銅獎 高雄長庚紀念醫院藥劑部　藥師　吳承誌 蘇建豪

一、臨床情境描述

林女士為 59 歲之女性，無糖尿病和眼疾史，也無接受眼部手術，3 個月前出現視物變形以及視域缺陷的症狀，經醫師檢查診斷為濕性(neovascular)老年性黃斑部病變(AMD)，醫師建議可接受光動療法、眼球內注射類固醇與抗血小板內皮細胞增長因子治療，因懼怕手術與其後遺症，遲遲無法決定接受治療，聽言補充葉黃素可改善症狀並延緩病程進展，故詢問補充葉黃素可否改善視物變形並增進視覺敏銳度？若要接受手術何種較佳？會發生什麼後遺症？

二、PICO

(一) (本次競賽選擇 PICO)

- Patient, problem：59 y/o female, early AMD, no history of DM or ophthalmic disease
- Intervention：Lutein
- Comparison：Placebo or active placebo
- Outcome：Incidence of development on advanced AMD, difference in ocular acuity, rate of vision loss

(二)

- Patient, problem：59 y/o female, early AMD, no history of DM or ophthalmic disease
- Intervention：Intravitreal VEGF inhibitors or steroid
- Comparison：Photodynamic therapy
- Outcome：Difference in ocular acuity, rate of vision loss, rate of arterial or venous thrombotic events

三、最佳文獻

文獻一：

Le Ma, Hong-Liang Dou, Yang-Mu Huang, Xin-Rong Lu, Xian-Rong Xu, Fang Qian…Xiao-Ming Lin. (2012). Improvement of Retinal Function in Early Age-Related Macular Degeneration After Lutein and Zeaxanthin Supplementation: A Randomized, Double-Masked, Placebo-Controlled Trial. *Am J Ophthalmol* 154,625–634.

文獻二：

The Age-Related Eye Disease Study 2 (AREDS2) Research Group. (2013). Lutein+Zeaxanthin and Omega-3 Fatty Acids for Age-Related Macular Degeneration The Age-Related Eye Disease Study 2 (AREDS2)
Randomized Clinical Trial. *JAMA* 309(19), 2005-2015.

文獻三：

Stuart P. Richerm, William Stiles, Kelly Graham-Hoffman, Marc Levin, Dennis Ruskin, James Wrobel… Carla Thomas (2011). Randomized, double-blind, placebo-controlled study of zeaxanthin and visual function in patients with atrophic age-related macular degeneration. *Optometry* 82, 667-680

文獻四：

Le Ma, Hong-Liang Dou, Yi-Qun Wu, Yang-Mu Huang, Yu-Bei Haung, Xian-Rong Xu…Xiao-Ming Lin. (2012). Lutein and zeaxanthin intake and the risk of age-related macular degeneration: a systematic review and meta-analysis. *British Journal of Nutrition* 107, 350-359

文獻五：

Jessica Kvansakul, Marisa Rodriguez-Carmona, David F. Edgar, Felix M. Barker, Wolfgang Ko¨pcke, Wolfgang Schalch and John L. Barbur. (2006). Supplementation with the carotenoids lutein or zeaxanthin improves human visual performance. *Ophthal. Physiol. Opt.* 26, 362–371.