



Self-aiming Eye Drop Bottle

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Product Research and Development

Creating Our Eyedropper

Background Information-Eye Disease

\$139 billion

"vision problems are among the most expensive health issues in the nation, according to PBA's report"



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Unmet Need- Eye Dropper

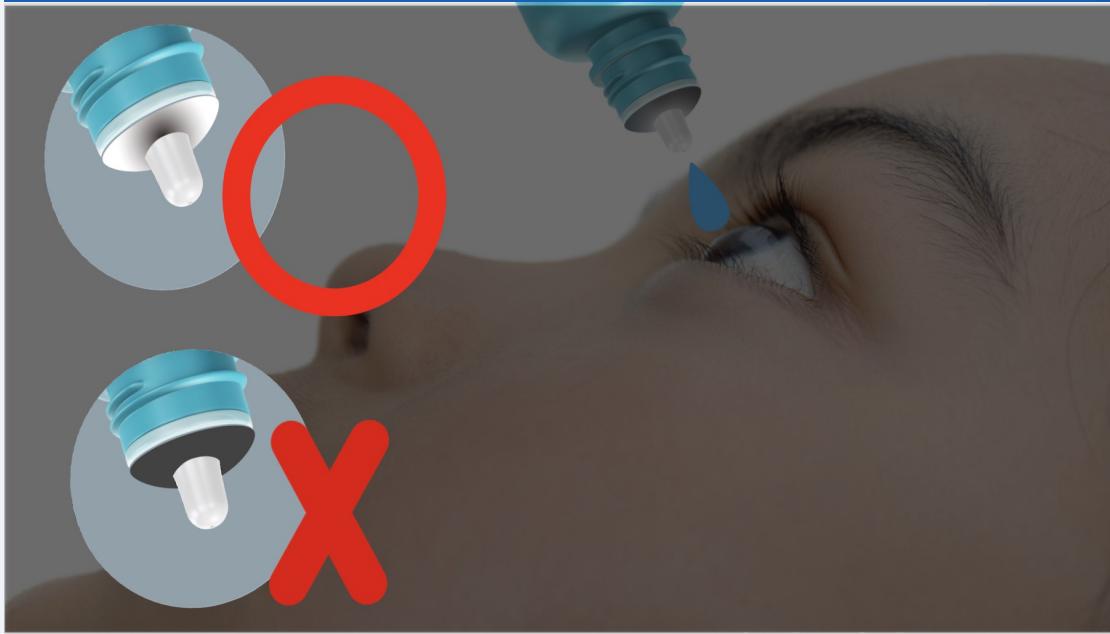
- ▶ Have trouble locating the right spot
- ▶ Current design:



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Design- Eye dropper with visual cues



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Brainstormed Ideas (Shape Options)



convex



flat



concave

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Brainstormed Ideas (Position Options)



rim of the dropper



rim of the bottle

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Brainstormed Ideas (Material Options)



Aluminium
Foil



Metal
Ring



Sticker



Chromium
Spray

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Design - Reflective Layer

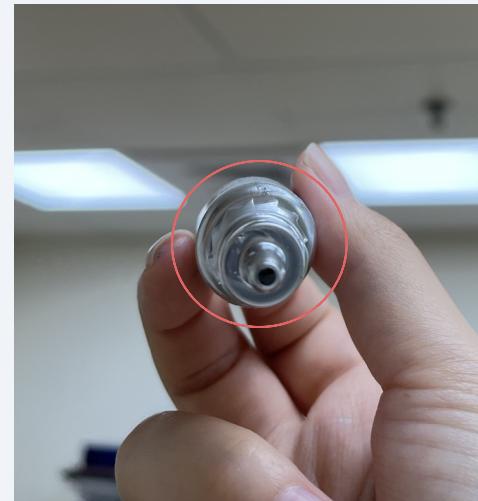
- ▶ Material of reflective layer: Chromium
- ▶ Coating method:
 - ▶ Chromium spray
 - ▶ Directly coated onto standard eye drop bottles



