

Parental preferences in the treatment of chronic childhood eye diseases: a conjoint analysis study

Parent Questionnaire

 DATE DD / MM / YY

TIME STARTED: _____ TIME ENDED: _____ TOTAL INTERVIEW TIME: _____ MIN

INTERVIEWER NAME: _____

INTRODUCTION

We are conducting a survey with parents who have a child with a chronic eye disease to understand preferences for a novel way of delivering medication to the eye. This survey can be completed in around 20 minutes.

There are no right or wrong answers and you do not have to respond to any questions that you feel uncomfortable answering. All information collected will be kept strictly confidential – your identity will not be known and only group data will be reported.

SECTION S: SCREENERS

| | | | |
|------------|---|---------------------|-----------------------|
| S1. | Do you have a child with an eye condition(s) that requires treatment with eye drops regularly? | | |
| | <input type="radio"/> Yes, one child <input type="radio"/> Yes, more than one child <input type="radio"/> No [TERMINATE] | | |
| | If you have more than one child with an eye condition, please answer this survey with your oldest child in mind. | | |
| S2. | Which condition(s) does your child use eye drops for? | | |
| | Eye condition | ✓ if one eye | ✓ if both eyes |
| | Myopia | | |
| | Glaucoma | | |
| | Allergic eye disease | | |
| | Lazy eye (Amblyopia) | | |
| | Others, please specify: | | |
| S3. | What is your child's age as of last birthday? | | |
| | _____ years old [TERMINATE if less than 1 year or more than 18 years old] | | |
| S4. | What is your child's gender? | | |
| | <input type="radio"/> Male <input type="radio"/> Female | | |

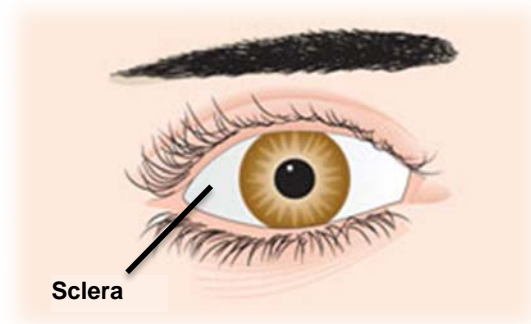
SECTION A: CURRENT EYE DROP USAGE

| | |
|------------|--|
| A1. | How long has your child used eye drops for? _____ months |
| A2. | How many types of eye drops does your child use on a regular basis? <ul style="list-style-type: none"><input type="radio"/> 1 type only<input type="radio"/> 2 types<input type="radio"/> 3 types<input type="radio"/> 4 or more types |
| A3. | Who is the main person administering the eye drops for your child? <ul style="list-style-type: none"><input type="radio"/> Your child [Skip Question A4]<input type="radio"/> Yourself / Your spouse<input type="radio"/> Your parents<input type="radio"/> Your domestic helper<input type="radio"/> Others: _____ |
| A4. | Does the person administering eye drops for your child find it inconvenient? <ul style="list-style-type: none"><input type="radio"/> Yes, very inconvenient<input type="radio"/> Yes, somewhat inconvenient<input type="radio"/> No |
| A5. | Does your child complain about using eye drops? <ul style="list-style-type: none"><input type="radio"/> Yes, often<input type="radio"/> Yes, sometimes<input type="radio"/> Yes, rarely<input type="radio"/> No |
| A6. | How often is your child recommended to receive eye drops? <ul style="list-style-type: none"><input type="radio"/> Once a day<input type="radio"/> Twice a day<input type="radio"/> Three times a day<input type="radio"/> Four or more times a day<input type="radio"/> Other (please specify) _____ |
| A7. | In the <u>past month</u> , how often did your child miss his/her eye drops? <ul style="list-style-type: none"><input type="radio"/> Never [Skip Question A8]<input type="radio"/> Rarely<input type="radio"/> Sometimes<input type="radio"/> Most of the time<input type="radio"/> Not sure |
| A8. | How concerned are you that your child's vision will suffer because he/she does not take the eye drops as recommended? <ul style="list-style-type: none"><input type="radio"/> Very concerned<input type="radio"/> Somewhat concerned<input type="radio"/> Somewhat unconcerned<input type="radio"/> Not concerned |

SECTION B: INTRODUCTION TO A NEW METHOD

Researchers are looking for new ways to deliver eye medication.

