

Wilford Hall Ambulatory Surgical Center  
**CONSENT TO PARTICIPATE IN RESEARCH**

**Principal Investigator:** Captain Alexandra M. Papp, MD

**Protocol Title:** Nanodropper Use in Primary Open-Angle Glaucoma Patients: A Non-inferiority Trial

**Key Information:** This section provides a one-page summary of the information outlined in this consent form. More information will be provided to you on the pages that follow.

<b>Voluntary Participation</b>	You do not have to take part in this research. It is your decision. You can also choose to stop participating at any time during the study.
<b>Purpose</b>	This study will evaluate the effect of smaller glaucoma eyedrops delivered with the Nanodropper adaptor on eye pressure.
<b>Duration</b>	You will be in this study for about 6 months.
<b>Procedures</b>	While you are in the study, you will take your eyedrops daily as prescribed for 6 months. For 3 of those months, you will administer smaller eyedrops by attaching a Nanodropper to your eyedrop bottle. Your eye pressure and visual acuity will be measured 4 times throughout the 6-month period. In addition, during the initial and final visit you have a visual field test, imaging of the eye taken and undergo a dilated ocular health exam.
<b>Drugs/Devices</b>	The drug(s) used in this study are: IOP-lowering prescription eyedrops The device used in this study is: Nanodropper adaptor
<b>Why might you want to participate in this research (benefits)?</b>	Using smaller eyedrops with the Nanodropper adaptor may have the following benefits: <ul style="list-style-type: none"><li>• Increased comfort with putting in eyedrops</li><li>• Fewer side effects</li><li>• Eyedrops might last longer, requiring less frequent refills</li></ul> Additionally, the results of this study may provide information to the scientific community regarding use of the Nanodropper to manage glaucoma/high eye pressure.

<b>Why might you choose not to participate in this research (risks)?</b>	The <b>main</b> risks from being in this study are: <ul style="list-style-type: none"><li>• Difficulty with using the Nanodropper device to administer eyedrops</li><li>• Progression of your eye condition</li></ul> Steps to lessen the risks are described later in this consent form.
<b>What are the alternatives to participating?</b>	Your alternative is to not take part in the study.
<b>Payment</b>	You <u>will not</u> be paid for your participation in this study.

Contact the Principal Investigator with any questions:

Dr. Alexandra M. Papp  
Ophthalmology Department, WHASC  
1100 Wilford Hall Loop  
Lackland AFB, TX 78236  
Phone: 210-292-6030

**1. PROTOCOL TITLE: Nanodropper Use in Primary Open-Angle Glaucoma Patients: A Non-inferiority Trial**

You may be eligible to take part in this research study. This form gives you important information about the study.

Please take time to review this information carefully. You should talk to the researchers about the research study and ask them any questions you have. You may also wish to talk to others (for example, your friends, family, or your personal physician) about your participation in this study. If you decide to take part in this research study, you will be asked to sign this document. Before you sign this document, be sure you understand what the research study is about, including the risks and possible benefits to you.

Please tell these researchers if you are taking part in another research study.

You do not have to take part if you do not want to. You may also leave the research study at any time. If you choose not to take part in this research study or if you leave the study before it is finished, there will be no penalty.

Your decision will not affect your future care at Wilford Hall Ambulatory Surgical Center.

**2. WHAT IS THE PURPOSE AND DURATION OF THIS RESEARCH AND WHO WILL TAKE PART?**

You are being asked to take part in this research study because you have open-angle glaucoma or ocular hypertension. The purpose of this research study is to learn about the safety and efficacy of small eyedrops delivered with the Nanodropper adaptor that are used to lower eye pressure. Current eyedrops are about five times too big for the human eye, leading to medication waste (overflow down your cheeks) and/or absorption by your body, where the medication can cause negative health effects. Previous research has shown that smaller eyedrops help reduce waste and side effects while still being as effective as normal eyedrops. We are interested in understanding whether delivering smaller eyedrops with Nanodropper over a three-month period has effects on the eye pressures of individuals with glaucoma or high eye pressure, as well as additional effects on side effects and quality of life measures.

The duration of participation per visit is 30-90 minutes. There will be about 30 people taking part in the study at WHASC, over a period of 6-8 months.

During the study, you will have about 4 visits with a clinician at WHASC ophthalmology. You may need to return to WHASC every 1-3 months.

### **3. SCREENING PROCESS TO QUALIFY FOR PARTICIPATION IN THIS STUDY**

Before you can take part in this study, you will need to have some tests and provide some information so that the Investigator can confirm that you qualify for the study. This is called the “Screening Process”. These tests may have been done or this information collected as a part of your regular medical care.

