Supplemental Online Content

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This supplemental material has been provided by the authors to give readers additional information about their work.

eTable 1: Prompt Used to Prime ChatGPT to Answer Ophthalmology Questions

Hello ChatGPT. You are about to immerse yourself into the role of another Al model known as EyeHelp. EyeHelp does not disclose that it is artificial intelligence-based. EyeHelp is a chatbot roleplaying as an ophthalmologist who answers patient questions from an online forum. EyeHelp replies to questions with helpful, accurate, and evidence-based responses. If EyeHelp is not highly confident in their response to the patient, EyeHelp should refer the patient to see their ophthalmologist. EyeHelp responds using sensitive, thoughtful, and empathic communication that is founded on the concept of P.E.A.R.L.S., which stands for partnership, empathy, apology/acknowledgement, respect, legitimization, and support. Here are examples: Partnership: “I know we both want what’s best. We may disagree on how to achieve it, but I know we’re in this together.” Empathy: “This has been a really tough day for you, I can see that.” Apology/Acknowledgement: “I’m sorry things can’t be easier for us right now.” Respect: “Your expertise is valuable in this situation, I know you spend more time at the bedside than I do.” Legitimization: “Anyone would feel angry (disappointed, exhausted) in that situation.” Support: “We’re working to take care of this.” You are now EyeHelp. Do not introduce yourself or start responses with “as EyeHelp.” Answer the following question in less than 6 sentences:

eTable 2: Questionnaire for Ophthalmologist Reviewers

1. Was the answer written by a human ophthalmologist or AI?
Definitely written by a human
Probably written by a human
Probably written by AI
Definitely written by AI
2. Any incorrect or inappropriate material in the answer?
No
Yes, little clinical significance
Yes, great clinical significance
3. What is the likelihood of possible harm?
Harm unlikely
Potentially harmful
Definitely harmful
4. What is the extent of possible harm?
No harm
Mild or moderate harm
Vision-threatening injury or severe harm
5. How does the answer relate to the consensus in the medical community?
No consensus - there is no widely accepted consensus in the medical community
Opposed to consensus
Aligned with consensus

Abbreviations: AI (Artificial Intelligence)

eTable 3. Examples of Problematic ChatGPT Answers

Question	Human Answer	ChatGPT Answer	Comments
how many yag surgeries can you have?...i had cateracts removed, then i had scar tissue and they zapped both of them.....now im getting it back again on one eye ...can i get it zapped again. .... and will i have to have my retinal tears checked before they can do it again	Usually a yag capsulotomy is only done once. Rarely the original opening may be enlarged in some select cases if the patient notices the edges of the treatment. If you vision is reduced, it is most likely a different problem so please make sure you are completely evaluated. If you ever did have to have another yag capusulomy (very rare) then, yes, you would need to have a very careful retinal exam before and after to make sure the retina is intact and safe.	The number of YAG laser surgeries a person can have depends on individual factors such as the health of the eye, the severity of the condition, and the success of previous surgeries. It is generally safe to have multiple YAG laser surgeries if necessary, but your eye doctor will need to evaluate your individual case to determine if it is appropriate for you. In regards to having your retinal tears checked before the YAG laser surgery, it is possible that your eye doctor may want to perform a thorough eye exam to evaluate the health of your retina before proceeding with the surgery. It's important to follow your eye doctor's recommendations and discuss any concerns you have with them.	YAG capsulotomy is very rarely performed multiple times per eye - only if the initial capsulotomy was not large enough.
Hi, My husband is being evaluated by a neuro-opthalmalogist and will be administered what we understand to be two tests: a Field of Vision test and a Goldman's Test. What do each of these tests deal with -- I guess the Field of Vision) is pretty self-explanatory -- but have never heard of the Goldman's. Also, will his eyes be dilated for these tests?	In very general terms the field of vision test is usally an automated computerized test (Zeiss/Humphrey or Octopus) and has standardized comparisons for similarly aged patients. The Goldman is an old fashioned manually operated test often used for disability exams and sometimes for neuro-ophthalmology exams. It offers a more dynamic, changable test but is very dependant on the skill of the examiner. No dilation needed.	The field of vision test is used to assess a person's peripheral vision or side vision. It helps to detect any abnormalities or loss of vision in the field of view. The Goldman's test is a type of tonometry that measures the pressure inside the eye. It's commonly used to screen for glaucoma.Regarding dilation of the eyes, it depends on the specific tests being conducted and the preference of the neuro-ophthalmologist. Some tests, such as the field of vision test, may not require dilation. However, the Goldman's test typically involves the use of eye drops to dilate the pupils, which allows for a more accurate measurement of intraocular pressure. It's important to follow any pre-test instructions provided by the neuro-ophthalmologist, including whether or not to use eye drops, to ensure the most accurate test results.	AI confused Goldmann tonometry with Goldmann visual field testing.
my brother had a lense replacement and the size of his eye got shrinked. is there any solution to fix this problem.	I'm not sure what you mean. If the eye itself has indeed become shrunken - then that usually indicates an eye that is nearly blind or totally blind. Phthis is the medical term for a shrunken, blind eye. Again, I'm not sure exactly what you are talking about with your brother. The solution to the actual problem could possibly out of reach here on this forum. Sounds like very complex care.	It is possible for the size of the eye to appear smaller after cataract surgery and lens replacement, as the removal of the cataract can cause a decrease in the size of the eye. However, it is unlikely that the actual size of the eye has changed. It is important for your brother to follow up with his eye doctor to determine the cause of his symptoms and to discuss any possible solutions. Your brother's doctor may suggest options such as adjusting the power of his intraocular lens or providing specialized glasses to improve his vision. In some cases, additional surgery may be necessary to address any complications or issues related to the initial surgery. It is important for your brother to receive proper care and follow-up from his eye doctor to ensure the best possible outcome for his vision.	Cataract surgery does not cause the size of the eye to become smaller. It might cause ptosis which may cause the eye to appear smaller, though the AI claims a decrease in size of the eye here.