One way is to inject a solution into the eye, which can provide sustained release of the medication over a few months. The solution will be injected at the white area of the eye (sclera) underneath a thin transparent membrane called the conjunctiva.



The injection will be done by the eye doctor and could be done either under moderate sedation or general anesthesia. Both put the child to sleep but, unlike general anesthesia, there is a chance of waking up when using moderate sedation. However, moderate sedation does not require fasting before the procedure, whereas general anesthesia require fasting for 8 hours before the procedure.

The decision on whether moderate sedation or general anesthesia is needed will depend on the individual child:

- For children below 4 years old, moderate sedation is recommended.
- For children between 4 to 8 years old, general anesthesia is recommended.
- For children above 8 years old, moderate sedation is recommended if they can cooperate with the doctor. However, general anesthesia is recommended if they cannot.

The injection will be as effective as eye drops if your child is using eye drops exactly as recommended by the doctor. It can be more effective than eye drops if your child has difficulty using eye drops regularly.

We are interested to know the extent to which various features of the injection would influence your interest in getting this for your child, thus replacing the need for regular eye drops.

1. Frequency of injection

The injection can provide sustained release of the medication over a few months. Each time the medication runs out, you would need to bring your child to the clinic for a new injection.

| | | | |
|--|--|--|--------------------------------------|
| B1. If the injection is needed every 3 months , would you consider the injection for your child? | | | |
| Very Unlikely <input type="radio"/> | Somewhat Unlikely <input type="radio"/> | Somewhat Likely <input type="radio"/> | Very Likely <input type="radio"/> |

2. Complications from the injection

An infection of the conjunctiva (conjunctivitis) could occur, but it will mostly be prevented successfully with antibiotics eye drops, used for a few days after the procedure.

Another complication is injury to the deeper layers of the eye. In most cases, the injury will heal by itself. In rare cases, surgery may be required to fix the injury. The costs of the surgery would not be borne by you.

| | | | |
|---|--|--|--------------------------------------|
| B2. Imagine that each time an injection is given, 10 in 10,000 patients develop complications. Would you consider the injection for your child? | | | |
| Very Unlikely <input type="radio"/> | Somewhat Unlikely <input type="radio"/> | Somewhat Likely <input type="radio"/> | Very Likely <input type="radio"/> |

3. Out-of-pocket cost

Out-of-pocket cost refers to the amount you would have to pay after subsidies and insurance.

| |
|---|
| B3. What is the out-of-pocket cost per year for the current eye drops for your child? |
| \$_____ per year |

It is possible that after government subsidies and insurance payouts are taken into account, the out-of-pocket cost of the injection could be \$0.

| | | | |
|---|--|--|--------------------------------------|
| B4. If the out-of-pocket cost per year of the injection is \$0 , would you consider the injection for your child? | | | |
| Very Unlikely <input type="radio"/> | Somewhat Unlikely <input type="radio"/> | Somewhat Likely <input type="radio"/> | Very Likely <input type="radio"/> |

4. Doctor's recommendation

| | | | |
|--|--|--|--------------------------------------|
| B5. If your doctor recommended the injection over eye drops , would you consider the injection for your child? | | | |
| Very Unlikely <input type="radio"/> | Somewhat Unlikely <input type="radio"/> | Somewhat Likely <input type="radio"/> | Very Likely <input type="radio"/> |

SECTION C: WHICH DELIVERY SYSTEM WOULD YOU CHOOSE FOR YOUR CHILD?

In this section, we will show you injections with different features and ask you to rank your choices in comparison to what your child currently does. **There are no right or wrong answers.**

Here is an example question:

Suppose that these options are available for your child

| | INJECTION A | INJECTION B | EYE DROPS |
|------------------------------------|----------------|-----------------------|---|
| Frequency of injection | Every 3 months | Every 12 months | My child continues using eye drops as he/she does now |
| Risk of complication per injection | 0 patients | 10 in 10,000 patients | |
| Out-of-pocket cost per year | \$0 | \$2,000 | |

Doctor's recommendation

| | | | |
|---|---|---|---|
| <p>Label your most preferred option "1".</p> <p>Then label your second most preferred option "2".</p> | <input style="width: 60px; height: 30px;" type="text"/> | <input style="width: 60px; height: 30px;" type="text"/> | <input style="width: 60px; height: 30px;" type="text"/> |
|---|---|---|---|

[BLOCK 1 – The order of the DCE tasks were randomized.]

