IOR03

Eptinezumab Reduced Migraine Activity and Achieved High Migraine Responder Rates Over Weeks 1–12: Results From the Phase 3 PROMISE-2 Trial in Chronic Migraine

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Disclosures

Paul Winner: Alder, Amgen, Allergan, Eli Lilly, Supernus, Teva

Peter J. Goadsby: grants and personal fees from Amgen and Eli Lilly; personal fees from Alder, Allergan, Autonomic Technologies, Dr. Reddy's Laboratories, Electrocore, eNeura, Novartis, Scion, Teva, and Trigemina; and a patent (magnetic stimulation for headache) assigned to eNeura without fee

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Jan Brandes: Allergan, Amgen, Avanir, Biohaven, CoLucid, Eli Lilly, Promius, Supernus, Teva, Valeant, Zosano

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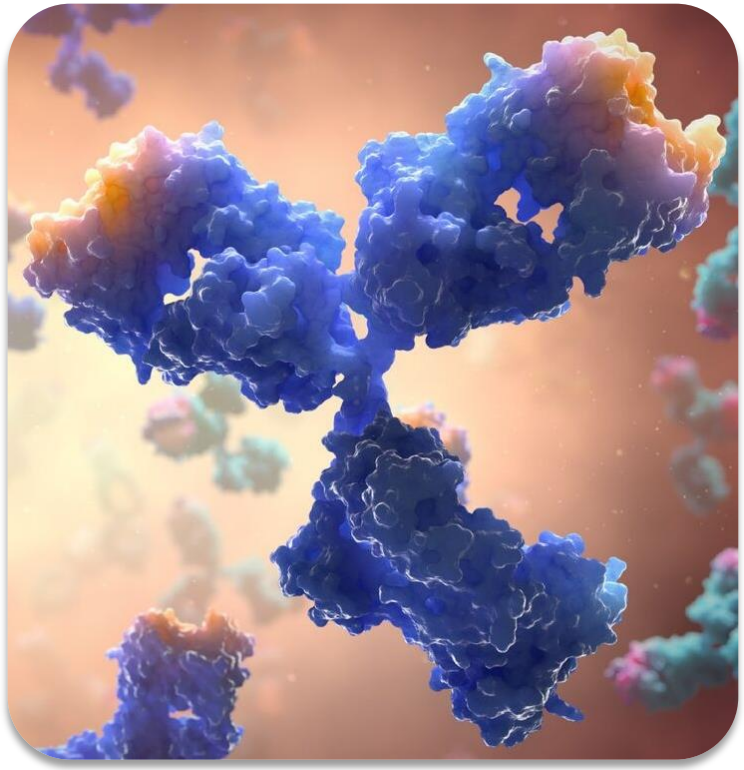
Joe Hirman: Alder (contract service provider)

Eptinezumab (ALD403)
An Anti-CGRP Monoclonal Antibody

- IgG1, anti-CGRP monoclonal antibody[1]
  - Selectively and potently inhibits both CGRP ligands*
- Reliable ~30 days $t_{1/2}$
- 100% bioavailability within hours after iv administration
- Quarterly dosing schedule
- Eptinezumab was efficacious and well tolerated[2-5]



