

SPYRE THERAPEUTICS, INC.

SECOND AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

Spyre Therapeutics, Inc. (the "**Corporation**"), a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the "**General Corporation Law**"), does hereby certify as follows:

1. The current name of the Corporation is Spyre Therapeutics, Inc. The Corporation was first formed on December 16, 2013 under the name Aeglea BioTherapeutics Holdings, LLC, a Delaware limited liability company. Aeglea BioTherapeutics Holdings, LLC converted into Aeglea BioTherapeutics, Inc. on March 10, 2015. The date of filing of the original Certificate of Incorporation of Aeglea BioTherapeutics, Inc. with the Secretary of State was March 10, 2015 under the name Aeglea BioTherapeutics, Inc.

2. The Second Amended and Restated Certificate of Incorporation of the Corporation attached hereto as Exhibit "A", which is incorporated herein by this reference, only restates and integrates and does not further amend the provisions of the Amended and Restated Certificate of Incorporation of the Corporation as theretofore amended or supplemented and there is no discrepancy between those provisions and the provisions of the Second Amended and Restated Certificate of Incorporation.

3. The Second Amended and Restated Certificate of Incorporation has been duly adopted by the Board of Directors of the Corporation in accordance with Section 245 of the Delaware General Corporation Law.

IN WITNESS WHEREOF, this Corporation has caused this Amended and Restated Certificate of Incorporation to be signed by a duly authorized officer of this Corporation on this 14th day of May, 2024.

By: /s/ Cameron Turtle
Cameron Turtle
Chief Executive Officer

EXHIBIT "A"

SPYRE THERAPEUTICS, INC.

SECOND AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

ARTICLE I: NAME

The name of the corporation is Spyre Therapeutics, Inc. (the "**Corporation**").

ARTICLE II: AGENT FOR SERVICE OF PROCESS

The address of the Corporation's registered office in the State of Delaware is 1521 Concord Pike Suite 201, City of Wilmington, County of New Castle, Delaware 19803. The name of the registered agent of the Corporation at that address is Corporate Creations Network Inc.

ARTICLE III: PURPOSE

The purpose of the Corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware.

ARTICLE IV: AUTHORIZED STOCK

1. Total Authorized. The total number of shares of all classes of stock that the Corporation has authority to issue is Four Hundred and Ten Million (410,000,000) shares, consisting of two classes: Four Hundred Million (400,000,000) shares of Common Stock, \$0.0001 par value per share ("**Common Stock**"), and Ten Million (10,000,000) shares of Preferred Stock, \$0.0001 par value per share ("**Preferred Stock**").

2. Designation of Additional Series.

2.1. The Board of Directors of the Corporation (the "**Board**") is authorized, subject to any limitations prescribed by the law of the State of Delaware, to provide for the issuance of the shares of Preferred Stock in one or more series, and, by filing a Certificate of Designation pursuant to the applicable law of the State of Delaware, to establish from time to time the number of shares to be included in each such series, to fix the designation, vesting, powers, preferences and relative, participating, optional or other rights, if any, of the shares of each such series and any qualifications, limitations or restrictions thereof, and to increase (but not above the total number of authorized shares of the class) or decrease (but not below the number of shares of such series then outstanding) the number of shares of any such series. The number of authorized shares of Preferred Stock may also be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of two-thirds of the voting power of all then outstanding shares of capital stock of the Corporation entitled to vote generally in the election of directors, without a vote of the holders of the Preferred Stock, unless a vote of any other holders is required pursuant to a Certificate or Certificates establishing a series of Preferred Stock; *provided*, that if two-thirds of the Whole Board has approved such increase or decrease of the number of authorized shares of Preferred Stock, then only the affirmative vote of the holders of a majority of the voting power of all of the then outstanding shares of the capital stock of the Corporation entitled to vote generally in the election of directors, voting together as a single class, without a vote of the holders of the Preferred Stock (unless a vote of any other holders is required pursuant to a Certificate or Certificates establishing a series of Preferred Stock), shall be required to effect such increase or decrease. For purposes of this Certificate of Incorporation, the term "**Whole Board**" shall mean the total number of authorized directors whether or not there exist any vacancies in previously authorized directorships.