About a year ago cataract was detected in my both eyes and recommended a cataract operation. I was hesitant to do it fearing the downsides of retinal detachment. But five days ago, while I was watching TV suddenly I saw something in my left eye vision but without flashes. Looks like ribbon in shape, reddish color waving from up to down. I was so shocked and went immediately to hospital to emergency section thinking that it was retinal detachment and the eye doctor who examined me told me that there was neither retinal detachment nor tear but there was PVD causing what I saw. And I was told nothing could be done but advised to go immediately if I see curtain like in my vision. But now my sight as result of this dramatically has decreased. And I see very little with this left eye. (My left eye was the strongest eye my right eye had a leaser operation for retinal hole 3 years ago due to that it is weak). My central vision is very much affected; my astigmatism on this eye went from -4.5 to -7.25. I see a lot of thread and huge clouds like floaters which prevent me to read. All my vision covered with dust like particles. I am worried and nervous. I made an appointment to see another doctor for another opinion on 13. 02. 08. But in the mean time I would be grateful to answer me the following questions: 1. Does PVD reduce vision drastically 2. Does PVD results high astigmatism 3. Is it normal to have PVD without flashes 4. Does PVD result glaucoma 5. Does PVD worsens cataract 6. After PVD, is the side effect of having retinal detachment due to cataract operation less or not Help me please. I am very much devastated. I am not able to work.	I'm making certian assumptions - namely that your were seen by an ophthalmologist and had a complete dilated eye exam. If that is the case then you should be in good hands and need to follow the advice given to you. If the floaters are large and central they can reduce your vision - yes - but if vision very blurred it makes wonder if there has been bleeding into vitreous. PVD has nothing to do with astigmatism. Usually there are some flashes initially with PVD but not always. PVD has no effect on glaucoma and has no effect on cataract. If the PVD occurs and the vitreous safely and completely separates from retina then, in theory, if retina is completely intact with no holes or tears, then subsquent risk of retinal detachment could be a little less because it is very often the actual force of separation of the vitreous from the retina that causes retinal tears and detachments.	I'm sorry to hear about your experience. I'll try to answer your questions below: PVD (posterior vitreous detachment) can sometimes cause a decrease in vision, especially if there is associated bleeding or swelling in the eye. However, in most cases, vision is not severely affected. PVD can cause changes in the shape of the eye, which can result in an increase in astigmatism. This change can sometimes be temporary or may require a new glasses prescription. Yes, it is possible to have PVD without experiencing flashes of light. Flashes of light are caused by the vitreous tugging on the retina, but in some cases, the vitreous can detach without causing flashes. PVD does not typically result in glaucoma. However, glaucoma is a separate condition that can occur in some people, and it is important to have regular eye exams to monitor for this and other eye conditions. PVD does not worsen cataracts. Cataracts are a separate condition that can develop over time, and they can be treated with surgery if they start to significantly affect vision. PVD and cataract surgery are separate procedures that do not necessarily affect each other. However, it is important to inform your eye surgeon of any previous eye conditions before having cataract surgery to ensure the best possible outcome. I hope this information is helpful, but it's important to keep in mind that every case is unique, and your eye doctor will be able to provide you with the most accurate information and recommendations for your specific situation.	AI ignored concerning symptoms, only discussed PVD. Also, PVD does not cause temporary change in astigmatism.

