SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-3

REGISTRATION STATEMENT Under The Securities Act of 1933

CRYOLIFE, INC.

(Exact Name of Registrant as specified in its charter)

Florida

(State or other jurisdiction of incorporation or organization)

59-2417093

(I.R.S. Employer Identification Number)

1655 Roberts Boulevard, NW Kennesaw, Georgia 30144 (770) 419-3355

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

J. Patrick Mackin, Chairman, President and Chief Executive Officer CryoLife, Inc. 1655 Roberts Boulevard, NW Kennesaw, Georgia 30144 (770) 419-3355

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to.

Jean F. Holloway General Counsel, Chief Compliance Officer and Corporate Secretary CryoLife, Inc. 1655 Roberts Boulevard, NW Kennesaw, Georgia 30144 Tel: (770) 419-3355 Drew M. Altman, Esq. Win Rutherfurd, Esq. Greenberg Traurig, P.A. 333 S.E. 2nd Avenue, Suite 4400 Miami, Florida 33131 (305) 579-0500

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this Registration Statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box: \Box

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box:

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \Box

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective statement for the same offering. \Box

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box:

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box: \Box

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ⊠	Accelerated filer
Non-accelerated filer \square (Do not check if a smaller reporting company)	Smaller reporting company \square
	Emerging growth company \square

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share(1)	Proposed Maximum Aggregate Offering Price(1)	Amount of Registration Fee(1)
Common Stock, par value \$0.01 per share				
Preferred Stock				
Debt Securities				
Warrants				
Units				

⁽¹⁾ An indeterminate aggregate initial offering price and number or amount of the securities of each identified class is being registered as may from time to time be sold at indeterminate prices. Separate consideration may or may not be received for securities that are issuable upon conversion of, or in exchange for, or upon exercise of, convertible or exchangeable securities. In accordance with Rules 456(b) and 457(r), the Registrant is deferring payment of all of the registration fee.

PROSPECTUS

CryoLife, Inc.

Common Stock Preferred Stock Debt Securities Warrants Units

CryoLife, Inc. ("CryoLife," "we," "us," or the "Company") may from time to time, offer to sell in one or more offerings common stock, preferred stock, debt securities, warrants, or units as described in this prospectus. Each time we offer any securities pursuant to this prospectus, we will provide specific information about the offering and the specific terms, amounts and offering prices of the securities being offered in one or more prospectus supplements, which may also add to, update, supplement or clarify information contained in this prospectus. This prospectus may not be used to sell our securities unless accompanied by a prospectus supplement. We urge you to carefully read this prospectus, the applicable prospectus supplement, any applicable offering materials and any documents we incorporate by reference before you make your investment decision.

We may offer and sell our securities to or through one or more agents, underwriters, dealers, or other third parties or directly to one or more purchasers on a continuous or delayed basis. If any agents or underwriters are involved in the sale of any of these securities, the applicable prospectus supplement will set forth the names of the agents or underwriters and any applicable fees, commissions, or discounts. Our net proceeds from the sale of securities will also be set forth in the applicable prospectus supplement.

Our common stock is listed on the New York Stock Exchange under the symbol "CRY."

Investing in our securities involves risks. You should consider the risks described under "Risk Factors" beginning on page 2 of this prospectus, as well as the other information contained or incorporated by reference in this prospectus or the applicable prospectus supplement, before making a decision to invest in our securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is August 11, 2021

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ABOUT THIS PROSPECTUS

This prospectus is part of an automatic registration statement that we filed with the Securities and Exchange Commission (the "SEC") as a "well-known seasoned issuer" as defined in Rule 405 under the Securities Act of 1933, as amended (the "Securities Act"), using a "shelf" registration process. We may sell any combination of the securities described in this prospectus from time to time. The types of securities that we may offer and sell from time to time pursuant to the prospectus are: common stock, preferred stock, debt securities, warrants, and units up to an indeterminate total dollar amount.

This prospectus provides you with only a general description of the securities to be offered. Each time we sell securities pursuant to this prospectus, we will describe in a prospectus supplement, which we will deliver with this prospectus, specific information about the offering and the terms of the particular securities offered. In each prospectus supplement we will, among other things, identify the type and amount of securities that we will be selling. You should read this prospectus and the applicable prospectus supplement together with any additional information you may need to make your investment decision. You should also read and carefully consider the information in the documents we have referred you to in the "Where You Can Find More Information" section found on page 12. Information incorporated by reference after the date of this prospectus is considered a part of this prospectus and may add, update, or change information contained in this prospectus. Any information in such subsequent filings that is inconsistent with this prospectus or any prospectus supplement will supersede the information in this prospectus or such prospectus supplement. Before purchasing any securities, you should carefully read this prospectus, the applicable prospectus supplement, and any free writing prospectus related to the applicable securities that is prepared by us or on our behalf or that is otherwise authorized by us, together with the additional information described under the heading "Information Incorporated by Reference" found on page 11.