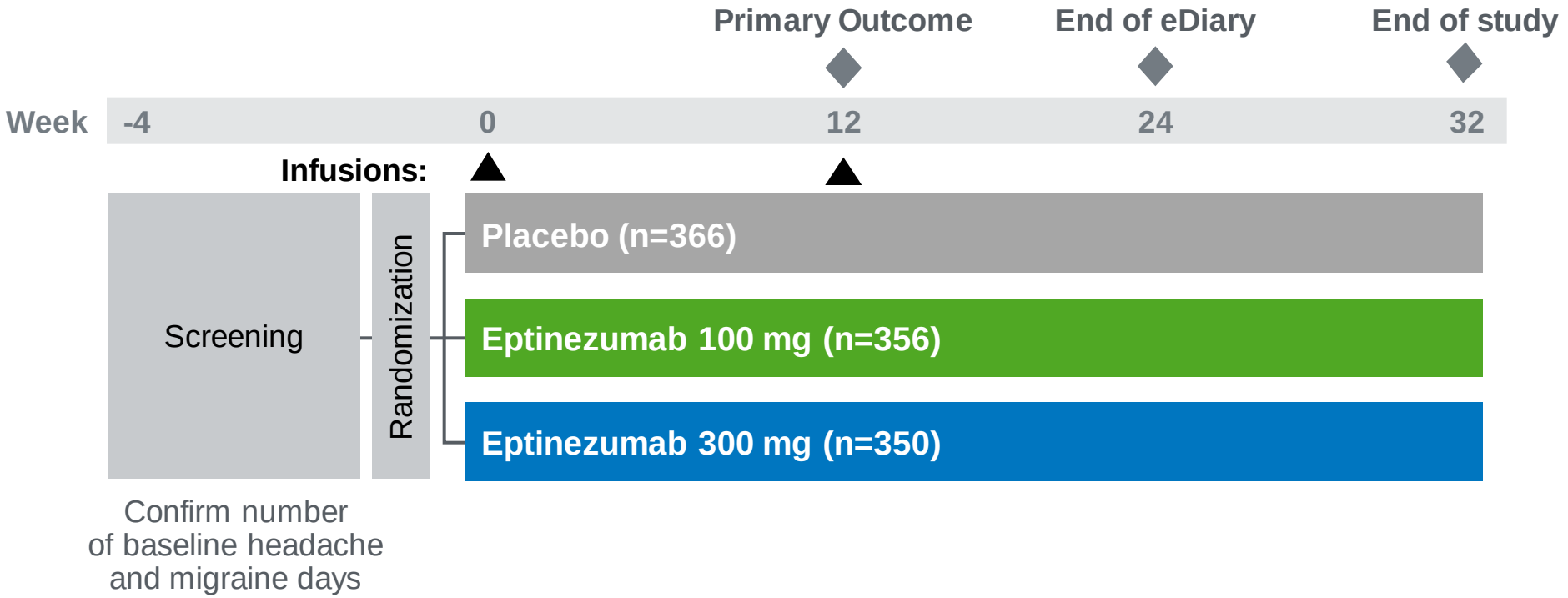
Eptinezumab

*α-CGRP and β-CGRP. CGRP, calcitonin gene-related protein.

1. Baker B, et al. AAN 2017, abstr P2.155; 2. Dodick DW, et al. *Lancet Neurol*. 2014;13:1100-07; 3. Saper J, et al. *Cephalalgia*. 2017;37(suppl):319-74;4. Dodick D, et al. *Neurology*. 2017;88(suppl 16):S52.033; 5. Lipton RB, et al. *Neurology*. 2018;90(suppl 15):S32.

Eptinezumab Chronic Migraine Study Design (N=1072) Phase 3 PROMISE-2*

- Patient population: male or female aged 18–65 years, with migraine diagnosis at age ≤50 years (ICHD-3 beta), migraine history ≥1 year, and ≥15 to ≤26 headache days, of which ≥8 assessed as migraine days during 28-day screening period



*NCT02974153. ICHD-3, International Classification of Headache Disorders, 3rd Edition.

Efficacy Endpoints

Primary Endpoint	Mean change from baseline in monthly migraine days (MMD)	Weeks 1–12
Key Secondary Endpoints	≥75% migraine responder rates*	Weeks 1–4
	≥50% migraine responder rates* ≥75% migraine responder rates*	Weeks 1–12
Other Secondary Endpoints	100% migraine responder rates*†	Weeks 1−12

