Information for Patient and Consent:
Cataract Surgery And/or Implantation of an Intraocular Lens

This information is given to you so that you can prepare for the discussion with your eye surgeon. This document will help you understand the risks of cataract surgery. It will also help you decide the type of replacement lens you want. Eyeglasses or contact lenses are usually required for best vision after cataract surgery.

WHAT IS A CATARACT?
The lens in the eye can become cloudy and hard, a condition known as a cataract. Cataracts can develop from normal aging, from an eye injury, or if you have taken medications known as steroids. Cataracts may cause blurred vision, dulled vision, sensitivity to light and glare, and/or ghost images. If the cataract changes vision so much that it interferes with your daily life, the cataract may need to be removed. Surgery is the only way to remove a cataract. You can decide not to have the cataract removed. If you don't have the surgery, your vision loss from the cataract will continue to get worse.

I fully understand this page: ________________
HOW WILL REMOVING THE CATARACT AFFECT MY VISION?
The goal of cataract surgery is to correct the decreased vision that is caused by the cataract. During the surgery, the doctor removes the cataract and puts in a new artificial lens called an intraocular lens. The intraocular lenses will be left in the eye permanently. Cataract surgery will not correct other causes of decreased vision, such as glaucoma, diabetes, or age-related macular degeneration. These pre-existing diseases may limit the best potential vision after surgery. Most people still need to wear glasses or contact lens after cataract surgery for either near and/or distance vision and astigmatism, regardless of which intraocular lenses you choose.

EXAMINATIONS PRIOR TO SURGERY
If you agree to have the surgery, you will undergo a complete eye examination by your surgeon. This may include an examination to determine your eyeglass prescription (refraction), measurement of your vision with and without glasses (visual acuity), measurement of the pressures inside your eye (tonometry), measurement of the curvature of your cornea (keratometry), ultrasonic measurement of the length of your eye (axial length), intraocular lens calculation (biometry) to determine the best estimate of the proper power of the implanted intraocular lenses, microscopic examination of the front part of your eye (slit-lamp examination), and examination of the retina of your eye with your pupils dilated.

I fully understand this page: _________
NEED TO STOP WEARING CONTACT LENSES PRIOR TO SURGERY
If you wear contact lenses, you must leave them out of your eyes for a period of time before your surgery. This is done because the contact lens rests on the cornea and distorts its shape, which can affect the accuracy of the doctor's measurements of the intraocular lens power. When you stop wearing your contact lenses, the corneas can return to their natural shape. If you wear rigid contacts, your vision will usually vary for a while as your corneas change shape. You will need to remain contact lens free until your vision and cornea stabilize.

MORE INFORMATION ABOUT MEASURING YOUR INTRAOCULAR LENSES
While the method used to calculate the power of the INTRAOCULAR LENSES is very accurate in most patients, the final result may be different from what is planned so the surgeon can make no guarantees. Measurement of biological systems have variability, and calculated results based on these measurements can vary from the final outcome. As the eye heals, the intraocular lenses can shift very slightly toward the front or the back of the eye. The amount of this shift is not the same in everyone, and it may cause different vision than predicted. Other factors as well can influence the final refractive outcome. A refractive surprise is possible, and it would mean needing to wear glasses or contacts to achieve good vision distance and/or near, even if you didn't plan to. If the eye's visual power after surgery is considerably different than what was planned, and you are not satisfied with the result, you may require an intraocular lens exchange and/or refractive surgery. This decision should not be made lightly, and the surgeon and consultant may want you to wait a period of time to reconsider.

I fully understand this page: __________
IMPORTANT NOTE: Patients who are highly nearsighted or highly farsighted have the greatest risk of differences between planned and actual outcomes. Patients who have had LASIK or other refractive surgeries are especially difficult to measure precisely and are also at higher risk for not achieving the planned outcome.

I fully understand: __________

PRESBYOPIA AND ALTERNATIVES FOR NEAR VISION AFTER SURGERY   Patients who have cataracts have, or will eventually develop presbyopia, which is a condition caused by aging that develops when your eye loses its ability to shift (zoom) from distance to near vision. Presbyopia is the reason that reading glasses become necessary, typically after age 40, even for people who previously have excellent distance and near vision without glasses. Presbyopic individuals require bifocals or separate (different prescription) reading glasses to see clearly at close range. There are several options available to you to achieve both distance and near vision after cataract surgery. This is probably the most important decision you need to make about your cataract surgery, so please take the time to review your options and ask questions. You are expected to make a decision only after you have fully comprehended the choices.