C1.1. Suppose that these options are available for your child

| | INJECTION A | INJECTION B | EYE DROPS |
|------------------------------------|-----------------------|----------------|---|
| Frequency of Injection | Every 6 months | Every 6 months | My child continues using eye drops as he/she does now |
| Risk of complication per injection | 10 in 10,000 patients | 0 patients | |
| Out-of-pocket cost per year | \$1,000 | \$0 | |

Doctor's recommendation

| | INJECTION A | INJECTION B | EYE DROPS |
|--|----------------------|----------------------|----------------------|
| Label your most preferred option "1", Then label your second most preferred option "2". | <input type="text"/> | <input type="text"/> | <input type="text"/> |

C1.2. Suppose that these options are available for your child

| | INJECTION A | INJECTION B | EYE DROPS |
|------------------------------------|-----------------|----------------------|---|
| Frequency of Injection | Every 12 months | Every 6 months | My child continues using eye drops as he/she does now |
| Risk of complication per injection | 0 patients | 1 in 10,000 patients | |
| Out-of-pocket cost per year | \$2,000 | \$300 | |

| | INJECTION A | INJECTION B | EYE DROPS |
|--|----------------------|----------------------|----------------------|
| Label your most preferred option "1", Then label your second most preferred option "2". | <input type="text"/> | <input type="text"/> | <input type="text"/> |

C1.3. Suppose that these options are available for your child

| | INJECTION A | INJECTION B | EYE DROPS |
|------------------------------------|----------------|----------------------|---|
| Frequency of Injection | Every 3 months | Every 3 months | My child continues using eye drops as he/she does now |
| Risk of complication per injection | 0 patients | 1 in 10,000 patients | |
| Out-of-pocket cost per year | \$0 | \$300 | |

Doctor's recommendation

| | INJECTION A | INJECTION B | EYE DROPS |
|--|----------------------|----------------------|----------------------|
| Label your most preferred option "1", Then label your second most preferred option "2". | <input type="text"/> | <input type="text"/> | <input type="text"/> |

C1.4. Suppose that these options are available for your child

| | INJECTION A | INJECTION B | EYE DROPS |
|------------------------------------|----------------|----------------------|---|
| Frequency of Injection | Every 6 months | Every 12 months | My child continues using eye drops as he/she does now |
| Risk of complication per injection | 0 patients | 1 in 10,000 patients | |
| Out-of-pocket cost per year | \$300 | \$0 | |

Doctor's recommendation

| | INJECTION A | INJECTION B | EYE DROPS |
|--|----------------------|----------------------|----------------------|
| Label your most preferred option "1", Then label your second most preferred option "2". | <input type="text"/> | <input type="text"/> | <input type="text"/> |

C1.5. Suppose that these options are available for your child

| | INJECTION A | INJECTION B | EYE DROPS |
|------------------------------------|-----------------------|-----------------|---|
| Frequency of Injection | Every 3 months | Every 12 months | My child continues using eye drops as he/she does now |
| Risk of complication per injection | 10 in 10,000 patients | 0 patients | |
| Out-of-pocket cost per year | \$300 | \$1,000 | |

Doctor's recommendation

| | INJECTION A | INJECTION B | EYE DROPS |
|--|----------------------|----------------------|----------------------|
| Label your most preferred option "1", Then label your second most preferred option "2". | <input type="text"/> | <input type="text"/> | <input type="text"/> |

C1.6. Suppose that these options are available for your child

| | INJECTION A | INJECTION B | EYE DROPS |
|------------------------------------|-----------------------|-----------------------|---|
| Frequency of Injection | Every 6 months | Every 12 months | My child continues using eye drops as he/she does now |
| Risk of complication per injection | 10 in 10,000 patients | 10 in 10,000 patients | |
| Out-of-pocket cost per year | \$1,000 | \$2,000 | |