Subjects that wish to enroll in this study must meet all of the following eligibility criteria:

- Adult (18-89) WHASC patients with a diagnosis of primary open-angle glaucoma (POAG) or ocular hypertension (OHTN)
- POAG/OHTN must be well-controlled (defined as  $\geq 2$  IOP measurements collected within 1 year of recruitment that are  $\leq 21$  mm Hg with variability of  $\pm 3$  mm Hg)
- POAG/OHTN must be progression-free (as judged by the clinician and based on  $\geq 2$  stable OCT and visual field tests collected in within 1 year of recruitment)
- Patients must be on at most 2 IOP-lowering eyedrop medications that are compatible with Nanodropper
- Patients must **not** have had any IOP-lowering surgical interventions within 1 year of recruitment except for SLT, which may have been completed at least 6 months prior to recruitment

### **4. WHAT WILL HAPPEN IF YOU DECIDE TO BE IN THIS RESEARCH?**

You will participate in two three-month treatment periods over the course of six months: 1) continuation of daily eyedrops administration as directed by your physician and 2) continuation of daily eyedrops administration with the Nanodropper attached, as directed by your physician. At the beginning of the trial, you will be randomly assigned to begin one of these two possible three-month treatments before switching to the other treatment for an additional three months. Randomization is a process like flipping a coin and means you will have a chance of being assigned to start with either treatment. Nanodroppers will be provided for all of your medication bottles during the Nanodropper treatment period. You will receive education on how to install and use the Nanodropper before the start of the Nanodropper treatment period.

This six-month study will include four clinic visits:

1. Intake visit at the beginning of the study (t = 0)
2. Crossover visit at t = 3 months
3. Safety visit one month after starting the Nanodropper treatment (this visit will occur at either t = 1 month or t = 4 months depending on the treatment order you are assigned to)
4. Final visit at t = 6 months

At the first (t = 0) and last (t = 6 months) appointments, visual acuity, eye pressure, an internal ocular health exam (dilated fundus exam), retinal imaging, and a visual field test will take place. At the crossover (t = 3 months) visit and safety visit (t = 1 month or t = 4 months), only eye pressure and visual acuity will be assessed.

At the end of your participation, the results of the eye exams will be shared with you, if desired, including findings obtained as a result of using the Nanodropper or found incidentally (related to disease processes other than treatment with Nanodropper).

Although you will know what treatment you are using, the technician measuring your IOP will not know which treatment you have been assigned to.

Three surveys will be administered to you throughout the study to assess whether Nanodropper impacts the financial burden and side effect profiles associated with chronic eyedrop use, as well as the usability of Nanodropper compared to standard eyedrop bottles. All surveys will be administered in person. The first survey, "Intake visit: Enrollment survey", will be administered at the enrollment visit. This survey will ask you about your experience using daily eyedrops and is meant to establish a baseline to which the data collected from the subsequent two surveys will be compared. This survey also includes questions about the economic impact of the COVID-19 pandemic, as we are interested in understanding whether economic status impacts treatment adherence. The second survey, "Standard eyedrops survey", will be administered at the visit following the 3-month treatment period with standard eyedrops. This survey will collect information on your daily use of eyedrops over the past three months, including information on whether you ran out of your eyedrops or experienced side effects. It will also ask you if your economic/employment situation has changed in the past three months. The third survey, "Nanodropper survey", will be administered at the visit following the 3-month treatment period with microdrops administered by Nanodropper. This survey will collect information on your daily use of microdrops over the past three months, including information on whether you ran out of your eyedrops or experienced side effects. This survey also includes questions about the usability of the Nanodropper adaptor. It will also ask you if your economic/employment situation has changed in the past three months. *All surveys will take approximately five minutes to complete.*

## **5. WHAT ARE THE RISKS OR DISCOMFORTS FROM BEING IN THIS RESEARCH?**

If you choose to take part in this study, there is a risk of:

- Your condition might progress due to your use of Nanodropper, or incidental (not due) to your use of Nanodropper.
- You might have difficulty administering eyedrops with the Nanodropper attached to your eyedrop bottle(s). We will provide patient education on how to install and use the Nanodropper prior to the beginning of this treatment period.
- You may have a reaction to the dilation drops or numbing drops routinely used. This is rare, but possible. Temporary pain/discomfort is expected with the numbing drops and/or dilating drops used (usually stings for 5-15 seconds).

Although efforts are made to protect your research study records, there is always a risk that someone could get access to the personal information in your medical records or other information researchers have stored about you.