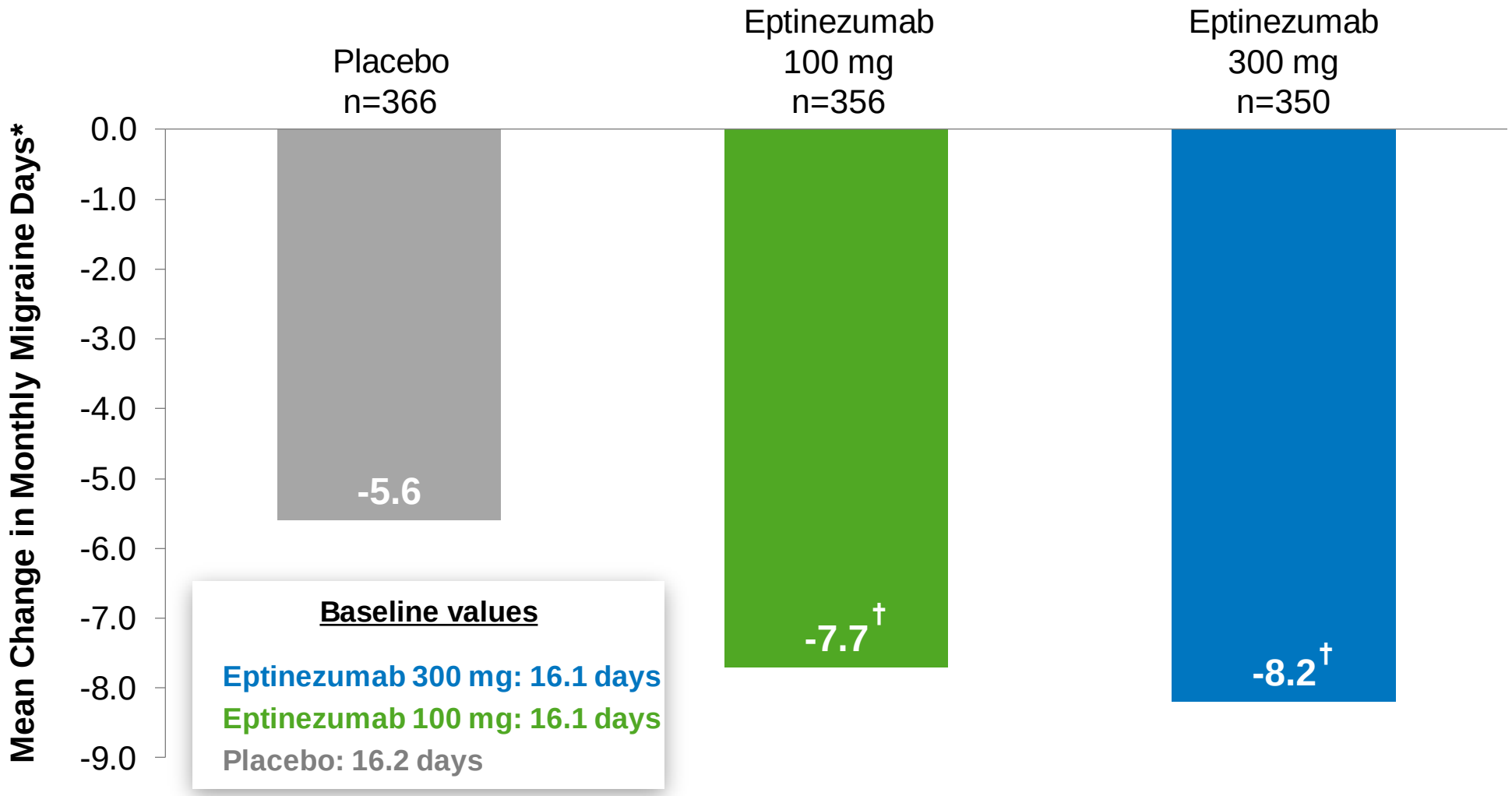
*Responder rate, percent of subjects with prespecified migraine response (reduction in MMD from baseline).
†Percentage of subjects who were migraine free for each 4-week internal, on average, over Weeks 1–12.

Baseline Characteristics and Demographics

	Placebo	Eptinezumab 100 mg	Eptinezumab 300 mg
Subjects, n	**366**	**356**	**350**
Mean age, years (SD)	39.6 (11.3)	41.0 (11.7)	41.0 (10.4)
Mean BMI, kg/m^2 (SD)	27.0 (5.6)	26.4 (5.0)	26.3 (5.0)
Female, %	89	86	90
Mean years from migraine diagnosis	17.0	18.3	19.0
Mean duration of chronic migraine, years (SD)	11.6 (10.9)	11.6 (11.7)	12.4 (11.2)
≥1 prophylactic medication, n (%)*	163 (44.5)	161 (45.2)	155 (44.3)
Mean migraine days/month (SD)	16.2 (4.6)	16.1 (4.6)	16.1 (4.8)
Mean headache days/month (SD)	20.6 (3.0)	20.4 (3.1)	20.4 (3.2)