2.2 Except as otherwise expressly provided in any Certificate of Designation designating any series of Preferred Stock pursuant to the foregoing provisions of this Article IV, any new series of Preferred Stock may be designated, fixed and determined as provided herein by the Board without approval of the holders of Common Stock or the holders of Preferred Stock, or any series thereof, and any such new series may have powers, preferences and rights, including, without limitation, voting rights, dividend rights, liquidation rights, redemption rights and conversion rights, senior to, junior to or pari passu with the rights of the Common Stock, the Preferred Stock or any future class or series of Preferred Stock or Common Stock.

2.3 Each outstanding share of Common Stock shall entitle the holder thereof to one vote on each matter properly submitted to the stockholders of the Corporation for their vote; *provided, however*, that, except as otherwise required by law, holders of Common Stock shall not be entitled to vote on any amendment to this Certificate of Incorporation (including any Certificate of Designation relating to any series of Preferred Stock) that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together as a class with the holders of one or more other such series, to vote thereon pursuant to this Certificate of Incorporation (including any Certificate of Designation relating to any series of Preferred Stock).

ARTICLE V: AMENDMENT OF BYLAWS

The Board shall have the power to adopt, amend or repeal the Bylaws of the Corporation. Any adoption, amendment or repeal of the Bylaws of the Corporation by the Board shall require the approval of a majority of the Whole Board. For purposes of this Certificate of Incorporation, the term "**Whole Board**" shall mean the total number of authorized directors whether or not there exist any vacancies in previously authorized directorships. The stockholders shall also have power to adopt, amend or repeal the Bylaws of the Corporation; *provided, however*, that in addition to any vote of the holders of any class or series of stock of the Corporation required by law or by this Certificate of Incorporation (including any Preferred Stock issued pursuant to a Certificate of Designation), the affirmative vote of the holders of at least two-thirds of the voting power of all of the then outstanding shares of the capital stock of the Corporation entitled to vote generally in the election of directors, voting together as a single class, shall be required to adopt, amend or repeal any provision of the Bylaws; *provided further*, that if two-thirds of the Whole Board has approved such adoption, amendment or repeal of any provisions of the Bylaws, then only the affirmative vote of the holders of a majority of the voting power of all of the then-outstanding shares of the capital stock of the Corporation entitled to vote generally in the election of directors, voting together as a single class, shall be required to adopt, amend or repeal any provision of the Bylaws.

ARTICLE VI: MATTERS RELATING TO THE BOARD OF DIRECTORS

1. Director Powers. The conduct of the affairs of the Corporation shall be managed by or under the direction of the Board. In addition to the powers and authority expressly conferred upon them by statute or by this Certificate of Incorporation or the Bylaws of the Corporation, the directors are hereby empowered to exercise all such powers and do all such acts and things as may be exercised or done by the Corporation.

2. Number of Directors. Subject to the rights of the holders of any series of Preferred Stock to elect additional directors under specified circumstances, the number of directors shall be fixed from time to time exclusively by resolution adopted by a majority of the Whole Board.

3. Classified Board. Subject to the rights of the holders of any series of Preferred Stock to elect additional directors under specified circumstances, the directors shall be divided, with respect to the time for which they severally hold office, into three classes designated as Class I, Class II and Class III, respectively (the "**Classified Board**"). The Board may assign members of the Board already in office to the Classified Board, which assignments shall become effective at the same time the Classified Board becomes effective. Directors shall be assigned to each class in accordance with a resolution or resolutions adopted by the Board, with the number of directors in each class to be divided as nearly equal as reasonably possible. The initial term of office of the Class I directors shall expire at the Corporation's first annual meeting of stockholders following the closing of the Corporation's initial public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, relating to the offer and

sale of Common Stock to the public (the "**Initial Public Offering**"), the initial term of office of the Class II directors shall expire at the Corporation's second annual meeting of stockholders following the closing of the Initial Public Offering and the initial term of office of the Class III directors shall expire at the Corporation's third annual meeting of stockholders following the closing of the Initial Public Offering. At each annual meeting of stockholders following the closing of the Initial Public Offering, directors elected to succeed those directors of the class whose terms then expire shall be elected for a term of office to expire at the third succeeding annual meeting of stockholders after their election.

