Exhibit 99.2

LONGBOARD PHARMACEUTICALS

Bexicaserin (LP352) Open-Label Extension (OLE) Interim Analysis

JUNE 10, 2024

Forward-Looking Statements

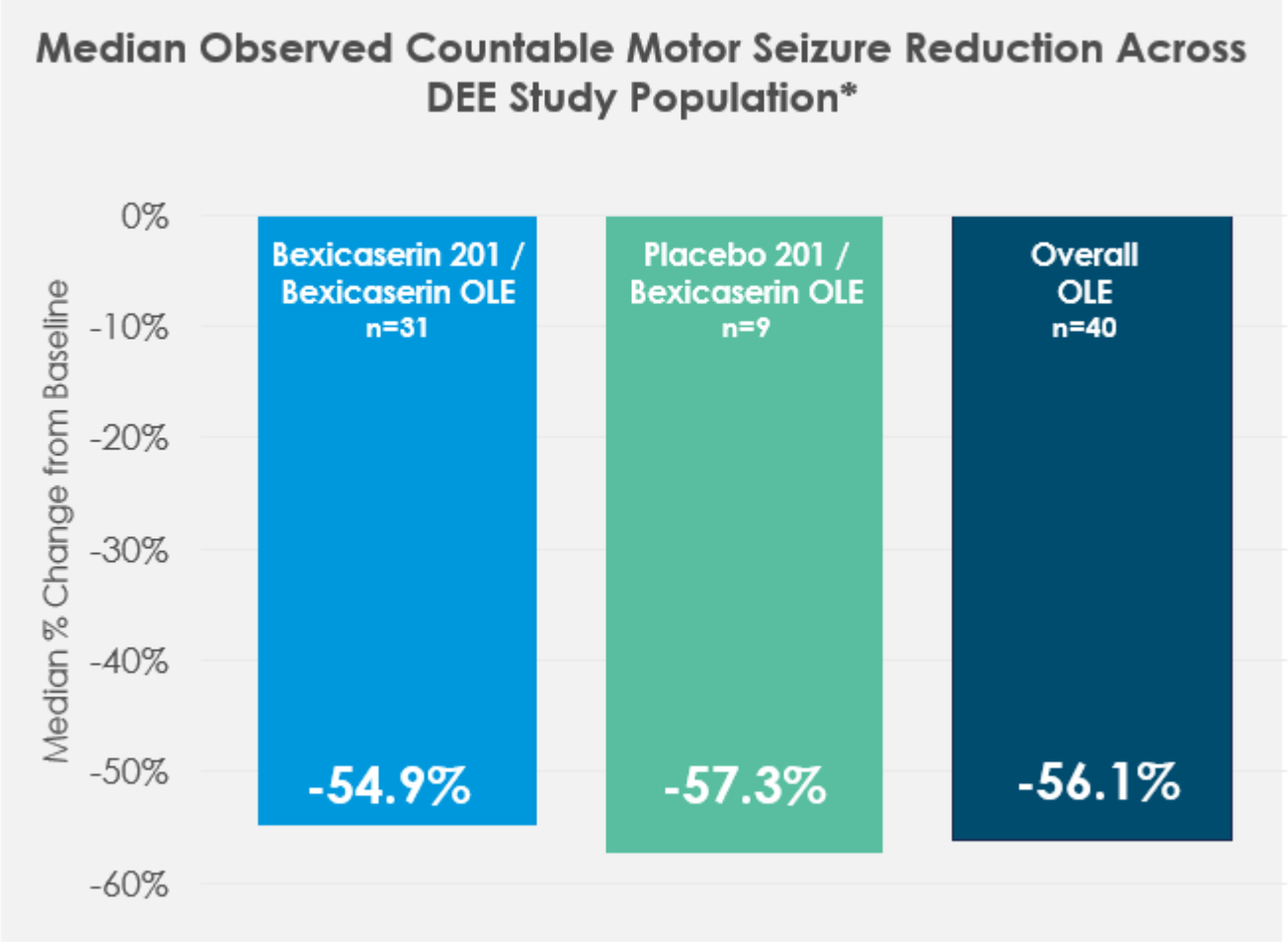
This presentation (including verbal statements that may accompany it) contains forward-looking statements about Longboard Pharmaceuticals, Inc. ("we," "Longboard" or the "Company"), including statements regarding: bexicaserin's (LP352) planned global Phase 3 program, data and potential; and other statements that are not historical facts, including statements that may include words such as "on track", "will", "may", "can", "would", "intend", "plan", "expect", "believe", "potential", "opportunity" and similar words. For such statements, we claim the protection of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including, but not limited to: topline or interim data may not reflect the complete or final results of a particular study or trial, and are subject to change; nonclinical and clinical data are voluminous and detailed, and regulatory agencies may interpret or weigh the importance of data differently and reach different conclusions than Longboard or others, request additional information, have additional recommendations or change their guidance or requirements before or after approval; our limited operating history; our history of incurring net losses and expectation that we will continue to incur net losses for the foreseeable future, and that we may never be profitable; our need for additional funding and related risks for our business, product development programs and future commercialization activities; the timing and success of clinical trials and preclinical studies we conduct; the ability to obtain and maintain regulatory approval to conduct our clinical trials (in the manner we propose or at all) and, ultimately, to market our product candidates; the ability to commercialize our product candidates; our ability to compete in the marketplace; risks regarding our license and dependencies on others; our ability to obtain and maintain intellectual property protection and freedom to operate for our product candidates; our ability to manage our growth; and other risks and factors disclosed in our filings with the U.S. Securities and Exchange Commission, including our most recently filed Annual Report on Form 10-K, subsequently filed Quarterly Reports on Form 10-Q, and in our other filings. We operate in a very competitive and rapidly changing environment. New risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. The forward-looking events and circumstances discussed in this presentation may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements. Except as required by law, we assume no responsibility for the accuracy and completeness of the forward-looking statements, and we undertake no obligation to update any forward-looking statements after the date of this presentation to conform these statements to actual results or to changes in our expectations.

