

# RETINITIS PIGMENTOSA (RP)

## RP

- Genetic eye condition causing a loss of function in retinal photoreceptor cells outside the macula
- 75 thousand+ affected in the US
- 1.75 million affected worldwide
- “Rarity” of disease in US is facilitating faster FDA approval via HUD/HDE Process
- No cures
- No therapies



Deterioration of peripheral vision leading to total blindness

# RP PILOT TRIAL

- Single center trial with 20 RP patients in intermediate or late stages
- Patients receive treatment for two twenty minute sessions per day
- Endpoints:
  - Safety
  - Efficacy – measured across four endpoints
    - Visual Field
    - Distant and Near BCVA (Best corrected Visual Acuity)
    - Contrast Sensitivity
- 20 patients completed 6 months of therapy as of August 2008

# RP – VISUAL FIELD

## Results\*

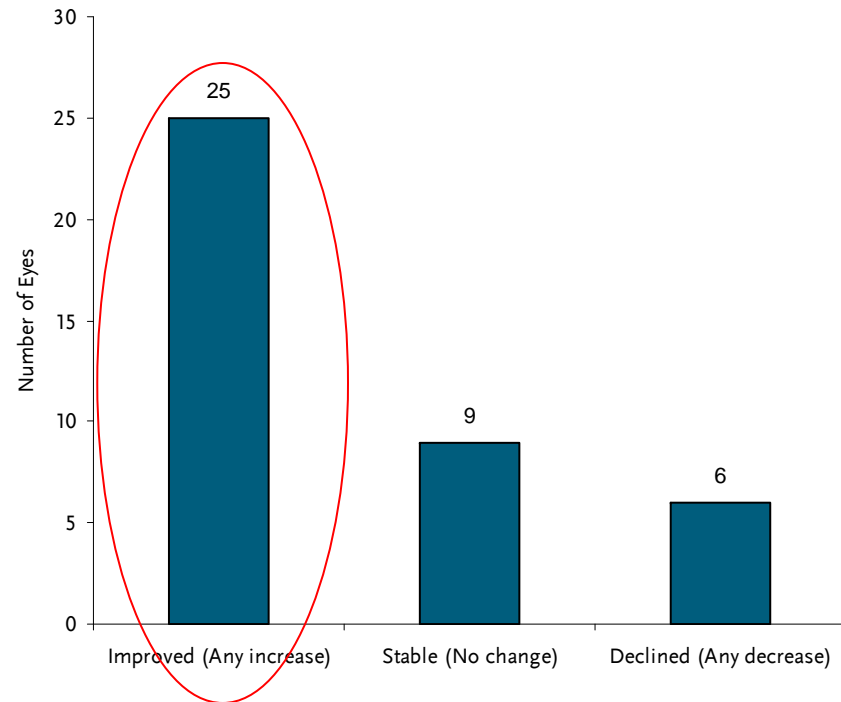
Humphrey Visual Field Analyzer was used to measure results

- Efficacy
  - 63% Improved
  - 85% either Improved or remained stable

RP is a degenerative disease

No Improvement expected

Change in Visual Field at 6 months



\*As presented at:

ISCEV (International Society of Clinicians in the Electrophysiology of Vision), Morgantown, WV, July 2008, general session presentation  
AAO (American Academy of Ophthalmology), Atlanta, November 2008, poster presentation

