



aerie

Pharmaceuticals, Inc.

Rhopressa™

(netarsudil ophthalmic solution) 0.02%

Rocket 4 Phase 3

6-Month Topline Results

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Any discussion of the potential use or expected success of our product candidates is subject to our product candidates being approved by regulatory authorities.

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Rhopressa™ Achieves Positive 6-Month Safety and Efficacy Results



- Safety data over the 6 months were consistent with observations in previous Rhopressa™ 3-month and 12-month Phase 3 clinical trials
- There were no drug-related serious adverse events and no evidence of treatment-related systemic effects
- The main adverse event for Rhopressa™ was conjunctival hyperemia, which was reported in ~48% of patients, scored as mild for ~75% of the patients and sporadic
- Rhopressa™ achieved primary efficacy endpoint at month 3 and performance at months 4, 5 and 6 remained within the non-inferiority range compared to timolol at baseline IOPs < 25 mmHg, and also < 27 mmHg
- Rhopressa™ demonstrated stable and consistent efficacy across all baseline IOPs in the trial from Week 2 to Month 6 across multiple statistical analyses (PP/ITT/LOCF)

Rocket 4 Trial Design

Patients with open angle glaucoma (OAG) or ocular hypertension (OHT)
with IOP >20 mmHg and < 30 mmHg at 8am,
N=708 subjects randomized at 52 US sites

↓
Patients randomized
1:1

Rhopressa™
(AR-13324) 0.02%
QD (PM)

Timolol 0.5%
BID (AM and
PM)

↓
Primary endpoints:

- Efficacy: Mean IOP at Weeks 2 and 6 and Month 3 for subjects with baseline IOP > 20 mmHg and <25 mmHg
(N= 423 subjects per protocol)
- Safety: Ocular and systemic safety during a 6-month treatment period

Patient Disposition (Topline 6-Month)

	Rhopressa™ QD N = 351	Timolol BID N = 357
Completed Month 6	243 (69.2%)	314 (88.0%)
Discontinued Prior to Month 6	108 (30.8%)	43 (12.0%)
Discontinued		
Adverse Event	68 (19.4%)	8 (2.2%)
Withdrawal of Consent	12 (3.4%)	16 (4.5%)
Non-Compliant	1 (0.3%)	2 (0.6%)
Lost to Follow-up	1 (0.3%)	3 (0.8%)
Lack of Efficacy	12 (3.4%)	1 (0.3%)
Disallowed Concurrent Medication	1 (0.3%)	3 (0.8%)
Investigator Decision	2 (0.6%)	4 (1.1%)
Protocol Violation	5 (1.4%)	4 (1.1%)
Other	6 (1.7%)	2 (0.6%)

Patient Disposition (Topline 6-Month) (For Baseline IOP <25mmHg)

	Rhopressa™ QD N = 214	Timolol BID N = 209
Completed Month 6	160 (74.8%)	188 (90.0%)
Discontinued Prior to Month 6	54 (25.2%)	21 (10.0%)
Discontinued		
Adverse Event	34 (15.9%)	5 (2.4%)
Withdrawal of Consent	7 (3.3%)	7 (3.3%)
Non-Compliant	1 (0.5%)	2 (1.0%)
Lost to Follow-up	0	1 (0.5%)
Lack of Efficacy	3 (1.4%)	0
Disallowed Concurrent Medication	1 (0.5%)	2 (1.0%)
Investigator Decision	2 (0.9%)	1 (0.5%)
Protocol Violation	3 (1.4%)	2 (1.0%)
Other	3 (1.4%)	1 (0.5%)

Discontinuation prior to Month 3 rate ~ 15% (in ROCKET 1, 2 and 4)

**Data on File

Based on Rocket 4 Topline 3-month and 6-month safety, Rocket 1 3-month, Rocket 2 3-month

Safety/Tolerability Overview of Rhopressa™ (Topline 6-Month)