Certain information contained in this presentation and statements made orally during this presentation relate to or are based on studies, research, publications, surveys and other data obtained from third-party sources and Longboard's own internal estimates and research. While Longboard believes these third-party studies, research, publications, surveys and other data to be reliable as of the date of this presentation, they have not been independently verified, and Longboard makes no representations as to the adequacy, fairness, accuracy or completeness of any information obtained from third-party sources.

This presentation discusses product candidates that have not yet been approved for marketing by the U.S. Food and Drug Administration (the "FDA").

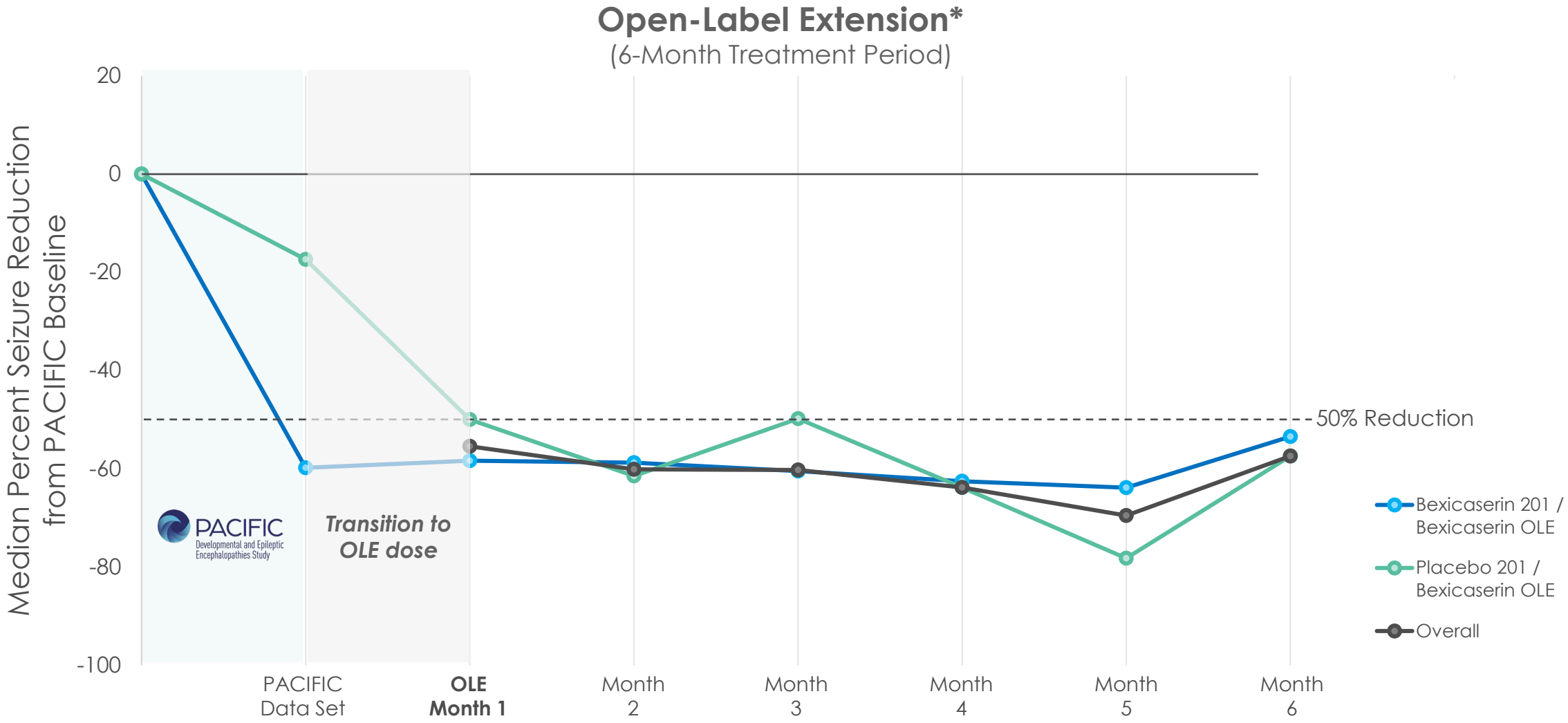
Summary: Interim Analysis from Bexicaserin (LP352) OLE Study

- **100% of PACIFIC completers continued into OLE** (95.1% in OLE at 6-months)
  - PACIFIC completers n=41 (DS=3, LGS=20, DEE Other=18)
- **Sustained response** over an approximate 6-month treatment period
- **Favorable safety and tolerability** results observed
- **PACIFIC (201 Study) Placebo participants:**
  - **All successfully titrated up** and entered maintenance phase of the OLE
  - **Motor seizure reduction** consistent with bexicaserin efficacy observed in PACIFIC
- **Global Phase 3 Program on track** to initiate later this year



Definitions: OLE=Open-label extension; DS=Dravet syndrome; LGS=Lennox-Gastaut syndrome; DEE=Developmental and Epileptic Encephalopathy
