

## **Yield10 Bioscience, Inc.**

### **Compensation Committee Charter**

#### **I. General Statement of Purpose**

The Compensation Committee of the Board of Directors (the “Compensation Committee”) of Yield10 Bioscience, Inc. (the “Company”), on behalf of the Board of Directors (the “Board”), discharges the Board’s responsibilities relating to compensation of the Company’s directors and executives, oversees the Company’s overall compensation structure, policies and programs and is responsible for producing an annual report on executive compensation for inclusion in the Company’s proxy statement relating to its annual meeting of stockholders or annual report on Form 10-K, in accordance with applicable rules and regulations. The primary objective of the Compensation Committee is to develop and implement compensation policies and plans that are appropriate for the Company in light of all relevant circumstances and which provide incentives that further the Company’s long-term strategic plan and are consistent with the culture of the Company and the overall goal of enhancing enduring stockholder value.

#### **II. Compensation Committee Composition**

The number of individuals serving on the Compensation Committee shall be fixed by the Board from time to time but shall consist of no fewer than two (2) members, each of whom shall satisfy the independence or similar standards established pursuant to Nasdaq Rule 5605(a)(2). In determining the members of the Compensation Committee, the Board will consider whether the members qualify as “non-employee directors” as defined in Rule 16b-3 under the Securities Exchange Act of 1934 as amended (the “Exchange Act”), and as “outside directors” as defined in Section 162(m) of the Internal Revenue Code of 1986, as amended.

The members of the Compensation Committee shall be appointed annually by the Board and may be replaced or removed by the Board at any time with or without cause. Resignation or removal of a Director from the Board, for whatever reason, shall automatically constitute resignation or removal, as applicable, from this committee. Vacancies occurring, for whatever reason, may be filled by the Board. The Board shall designate one member of the Compensation Committee to serve as Chairman of the Compensation Committee.

#### **III. Meetings**

The Compensation Committee generally is to meet at least once per year in person or by conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, with any additional meetings as deemed necessary by the Compensation Committee. A majority of the members of the Compensation Committee shall constitute a quorum for purposes of holding a meeting and the Compensation Committee may act by a vote of a majority of members present at such meeting. In lieu of a meeting, the Compensation Committee may act by unanimous written consent in accordance

with the Company's bylaws. The Chairperson of the Compensation Committee, in consultation with the other members and management, may set meeting agendas consistent with this Charter..

#### **IV. Compensation Committee Activities**

The Compensation Committee's purpose and responsibilities shall be to:

##### **A. Review of Charter**

- Review and reassess the adequacy of this Charter annually and submit any proposed changes to the Board for approval.

##### **B. Annual Report on Executive Compensation**

- Prepare the Compensation Committee report for inclusion in the Company's proxy statement or annual report on Form 10-K, in accordance with the applicable rules and regulations of the Securities and Exchange Commission, any securities exchange or automated quotation system on which the Company's securities are traded, and any other rules and regulations applicable to the Company.
- Review and discuss with management the Compensation Discussion and Analysis ("CD&A) to be included in in the Company's proxy statement relating to its annual meeting of stockholders or annual report on Form 10-K, if applicable.
- Based on the Compensation Committee's review of the CD&A and discussions with management, make a recommendation to the Board with respect to the inclusion of the CD&A in the Company's proxy statement or annual report on Form 10-K, if applicable.

##### **C. Annual Performance Evaluation of the Compensation Committee**

- Perform an annual performance evaluation of the Compensation Committee and report to the Board on the results of such evaluation.

##### **D. Incentive-Compensation and Equity-Based Plans**

- Review and approve actions with respect to the adoption, amendment, administration and termination of all incentive-based compensation, equity-based compensation, and other similar plans of the Company, all in accordance with the terms of such plans, including but not limited to (1) designating eligible participants, (2) determining the size, types, terms,

conditions, and participant rights, (3) approving awards and agreements or instruments reflecting awards, (4) construing and interpreting plans and agreements or instruments entered into under them, (5) amending or waiving terms and conditions of outstanding awards, agreements and instruments; provided, that, in each case, where stockholder approval of any action is required under the applicable rules and regulations of the Securities and Exchange Commission, any securities exchange or automated quotation system on which the Company's securities are traded, and any other rules and regulations applicable to the Company, the Compensation Committee shall make recommendations regarding the foregoing to the Board for approval. In connection with the foregoing, the Compensation Committee should consider appropriate industry benchmarks and, as appropriate, the compensation policies pursued by companies similarly situated to the Company.

- To the extent permitted by applicable law, Nasdaq Rules, and the provisions of a given incentive-based or equity-based plan, and consistent with the requirements of applicable law and such plan, the Compensation Committee may delegate to one or more executive officers of the Company the authority to grant cash awards, stock options or other stock awards pursuant to such plan to employees of the Company or any subsidiary of the Company who are not directors or executive officers of the Company.