4. Term and Removal. Each director shall hold office until such director's successor is elected and qualified, or until such director's earlier death, resignation or removal. Any director may resign at any time upon notice to the Corporation given in writing or by any electronic transmission permitted in the Corporation's Bylaws. Subject to the rights of the holders of any series of Preferred Stock, no director may be removed except for cause and only by the affirmative vote of the holders of at least two-thirds of the voting power of the then-outstanding shares of capital stock of the Corporation then entitled to vote at an election of directors voting together as a single class. In the event of any increase or decrease in the authorized number of directors, (a) each director then serving as such shall nevertheless continue as a director of the class of which he or she is a member and (b) the newly created or eliminated directorships resulting from such increase or decrease shall be apportioned by the Board among the classes of directors so as to ensure that no one class has more than one director more than any other class. To the extent possible, consistent with the foregoing rule, any newly created directorships shall be added to those classes whose terms of office are to expire at the latest dates following such allocation, and any newly eliminated directorships shall be subtracted from those classes whose terms of office are to expire at the earliest dates following such allocation, unless otherwise provided from time to time by resolution adopted by the Board. No decrease in the authorized number of directors shall shorten the term of any incumbent director.

5. Board Vacancies. Subject to the rights of the holders of any series of Preferred Stock, any vacancy occurring in the Board for any cause, and any newly created directorship resulting from any increase in the authorized number of directors, shall, unless (a) the Board determines by resolution that any such vacancies or newly created directorships shall be filled by the stockholders or (b) as otherwise provided by law, be filled only by the affirmative vote of a majority of the directors then in office, although less than a quorum, or by a sole remaining director, and not by the stockholders. Any director elected in accordance with the preceding sentence shall hold office for a term expiring at the annual meeting of stockholders at which the term of office of the class to which the director has been assigned expires or until such director's successor shall have been duly elected and qualified, or until such director's earlier death, resignation or removal.

6. Vote by Ballot. Election of directors need not be by written ballot unless the Bylaws of the Corporation shall so provide.

ARTICLE VII: DIRECTOR AND OFFICER LIABILITY

1. Limitation of Liability. To the fullest extent permitted by law, no director or officer of the Corporation shall be personally liable for monetary damages for breach of fiduciary duty as a director or officer. Without limiting the effect of the preceding sentence, if the Delaware General Corporation Law is hereafter amended to authorize the further elimination or limitation of the liability of a director or officer, then the liability of a director or officer of the Corporation shall be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law, as so amended.

2. Change in Rights. Neither any amendment nor repeal of this Article VII, nor the adoption of any provision of this Certificate of Incorporation inconsistent with this Article VII, shall eliminate, reduce or otherwise adversely affect any limitation on the personal liability of a director or officer of the Corporation existing at the time of such amendment, repeal or adoption of such an inconsistent provision.

ARTICLE VIII: MATTERS RELATING TO STOCKHOLDERS

1. No Action by Written Consent of Stockholders. Subject to the rights of any series of Preferred Stock, no action shall be taken by the stockholders of the Corporation except at a duly called annual or special meeting of stockholders and no action shall be taken by the stockholders by written consent.

2. Special Meeting of Stockholders. Special meetings of the stockholders of the Corporation may be called only by the Chairperson of the Board, the Chief Executive Officer, the President or the Board acting pursuant to a resolution adopted by a majority of the Whole Board.