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Design - Visual Cue

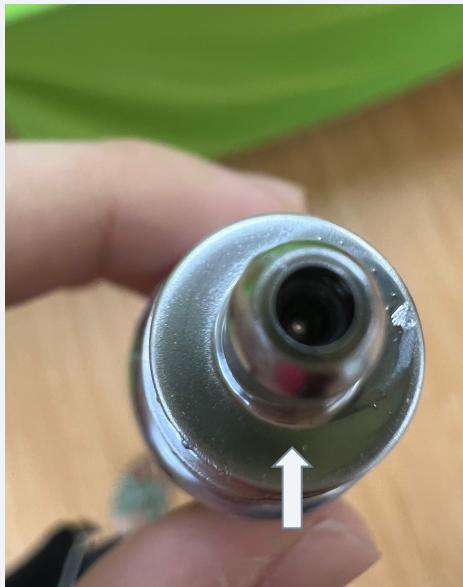
- ▶ Visual cue design
 - ▶ See the rim turns dark
→ move eyeball upward
→ put in the eye drop



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Demo

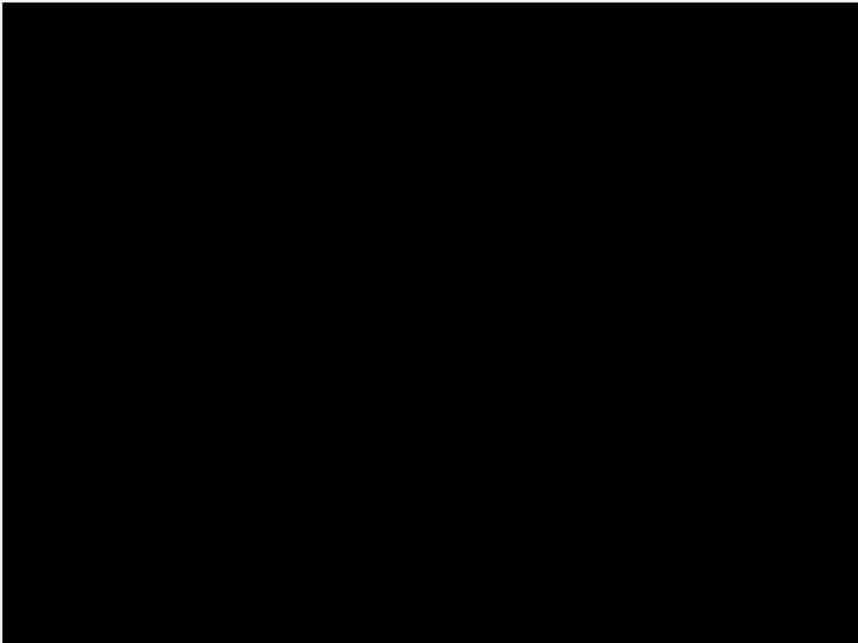
- ▶ Reflective layer and the visual cue design



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Demo

- ▶ The visual cue design



Product Benefits-Conclusion

- ▶ Functional Benefit:
Allows users to put in eye drop by themselves precisely and efficiently
- ▶ Emotional Benefit:
Makes senior users feel empowered and independent

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Manufacturing Plan



塑膠射出成型

人工貼膜
吹膜成型

模具穴數	24穴
MOQ	50萬罐
生產價錢	250萬 (含貼膜人工)

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Manufacturing Plan

- ▶ Handmade
- ▶ Factory made



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Business Analysis

Target Audience (藥廠)/ Business Plan



台大研發處

https://ord.ntu.edu.tw/w/ordntu/Student_2007201529010003

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Target End-Users and End-User Insight

- ▶ Population size: 110 01 TW老年人口 (65 歲以上) 380.4 萬人 - 內政部統計
- ▶ 1/4的銀髮族有眼睛疾病相關的問題
- ▶ 銀髮族市場的眼藥水規模
 - ▶ $100\text{萬} * 5\text{元} * 12\text{罐} = 6000\text{萬}$



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Competitive Environment-Innovation and Competition