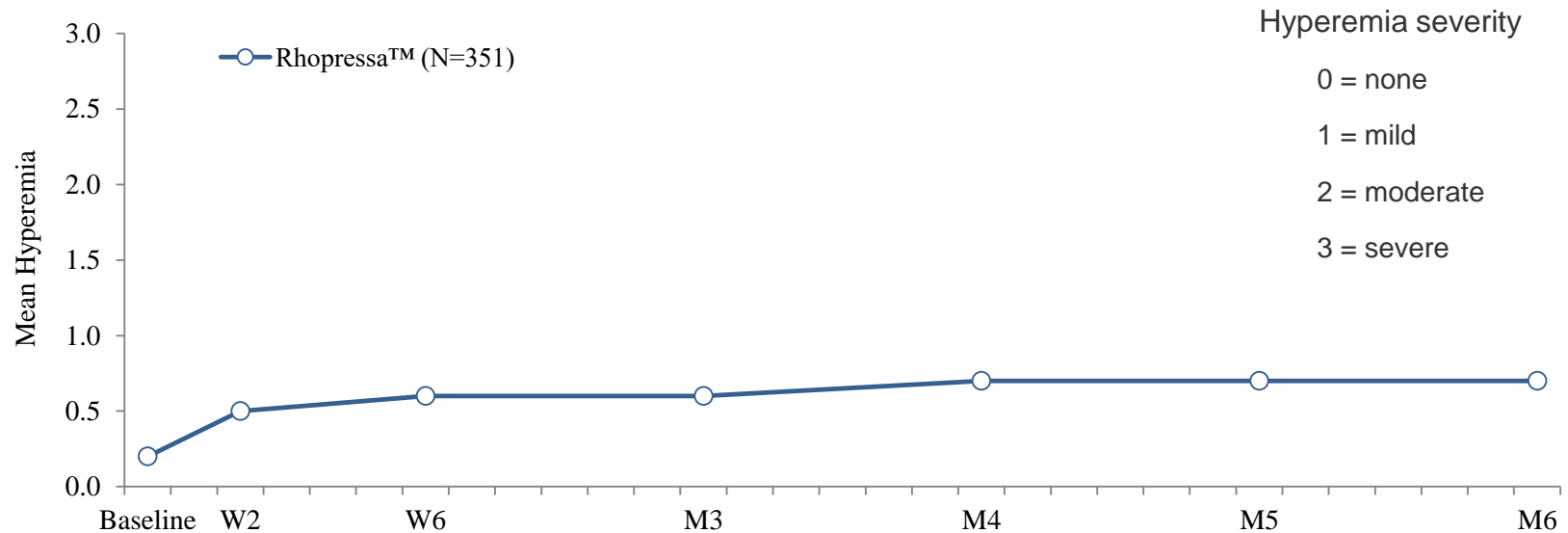
- There were no drug-related serious adverse events (SAEs)
- There was no evidence of treatment-related systemic effects (e.g., clinical laboratory or hematology values, heart rate or blood pressure)
- The most common adverse event was conjunctival hyperemia with ~48% incidence and was scored as mild for ~75% of the patients
 - ~ 20% of all patients had hyperemia at baseline
 - Only ~10% of patients had hyperemia on each study visit day from week 2 to month 6
- Other ocular AEs
 - AEs occurring in ~5-25% of subjects receiving Rhopressa™ included: cornea verticillata, conjunctival hemorrhage, lacrimation increased, erythema of eyelid and vision blurred

Rhopressa™ Phase 3 Safety Profile (Topline 6-Month)

Adverse Events (≥5% in any group)	Rhopressa™ QD N = 351	Timolol BID N = 357
Eye Disorders		
Conjunctival Hyperemia	168 (47.9%)	33 (9.2%)
Cornea Verticillata	86 (24.5%)	0 (0.0%)
Conjunctival Hemorrhage	56 (16.0%)	11 (3.1%)
Lacrimation Increased	26 (7.4%)	5 (1.4%)
Erythema of Eyelid	26 (7.4%)	2 (0.4%)
Vision Blurred	22 (6.3%)	4 (1.1%)
Administration Site Conditions		
Instillation Site Pain	83 (23.6%)	92 (25.8%)
Instillation Site Erythema	36 (10.3%)	4 (1.1%)

Patients with known contraindications or hypersensitivity to timolol were excluded





No Change in Mean Hyperemia Score Over Time (Topline 6-Month)



- Hyperemia severity did not increase with continued dosing
- Hyperemia was sporadic
 - Only ~10% of patients had hyperemia on each study visit day from week 2 to month 6 (similar to the rates seen 12-month ROCKET 2)
- ~ 20% of all patients had hyperemia at baseline (similar to the rates seen in ROCKET 1 and 2)
- *Only ~4% of all patients discontinued due to hyperemia*

