IRULYA THERAPEUTICS INC.

AMENDED AND RESTATED CORPORATE GOVERNANCE GUIDELINES

The Board of Directors (the "***Board***") of **IRULYA THERAPEUTICS INC.** (the "***Company***") has established the following corporate governance guidelines (these "***Guidelines***") for the conduct and operation of the Board. These guidelines are designed to give directors a flexible framework for effectively pursuing the Company's objectives for the benefits of its stockholders. These guidelines should be interpreted in the context of all applicable laws, the Company's certificate of incorporation, bylaws, other corporate governance documents and policies (each as amended, restated and in effect).

1 BOARD COMPOSITION, STRUCTURE AND POLICIES

1.1 Size and Structure of the Board

The Board will set the number of directors in accordance with the Company's amended and restated certificate of incorporation (as amended from time to time, the "***Certificate of Incorporation***") and amended and restated bylaws (as amended from time to time, the "***Bylaws***"). The Nominating and Corporate Governance Committee of the Board (the "***Nominating Committee***") will review and make recommendations to the Board, as the Nominating Committee sees fit, concerning the size, structure, composition and functioning of the Board and its committees. The Nominating Committee will also recommend to the Board, if applicable, the class of directors in which a director should serve in accordance with any applicable provisions of the Certificate of Incorporation and Bylaws.

1.2 Independence of Directors

The Board will be composed of not less than a majority of independent directors, subject to an election by the Company to rely on any exemptions, cure periods and/or transition periods permitted by the applicable listing standards and rules of The Nasdaq Stock Market (**"*Nasdaq*"**). The Company defines an "independent" director in accordance with the Nasdaq definition of independence. Members of the Audit Committee of the Board (the "***Audit Committee***") and Compensation Committee of the Board ("***Compensation Committee***") are subject to the additional independence requirements of applicable SEC rules and Nasdaq listing standards.

The Board will make affirmative determinations of director independence at least annually, after taking into consideration the recommendation of the Nominating Committee. The Nasdaq independence definition includes a series of objective tests, such as that the director is not an employee of the Company and has not engaged in various types of business dealings with the Company. Because it is not possible to anticipate or explicitly provide for all potential conflicts of interest that may affect independence, in assessing directors' independence, the Board is also responsible for determining affirmatively, as to each independent director, that no material relationships exist that, in the opinion of the Board, would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In making these

determinations, the Board will broadly consider all relevant facts and circumstances, including information provided by the directors and the Company with regard to each director's business and personal activities as they may relate to the Company and the Company's management. As the concern is independence from management, the Board does not view ownership of even a significant amount of stock, by itself, as a bar to an independence finding. Each director shall notify the Board of any change in circumstances that may put that director's independence at issue. In the event of such notification, the Board will evaluate such director's independence as promptly as practicable thereafter.

Directors may be asked from time to time to leave a Board meeting when the Board is considering a transaction in which the director (or another organization with which the director is affiliated) has a financial or other interest. The Audit Committee shall review, approve or ratify and oversee all related party transactions in compliance with the Company's policies and Nasdaq rules.

1.3 Board Leadership Structure

The Board maintains the flexibility to determine whether the roles of Chief Executive Officer and Chairperson of the Board ("***Chair***") should be combined or separated, based on what it believes is in the best interests of the Company and its stockholders at a given point in time. The needs of the Company and the individuals available to assume these roles may require different outcomes at different times, and the Board believes that retaining flexibility in these decisions is in the best interests of the Company and its stockholders. The Board believes that a one-size-fits-all approach to corporate governance, with a mandated independent Chair, or otherwise that the Chair and Chief Executive Officer positions be held by different individuals, would not result in better governance or oversight. The Nominating Committee will periodically review this matter and make recommendations to the Board.

If the individual appointed as Chair is not an independent director, or whenever the independent directors determine that it is in the best interests of the Company and its stockholders, the Nominating Committee may nominate an independent director to serve as lead independent director (the "***Lead Independent Director***"). Following nomination by the Nominating Committee, each independent director will be given the opportunity, by ballot, to vote in favor of the Lead Independent Director nominee or to write in a candidate of that independent director's own. The Lead Independent Director will be elected by a plurality vote. The name of the Chair or Lead Independent Director will be listed in the Company's proxy statement. The Lead Independent Director will have such responsibilities as may be determined from time to time by the Board, upon the recommendation of the Nominating Committee.

1.4 Selection of Directors

The Board will be responsible for nominating individuals for election to the Board by the Company's stockholders at the annual meeting of stockholders. The Board is also responsible for filling vacancies and newly created directorships on the Board that may occur between annual meetings of stockholders. The Nominating Committee is responsible for seeking and identifying individuals believed to be qualified to become members of the Board, reviewing, screening and evaluating the qualifications of, and recommending to the Board qualified director nominees for

election or reelection to the Board at each annual stockholders' meeting and as necessary to fill vacancies and newly created directorships, in accordance with the Nominating Committee's charter and consistent with the criteria listed below.

