# Evaluating Vision-related Reading Ability With a de Novo PRO Instrument in a Phase 3 Study of AGN-190584 (Pilocarpine 1.25%) for Presbyopia

July 25, 2021

Majid Moshirfar, MD,<sup>1</sup> Francis Price Jr., MD,<sup>2</sup> Jonathan Stokes, MBA,<sup>3</sup> Xiaomeng Niu, PhD,<sup>3</sup> Elaheh Shirneshan, PhD<sup>3</sup>

<sup>1</sup>Hoopes Vision, Draper, Utah; <sup>2</sup>Price Vision Group, Indianapolis, Indiana; <sup>3</sup>Allergan, an AbbVie company, Irvine, CA

Financial arrangements of the authors with companies whose products may be related to the present report are listed below, as declared by the authors.

**Majid Moshirfar** has no financial interest in the subject matter. Hoopes Vision has received research support from Allergan (an AbbVie company)

Francis Price Jr. has received research support from Alcon and Allergan (an AbbVie company) and has personal financial interest in RxSight and Starr Surgical

Jonathan Stokes, Xiaomeng Niu, Elaheh Shirneshan are employees of AbbVie Inc and may hold AbbVie stock

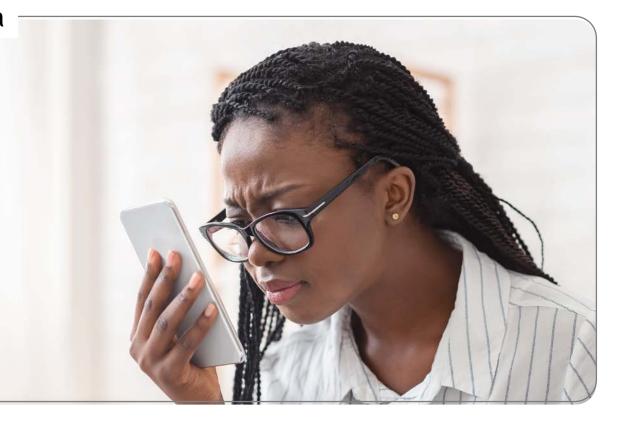
The study was sponsored by Allergan (prior to its acquisition by AbbVie Inc). Editorial assistance was provided to the authors by Evidence Scientific Solutions, Philadelphia, PA. ICMJE authorship criteria were met. Neither honoraria nor payments were made for authorship.

AGN-190584 is not an FDA approved drug

Patients are **FRUSTRATED** with presbyopia

90%

of participants in a survey of 1,339 presbyopes aged 40-55 years are frustrated or irritated with presbyopia<sup>1</sup>



Purpose: Evaluate the impact of AGN-190584 vs vehicle on PROs (near vision reading performance and satisfaction) in GEMINI 1

AGN-190584 is a once daily, topical, ophthalmic drop of optimized pilocarpine HCl 1.25% (in a proprietary vehicle) specifically designed to treat presbyopia

# The Validated NVPTQ Evaluates 4 Reading Tasks<sup>1</sup>



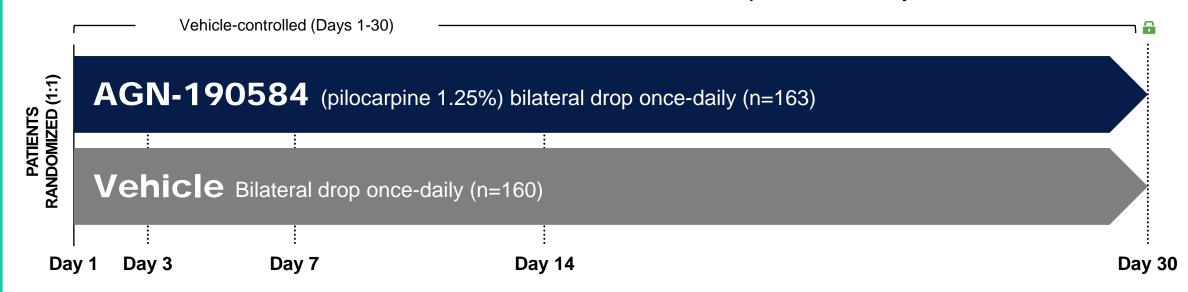
NVPTQ = Near Vision Presbyopia Task-based Questionnaire

<sup>\*</sup>NVPTQ also asks 1 question for each reading task on whether the presbyope had to squint while reading text.

<sup>&</sup>lt;sup>1</sup>Shirneshan E, et al. Psychometric evaluation of the Near Vison Presbyopia Task-Based Questionnaire using phase 2b clinical trial data. Presented at the American Academy of Optometry Annual Meeting, October 7–22, 2020.