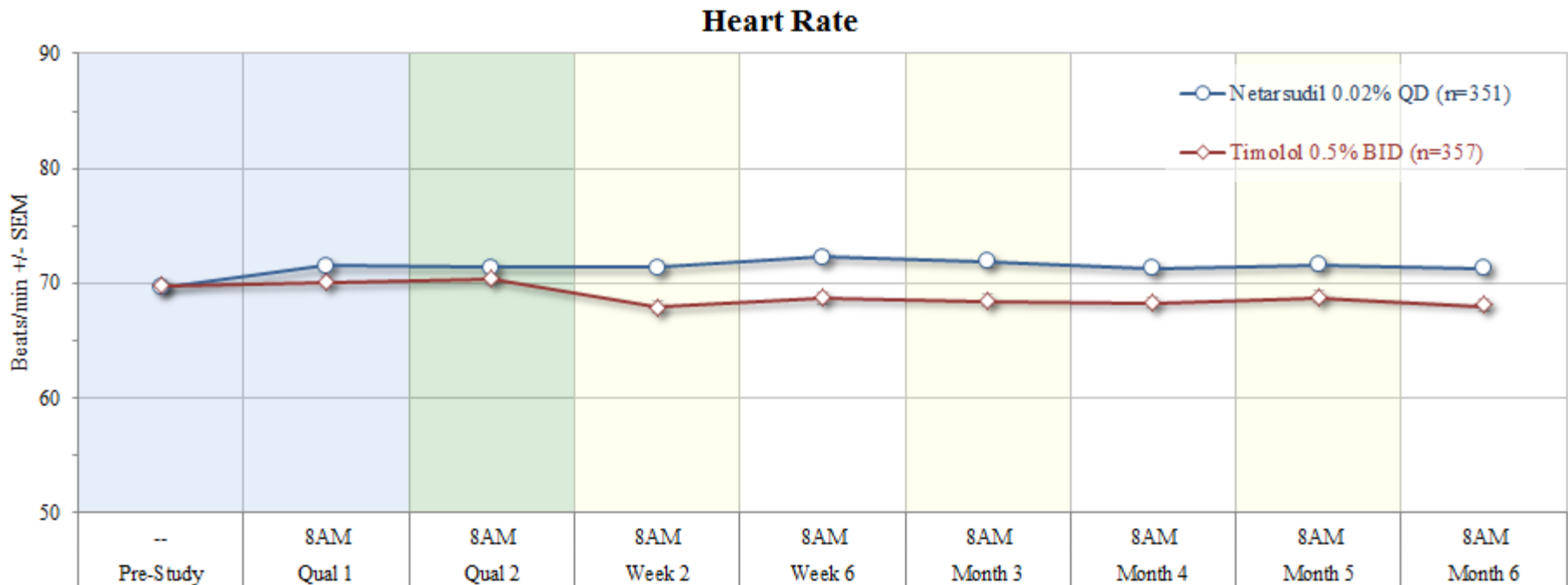
When Present, ~75% of Rhopressa™ Hyperemia Graded as Mild



Grade	Image	Description
0		None/Normal
1		Mild
2		Moderate
3		Severe

For illustrative purposes only

Timolol Caused Statistically Significant Reduction in Heart Rate (Rocket 4)