1.5 Board Membership Criteria

The Board will determine the appropriate characteristics, skills and experience for the Board as a whole and for its individual members. The Board considers director nominee recommendations from the Nominating Committee. The Board may consider the minimum general criteria set forth below and may add any specific additional criteria with respect to specific searches, in selecting candidates and existing directors for service on the Board.

In considering candidates recommended by the Nominating Committee, the Board may consider such factors as: (a) minimum individual qualifications, including strength of character, the ability to exercise sound business judgment, familiarity with the Company's business and industry, independence of thought and having sufficient time to devote to the affairs of the Company, an ability to work collegially with the other members of the Board and the commitment to rigorously represent the long-term interests of the Company's stockholders and (b) all other factors it considers appropriate, which may include (i) possessing relevant professional background or expertise upon which to be able to offer advice and guidance to management; (ii) demonstrating excellence in the candidate's field; (iii) experience as a board member or executive officer of another publicly held company; (iv) having a diverse personal background, perspective and experience; (v) requirements of applicable law; and (vi) potential conflicts of interest with other pursuits.

The Board reviews candidates for director nomination in light of the current composition of the Board, the operating requirements of the Company and the long-term interests of the Company's stockholders. In the case of incumbent directors whose terms of office are set to expire, the Board reviews such directors' overall service to the Company during their term, including the number of meetings attended, level of participation, quality of performance, and any relationships and transactions that might impair such directors' independence. In the case of new director candidates, the Board also determines whether the nominee must be independent for purposes of satisfying applicable listing requirements.

1.6 Term Limits

The Board does not believe it should limit the number of terms for which an individual may serve as a director. Directors who have served on the Board for an extended period of time are able to provide continuity and valuable insight into the Company, its operations and prospects based on their experience with, and understanding of, the Company's history, policies and objectives. The Board believes that, as an alternative to term limits, it can ensure that the Board continues to evolve and adopt new ideas and viewpoints through the director nomination process described in these Governance Guidelines.

1.7 Limits on Board Memberships

Directors should advise the Chair and the chairperson of the Nominating Committee before accepting membership on the board of directors or committee of another company or

other significant commitments involving affiliation with other businesses, non-profit entities or governmental units. Service on board and board committees of other companies should be consistent with the Company's Amended and Restated Code of Conduct and other conflict-of-interest policies. In selecting nominees for election or re-election to the Board, the Board shall take into account other demands on the time of a candidate. Non-employee directors should generally serve on no more than five public company boards (including the Company's Board) and directors that serve on the Audit Committee should serve on no more than three public company audit committees (including the Company's Audit Committee), without the approval of the Board. In addition, directors who also serve as executive officers (other than executive chair) or in equivalent positions should generally serve on no more than one external public company board and directors who serve as executive chairs of public companies should generally serve on no more than two external public company boards, in each case without the approval of the Board.

1.8 Retirement Age

The Board does not believe that a fixed retirement age for directors is appropriate because such a policy may deprive the Board of the service of directors who have developed, through valuable experience over time, an increasing insight into the Company and its operations. It is expected that the Nominating Committee will consider the age and tenure of continuing directors when selecting or recommending for the Board's selection those candidates to be nominated for election to the Board.

1.9 Directors Who Change Their Job Responsibility

A director who retires from their present primary employment or who materially changes their primary employment position should promptly notify the chairperson of the Nominating Committee. The Board does not believe any director who retires from their present employment, or who materially changes their position, should necessarily leave the Board; however, there should be an opportunity for the Board, through the Nominating Committee, to review the continued appropriateness of Board membership under these circumstances. The Nominating Committee will then make a recommendation to the Board as to any action to be taken with respect to such circumstances. Directors who are officers of the Company are expected to tender their resignations upon termination of employment with the Company. Whether the individual continues to serve on the Board is then a matter for determination by the Board.

1.10 Review of Director and Officer Questionnaires

The Company shall periodically (at least annually) distribute to and receive from each director and officer (as that term is defined in Rule 16a-1(f) under the Securities Exchange Act of 1934, as amended) a Directors' and Officers' Questionnaire (the "***D&O Questionnaire***"). The General Counsel (or designee) shall review (in consultation with the Company's outside legal counsel, as appropriate) all D&O Questionnaires to assist in making any required disclosures in the Company's filings with the Securities and Exchange Commission and to confirm, among other matters, the continued independence of each independent director. New directors or officers to the Company shall complete a D&O Questionnaire prior to serving as a Company director or officer. The review of the completed D&O Questionnaire shall consider, among other

things, the director's or officer's outside business dealings and any relationship he/she may have with the Company, outside of serving as a director or officer of the Company.