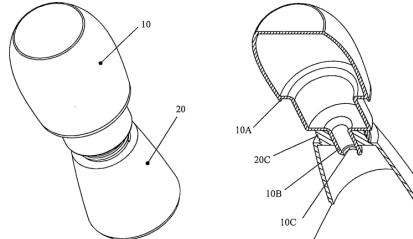
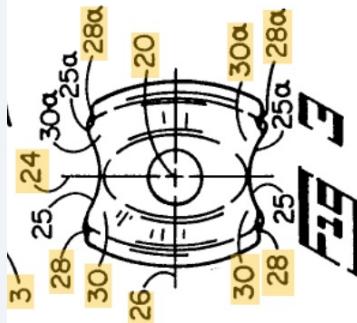
- ▶ Mirrored eye-dropper
 - ▷ Particular shape design
 - Less generic
 - ▷ Lack of visual cue
 - Less intuitive



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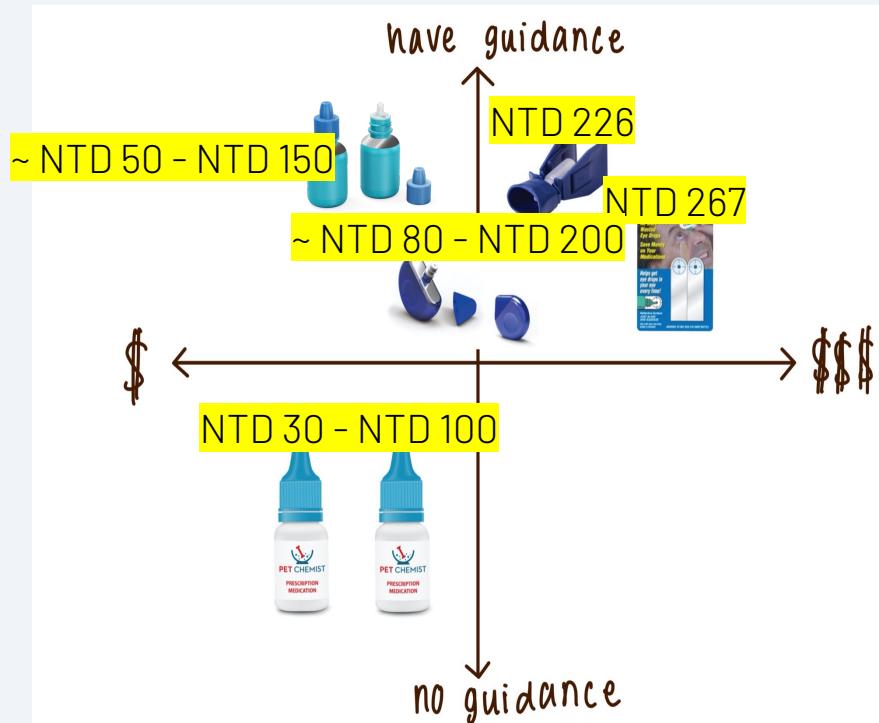
Competitive Environment-Patent & Competitor analysis

name	patent	classification	function
Eyelid opener	US5064420A	A61F9/0026 Ophthalmic product dispenser attachments	facilitate positioning near the eye
具點滴輔助器之眼藥水瓶	M623661	新型	解決因手腕懸空、出力、擠壓瓶身所造成之抖動、滴不準的問題
好滴	Mxxxxxx	新型、創新	視線輔助幫助定位、滴入結膜囊



Competitive Environment-Competitors & target price

Product Conceptual Map



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法規

Law and Regulations – 包裝

- ISO 15378 醫療包裝材料品質管理系統
- 品質管理系統 (QMS)
- 優良製造作業規範 (GMP)
- ISO 13485 醫療器材品質管理系統



Law and Regulations – 內容物

- 藥事法
- 眼藥水

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Risk management



Fail to earn money



Fail to operate



Fail to compete



market Region? Regulations?
pharmaceutical Unsatisfied? Better competitors?
company



Research funds, fund turnover



Improvement of products?

Lower price?

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Conclusion-Our Design

- ▶ Mira Self-aiming Eye Drop Bottle
 - ▶ Innovative Visual Cue Design
 - ▶ Safe and inexpensive material
 - ▶ Functional and Emotional Benefit



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Thank You!



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