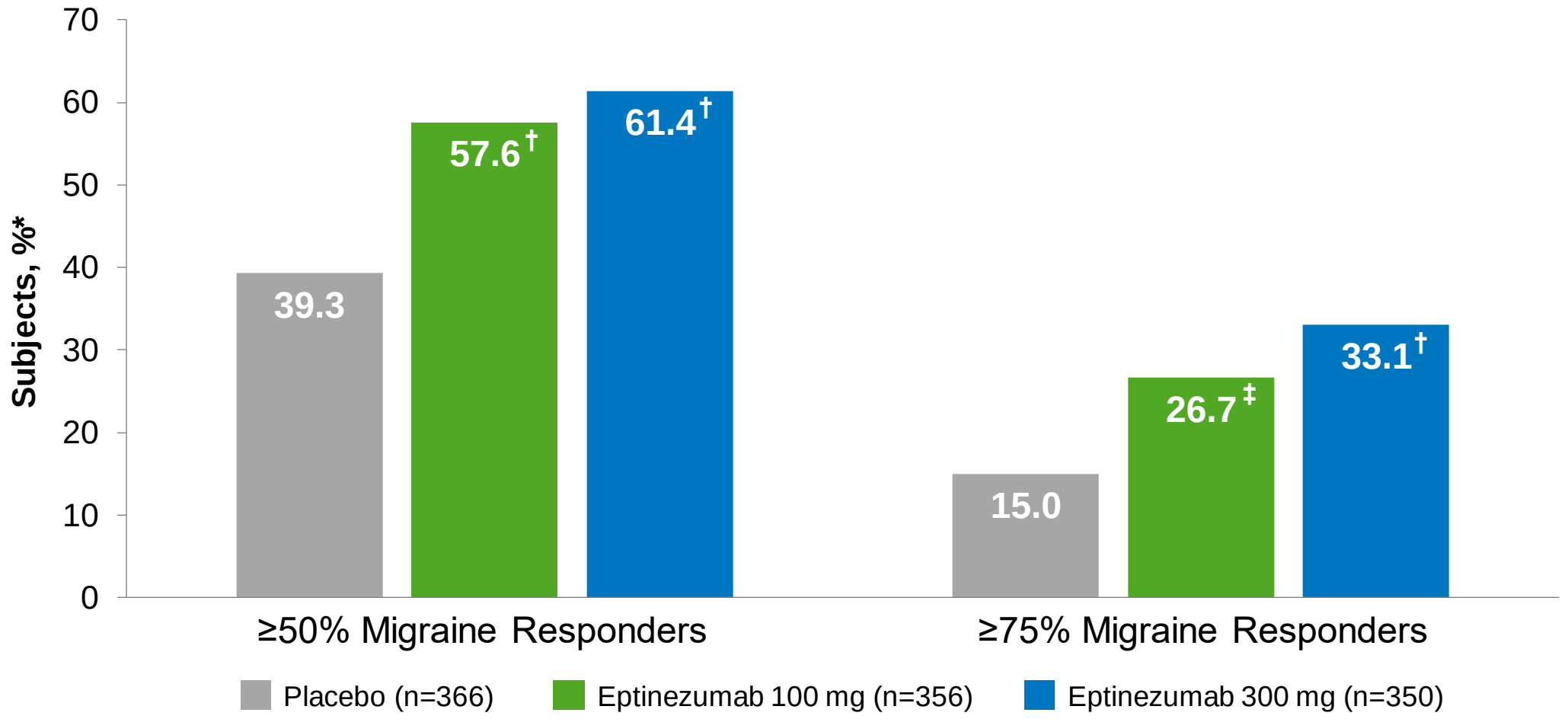
*According to American Academy of Neurology/American Headache Society guidelines for migraine preventive treatment (medications identified by clinical review of coded medical data); BMI, body mass index; SD, standard deviation.

Primary Endpoint:
Eptinezumab Significantly Decreased Monthly Migraine Days: Weeks 1–12