**E. Matters Related to Compensation of the Company's Chief Executive Officer**

- Review and approve the corporate goals and objectives that may be relevant to the compensation of the Company's Chief Executive Officer ("CEO").
- Evaluate the CEO's performance in light of the goals and objectives that were set for the CEO.
- Determine and approve the CEO's compensation based on such evaluation and review periodically the aggregate amount of compensation being paid or potentially payable to the CEO. In determining the long-term incentive component of the CEO's compensation, the Compensation Committee should consider the Company's performance and relative stockholder return, the value of similar incentive awards to CEOs at comparable companies and the awards given to the Company's CEO in past years.
- The Company's Chief Executive Officer may not be present during voting or deliberation concerning his or her compensation.

**F. Matters Related to Compensation of the Officers Other Than the Chief Executive Officer**

- Determine the compensation of all officers of the Company other than the CEO based on the CEO's evaluation of the officers' performance in light of the goals and objectives that were set for them, and review periodically the aggregate amount of compensation being paid or potentially payable to the Company's officers; for the purposes hereof the term "officer" has the meaning defined in Section 16 of the Exchange Act and Rule 16a-1 promulgated thereunder.

## **V. Additional Compensation Committee Authority**

The Compensation Committee is authorized, on behalf of the Board, to do any of the following, as the Compensation Committee deems necessary or appropriate in its discretion:

### **A. Matters Related to Compensation of the Company's Directors**

- Annually review and make recommendations to the Board with respect to the compensation of the directors of the Company, including with respect to any incentive-compensation plans and equity-based plans.

### **B. Matters Relating to Compensation Consulting Firms or Other Outside Advisors**

- Retain or obtain the advice of compensation consultants, legal counsel and/or other advisers; provided that:
  - The Compensation Committee is authorized to, and must, have direct responsibility for the appointment, compensation and oversight of the work of any compensation consultant, legal counsel or other adviser retained by the Compensation Committee and the Company must provide for appropriate funding, as determined by the Compensation Committee, for payment of reasonable compensation to any such compensation consultant, legal counsel or other adviser; and
  - Before any compensation consultant, legal counsel or other adviser (other than (1) in-house legal counsel or (2) any compensation consultant, legal counsel or other adviser whose role is limited to the following activities for which no disclosure would be required under Item 407(e)(3)(iii) of Regulation S-K: (i) consulting on any broad-based plan that does not discriminate in scope, terms, or operation, in favor of executive officers or directors of the Company, and that is available generally to all salaried employees or (ii) providing information that either is not customized for a particular company or that is customized based on parameters that are not developed by the compensation

consultant, legal counsel or other adviser and about which the compensation consultant, legal counsel or other adviser does not provide advice) is selected by, or provides advice to, the Compensation Committee, the Compensation Committee shall take into consideration the following factors:

- The provision of other services to the Company by the person that employs the compensation consultant, legal counsel or other adviser;
  - The amount of fees received from the Company by the person that employs the compensation consultant, legal counsel or other adviser, as a percentage of the total revenue of the person that employs the compensation consultant, legal counsel or other adviser;
  - The policies and procedures of the person that employs the compensation consultant, legal counsel or other adviser that are designed to prevent conflicts of interest;
  - Any business or personal relationship of the compensation consultant, legal counsel or other adviser with a member of the Compensation Committee;
  - Any stock of the Company owned by the compensation consultant, legal counsel or other adviser; and
  - Any business or personal relationship of the compensation consultant, legal counsel, other adviser or the person employing the adviser with an executive officer of the Company.
- Prohibit the Company from engaging a compensation consultant engaged by the Compensation Committee, or an affiliate of any such compensation consultant, to provide any other services to the Company without the approval of the Compensation Committee.

**C. Matters Related to Executive Employment Agreements and Supplemental Benefits**

- Review and approve, for the CEO and the other executive officers of the Company, any employment agreements, severance arrangements, and change in control agreements or provisions, in each case, when and if appropriate, and any special or supplemental benefits.

## **VI. General**

- The Compensation Committee may establish and delegate authority to one or more subcommittees consisting of one or more of its members, when the Compensation Committee deems it appropriate to do so in order to carry out its responsibilities.
- The Compensation Committee shall make regular reports to the Board concerning areas of the Compensation Committee's responsibility.
- In carrying out its responsibilities, the Compensation Committee shall be entitled to rely upon advice and information that it receives in its discussions and communications with management and such experts, advisors and professionals with whom the Compensation Committee may consult. The Compensation Committee shall have the authority to request that any officer or employee of the Company, the Company's outside legal counsel, the Company's independent auditor or any other professional retained by the Company to render advice to the Company attend a meeting of the Compensation Committee or meet with any members of or advisors to the Compensation Committee. The Compensation Committee shall also have the authority to engage legal, accounting or other advisors to provide it with advice and information in connection with carrying out its responsibilities and shall have sole authority to approve any such advisor's fees and other retention terms.
- The Compensation Committee may perform such other functions as may be requested by the Board from time to time.
- References in this Charter to rules of the SEC, the Nasdaq Stock Market or other regulatory bodies shall be deemed to refer to such rules and to any substantially equivalent rules adopted to replace such rules, in each case as subsequently amended, modified or supplemented.

ADOPTED: July 13, 2006.

AMENDED AND RESTATED: July 23, 2008

FURTHER AMENDED AND RESTATED: June 20, 2013

UPDATED FOR NAME CHANGE: January 6, 2017