Doctor's recommendation

| | INJECTION A | INJECTION B | EYE DROPS |
|--|----------------------|----------------------|----------------------|
| Label your most preferred option "1", Then label your second most preferred option "2". | <input type="text"/> | <input type="text"/> | <input type="text"/> |

C1.7. Suppose that these options are available for your child

| | INJECTION A | INJECTION B | EYE DROPS |
|------------------------------------|--------------------------|-------------------------|---|
| Frequency of Injection | Every 12 months | Every 6 months | My child continues using eye drops as he/she does now |
| Risk of complication per injection | 10 in 10,000 patients | 1 in 10,000 patients | |
| Out-of-pocket cost per year | \$300 | \$0 | |

| | INJECTION A | INJECTION B | EYE DROPS |
|--|----------------------|----------------------|----------------------|
| Label your most preferred option "1", Then label your second most preferred option "2". | <input type="text"/> | <input type="text"/> | <input type="text"/> |

C1.8. Suppose that these options are available for your child

| | INJECTION A | INJECTION B | EYE DROPS |
|------------------------------------|----------------------|-----------------------|---|
| Frequency of Injection | Every 12 months | Every 3 months | My child continues using eye drops as he/she does now |
| Risk of complication per injection | 1 in 10,000 patients | 10 in 10,000 patients | |
| Out-of-pocket cost per year | \$2,000 | \$0 | |

Doctor's recommendation

| | INJECTION A | INJECTION B | EYE DROPS |
|--|----------------------|----------------------|----------------------|
| Label your most preferred option "1", Then label your second most preferred option "2". | <input type="text"/> | <input type="text"/> | <input type="text"/> |

C1.9. Suppose that these options are available for your child

| | INJECTION A | INJECTION B | EYE DROPS |
|------------------------------------|-------------------------|--------------------------|---|
| Frequency of Injection | Every 6 months | Every 6 months | My child continues using eye drops as he/she does now |
| Risk of complication per injection | 1 in 10,000 patients | 10 in 10,000 patients | |
| Out-of-pocket cost per year | \$300 | \$1,000 | |

| | INJECTION A | INJECTION B | EYE DROPS |
|--|----------------------|----------------------|----------------------|
| Label your most preferred option "1", Then label your second most preferred option "2". | <input type="text"/> | <input type="text"/> | <input type="text"/> |

C1.10. Suppose that these options are available for your child

| | INJECTION A | INJECTION B | EYE DROPS |
|------------------------------------|----------------------|-----------------------|---|
| Frequency of Injection | Every 3 months | Every 6 months | My child continues using eye drops as he/she does now |
| Risk of complication per injection | 1 in 10,000 patients | 10 in 10,000 patients | |
| Out-of-pocket cost per year | \$300 | \$300 | |

Doctor's recommendation

| | INJECTION A | INJECTION B | EYE DROPS |
|--|----------------------|----------------------|----------------------|
| Label your most preferred option "1", Then label your second most preferred option "2". | <input type="text"/> | <input type="text"/> | <input type="text"/> |

[BLOCK 2 - The order of the DCE tasks were randomized.]

C2.1. Suppose that these options are available for your child

| | INJECTION A | INJECTION B | EYE DROPS |
|------------------------------------|-----------------|----------------|---|
| Frequency of Injection | Every 12 months | Every 6 months | My child continues using eye drops as he/she does now |
| Risk of complication per injection | 0 patients | 0 patients | |
| Out-of-pocket cost per year | \$300 | \$1,000 | |

Doctor's recommendation

| | INJECTION A | INJECTION B | EYE DROPS |
|--|----------------------|----------------------|----------------------|
| Label your most preferred option "1", Then label your second most preferred option "2". | <input type="text"/> | <input type="text"/> | <input type="text"/> |

C2.2. Suppose that these options are available for your child

| | INJECTION A | INJECTION B | EYE DROPS |
|------------------------------------|----------------------|----------------------|---|
| Frequency of Injection | Every 12 months | Every 3 months | My child continues using eye drops as he/she does now |
| Risk of complication per injection | 1 in 10,000 patients | 1 in 10,000 patients | |
| Out-of-pocket cost per year | \$1,000 | \$2,000 | |

