mistakes or intentional misconduct by signing this form, accepting medical care or accepting payment for medical expenses.

Will the personnel involved in the study receive any payment?
The investigator receives payment from Moderna Therapeutics, Inc. who is the sponsor of this study.

Confidentiality

This research study may be performed only by collecting and using your medical information. Your study records will be kept as confidential as possible. Only a number will be used to identify you. You will not be personally identified in any reports or publications that may result from this research study.

Because of the research goals of this study, however, your study records cannot be kept completely confidential. The sponsor of this study is Moderna Therapeutics, Inc.

The study personnel, the sponsor and its agents and Pharmaceutical Product Development, LLC (PPD) will need to review the medical information collected from you for use in this study in order to accurately record information for this study. In addition, in order to review the study findings, the U.S. Food and Drug Administration (FDA), other government agencies, and the Institutional Review Board (IRB) will be able to inspect and copy confidential study-related records which identify you by name. Representatives of the sponsor and government agencies may also observe a study visit, to check that study staff are performing the study correctly.

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Statement of Consent

- I have read and understand the statements in this informed consent form
- I have had the opportunity to ask questions and I am satisfied with the explanations provided
- I voluntarily agree to take part in this study
- I understand that I will receive a copy of this signed and dated written consent form
- For Men: I agree to utilize an acceptable method of birth control with my partner as outlined in this informed consent AND agree to not donate sperm from the time of first vaccination until 3 months after the last vaccination.
- For Women of childbearing potential: I agree to utilize an acceptable method of birth control as outlined in this informed consent. Should I become pregnant during my participation in the trial I agree to provide information on my pregnancy and birth outcome as part of the safety follow up.
- I agree that the blood sample provided by me during this study will be used for the specific pursuits for flavivirus research.

_____

Subject Signature Date
Printed Name

- I additionally consent to the use of my coded medical information for future medical or pharmaceutical research.

_____

Subject Signature Date
Printed Name

- I have presented the study and answered the subject's questions
- I will give the subject a copy of this signed and dated Informed Consent

_____

Presenter (Investigator/Delegate) Signature Date
Printed Name

AUTHORIZATION TO USE AND DISCLOSE PROTECTED HEALTH INFORMATION

The following sections provide a specific description of how your information will be used and disclosed if you participate in this research study. By signing this consent form, you are authorizing such access. If you do not sign this form to authorize access, you will not be able to participate in this research study.

The medical information that will be collected from you if you participate in the study includes:

- Information obtained from procedures to determine your eligibility to participate in the study, including a routine medical history, physical exam, and blood and urine tests.
- Information that is created or collected from you during your participation in the study, including the results of the blood and urine tests and any other procedures performed during the study.
- Information contained in your underlying medical records related to your medical history and treatment.

The above information may identify you by name, address, telephone number, social security number, health plan number, study number, date of birth, dates relating to various medical procedures, and/or other identifying information.

If you sign this form and participate in the study, the study personnel will be authorized to use the information described above to carry out the purposes of the research study. The study personnel will also be authorized to disclose the relevant information described above to the following parties involved in the research study:

- Moderna Therapeutics, PPD or other agents designated by Moderna Therapeutics, to collect or review study data for verification of study procedures and/or adverse event reporting.
- The Institutional Review Board (IRB) or Independent Ethics Committee (IEC) that oversees the research study at your site.
- Government regulatory agencies including the Food and Drug Administration (FDA).

- Clinical trial recruitment company, if you were referred to the study by such a company once your information is disclosed to the study sponsors, its agents, the IRB/IEC or government agencies as described above, there is a potential that your medical information will be re-disclosed and will no longer be protected by US federal privacy regulations. In addition to disclosures to the entities identified above, PPD may further electronically disclose your coded health information to others involved in the research study, such as:
- To laboratories or offsite testing facilities for clinical tests for safety and immune responses as required by study protocols.
- To approved offsite storage facilities or cloud service providers to meet study record retention and storage requirements.
- *To study Moderna Therapeutics, who directs the medical research studies.*
- *To other third parties contracted by PPD and/or Moderna Therapeutics, to provide services related to studies.*

The study data may be transferred to other countries for processing, including countries not covered by data protection legislation. The laws of your state may provide further protection.

While the study is in progress, your access to your study records will be temporarily suspended. You will be able to access your information when the research study is completed. You have the right to see and copy the medical information collected from you in the course of the study for as long as that information is maintained by the study personnel and other entities subject to federal privacy regulation.

Study data, including your coded medical information, may be used and shared for pharmaceutical research purposes related to this study. This authorization will expire in 50 years from the date you sign it unless you revoke (cancel or withdraw) sooner. In signing this form, you authorize the use and disclosure of your information for purposes of the study at any time in the future.

You may withdraw your authorization at any time by sending a written request to the investigator listed on page one of this informed consent. If you withdraw your authorization, data collected prior to your withdrawal may still be processed along with other data collected as part of the study.

Normally no new information will be collected for the study database unless you specifically authorize that. However, the law does require that any side effects you may suffer are documented and reported. To complete the study findings, your long term health status may also be obtained from public sources.

I understand that I have the right to refuse to sign this authorization, which will result in my inability to participate in the study. You will receive a copy of this Authorization after you have signed it.

_____
Printed Name of Subject

_____ _____
Signature of Subject Date

- I have presented the Authorization and answered the subject's questions
- I will give the subject a copy of this signed and dated Authorization

_____
Presenter (Investigator/Delegate) Signature Date
Printed Name