

RESTATED
CERTIFICATE OF INCORPORATION
OF
SHOCKWAVE MEDICAL, INC.

The undersigned, Douglas Godshall, does hereby verify that:

ONE: He is the duly elected and acting President and Chief Executive Officer of Shockwave Medical, Inc. (the “**Corporation**”), a corporation organized and existing under the laws of the State of Delaware.

TWO: The original Certificate of Incorporation of the Corporation was filed with the Secretary of State of the State of Delaware on June 17, 2009, was amended and restated on May 16, 2011, July 1, 2013, May 5, 2015, November 9, 2016, December 6, 2018 and March 11, 2019 and amended on February 22, 2019.

THREE: This Restated Certificate of Incorporation (the “**Certificate of Incorporation**”) only restates and integrates and does not further amend the provisions of the Amended and Restated Certificate of Incorporation that was filed with the Secretary of State of the State of Delaware on March 11, 2019 as amended by the Certificate of Retirement that was filed with the Secretary of State of the State of Delaware on March 11, 2019 (together, the “**Amended Certificate**”) and was duly adopted by the Corporation’s Board of Directors (the “**Board of Directors**”) in accordance with the provisions of Section 245 of the General Corporation Law of the State of Delaware. There is no discrepancy between the provisions of the Amended Certificate and the provisions of this Certificate of Incorporation.

FOUR: The text of the Amended Certificate is hereby integrated and restated in its entirety to read as follows:

ARTICLE I.
NAME

The name of the corporation is Shockwave Medical, Inc.

ARTICLE II.
REGISTERED OFFICE AND AGENT

The address of its registered office in the State of Delaware is The Corporation Trust Company, 1209 Orange Street, City of Wilmington, County of

New Castle, DE 19801. The name of its registered agent at such address is The Corporation Trust Company.

**ARTICLE III.
PURPOSE AND POWERS**

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 as the same exists or may hereafter be amended (“**Delaware Law**”).

**ARTICLE IV
CAPITAL STOCK**

(A) Authorized Shares

1. **Classes of Stock.** The total number of shares of stock that the Corporation shall have authority to issue is 286,274,838 shares consisting of 281,274,838 shares of Common Stock, par value \$0.001 per share (the “**Common Stock**”), and 5,000,000 shares of Preferred Stock, par value \$0.001 per share (the “**Preferred Stock**”).

The powers, preferences and rights of, and the qualifications, limitations and restrictions upon, each class or series of stock shall be determined in accordance with, or as set forth below in, this Article IV.

2. **Preferred Stock.** The Board of Directors is hereby empowered, without any action or vote by the Corporation’s stockholders (except as may otherwise be provided by the terms of any class or series of Preferred Stock then outstanding), to authorize by resolution or resolutions from time to time the issuance of one or more classes or series of Preferred Stock and to fix the designations, powers, preferences and relative, participating, optional or other rights, if any, and the qualifications, limitations or restrictions thereof, if any, with respect to each such class or series thereof and the number of shares constituting each such class or series, and to increase or decrease the number of shares of any such class or series to the extent permitted by Delaware Law.

(B) Common Stock.

Each holder of Common Stock, as such, shall be entitled to one vote for each share of Common Stock held of record by such holder on all matters on which stockholders generally are entitled to vote; *provided, however*, that, except as otherwise required by law, holders of Common Stock, as such, shall not be entitled to vote on any amendment to this Certificate of Incorporation (including any certificate of designations relating to any class or series of Preferred Stock) that relates solely to the terms of one or more outstanding classes or series of

Preferred Stock if the holders of such affected class or series are entitled, either separately or together with the holders of one or more other such classes or series, to vote thereon pursuant to this Certificate of Incorporation (including any certificate of designations relating to any class or series of Preferred Stock) or pursuant to Delaware Law.

ARTICLE V. BYLAWS

The Board of Directors shall have the power to adopt, amend or repeal the bylaws of the Corporation (the “**Bylaws**”).

The stockholders may adopt, amend or repeal the Bylaws only with the affirmative vote of the holders of not less than 75% of the voting power of all outstanding securities of the Corporation generally entitled to vote in the election of directors, voting together as a single class.

ARTICLE VI. ELECTION AND REMOVAL OF DIRECTORS

(A) **Power of the Board of Directors.** The business and affairs of the Corporation shall be managed by or under the direction of a Board of Directors.

(B) **Number of Directors.** The number of directors which shall constitute the Board of Directors shall, as of the date this Certificate of Incorporation becomes effective, be seven and, thereafter, shall be fixed exclusively by one or more resolutions adopted from time to time solely by the affirmative vote of a majority of the Board of Directors.

(C) **Election of Directors.**

(1) The directors shall be divided into three classes, designated Class I, Class II and Class III. Each class shall consist, as nearly as may be practicable, of one-third of the total number of directors constituting the entire Board of Directors. Each director shall serve for a term ending on the date of the third annual meeting of stockholders next following the annual meeting at which such director was elected; *provided* that directors initially designated as Class I directors shall serve for a term ending on the date of the 2020 annual meeting, directors initially designated as Class II directors shall serve for a term ending on the date of the 2021 annual meeting, and directors initially designated as Class III directors shall serve for a term ending on the date of the 2022 annual meeting. Notwithstanding the foregoing, each director shall hold office until such director’s successor shall have been duly elected and qualified or until such director’s earlier death, resignation or removal. In the event of any change in the number of directors, the Board of Directors shall apportion any newly created directorships among, or reduce the number of directorships in, such class or classes as shall

equalize, as nearly as possible, the number of directors in each class. In no event will a decrease in the number of directors shorten the term of any incumbent director.