Doctor's recommendation

| | INJECTION A | INJECTION B | EYE DROPS |
|--|--------------------------|--------------------------|--------------------------|
| Label your most preferred option "1", Then label your second most preferred option "2". | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

C2.3. Suppose that these options are available for your child

| | INJECTION A | INJECTION B | EYE DROPS |
|------------------------------------|-----------------------|----------------------|---|
| Frequency of Injection | Every 12 months | Every 12 months | My child continues using eye drops as he/she does now |
| Risk of complication per injection | 10 in 10,000 patients | 1 in 10,000 patients | |
| Out-of-pocket cost per year | \$0 | \$2,000 | |

Doctor's recommendation

| | INJECTION A | INJECTION B | EYE DROPS |
|--|----------------------|----------------------|----------------------|
| Label your most preferred option "1", Then label your second most preferred option "2". | <input type="text"/> | <input type="text"/> | <input type="text"/> |

C2.4. Suppose that these options are available for your child

| | INJECTION A | INJECTION B | EYE DROPS |
|------------------------------------|----------------------|----------------|---|
| Frequency of Injection | Every 6 months | Every 3 months | My child continues using eye drops as he/she does now |
| Risk of complication per injection | 1 in 10,000 patients | 0 patients | |
| Out-of-pocket cost per year | \$1,000 | \$300 | |

Doctor's recommendation

| | INJECTION A | INJECTION B | EYE DROPS |
|--|----------------------|----------------------|----------------------|
| Label your most preferred option "1", Then label your second most preferred option "2". | <input type="text"/> | <input type="text"/> | <input type="text"/> |

C2.5. Suppose that these options are available for your child

| | INJECTION A | INJECTION B | EYE DROPS |
|------------------------------------|-----------------------|----------------------|---|
| Frequency of Injection | Every 3 months | Every 3 months | My child continues using eye drops as he/she does now |
| Risk of complication per injection | 10 in 10,000 patients | 1 in 10,000 patients | |
| Out-of-pocket cost per year | \$2,000 | \$0 | |

Doctor's recommendation

| | INJECTION A | INJECTION B | EYE DROPS |
|--|----------------------|----------------------|----------------------|
| Label your most preferred option "1", Then label your second most preferred option "2". | <input type="text"/> | <input type="text"/> | <input type="text"/> |

C2.6. Suppose that these options are available for your child

| | INJECTION A | INJECTION B | EYE DROPS |
|------------------------------------|----------------|-----------------------|---|
| Frequency of Injection | Every 3 months | Every 6 months | My child continues using eye drops as he/she does now |
| Risk of complication per injection | 0 patients | 10 in 10,000 patients | |
| Out-of-pocket cost per year | \$1,000 | \$0 | |

| | INJECTION A | INJECTION B | EYE DROPS |
|--|----------------------|----------------------|----------------------|
| Label your most preferred option "1", Then label your second most preferred option "2". | <input type="text"/> | <input type="text"/> | <input type="text"/> |

C2.7. Suppose that these options are available for your child

| | INJECTION A | INJECTION B | EYE DROPS |
|------------------------------------|----------------------|----------------------|---|
| Frequency of Injection | Every 3 months | Every 6 months | My child continues using eye drops as he/she does now |
| Risk of complication per injection | 1 in 10,000 patients | 1 in 10,000 patients | |
| Out-of-pocket cost per year | \$0 | \$2,000 | |

| | INJECTION A | INJECTION B | EYE DROPS |
|--|----------------------|----------------------|----------------------|
| Label your most preferred option "1", Then label your second most preferred option "2". | <input type="text"/> | <input type="text"/> | <input type="text"/> |

C2.8. Suppose that these options are available for your child

| | INJECTION A | INJECTION B | EYE DROPS |
|------------------------------------|-----------------------|-----------------------|---|
| Frequency of Injection | Every 6 months | Every 3 months | My child continues using eye drops as he/she does now |
| Risk of complication per injection | 10 in 10,000 patients | 10 in 10,000 patients | |
| Out-of-pocket cost per year | \$2,000 | \$1,000 | |

Doctor's recommendation

| | INJECTION A | INJECTION B | EYE DROPS |
|--|----------------------|----------------------|----------------------|
| Label your most preferred option "1", Then label your second most preferred option "2". | <input type="text"/> | <input type="text"/> | <input type="text"/> |