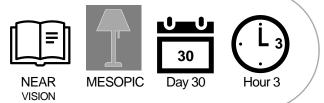
# **Study Design**

Multicenter, double-masked, randomized, vehicle-controlled, phase 3 study



### PRESPECIFIED SECONDARY ENDPOINTS

Mean change from baseline in mesopic **NVPTQ** performance and satisfaction on Day 30, Hour 3



## ADDITIONAL PRESPECIFIED ENDPOINTS

Mean change from baseline in photopic NVPTQ performance and satisfaction on Day 30, Hour 3

Mesopic NVPTQ performance and satisfaction responders on Day 30, Hour 3



## **AGN-190584 Significantly Improves Mesopic NVPTQ Performance and Satisfaction**

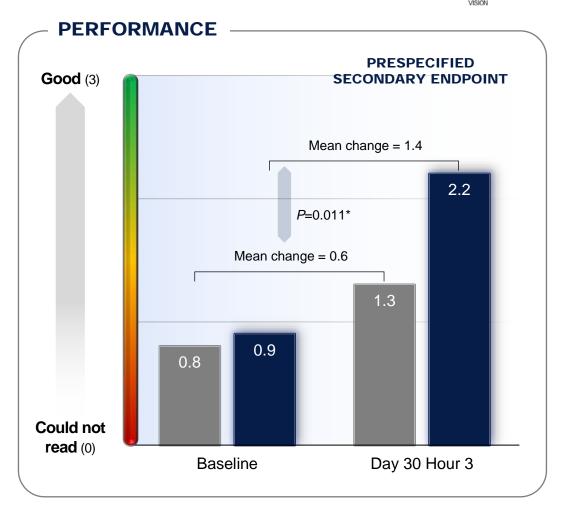
## **Change from Baseline in Mesopic NVPTQ**

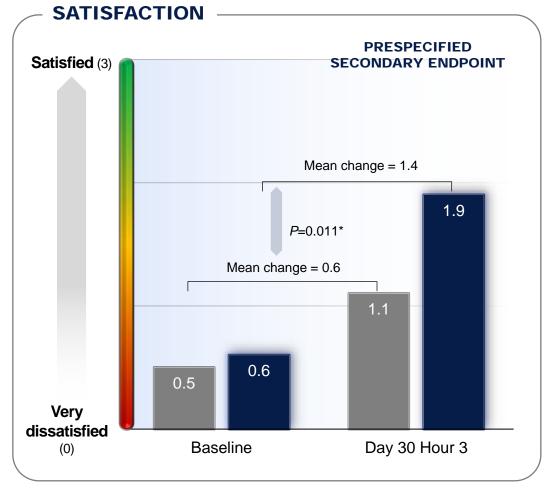












NVPTQ = Near Vision Presbyopia Task-based Questionnaire

<sup>\*</sup>Score difference between groups baseline vs Day 30, Hour 3 was 0.8 points for both NVPTQ performance and satisfaction.

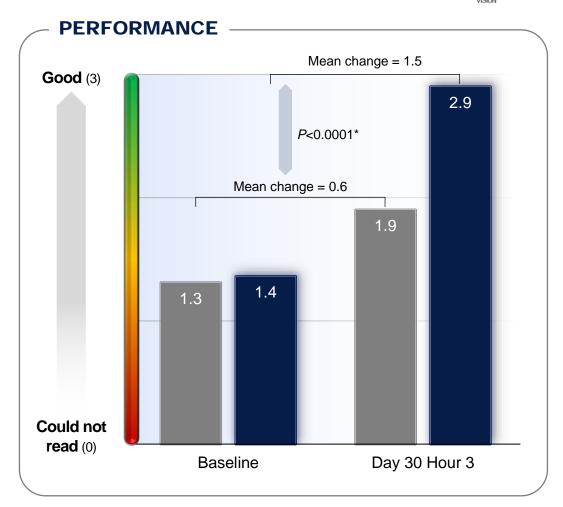
## AGN-190584 Significantly Improves Photopic NVPTQ Performance and Satisfaction

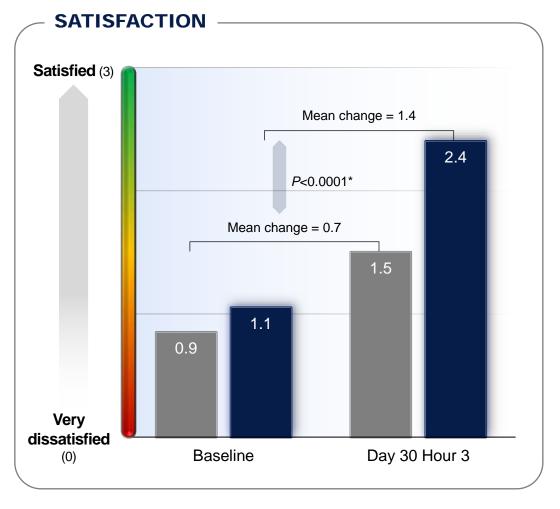
## Change from Baseline in Photopic NVPTQ