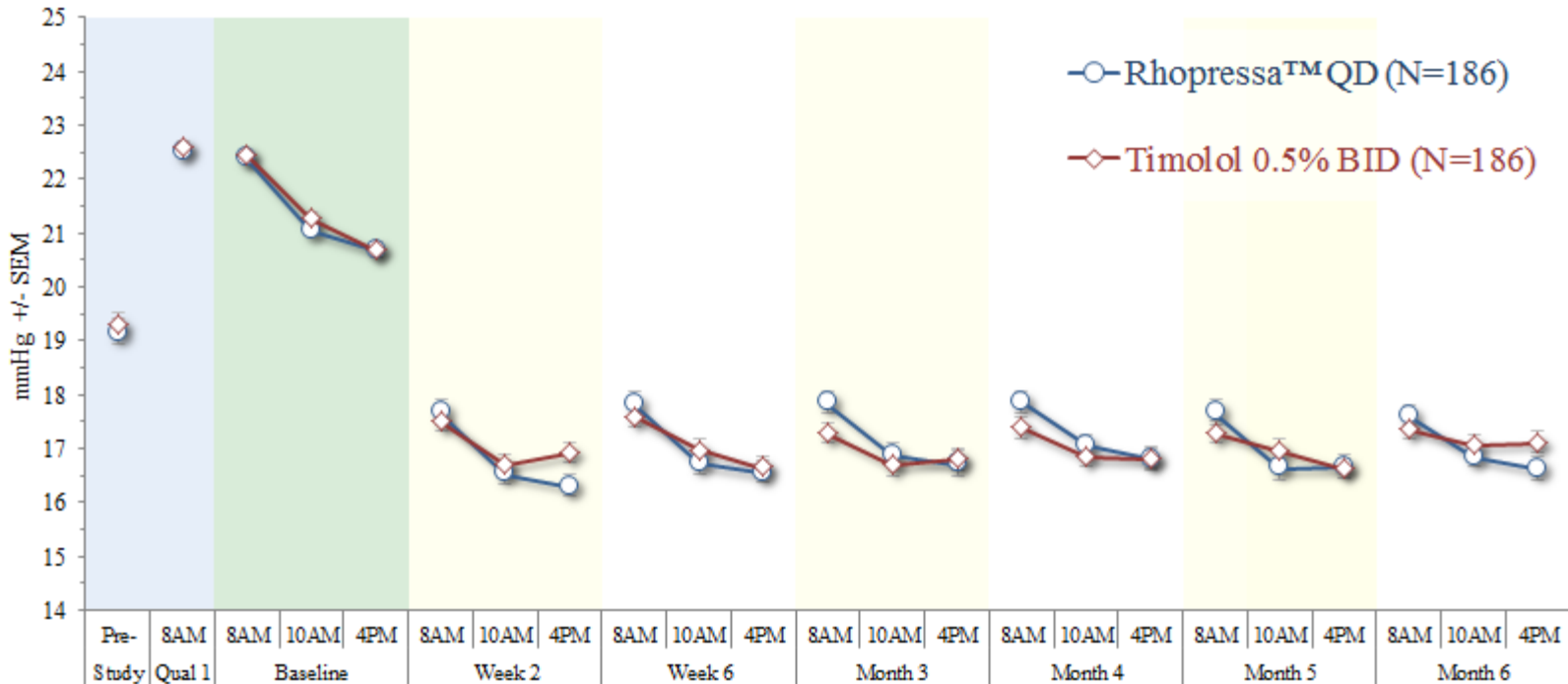


- Timolol
 - reduced mean heart rate by 2 - 3 beats per minute (average across all patients; $p < 0.0001$)
 - maximum change from baseline ~40 beats per minute
- Despite all measures to exclude patients with possible negative sensitivity to beta-blockers

Rhopressa™ Achieved Non-Inferiority in the Primary Efficacy Analysis for Baseline IOP < 25 mmHg and Maintained Stable Efficacy