# RP – DISTANT BCVA

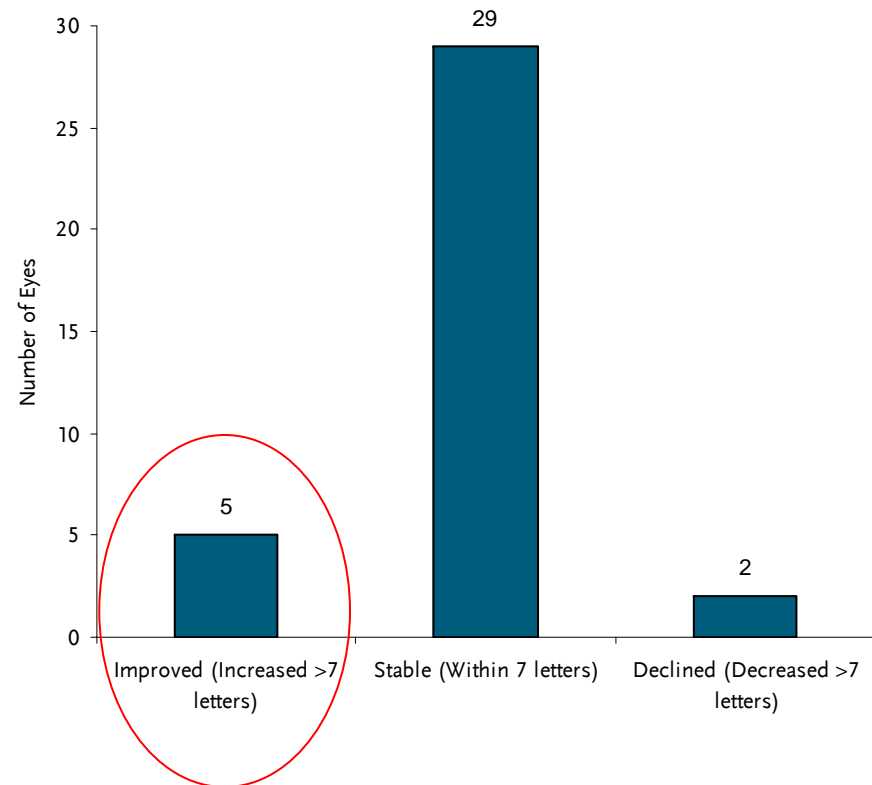
## Results\*

- BCVA (Best Corrected Visual Acuity) results are measured in letters-of-improvement on the logMAR vision chart
- Efficacy
  - A change of 7 letters is significant
  - 14% improved
  - 94% either improved or remained stable

RP is a degenerative disease

No Improvement expected

Change in Best Corrected Distance Visual Acuity at 6 months



\*As presented at:

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# RP – NEAR BCVA

## Results\*

- BCVA (Best Corrected Visual Acuity) results are measured in letters-of-improvement on the logMAR vision chart
- Efficacy
  - A change of 5 letters is significant
  - BCVA Improved or stable in 94% of eyes
  - 22% Improved
  - 72% remained stable
  - Only one patient declined (both eyes)