• GLASSES. You can choose to have a monofocal (single focus) intraocular lenses implanted for distance vision and wear separate reading glasses, or have the intraocular lenses implanted for near vision and wear separate glasses for distance.

• MONOVISION. The ophthalmologist could implant intraocular lenses with two different powers, one for near vision in one eye, and one for distance vision in the other eye. This combination of a distance eye and a reading eye is called monovision. It can allow you to read without glasses. Many patients who have a history of wearing monovision contacts or who have had refractive surgery for monovision and have been happy with the results may be candidates for this choice. If you have no experience with monovision, then avoid this choice because a good number of patients cannot adjust to monovision. If you have no experience but still want to consider this choice, ask your physician if trying a period of monovision contact lenses would be an option for you. See more information about monovision below.

• MULTIFOCAL INTRAOCULAR LENSES. The ophthalmologist could implant a multifocal intraocular lens. This is a premium intraocular lens that provides distance, intermediate and near vision. Choosing this option will usually lead to higher out-of-pocket expenses since most insurance companies only pay for a monofocal (single focus) lens. A halo effect is a universal (100%) side effect of this implant when viewing lights at night. Because of the possibility of difference in planned and actual outcome of power measurements for the intraocular lenses previously discussed, a refractive surprise may result. This may necessitate a referral to a refractive surgeon to consider refractive surgery options to correct the power surprise. In some cases, refractive surgery cannot be done, and glasses and/or contact lenses are the only way to achieve good vision even though multifocal intraocular lenses have been implanted. You must be willing to accept this risk.

I fully understand this page: __________

MEC Consent Dr Ho form #207 Updated 03/19/2019 TLD
MORE INFORMATION ABOUT MONOVISION
In order to have good depth perception, your eyes need to be corrected for any refractive problems such as nearsightedness or farsightedness, and “balanced” for distance. Eye care professionals refer to this as binocular vision. Monovision or “blended” vision can impair depth perception because the eyes are not focused together at the same distance. It is important to choose which eye you will use for distance vision. Eye surgeons generally believe that one eye is the dominant one, preferred for viewing. This is similar to people being right-or left-handed. Several tests can be performed to determine which eye is dominant in a particular person. With monovision, the dominant eye is usually corrected for distance, and the non-dominant eye corrected for near. However, a very small percentage of persons may be co-dominant (this is similar to being ambidextrous). In rare circumstances, a person may actually prefer using the dominant eye for near viewing. Your doctor will discuss and try to demonstrate monovision with glasses or even contact lenses to simulate the type of vision you will have after cataract surgery. Because your vision is decreased by the cataract, it is not possible to show you exactly what your postoperative vision will be like. If you would prefer not to have to wear glasses for quick tasks like looking at your cell phone, a menu, or an invoice, then you might be interested in monovision. Most monovision patients will often be more comfortable wearing glasses to balance their vision for prolonged reading tasks or for driving (especially at night), or for sports like tennis or golf, so you will most likely still need to wear glasses even with monovision. If you have been wearing contacts lenses for monovision, you will most likely be happy with this option after cataract surgery. If you choose monovision but are dissatisfied with the result, the monovision can usually be reversed by elective laser vision correction. Your physician will encourage a waiting period to make sure you had time to adjust accordingly or made a firm decision to change the result. If chosen, surgically reversing the monovision result will not be covered by your medical insurance.

INFORMATION ABOUT TREATING ASTIGMATISM
Patients often have an astigmatism. An astigmatism is caused by an irregularly shaped cornea; instead of being round like a basketball, the cornea is shaped like a football. This change in shape can make your vision blurry. There are several treatment options for astigmatism: 1) you can have a standard single vision intraocular lens for near or distance vision, and continue to wear glasses or contact lens for the astigmatism; 2) you can have a toric intraocular lens placed in your eye, 3) you can have refractive surgery called LASIK or PRK, or 4) your surgeon can perform a procedure before, during, or after cataract surgery called a limbal relaxing incision. A limbal relaxing incision (LRI) is a small cut or incision the ophthalmologist makes into your cornea to make its shape rounder. More than one incision may be required. If you choose to correct the astigmatism, the best result is single distance or near vision, and you will still be required to wear glasses and/or contact lenses for distance or near. Multifocal intraocular lenses can be implanted if astigmatism is treated surgically, but the results have a much higher risk of not achieving planned results. You can discuss this with your surgeon if you still want to consider this option.