2 ROLE OF THE BOARD OF DIRECTORS

The Company's stockholders select the Board to provide oversight of and strategic guidance to senior management. The fundamental responsibility of a Board member is to fulfill their fiduciary duties of care and loyalty and otherwise to exercise their business judgment in the best interests of the Company and its stockholders. Board service requires significant time and attention. More specifically, the Board has responsibilities to (i) review, approve and monitor fundamental financial and business strategies and major corporate actions, (ii) assess major risks facing the Company and consider ways to address those risks, (iii) select and oversee management and determine its composition and (iv) oversee the establishment and maintenance of processes and conditions to manage these risks and maintain the integrity of the Company. To fulfill their duties, directors must prepare for meetings and discussions with management, participate in Board meetings, review relevant materials and serve on committees. Directors are expected to maintain an attitude of constructive involvement and oversight, ask relevant and incisive questions and demand honest and accurate answers. Directors must act with integrity and demonstrate a commitment to the Company, the Company's values, business and long-term stockholder value.

3 DIRECTOR ORIENTATION AND CONTINUING EDUCATION

It is expected that management, under the oversight of the Nominating Committee, will provide an orientation process for newly elected directors that is designed to familiarize them with the Company's business, strategies, significant financial, accounting and risk management issues and policies and procedures. The Company may also offer continuing education programs to assist directors in maintaining the appropriate level of expertise to perform their duties as directors.

Directors are encouraged to be involved in continuing director education on an ongoing basis to enable them to better perform their duties and to recognize and appropriately address issues that arise. Directors are encouraged to attend seminars, conferences and other continuing education programs designed especially for directors of public companies, including but not limited to, accredited director education programs.

4 DIRECTOR COMPENSATION

The Compensation Committee will periodically review and recommend to the Board the form and amount of compensation paid to non-employee directors for their service on the Board and its committees in accordance with the principles set forth in its charter and applicable legal and regulatory guidelines. To assist in setting compensation, the Compensation Committee or the Board, as applicable, may request compensation information from the Company or from independent consultants.

5 BOARD MEETINGS

5.1 Number of Meetings.

The Board expects to have at least four (4) regular meetings each year.

5.2 Attendance.

The Company expects directors to attend and participate in all meetings of the Board and committees on which they serve. Directors must notify the Chair (or the chair of the relevant committee) of circumstances preventing attendance at a meeting.

Although the Company does not have a formal policy regarding attendance by Board members at annual meetings of stockholders, directors are expected to attend such meetings. When applicable, directors are encouraged to attend Board meetings, meetings of committees of which they are members and any meeting of stockholders in person but may also attend such meetings by telephone or video conference.

5.3 Preparation and Commitment.

The Company will provide directors with appropriate preparatory materials in advance of a meeting. The Company expects the Company's directors to prepare for and participate in all Board and committee meetings. Each director should ensure that other existing and planned future commitments do not materially interfere with the member's service as director.

5.4 Agenda.

The Chair, together with any presiding Lead Independent Director, will, in consultation with management, set the agenda for each Board meeting. Each Board member is encouraged to suggest the inclusion of items on the agenda at any time. Each Board member is free to raise at any Board meeting subjects that are not on the agenda for that meeting.

5.5 Executive Session.

The independent directors of the Board will meet in regularly scheduled executive sessions without management and any non-independent directors. It is expected that such executive sessions will occur no less than two times per year. Executive session discussions may include such topics as decided by the attendees. The directors generally shall not take formal action at these sessions, but may make recommendations for consideration by the full Board.

A director designated by the independent directors will preside at the executive sessions. If a Lead Independent Director is elected, such person will preside at executive sessions.

6. BOARD COMMITTEES

6.1 Standing Committees

The Board has established three standing committees—the Audit Committee, the Compensation Committee, and the Nominating and Corporate Governance Committee—each of which operates under a charter that has been approved by the Board. Each charter sets forth the responsibilities of the committee and procedures that the committee will follow. The Nominating Committee oversees the Board's committee structure, composition and functioning.

6.2 Board Committee Composition

Each committee shall be composed of no fewer than the number of members set forth in the relevant committee charter. In addition, each committee member must satisfy the membership requirements set forth in the relevant committee charter and all applicable legal, regulatory and stock exchange requirements.

When appropriate, the Nominating Committee will recommend to the Board qualified nominees for membership on each committee and make recommendations regarding the removal of any member of any committee. In addition, when appropriate, the Nominating Committee will recommend members of the Board to serve as the chairperson of each committee. In making those recommendations, the Nominating Committee will consider the interests, independence and experience of the directors and the independence and experience requirements set forth in the Nasdaq listing standards, the rules and regulations of the SEC and applicable law.