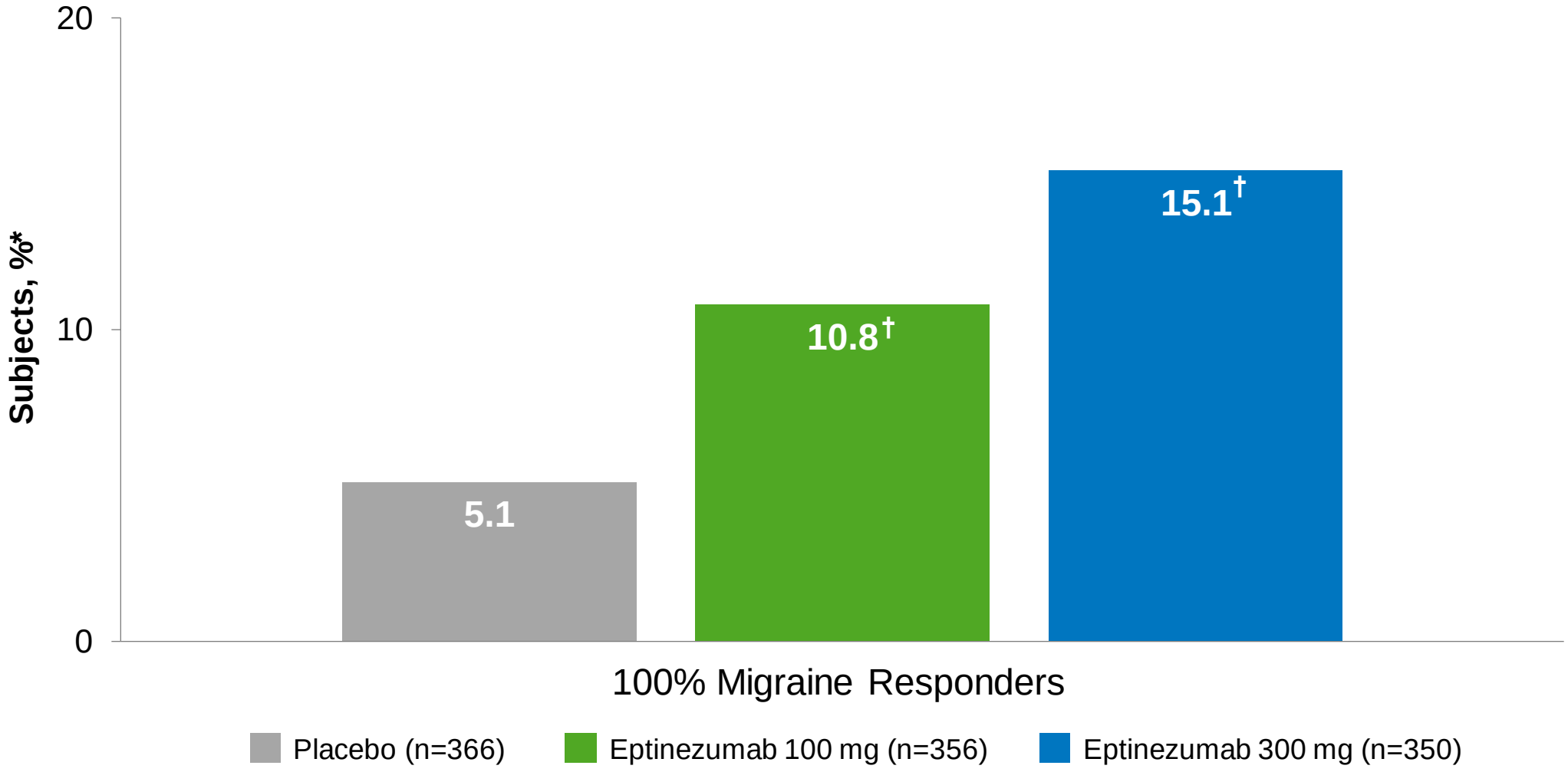
*Analysis of covariance model used to test for difference between treatment arms; †p <0.0001 vs placebo.