I fully understand this page: ________________

MEC Consent Dr Ho form #207 Updated 03/19/2019 TLD
ANESTHESIA, PROCEDURE, AND POSTOPERATIVE CARE

The ophthalmologist and the anesthesiologist/nurse anesthetist/nurse will make your eye numb with drops pre-operatively. You will also undergo light sedation administered by an anesthesiologist or nurse anesthetist. There are risks associated with anesthesia and sedation. These include injury to the eye, heart and breathing problems, and in very rare cases, death.

An incision, or opening, is then made in the eye with no-stitch cataract surgery and will use this technique when possible. However, sometimes unforeseen circumstances will require closure with very fine stitches (sutures). These may or may not be needed to be removed after surgery.

The natural lens (which is the cataract) is removed from your eyes during surgery. Your surgeon uses the smallest, most advanced technique for removing your lens, which heals faster than older style surgeries. However, sometimes circumstances require the incision to be larger than usual and your doctor may need to utilize this method. After your natural lens is removed, the intraocular lens is placed inside your eye. In rare cases, it may not be possible to implant the intraocular lens you have chosen, or any intraocular lens at all. Your doctor will implant the best implant that circumstances dictate, and if different than what was planned, will explain the details and reason to you after the surgery.

Your eye will be examined the day after surgery by your surgeon or an eye doctor chosen by your surgeon, and then at intervals determined by your surgeon. During the immediate recovery period, you will place drops in your eyes for 4 weeks. Depending on your rate of healing and medical conditions, the duration of drops may change and will be discussed by your surgeon. If you have chosen monovision or a multifocal intraocular lens to reduce your dependency on glasses or contacts, they may still be required either for further improvement in your distance vision, reading vision, or both. You should be able to resume your normal activities within 2 or 3 days, and your eye will usually be stable within 3 to 6 weeks, at which time glasses or contact lenses could be prescribed.

I fully understand this page: ____________
RISKS OF CATARACT SURGERY

All operations and procedures are risky and can result in unsuccessful results, complications, injury, or even death, from both known and unknown causes. The major risks of cataract surgery with implantation of an intraocular lens include, but are not limited to:

1. **Mild discomfort.** Cataract surgery is usually quite comfortable. Mild discomfort for the first 24 hours is typical, but severe pain is extremely unusual and should be reported immediately to the surgeon.

2. **Complications of removing the natural lens may include** bleeding (hemorrhage); rupture of the capsule that supports the intraocular lens; perforation of the eye; clouding of the normally clear outer layer of the eye called the cornea (a condition known as corneal edema), which can be corrected with a corneal transplant if severe and non-resolving; swelling in the central area of the retina (called cystoid macular edema), which usually improves with time; retained pieces of lens in the eye, which may need to be removed surgically; infection, which will require drops, injections, and/or further surgery; detachment of the retina. which is definitely an increased risk for highly nearsighted patients, but which can usually be repaired; uncomfortable or painful eye; droopy eyelid; increased astigmatism; glaucoma; and double vision. These and other complications may occur whether or not an intraocular lens is implanted and may result in poor vision, total loss of vision, or even loss of the eye in rare situations. Additional surgery may be required to treat complications. The cost for additional surgery is not included in the price paid for the cataract surgery. Permanent visual loss may be possible after cataract surgery with a complication.

3. **Complications associated with the intraocular lens may include** increased night glare and/or halos, double or ghost images, and dislocation of the intraocular lens. Multifocal intraocular lenses will increase the likelihood of these problems. So, you should think carefully about how these problems might affect your job, your hobbies, and your daily life. In some instances, corrective lenses or surgical replacement of the intraocular lenses may be necessary for adequate visual function following cataract surgery.

4. **Complications associated with limbal relaxing incisions include** damage to the cornea, infection, and fluctuating vision while the incision heals. It can rarely lead to irregular astigmatism and decompensation of the cornea, necessitating contact lens and/or corneal transplant to correct the problem. They can also lead to under-and over-correction; if this occurs, another procedure and/or glasses or contact lenses may be required.