Mean IOP at Each Time Point (PP) – Topline 6-Month

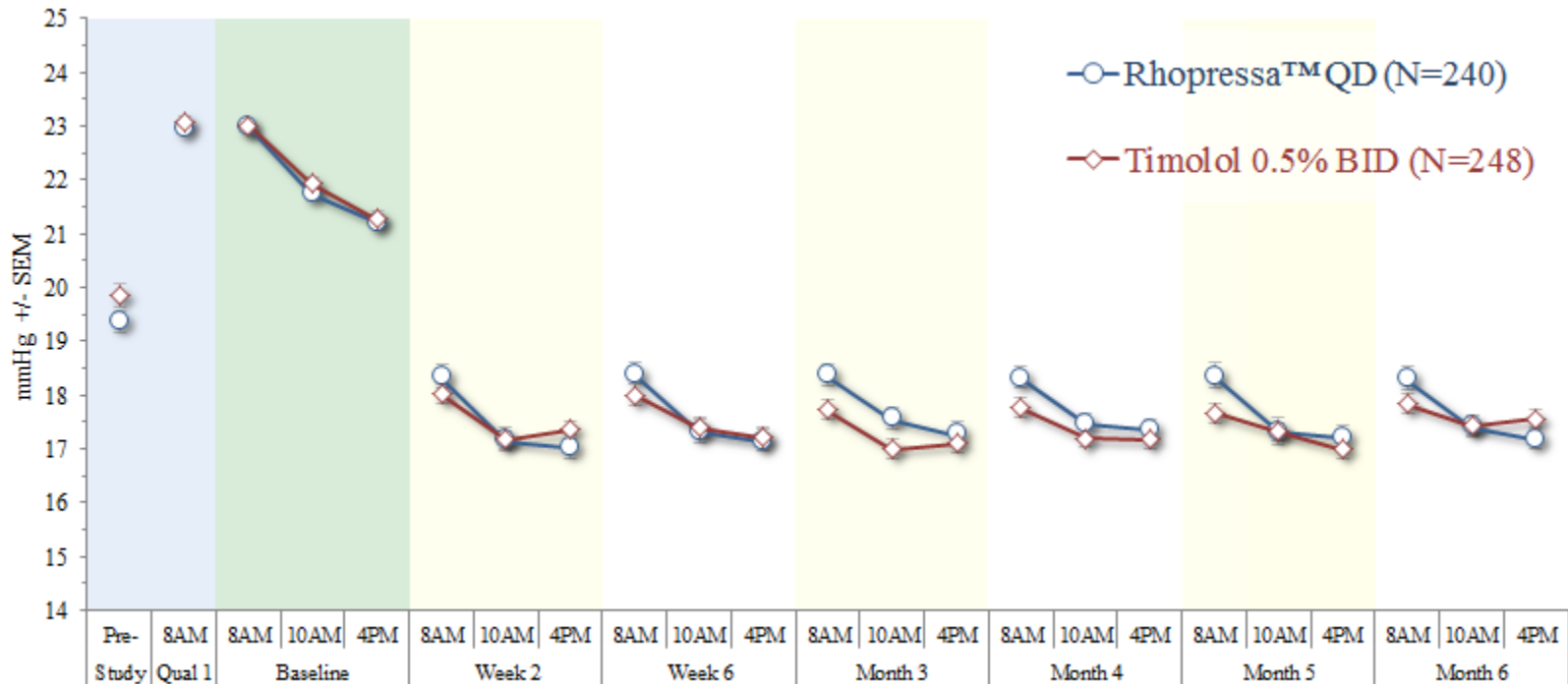


- Rhopressa™ performance remained within the non-inferiority range

++Data on File
Based on Rocket 4 Topline 6-month safety

Rhopressa™ Achieved Non-Inferiority for Baseline IOP < 27 mmHg and Maintained Stable Efficacy

Mean IOP at Each Time Point (PP) – Topline 6-Month



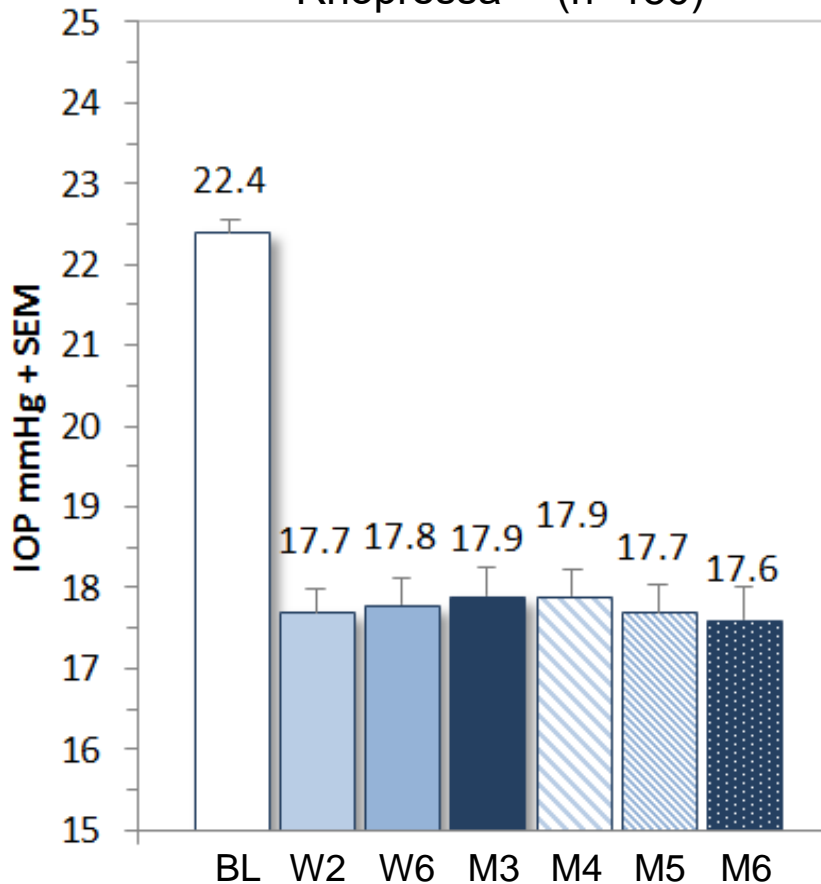
- Rhopressa™ performance remained within the non-inferiority range