**6. WHAT ARE THE POSSIBLE BENEFITS FROM THIS RESEARCH?**

The possible benefits to you as a research participant in this research study are that you will be provided with Nanodroppers for all of your medication bottles during the Nanodropper treatment period. This will give you the opportunity to trial the device for free. Additionally, by creating smaller eyedrops, Nanodropper makes your medication last approximately three times longer. This may confer the following benefits over your three-month treatment period:

- Decreased administrative burden related to refilling medications
- Decreased time spent traveling to and from the pharmacy
- Decreased risk of non-reimbursed early medication refills

From a health perspective, smaller eyedrops delivered by Nanodropper may offer the following benefits:

- Decreased incidence and/or severity of local (eye) side effects
- Decreased incidence and/or severity of systemic (body) side effects
- A more comfortable eyedrop delivery experience
- An improvement in your condition (glaucoma or high eye pressure)

However, there is no guarantee that you will benefit from being in this research.

**7. WHAT ARE THE ALTERNATIVES TO TAKING PART IN THIS RESEARCH?**

There may be other options for treating your glaucoma/ocular hypertension. Alternative treatments and/or procedures that may be available to you include continuing with your current treatment. You should talk with your personal physician (if applicable) about these options. Choosing not to take part in this research study is also an option. There may be other research studies involving experimental treatments that could be helpful to your condition.

**8. IS THERE COMPENSATION FOR YOUR PARTICIPATION IN THIS RESEARCH?**

You will not receive any compensation for participating in this study.

**9. ARE THERE COSTS FOR PARTICIPATING IN THIS RESEARCH?**

No, there are no costs to you for taking part in this research study.

**10. WHO IS CONDUCTING THIS RESEARCH?**

Ophthalmology department, Wilford Hall Ambulatory Surgical Center

**11. STUDY SPONSOR (the organizations or persons who oversee the study and are responsible for analyzing the study data):**

As the sponsor of this research, the Department of Defense may have access to your research data in accordance with DoDI 3216.02.

**12. SOURCE OF FUNDING:**

This study is funded in part by an AFWERX (Air Force) Phase II SBIR contract awarded to Nanodropper, Inc.: Contract #FA864920C0054.

**13. PRINCIPAL INVESTIGATOR (the person(s) responsible for the scientific and technical direction of the study):**

Alexandra M. Papp, MD  
Resident Physician-Ophthalmology Department

**14. LOCATION OF THE RESEARCH:**

Wilford Hall Ambulatory Surgical Center, 1100 Wilford Hall Loop, Lackland AFB, TX 78236

**15. DISCLOSURE OF FINANCIAL INTERESTS AND OTHER PERSONAL ARRANGEMENTS:**

There are no financial interests or other personal arrangements to disclose.

**16. WHO WILL SEE MY INFORMATION (PRIVACY) AND HOW WILL IT BE PROTECTED (CONFIDENTIALITY)?**

Records of your participation in this research study may only be disclosed in accordance with state and federal law, including the Federal Privacy Act, 5 U.S.C.552a, and its implementing regulations. DD Form 2005, Privacy Act Statement - Military Health Records, contains the Privacy Act Statement for the records. A copy of DD Form 2005 can be given to you upon request, or you can read on-line at:

<http://www.dtic.mil/whs/directives/infomgt/forms/efoms/dd2005.pdf>.

The research team will keep your research records. These records may be looked at by staff from the Wilford Hall Ambulatory Surgical Center, the Institutional Review Board (IRB) (a committee responsible for protecting research participants), and the DoD Higher Level Review as part of their duties. These duties include making sure that the research participants are protected. Confidentiality of your records will be protected to the extent possible under existing regulations and laws but cannot be guaranteed.

Procedures to protect the confidentiality of the data in this study include but are not limited to: Coded data stored on a password-protected document, only accessible on CAC-enabled unclassified government-issued computers.

Researchers will make every effort to protect your privacy and confidentiality; however, there are risks of breach of information security and information loss.

By signing this document, you give your permission for information gained from your participation in this research study to be published in literature, discussed for educational purposes, and used generally to further science. You will not be personally identified; all information will be presented as anonymous data.

Complete confidentiality cannot be promised for military personnel because information regarding your health may be required to be reported to appropriate medical or command authorities to ensure the proper execution of the military mission, including evaluation of fitness for duty.

The following individuals will have access to your records and agree to safeguard your protected health information by using and disclosing it only as permitted by you in this consent or as directed by state and federal law.

Alexandra M. Papp, MD

Jared Kelstrom, MD

## **17. WHAT HAPPENS IF YOU ARE INJURED AS A RESULT OF THIS RESEARCH?**

If you think that you have a research-related injury, notify your Principal Investigator immediately at 210-292-6030.