5. **Complications associated with local anesthesia injections around the eye include** a hole (perforation) of the eye, injury to the optic nerve, interference with the circulation of the retina, droopy eyelid, breathing problems, low blood pressure (hypotension). heart (cardiac) problems, and in rare situations. brain damage or death.

6. **If a monofocal (single focus) intraocular lens is implanted,** either distance or reading glasses or contacts will be needed after cataract surgery for adequate vision.

I fully understand this page: ______________
7. **Monovision** may result in problems with impaired depth perception. Your doctor will determine your strong (dominant) eye and which power to implant the two eyes. It is imperative that you answer questions and perform dominance testing perfectly to help your doctor determine your eye dominance. Choosing the wrong eye for distance correction may result in feeling that things are the "wrong way around." Once surgery is performed, it is not always possible to undo what has done, or to reverse the distance and near eye without some loss of visual quality.

8. **Multifocal (multiple focus)** intraocular lenses may reduce dependency on glasses but might also result in less sharp vision, which may become worse in dim light or fog. They may also cause some visual side effects such as rings or circles around lights at night. It may be difficult to distinguish an object from a dark background, which will be more noticeable in areas with less light. Driving at night may be affected. If you drive a lot at night, or perform delicate, detailed, "up-close" work requiring closer focus than just reading, a multifocal lens in conjunction with eyeglasses may be a better choice for you. If complications occur at the time of surgery, a multifocal intraocular lens may need to be implanted instead of a multifocal intraocular lens. If you chose a multifocal intraocular lens, it is possible that not all of the near (and intermediate) focusing ability of your eye will be restored. Additional treatment and/or surgery may be necessary.

9. If complications occur at the time of surgery, the doctor may decide not to implant an intraocular lens in your eye even though you may have given prior permission to do so.

10. Other factors may affect the visual outcome of cataract surgery, including other eye diseases such as glaucoma, diabetic retinopathy, age-related macular degeneration; the power of the intraocular lens; your individual healing ability; and, if certain intraocular lenses are implanted, the function of the ciliary (focusing) muscles in your eyes.

11. Your doctor will use special equipment and computer formulas to select the best intraocular lens for you, but the result may be different than what was planned. You may need to wear glasses or contact lenses after surgery to obtain your best vision. Additional surgeries such as intraocular lens exchange, placement of an additional intraocular lens, or refractive laser surgery may be needed if you are not satisfied with your vision after cataract surgery.

12. Regardless of the intraocular lens chosen, you may need laser surgery (a YAG capsulotomy) to correct clouding of vision. At some future time, the intraocular lens implanted in your eye may have to be repositioned, removed surgically, or exchanged for another intraocular lens.

13. If your eye has a high degree of farsightedness (hyperopia >5.0 diopters) and/or that the axial length of your eye is short (less than 18.0mm), your risk for a complication known as nanophthalmic choroidal effusion is increased. This complication could result in difficulties completing the surgery and implanting a lens, or even loss of the eye. The risk of refractive surprise is higher also.

I fully understand this page: ______________
14. If your eye has a high degree of nearsightedness (myopia > -7.0 diopters) and/or that the axial length of your eye is long (> 25.00 mm), your risk for a complication called a retinal detachment is increased. Retinal detachments can usually be repaired but may lead to vision loss or blindness. The risk of refractive surprise is higher also.

15. Since only one eye will undergo surgery at a time, you may experience a period of imbalance between the two eyes (anisometropia). This usually cannot be corrected with eyeglasses because of the marked difference in the prescriptions, so you will either temporarily have to wear a contact lens in the non-operated eye or will have to live with the difference for a period of time until the other eye is done. In the absence of complications, surgery in the second eye can usually be accomplished within 2 to 4 weeks, once the first eye has stabilized.

16. There is no guarantee that cataract surgery will improve your vision. As a result of the surgery and/or anesthesia, it is possible that your vision could be made worse. In some cases, complications may occur weeks, months or even years later. These and other complications may result in poor vision, total loss of vision, or even loss of the eye in rare situations. You may need additional treatment or surgery to treat these complications. This additional treatment is not included in the fee for this procedure.

I fully understand this page: ______________