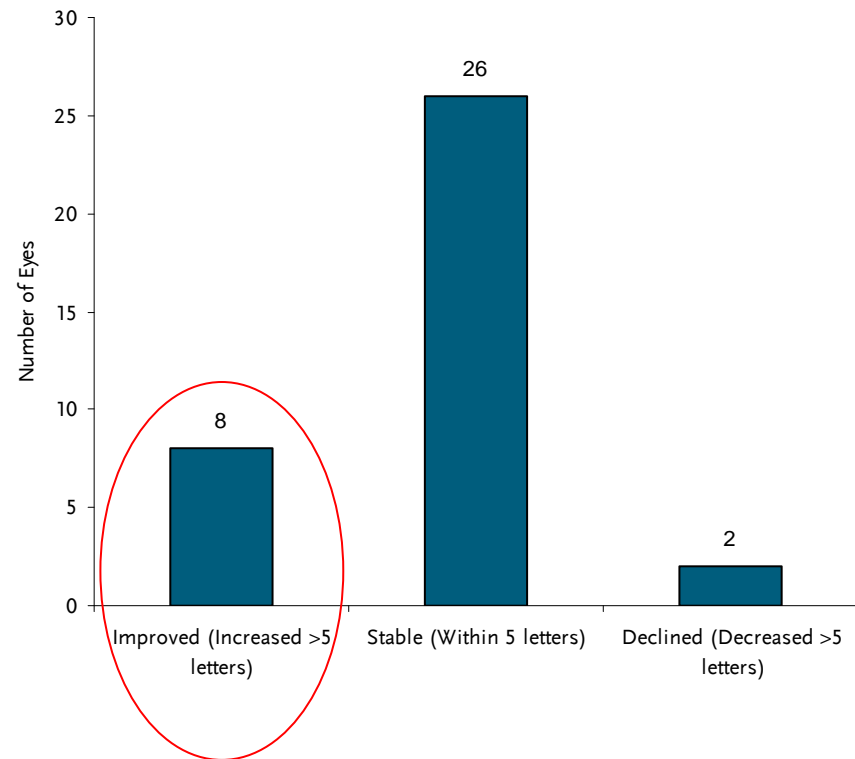
RP is a degenerative disease

No Improvement expected

\*As presented at:

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AAO (American Academy of Ophthalmology), Atlanta, November 2008, poster presentation

Change in Best Corrected Near Visual Acuity at 6 months



# RP – CONTRAST SENSITIVITY

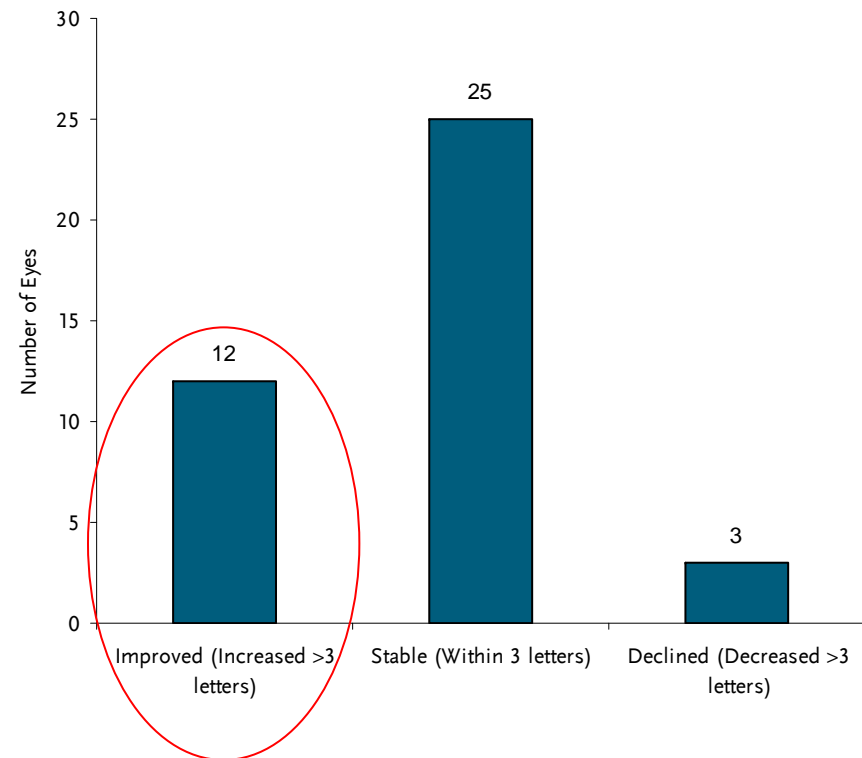
## Results\*

- Pelli-Robson used to measure results
- Efficacy
  - A change of 3 letters is significant
  - Contrast sensitivity either Improved or remained stable in 93% of eyes at 3-months
  - 30% Improved

RP is a degenerative disease

No Improvement expected

Change in Contrast Sensitivity at 3 months



\*As presented at:

ISCEV (International Society of Clinicians in the Electrophysiology of Vision), Morgantown, WV, July 2008, general session presentation  
AAO (American Academy of Ophthalmology), Atlanta, November 2008, poster presentation