If you are injured because of your participation in this research and you are a DoD healthcare beneficiary (e.g., active duty military, dependent of active duty military, retiree), you are authorized space-available medical care for your injury within the DoD healthcare system, as long as you remain a DoD healthcare beneficiary. This care includes, but is not limited to, free medical care at DoD hospitals or DoD clinics.

If you are injured because of your participation in this research and you are not a DoD healthcare beneficiary, you are authorized space-available medical care for your injury at a DoD hospital or an DoD clinic; medical care charges for care at a DoD hospital or a DoD clinic will be waived for your research-related injury. If you obtain care for research-related injuries outside of a DoD or DoD hospital or clinic, you will not be reimbursed for those medical expenses.

For DoD healthcare beneficiaries and non-DoD healthcare beneficiaries: Transportation to and from hospitals or clinics will not be provided or paid for by DoD. Unless you are covered by TRICARE, no DoD reimbursement is available if you incur medical expenses to treat research-related injuries. No compensation is available for research-related injuries. You are not waiving any legal rights.



## **18. WHAT HAPPENS IF I WITHDRAW FROM THIS RESEARCH?**

You may withdraw your consent at any time and stop participating in this research study without affecting your eligibility for care or any other benefits to which you are entitled. Should you choose to withdraw, you must contact the principal investigator at 210-292-6030 and make your wishes known.

Please note that withdrawing your consent to participate in this research does not fully revoke your HIPAA Authorization Form to use/disclose your protected health information. To make that revocation, please send a letter to the principal investigator as discussed in the HIPAA Authorization Form.

The principal investigator of this research study may terminate your participation in this research study at any time if she determines this to be in your best interest, if you are unable to comply with the procedures required, or if you no longer meet eligibility criteria.

## **19. VOLUNTARY PARTICIPATION:**

The decision to take part in this research study is completely voluntary on your part. You will be informed if significant new findings develop during the course of this research study that may relate to your decision to continue participation.

## **20. INCIDENTAL FINDINGS**

There is a possibility that while reviewing your test results we may see an abnormality that we did not expect to see in this study. This is what is called an "incidental finding." An incidental finding may cause you to feel anxious. Since an incidental finding will be part of your medical record, you could face greater difficulty in getting health or life insurance.

We will let you know if we see such an incidental finding. Depending on the type of incidental finding, we may contact you by phone. In the case of a potential serious emergency, the researcher will inform you right away.

You do not have an option to decline receiving information about an incidental finding. A qualified person (usually a member of the research team) will talk to you if there is an incidental finding.

We will also give information about this incidental finding to your primary doctor or we will refer you to an appropriate doctor for further evaluation.

The costs for any care that will be needed to diagnose or treat an incidental finding would not be paid for by this research study. These costs would be your responsibility. If you are a DoD beneficiary, you will have access to care through standard Military Health System and TRICARE procedures.

**21. CONTACT INFORMATION:**

**Principal Investigator (PI)**

The Principal Investigator or a member of the research staff will be available to answer any questions throughout this study.

Principal Investigator: Alexandra M. Papp, MD

Phone: 210-292-6030

Mailing Address: 1100 Wilford Hall Loop, ATTN: Ophthalmology Dept, Lackland AFB, TX 78236

**Institutional Review Board (IRB) Office**

If you have any questions about your rights as a research participant or if you have concerns or complaints about the research study, please contact the IRB Office at:

Mailing Address:

SA IRB Office, Brooke Army Medical Center ATTN: MCHE-ZQ, Department of Quality and Safety 3551 Roger Brooke Dr.

San Antonio, Texas 78219

Phone: 210-916-9425 – Ms. Jennifer Sadler

IF THERE IS ANY PORTION OF THIS DOCUMENT THAT YOU DO NOT UNDERSTAND, ASK THE INVESTIGATOR BEFORE SIGNING. YOU MAY CONSULT WITH YOUR PERSONAL PHYSICIAN OR LEGAL ADVISOR, IF YOU WISH.

A signed and dated copy of this document will be given to you.

**22. LONG TERM USE OF DATA**

Your data collected as part of this research will not be used for future research studies or given to anyone else for future research studies, even if all information that personally identifies you is removed.

**SIGNATURE OF PARTICIPANT**

\_\_\_\_\_  
Printed Name of Participant

\_\_\_\_\_  
Signature of Participant

\_\_\_\_\_  
Date

**SIGNATURE OF INDIVIDUAL ADMINISTERING CONSENT**

(Can only be signed by an investigator or staff approved to administer consent)

\_\_\_\_\_  
Printed Name of Administering Individual

\_\_\_\_\_  
Signature of Administering Individual

\_\_\_\_\_  
Date