++Data on File
Based on Rocket 4 Topline 6-month safety

Rhopressa™ Efficacy Stable through 6 Months 8am IOP

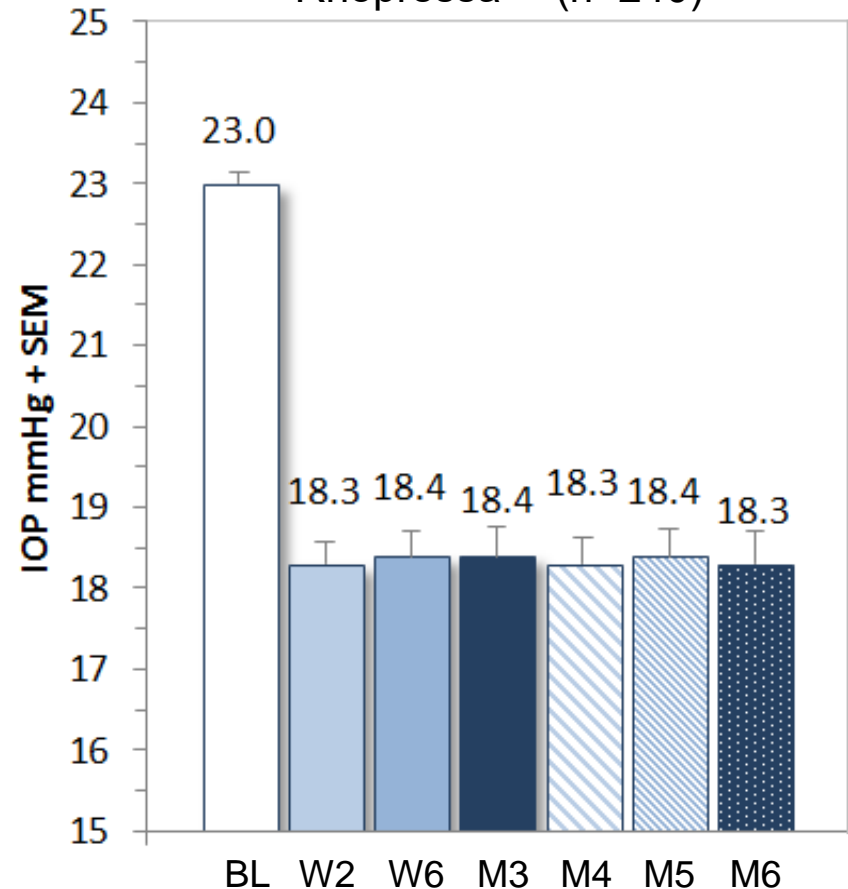
Baseline < 25 mmHg

Rhopressa™ (n=186)



Baseline < 27 mmHg

Rhopressa™ (n=240)



Rhopressa™ Once-Daily Performance Summary To Date



Well researched in over 2,000 clinical patients

200+ Ophthalmologists' and Optometrists' experience with the new drug class

Once-daily consistent efficacy demonstrated in 4 Phase 3 trials (Rocket 1, 2, 4 and Mercury 1)

Stable efficacy through 12 months

Well tolerated with no evidence of treatment-related serious or systemic effects

Continue to explore additional differentiating attributes e.g., 24-hour IOP control, trabecular outflow and anti-fibrotic effects