*Percent change from PACIFIC Study baseline in frequency over treatment period of approximately 6 months in the OLE Study (LP352-202)

Bexicaserin (LP352) Median Observed Countable Motor Seizure Reduction in OLE



*Percent change from PACIFIC Study (LP352-201) baseline in monthly seizure frequency

Summary: Bexicaserin (LP352) Safety and Tolerability in the OLE Interim Analysis

Parameter	Overall (N = 41) n (%)
Safety Set	41 (100)
Full Analysis Set	40 (97.6)

- SAEs in the overall group were comprised of pneumonia, pneumonia bacterial, change in seizure presentation, seizure, and agitation
- One participant discontinued from the study due to the adverse event of lethargy (2.4%) during the titration period
- One participant discontinued from the study by the withdrawal of consent (2.4%) during the first month of maintenance
- **Favorable safety and tolerability results observed**

Preferred Term*	Overall (N = 41) n (%)
Upper respiratory tract infections	5 (12.2)
COVID-19	3 (7.3)
Pneumonia	3 (7.3)
Sinusitis	3 (7.3)
Seizure	3 (7.3)
Decreased appetite	3 (7.3)

AE=adverse event; n=number of participants; SAE=serious AE; TEAE, treatment-emergent AE
Safety Set includes all participants who were administered at least one dose of study medication (up to 12 months). Full Analysis Set includes all participants who complete titration and have at least 1 post-baseline seizure measurement during maintenance (up to 6 months) *Over 5% of participants