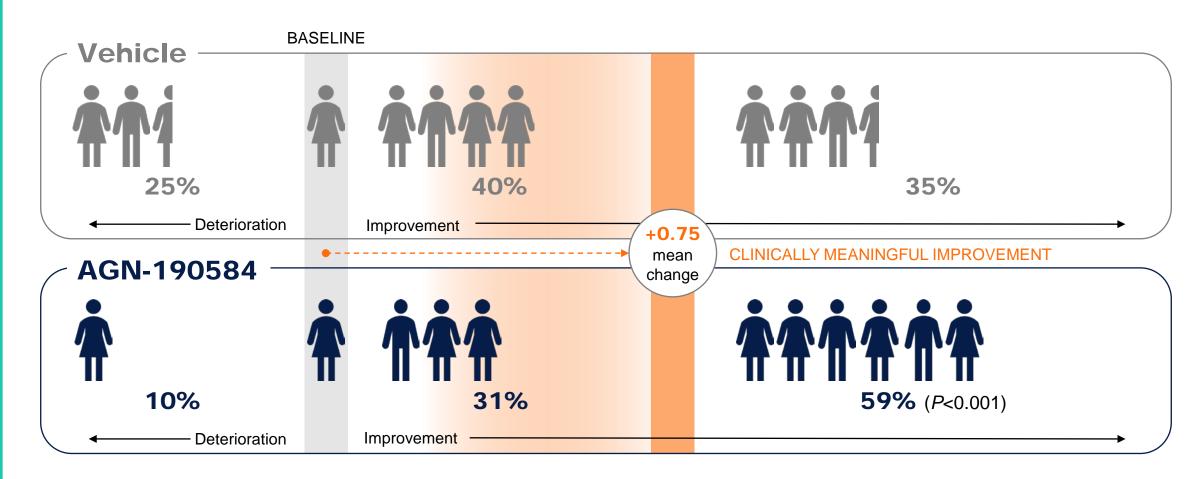




# Consistently More NVPTQ Performance Responders with AGN-190584

**Mesopic NVPTQ Performance Responders\*** 

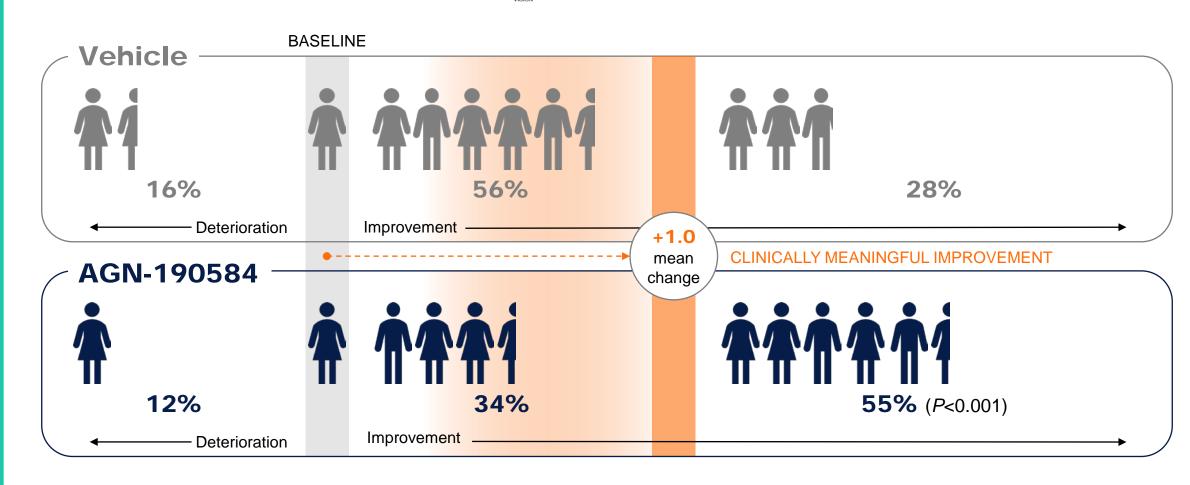




# Consistently More NVPTQ Satisfaction Responders with AGN-190584

**Mesopic NVPTQ Satisfaction Responders\*** 

















GEMINI 1 met the prespecified secondary efficacy endpoints related to NVPTQ at day 30, hour 3 (significant improvement in mesopic NVPTQ performance and satisfaction with AGN-190584)



Significant improvement was also seen in photopic NVPTQ performance and satisfaction with AGN-190584 vs vehicle



Consistently more presbyopes were responders to both NVPTQ performance and satisfaction with AGN-190584 vs vehicle

# Thank you!