Key Secondary Endpoints:
≥50% and ≥75% Migraine Responder Rates: Weeks 1–12



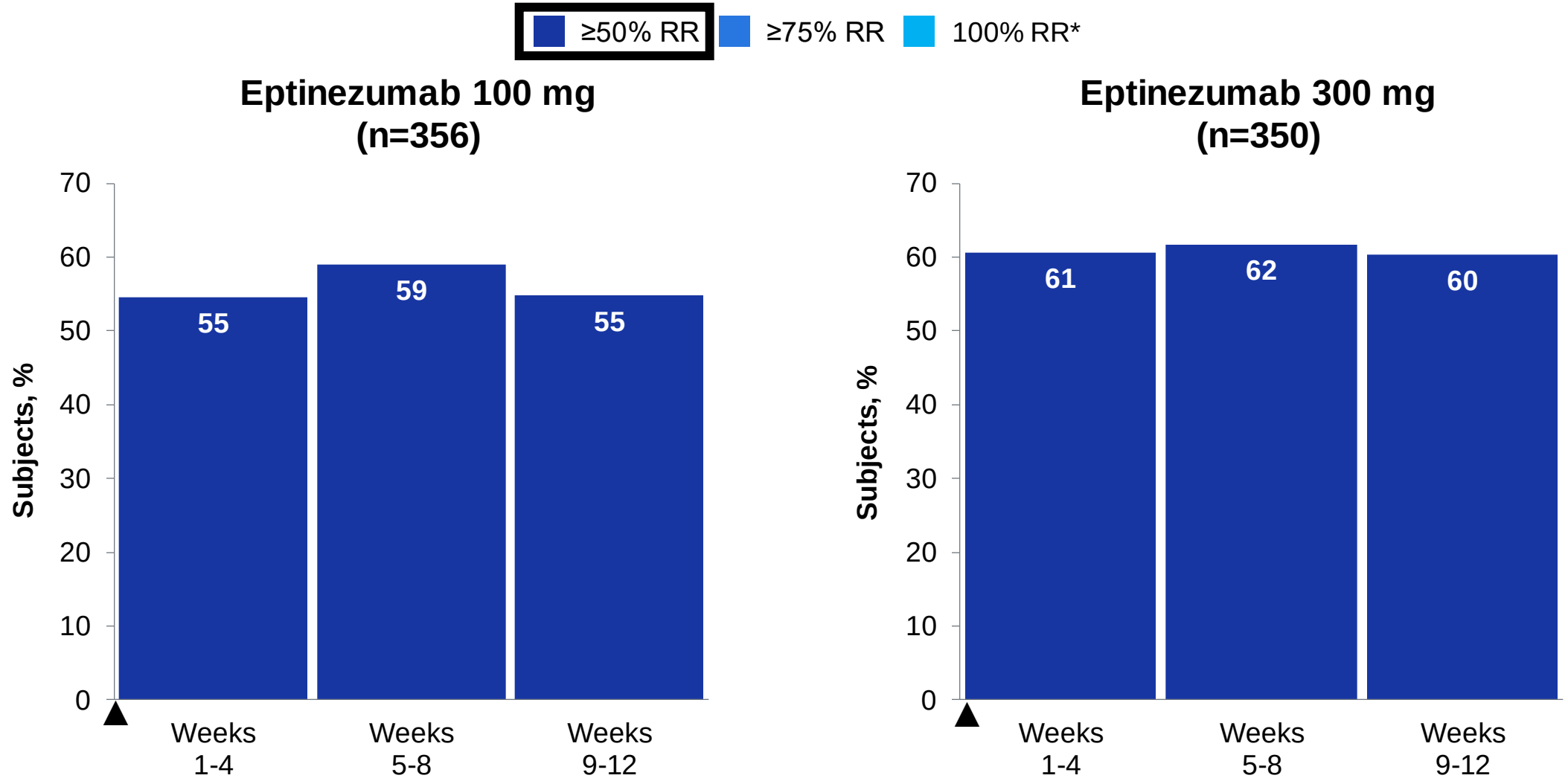
*Stratified Cochran–Mantel–Haenszel test used for statistical analysis; †p <0.0001 vs placebo; ‡p=0.0001 vs placebo.

Secondary Endpoint: Percentages of Subjects With Migraine Freedom Each Month on Average‡: Weeks 1–12



