SPYRE THERAPEUTICS, INC.

AUDIT COMMITTEE CHARTER

1. Members. The Board of Directors (the "Board") of Spyre Therapeutics, Inc. (the "Company") appoints an Audit Committee (the "Committee") of at least three members, consisting entirely of independent directors, and designates one member as chair of the Committee or delegates the authority to designate a chair to the Committee. Each member of the Committee shall be independent in accordance with the requirements of Rule 10A-3 of the Securities Exchange Act of 1934 and the rules of the Nasdaq Stock Market ("Nasdaq").

Each member of the Committee must be able to read and understand fundamental financial statements, including the Company's balance sheet, income statement and statement of cash flows, as determined by the Board, and at least one member of the Committee must be an "audit committee financial expert," as determined by the Board in accordance with the rules and regulations of the Securities and Exchange Commission ("SEC Rules"). In addition, at least one member of the Committee must be financially sophisticated, as determined by the Board in accordance with Nasdaq listing standards, and no member of the Committee may have participated in the preparation of the financial statements of the Company or any current subsidiary of the Company at any time during the past three years.

The foregoing shall be subject to all applicable exemptions or exceptions permitted under Nasdaq listing standards.

2. Purpose, Duties and Responsibilities. The purpose of the Committee, at a minimum, must be to:

- represent and assist the Board in discharging its oversight responsibility relating to: (a) the accounting and financial reporting processes of the Company, including the audits of the Company's financial statements and the integrity of the financial statements; (b) the Company's compliance with ethical, legal and regulatory requirements; (c) the outside auditor's qualifications and independence and (d) the performance of the Company's internal audit function, if any, and outside auditor;

- determining whether to appoint, retain or terminate the Company's independent auditors and to pre-approve audit, audit-related, tax and other services, if any, to be provided by the independent auditors; and

- oversee the preparation of the report of the Committee required by SEC Rules to be included in the Company's annual proxy statement.

Among its specific duties and responsibilities, the Committee will:

Oversight of Independent Auditor

(a) Be directly responsible, in its capacity as a committee of the Board, for the appointment, compensation, retention and oversight of the work of the outside auditor. In this regard, the Committee will appoint, retain, compensate, evaluate

and terminate, when appropriate, the outside auditor, who will report directly to the Committee.

(b) At least annually, obtain and review a report by the outside auditor describing: (1) the outside auditor's internal quality-control procedures and (2) any material issues raised by the most recent internal quality-control review or peer review or by any inquiry or investigation by governmental or professional authorities, within the preceding five years, relating to one or more independent audits carried out by the outside auditor, and any steps taken to deal with any such issues.

(c) Approve in advance all audit, internal control-related services and, subject to the exception under Section 10A(i)(1)(B) of the Exchange Act, permissible non-audit services to be provided by the outside auditor and establish policies and procedures for the pre-approval of audit and permissible non-audit services to be provided by the outside auditor.

(d) At least annually, consider the independence of the outside auditor, and, consistent with rules of the Public Company Accounting Oversight Board ("PCAOB"), obtain and review a report by the outside auditor describing any relationships between the outside auditor and the Company or individuals in financial reporting oversight roles at the Company that may reasonably be thought to bear on the outside auditor's independence and discuss with the outside auditor the potential effects of any such relationships on the independence of the outside auditor.

(e) Review and discuss with the outside auditor the matters required to be discussed by the outside auditor under Auditing Standard No. 1301, as adopted by the PCAOB and amended from time to time, including any problems or difficulties the outside auditor encountered in the course of its audit work and management's response.

Oversight of Financial Reporting

(f) Meet to review and discuss with management and the outside auditor the annual audited and quarterly unaudited financial statements of the Company (including the Company's specific disclosures under "Management's Discussion and Analysis of Financial Condition and Results of Operations") and the independent auditor's reports related to the financial statements.

(g) Recommend to the Board, based on the review and discussion described in paragraphs (d) - (f) above, whether the financial statements should be included in the Company's Annual Reports on Form 10-K.

(h) Receive reports from the outside auditor and management regarding, and review and discuss the adequacy and effectiveness of, the Company's internal controls, including any significant deficiencies in internal controls and significant changes in internal controls reported to the Committee by the outside auditor or management.

(i) Receive reports from management regarding, and review and discuss the adequacy and effectiveness of, the Company's disclosure controls and procedures.

(j) Oversee the performance and effectiveness of the internal audit function, if any.

(k) Review and discuss earnings press releases and corporate practices with respect to earnings press releases and financial information and earnings guidance provided to analysts.

Oversight of Risk and Compliance

(l) Review and discuss the Company's practices with respect to risk assessment and risk management, and oversee risks related to the Company's financial statements and financial reporting process, compliance and information technology, use of artificial intelligence and cybersecurity.

(m) Oversee the Company's compliance program with respect to legal and regulatory requirements, including the Company's Code of Business Conduct and Ethics and policies and procedures for monitoring compliance; and, at least annually, meet to review the implementation and effectiveness of the Company's compliance program with the Chief Legal Officer, who shall have the authority to communicate directly to the Committee, promptly, about actual and alleged violations of law or the Company's code(s) of conduct, including any matters involving criminal or potential criminal conduct.

(n) Establish and oversee procedures for handling reports of potential misconduct, including: (1) violations of law or the Company's Code of Business Conduct and Ethics; (2) complaints regarding accounting, internal accounting controls, auditing and federal securities law matters and (3) the confidential, anonymous submission of concerns by employees regarding accounting, internal accounting controls, auditing and federal securities law matters.

(o) Establish and periodically review policies and procedures for the review, approval and ratification of related person transactions (as defined in applicable SEC Rules), review related person transactions, and oversee other related party transactions governed by applicable accounting standards.

(p) Establish policies for the hiring of employees and former employees of the outside auditor.

(q) Establish and periodically review and approve the Company's investment policy.

(r) Review and approve the Company's overall insurance coverage, including D&O insurance.

(s) Annually evaluate the performance of the Committee and the adequacy of the Committee's charter and recommend changes to the charter to the Board as appropriate.

3. Subcommittees. The Committee may delegate its duties and responsibilities to one or more subcommittees as it determines appropriate.

4. Outside Advisers. The Committee has the authority to retain such outside counsel, accountants, experts and other advisers as it determines appropriate to assist it in the performance of its functions and will receive appropriate funding from the Company, as determined by the Committee, for the payment of compensation to any such advisers and for the payment of ordinary administrative expenses that are necessary or appropriate in carrying out the Committee's duties.

5. Meetings. The Committee will meet at least quarterly, at such times and places as the Committee or its chair determines. The Committee will meet separately in executive session, periodically, with management as well as the outside auditor. A majority of the members of the Committee constitutes a quorum. The Committee will report regularly to the Board with respect to its activities.

Adopted by the Board on: July 8, 2026