C2.9. Suppose that these options are available for your child

| | INJECTION A | INJECTION B | EYE DROPS |
|------------------------------------|-------------------------|--------------------------|---|
| Frequency of Injection | Every 6 months | Every 6 months | My child continues using eye drops as he/she does now |
| Risk of complication per injection | 1 in 10,000 patients | 10 in 10,000 patients | |
| Out-of-pocket cost per year | \$300 | \$1,000 | |

| | INJECTION A | INJECTION B | EYE DROPS |
|--|----------------------|----------------------|----------------------|
| Label your most preferred option "1", Then label your second most preferred option "2". | <input type="text"/> | <input type="text"/> | <input type="text"/> |

C2.10. Suppose that these options are available for your child

| | INJECTION A | INJECTION B | EYE DROPS |
|------------------------------------|----------------------|-----------------------|---|
| Frequency of Injection | Every 3 months | Every 6 months | My child continues using eye drops as he/she does now |
| Risk of complication per injection | 1 in 10,000 patients | 10 in 10,000 patients | |
| Out-of-pocket cost per year | \$300 | \$300 | |

Doctor's recommendation

| | INJECTION A | INJECTION B | EYE DROPS |
|--|----------------------|----------------------|----------------------|
| Label your most preferred option "1", Then label your second most preferred option "2". | <input type="text"/> | <input type="text"/> | <input type="text"/> |

SECTION D: YOUR CHILD'S HEALTH

| | |
|------------|---|
| D1. | How long ago was your child first diagnosed with his/her eye disease(s)? _____ months / years _____ months / years _____ months / years |
| D2. | How many times has your child visited an eye clinic in the past 12 months, excluding today ? _____ times |
| D3. | How effective do you think the eye drops are in controlling your child's eye disease? <input type="radio"/> Very effective <input type="radio"/> Somewhat effective <input type="radio"/> Not so effective <input type="radio"/> Not effective at all |
| D4. | Does your child use medications regularly for any other chronic conditions? <input type="radio"/> Asthma <input type="radio"/> Allergic Rhinitis <input type="radio"/> Eczema <input type="radio"/> Psoriasis <input type="radio"/> Others _____ <input type="radio"/> No |

SECTION E: PARENT SOCIODEMOGRAPHICS

| | |
|------------|---|
| E1. | What is your age as of last birthday? _____ years old |
| E2. | What is your gender? <input type="radio"/> Male <input type="radio"/> Female |
| E3. | Which ethnic group do you belong to? <input type="radio"/> Chinese <input type="radio"/> Malay <input type="radio"/> Indian <input type="radio"/> Others, please specify: _____ |
| E4. | What is your current marital status? <input type="radio"/> Single <input type="radio"/> Married <input type="radio"/> Divorced <input type="radio"/> Widowed |
| E5. | How many children do you have in total? _____ child/children |
| E6. | What is the highest level of education you have completed? <input type="radio"/> No formal education <input type="radio"/> Primary <input type="radio"/> Secondary <input type="radio"/> Post-Secondary (Non-Tertiary) <input type="radio"/> Diploma and professional qualification <input type="radio"/> University degree <input type="radio"/> Other |
| E7. | What is your current employment status? <input type="radio"/> Unemployed <input type="radio"/> Part-time employment <input type="radio"/> Full-time employment <input type="radio"/> Homemaker <input type="radio"/> Retired |
| E8. | What type of housing are you living in? <input type="radio"/> HDB/JTC flat (1-2 room) <input type="radio"/> HDB/JTC flat (3 room) <input type="radio"/> HDB/JTC flat (4 room) <input type="radio"/> HDB/JTC flat (5 room and above/HUDC/Executive) <input type="radio"/> Bungalow/Semi-detached/Terrace house <input type="radio"/> Shop house <input type="radio"/> Condo <input type="radio"/> Other, please specify: _____ |

E9. Which of the following best describes your household's total income from all sources, after tax and compulsory deductions?

- Less than \$25,000 a year
- \$25,000 to \$44,999 a year
- \$45,000 to \$84,999 a year
- \$85,000 to \$124,999 a year
- \$125,000 a year or above

Thank you for completing this survey.