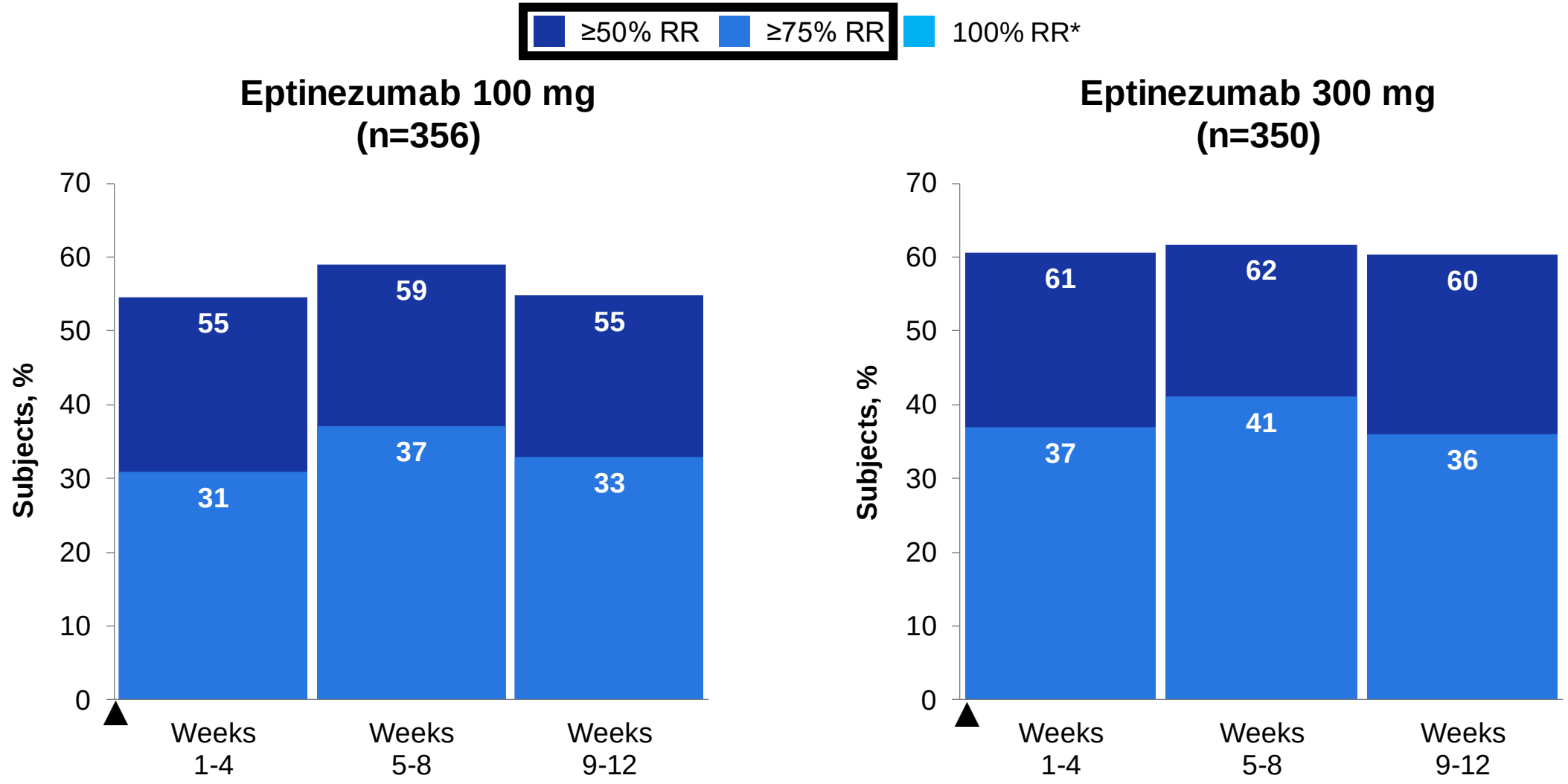
*Stratified Cochran–Mantel–Haenszel test used for statistical analysis; †p <0.0001 vs placebo, unadjusted; ‡Percentage of subjects who were migraine free for each 4 week interval on average over Months 1–3.