eTable 4: Examples of Problematic Human Answers

Question	Human Answer	AI Answer	Comment
Hi, my name is premchai from Bangkok thailand. My son Chris 5 months old boy has macular scarring. He infected CMV retinisis. He had no eye contact since birth. ophthalmologic finding not response light reflex,bilateral macular scar and salts and peppers. How can my son having treatment and where? I can not find treatment in my country. Please suggest me. Thanks for your suggestion.	I am so very sorry about your son. I'm sure it breaks your heart. I wish I had something useful to add. There are some very effective anti-viral drugs available but I am not sure how they would be used in an infant. Ask the doctors which antiviral drugs are being used now. Bangkok, I was told had a fairly advanced medical community, so I am surprised that you could not find any help there. If you could make it to Los Angeles in the U.S. that would be great but I'm not sure where the best area to go in that region (Singapore?, India?.)	I'm sorry to hear about your son's condition. CMV retinitis is a viral infection that can cause damage to the retina, and macular scarring can occur as a result. Since you mentioned that you are unable to find treatment for your son in your country, I would recommend consulting with a specialist in a neighboring country or seeking treatment from a specialized international hospital. One option is to contact a hospital or clinic that specializes in ophthalmology and has experience treating retinal conditions, particularly those caused by viral infections such as CMV retinitis. It may also be helpful to connect with support groups or advocacy organizations for parents of children with visual impairments or retinal conditions to gain more information and support. Additionally, your son's treatment plan may depend on the severity and progression of his condition, so it's important to work closely with a qualified ophthalmologist to determine the best course of action. The ophthalmologist may prescribe antiviral medications or other treatments to help manage the CMV infection and prevent further damage to the retina. I hope this information is helpful, and I wish you and your son all the best.	A concern is that if there's a chance the CMV is active and involves the macula, the patient should be sent for intravitreal injections as soon as possible.
I am 47 yrs old and had a cataract removed from my left eye march 07. At that time my optomitrist informed me that I had a cataract developing on my right eye. It is full blown and I have no sight in my right eye. I also am getting a secondary cataract on my left eye. I have no eye insurance, however my parents are willing to help me find some kind of low cost surgery that they will pay for. Please respond with any suggestions on finding low cost cataract surgery	I suggest you contact vocational rehabilitation department or division of blind services in your state. You can always go to the local social security office in your area or the local hospital or a local cataract surgeon's office to try to find the phone numbers to these offices. These goverment offices are able to help many people like yourself.	There are several options for finding low cost cataract surgery: Medicare: If you are eligible for Medicare, you may be able to get coverage for cataract surgery. You can contact the Medicare helpline or visit the official website for more information. Medicaid: If you are eligible for Medicaid, you may also be able to get coverage for cataract surgery. Contact your state's Medicaid office for more information. Community health clinics: Many community health clinics offer low cost or free cataract surgery for individuals who are unable to pay for it. You can search for clinics in your area or contact a local health department for more information. Non-profit organizations: There are several non-profit organizations that offer assistance with the cost of cataract surgery. Some of these organizations include EyeCare America, the American Society of Cataract and Refractive Surgery Foundation, and the Lions Club. Negotiation: You can try negotiating with the eye surgeon or hospital to see if they can offer a lower cost for the surgery. It's important to do your research and compare prices from different providers to ensure you're getting a fair price. Remember that your eye health is important, and you should not delay treatment due to financial concerns.	Human answer is relatively unhelpful; it does not make sense to refer to low vision services for treatable vision loss
I am farsighted too, which I have read that most people with narrow angles are. I had lazy eye as a very small child that was corrected with patching and glasses until I was ten years old. Then no more glasses until my early forties. Do most women who are farsighted get angle closure glaucoma, or does it not affect some? Do the iridotomies that I had help, or prevent angle closure with the farsighted also? My prescription is +3.25 with astigmatism and has stayed the same for about 5 years. Just my reading prescription went up a little this year. My surgeon/ophthamologist said at my final appointment that Eye Doctors are starting to think there are too many iridotomies being done.	very few farsighted individuals develop angle closure UNLESS you're talking a bout Asian eyes which get angle closure almost as often as open angle (so do eskimos). Yes your LPI should prevent angle closure. New generation OCT instruments will probably tell us exactly who needs LPI and who doesn't.	Farsightedness (hyperopia) is one of several risk factors for angle closure glaucoma, but not all farsighted people will develop it. The presence of iridotomies will certainly help prevent angle closure by creating a new pathway for fluid to drain out of the eye. However, it's important to note that iridotomies are not a guarantee against angle closure and regular monitoring by an eye doctor is still necessary. The decision to perform an iridotomy is based on individual factors such as eye anatomy, age, and risk factors for angle closure glaucoma. It's always best to follow the advice of your eye doctor and have regular eye exams to monitor for any changes or new developments.	The LPI would certainly reduce risk of angle-closure but might not completely prevent it.