6.4 Committee Meetings and Agenda

Each committee chairperson, in consultation with that committee's members and members of management, will determine the frequency, agenda and length for each committee meeting and the appropriate attendees taking into consideration that committee's charter, the authority and responsibilities delegated by the Board to that committee, and the legal, regulatory, accounting and governance principles applicable to that committee's functions.

7. BOARD ACCESS TO MANAGEMENT; USE OF OUTSIDE ADVISORS

The Board and each committee will have full access to all books, records, facilities and personnel of the Company as they deem appropriate in order to carry out their responsibilities. Directors are expected to use their judgment to ensure that this contact is not distracting to the Company's operations or to management's duties and responsibilities. Directors should copy the Chief Executive Officer and/or the General Counsel on written communications to management whenever appropriate.

Each of the Board and its committees, in discharging its role, will have the authority to retain and terminate outside counsel or other experts. The Company will provide appropriate funding for payment of reasonable compensation to any such outside counsel or other experts.

8. SUCCESSION PLANNING

The Compensation Committee with respect to (i) the Chief Executive Officer and (ii) other executive officers, will periodically review and discuss with the Board and the Chief Executive Officer, the Company's executive officers plans for development and succession strategy and plans for such executives. Any succession plan should include, among other things, an assessment of the experience, performance and skills for possible successors to the Chief Executive Officer. In addition, it is expected that the Board will approve and maintain a process regarding Chief Executive Officer succession in the event of an emergency or other sudden temporary or permanent absence of the Chief Executive Officer.

9. BOARD ASSESSMENT

The Nominating Committee will oversee evaluations of the Board, its committees, and Board members, including assessing the contribution and independence of incumbent directors to determine whether to recommend them for reelection to the Board. The Nominating Committee will periodically review each director's time commitments and ability to properly discharge their duties, as described herein. It is expected that the Nominating Committee will review and evaluate the performance of the Board, as well as its own performance, and will oversee the performance evaluations of the other committees, at least annually. The Nominating Committee may conduct such evaluations and reviews in such manner as it deems appropriate.

The Nominating Committee should provide the results of these evaluations to the Board for further discussion as appropriate.

10. BOARD COMMUNICATIONS

10.1 Communications to the Board

Anyone may communicate with a member or members of the Board, including the Chair of the Board, Chair of the Audit, Compensation, or Nominating Committees, or to the non-management or independent directors, by sending a written communication to the attention of the Company's Corporate Secretary at 101 College Street, Suite 210, New Haven, Connecticut 06510.

Communications addressed to the Board or to a Board member are distributed to the Board or to any individual director or directors as appropriate. Any such communication is promptly distributed to the director or directors named therein unless such communication is considered, either presumptively or in the reasonable judgment of the Company's Corporate Secretary, to be improper for submission to the intended recipient or recipients. Examples of communications that would presumptively be deemed improper for submission include, without limitation, solicitations, communications that raise grievances that are personal to the sender, communications that relate to the pricing of the Company's products or services, communications that do not relate directly or indirectly to the Company and communications that are frivolous in nature.

10.2 Board Communications with Interested Parties

The Chief Executive Officer is responsible for establishing effective communications with all interested parties, including stockholders of the Company. It is the policy of the Company that management speaks for the Company. This policy does not preclude outside directors, including the Lead Director, if any, from communicating with stockholders or other interested parties, but it is expected that, in most circumstances, any such communications will be coordinated with management. In all cases, any communications by directors or employees of the Company are subject to the Company's disclosure policies.

11. CONFIDENTIALITY

Board members have an obligation to protect and keep confidential all the Company's non-public information unless the Company has authorized public disclosure or unless otherwise required by applicable law. Confidential information includes all non-public information entrusted to or obtained by a director by reason of the director's position on the Board. This includes information regarding the Company's strategy, business, finances, and operations, and will include minutes, reports, and materials of the Board and its committees and other documents identified as confidential by the Company.

Board members may not use such confidential information for personal benefit or to benefit other persons or entities other than the Company. Unless authorized by the Company or applicable law, directors will refrain from disclosing confidential information to anyone outside the Company, especially anyone affiliated with any entity or person that employs the director or has sponsored the director's election to the Board. These obligations continue even after service on the Board has ended. Any questions or concerns about potential disclosures should be directed to the Company's General Counsel, who then may communicate with the Chief Executive Officer or the Nominating Committee regarding potential disclosures.

12. REVIEW OF GOVERNANCE GUIDELINES

It is expected that the Nominating Committee will review and assess the adequacy of these Governance Guidelines from time to time and, as appropriate, will recommend any proposed changes to the Board for approval. These Guidelines, as may be amended from time to time, shall be posted on the Company's website.