Monthly Migraine Responder Rates After Single Infusion of Eptinezumab



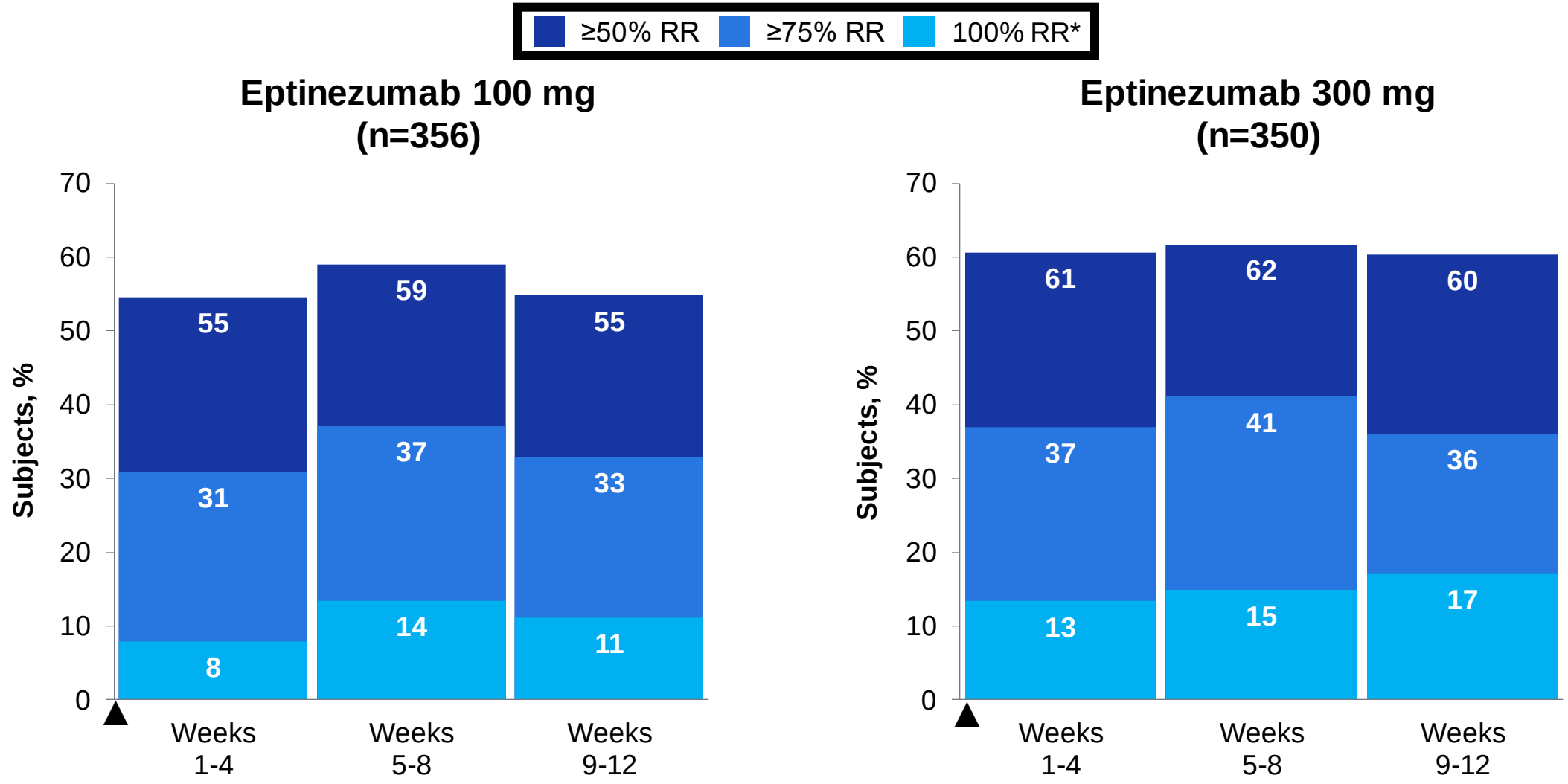
*Percentage of subjects who were migraine free for each 4-week interval.

Monthly Migraine Responder Rates After Single Infusion of Eptinezumab



*Percentage of subjects who were migraine free for each 4-week interval.

Monthly Migraine Responder Rates After Single Infusion of Eptinezumab



*Percentage of subjects who were migraine free for each 4-week interval.

Safety Profile Through Week 32*

Subjects, n (%)	Placebo n=366	Eptinezumab 100 mg n=356	Eptinezumab 300 mg n=350
Any TEAE	171 (47)	155 (44)	182 (52)
Any serious TEAE†	3 (<1)	3 (<1)	4 (1)
Any TEAE leading to drug withdrawal	2 (<1)	3 (<1)	8 (2)
Most frequent TEAEs‡			
Nasopharyngitis	22 (6)	19 (5)	33 (9)
Upper respiratory tract infection	20 (6)	15 (4)	19 (5)
Nausea	7 (2)	6 (2)	12 (3)
Urinary tract infection	6 (2)	8 (2)	12 (3)
Arthralgia	3 (<1)	5 (1)	11 (3)
Influenza	9 (3)	1 (<1)	10 (3)
Dizziness	4 (1)	5 (1)	9 (3)
Sinusitis	15 (4)	7 (2)	9 (3)
Migraine	16 (4)	6 (2)	8 (2)
Anxiety	1 (<1)	4 (1)	7 (2)
Fatigue	7 (2)	8 (2)	6 (2)
Back pain	6 (2)	7 (2)	6 (2)
Bronchitis	8 (2)	7 (2)	4 (1)

*Safety profile represents safety population; †All serious TEAEs reported unrelated to study drug; ‡≥2% in any active treatment group. TEAE, treatment-emergent adverse event.

Conclusions

- Eptinezumab-treated subjects showed significant reductions in MMD over Weeks 1–12
- Migraine responder rates (RR) with eptinezumab 300 mg were significantly greater than with placebo over Weeks 1–12:
  - Approximately 61% of subjects achieved a ≥50% reduction in migraine days
  - More than 33% of subjects achieved a ≥75% reduction in migraine days
  - Approximately 15% of subjects were migraine free, on average, each month
- Magnitudes of RR observed at Month 1 were near maximal and were consistently sustained over the 3 months following a single infusion of eptinezumab
- Overall TEAE rates for eptinezumab were similar to placebo and the safety profile was consistent with previous eptinezumab studies

Acknowledgment

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