(2) The Board of Directors may assign members of the Board of Directors already in office to the Classes described in Article VI(C)(1), which assignments shall become effective at the same time this Amended and Restated Certificate of Incorporation becomes effective.

(3) There shall be no cumulative voting in the election of directors. Election of directors need not be by written ballot unless the Bylaws so provide.

(D) Vacancies. Vacancies on the Board of Directors resulting from death, resignation, removal or otherwise and newly created directorships resulting from any increase in the number of directors shall, except as otherwise required by law, be filled solely by a majority of the directors then in office (although less than a quorum) or by the sole remaining director, and each director so elected shall hold office for a term that shall coincide with the term of the Class to which such director shall have been elected.

(E) Removal. No director may be removed from office by the stockholders except for cause with the affirmative vote of the holders of not less than a majority of the total voting power of all outstanding securities of the Corporation generally entitled to vote in the election of directors, voting together as a single class.

ARTICLE VII. MEETINGS OF STOCKHOLDERS

(A) Stockholder Meetings

(1) **Annual Meetings.** An annual meeting of stockholders for the election of directors to succeed those whose terms expire and for the transaction of such other business as may properly come before the meeting shall be held at such place, on such date, and at such time as the Board of Directors shall determine.

(2) **Special Meetings.** Special meetings of the stockholders may be called only by the Board of Directors acting pursuant to a resolution adopted by a majority of the Board of Directors, or by the chairman of our Board of Directors.

(B) Limits on Written Consents. Subject to the rights of the holders of any class or series of Preferred Stock then outstanding, as may be set forth in the resolution or resolutions adopted by the Board of Directors pursuant to Article IV(A)(2) hereto for such class or series of Preferred Stock, any action required or

permitted to be taken at any annual or special meeting of stockholders may be taken only upon the vote of stockholders at an annual or special meeting duly noticed and called in accordance with Delaware Law, as amended from time to time, and this Article VII and may not be taken by written consent of stockholders without a meeting, unless such consent is unanimous.

ARTICLE VIII. INDEMNIFICATION

(A) Limited Liability. A director of the Corporation shall not be liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director to the fullest extent permitted by Delaware Law.

(B) Right to Indemnification.

(1) Each person (and the heirs, executors or administrators of such person) who was or is a party or is threatened to be made a party to, or is involved in any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that such person is or was a director or officer of the Corporation or is or was serving at the request of the Corporation as a director or officer of another corporation, partnership, joint venture, trust or other enterprise, shall be indemnified and held harmless by the Corporation to the fullest extent permitted by Delaware Law. The right to indemnification conferred in this Article VIII shall also include the right to be paid by the Corporation the expenses incurred in connection with any such proceeding in advance of its final disposition to the fullest extent authorized by Delaware Law. The right to indemnification conferred in this Article VIII shall be a contract right.

(2) The Corporation may, by action of its Board of Directors, provide indemnification to such of the employees and agents of the Corporation to such extent and to such effect as the Board of Directors shall determine to be appropriate and authorized by Delaware Law.

(C) Insurance. The Corporation shall have power to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the Corporation, or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any expense, liability or loss incurred by such person in any such capacity or arising out of such person's status as such, whether or not the Corporation would have the power to indemnify such person against such liability under Delaware Law.

(D) Nonexclusivity of Rights. The rights and authority conferred in this Article VIII shall not be exclusive of any other right that any person may otherwise have or hereafter acquire.

(E) Preservation of Rights. Neither the amendment nor repeal of this Article VIII, nor the adoption of any provision of this Certificate of Incorporation or the Bylaws, nor, to the fullest extent permitted by Delaware Law, any modification of law, shall adversely affect any right or protection of any person granted pursuant hereto existing at, or arising out of or related to any event, act or omission that occurred prior to, the time of such amendment, repeal, adoption or modification (regardless of when any proceeding (or part thereof) relating to such event, act or omission arises or is first threatened, commenced or completed).

ARTICLE IX. AMENDMENTS

The Corporation reserves the right to amend this Certificate of Incorporation in any manner permitted by Delaware Law and all rights and powers conferred upon stockholders, directors and officers herein are granted subject to this reservation. Notwithstanding the foregoing, the provisions set forth in Articles IV(B), V, VI, VII(A), VII(B) and this Article IX may not be repealed or amended in any respect, and no other provision may be adopted, amended or repealed which would have the effect of modifying or permitting the circumvention of the provisions set forth in any of Articles IV(B), V, VI, VII(A), VII(B) or this Article IX, unless such action is approved by the affirmative vote of the holders of not less than 75% of the total voting power of all outstanding securities of the Corporation generally entitled to vote in the election of directors, voting together as a single class.

IN WITNESS WHEREOF, the undersigned has executed this Restated Certificate of Incorporation as of the date set forth below and certifies under penalty of perjury that he has read the foregoing Certificate of Incorporation and knows the contents thereof and that the statements therein are true.

Executed at Santa Clara, California on March 11, 2019.

/s/ Douglas Godshall

Douglas Godshall

President and Chief Executive Officer