3. Advance Notice of Stockholder Nominations and Business Transacted at Special Meetings. Advance notice of stockholder nominations for the election of directors of the Corporation and of business to be brought by stockholders before any meeting of stockholders of the Corporation shall be given in the manner provided in the Bylaws of the Corporation. Business transacted at special meetings of stockholders shall be confined to the purpose or purposes stated in the notice of meeting.

ARTICLE IX: CHOICE OF FORUM

Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery in the State of Delaware shall be the sole and exclusive forum for any stockholder (including a beneficial owner) to bring (i) any derivative action or proceeding brought on behalf of the Corporation, (ii) any action asserting a claim of breach of fiduciary duty owed by, or other wrongdoing by, any director, officer or other employee of the Corporation to the Corporation or the Corporation's stockholders, (iii) any action asserting a claim against the Corporation, its directors, officers or employees arising pursuant to any provision of the Delaware General Corporation Law or the Corporation's certificate of incorporation or bylaws or (iv) any action asserting a claim against the Corporation, its directors, officers or employees governed by the internal affairs doctrine, except for, as to each of (i) through (iv) above, any claim as to which the Court of Chancery determines that there is an indispensable party not subject to the jurisdiction of the Court of Chancery (and the indispensable party does not consent to the personal jurisdiction of the Court of Chancery within ten days following such determination), which is vested in the exclusive jurisdiction of a court or forum other than the Court of Chancery, or for which the Court of Chancery does not have subject matter jurisdiction. If any provision or provisions of this Article IX shall be held to be invalid, illegal or unenforceable as applied to any person or entity or circumstance for any reason whatsoever, then, to the fullest extent permitted by law, the validity, legality and enforceability of such provisions in any other circumstance and of the remaining provisions of this Article IX (including, without limitation, each portion of any sentence of this Article IX containing any such provision held to be invalid, illegal or unenforceable that is not itself held to be invalid, illegal or unenforceable) and the application of such provision to other persons or entities and circumstances shall not in any way be affected or impaired thereby. Any person or entity purchasing or otherwise acquiring any interest in shares of capital stock of the Corporation shall be deemed to have notice of and to have consented to the provisions of this Article IX.

ARTICLE X: AMENDMENT OF CERTIFICATE OF INCORPORATION

If any provision of this Certificate of Incorporation becomes or is declared on any ground by a court of competent jurisdiction to be illegal, unenforceable or void, portions of such provision, or such provision in its entirety, to the extent necessary, shall be severed from this Certificate of Incorporation, and the court will replace such illegal, void or unenforceable provision of this Certificate of Incorporation with a valid and enforceable provision that most accurately reflects the Corporation's intent, in order to achieve, to the maximum extent possible, the same economic, business and other purposes of the illegal, void or unenforceable provision. The balance of this Certificate of Incorporation shall be enforceable in accordance with its terms.

The Corporation reserves the right to amend or repeal any provision contained in this Certificate of Incorporation in the manner prescribed by the laws of the State of Delaware and all rights conferred upon stockholders are granted subject to this reservation; *provided, however*, that, notwithstanding any other provision of this Certificate of Incorporation or any provision of law that might otherwise permit a lesser vote or no vote, but in addition to any vote of the holders of any class or series of the stock of the Corporation required by law or by this Certificate of

Incorporation, the affirmative vote of the holders of at least two-thirds of the voting power of all of the then-outstanding shares of the capital stock of the Corporation entitled to vote generally in the election of directors, voting together as a single class, shall be required to amend or repeal any provision of this Certificate of Incorporation; provided, further, that if two-thirds of the Whole Board has approved such amendment or repeal of any provisions of this Certificate of Incorporation, then only the affirmative vote of the holders of at least a majority of the voting power of all of the then-outstanding shares of the capital stock of the Corporation entitled to vote generally in the election of directors, voting together as a single class, shall be required to amend or repeal such provisions of this Certificate of Incorporation.