You should rely only on the information contained or incorporated by reference in this prospectus, any prospectus supplement, and any free writing prospectus related to the applicable securities that is prepared by us or on our behalf or that is otherwise authorized by us. We have not authorized any other person to provide you with additional or different information. If anyone provides you with additional, different, or inconsistent information, you should not rely on it. We will not make an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus, as well as information we have previously filed with the SEC and incorporate herein by reference, is accurate only as of the date on the front cover of this prospectus. Our business, financial condition, results of operations and prospects may have changed since that date.

As allowed by the SEC rules, this prospectus does not contain all of the information included in the registration statement. For further information, we refer you to the registration statement, including its exhibits. Statements contained in this prospectus about the provisions or contents of any agreement or other document are not necessarily complete. If the SEC's rules and regulations require that an agreement or document be filed as an exhibit to the registration statement, please see that agreement or document for a complete description of these matters.

RISK FACTORS

Investing in our securities involves risks. You should carefully consider the risks described under "Risk Factors" contained in our Annual Report on Form 10-K for the year ended December 31, 2020, our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2021 and June 30, 2021, and the other documents incorporated by reference in this prospectus, and under similar headings in our subsequently filed Quarterly Reports on Form 10-Q and Annual Reports on Form 10-K, as well as the other risks and uncertainties described in any applicable prospectus supplement and in the other documents incorporated by reference in this prospectus. See the section entitled "Where You Can Find More Information" in this prospectus. The risks and uncertainties we discuss in the documents incorporated by reference in this prospectus are those we currently believe may materially affect our Company. Additional risks and uncertainties not presently known to us or that we currently believe are immaterial also may materially and adversely affect our business, financial condition, and results of operations.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, any applicable prospectus supplement, and the documents and information incorporated by reference herein and therein may contain "forward-looking statements" within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Forward-looking statements may include, but are not limited to, statements relating to our objectives, plans and strategies as well as statements, other than historical facts, that address activities, events, or developments that we intend, expect, project, believe or anticipate will or may occur in the future. These statements are often characterized by terminology such as "may," "will," "should," "expects," "plans," "anticipates," "could," "intends," "target," "projects," "contemplates," "believes," "estimates," "predicts," "potential," or "continue" or the negative of these terms or other similar expressions.

Forward-looking statements are based on assumptions and assessments made in light of our experience and perception of historical trends, current conditions, expected future developments, and other factors believed to be appropriate. Forward-looking statements are not guarantees of future performance and are subject to risks and uncertainties, many of which are outside of our control. You should not place undue reliance on these forward-looking statements, which reflect our view only as of the date of this prospectus, and we undertake no obligation to update these forward-looking statements in the future, except as required by applicable law.

A number of important factors could cause actual results to differ materially from those indicated by the forward-looking statements, including, without limitation, those factors described under the heading "Risk Factors" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2020, and in our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2021 and June 30, 2021, which are incorporated by reference in this prospectus, and under similar headings in our subsequently filed Quarterly Reports on Form 10-Q, any Current Reports on Form 8-K that are filed with the SEC and Annual Reports on Form 10-K, as well as the other risks and uncertainties described in any applicable prospectus supplement or free writing prospectus and in the other documents incorporated by reference in this prospectus. Some of the key factors that could cause actual results to differ from our expectations include the following:

- · material changes in general economic conditions;
- · impacts of the COVID-19 pandemic and similar outbreaks or other natural disasters or unexpected events, including their impact on us, our operations, our customers, the credit markets, or our future financial or operational results;
- · risks related to our global expansion;
- changes in our competitive landscape: we operate in highly competitive market segments, face competition from large, well-established medical device companies and tissue service providers with greater resources;
- · concentration of our sources of revenue;
- · the continued fluctuation of foreign currencies;
- · charges or new risks resulting from acquisitions, restructurings, and integrations;
- the sufficiency of our existing insurance coverage;
- our dependence on suppliers and contract manufacturers;

- · our dependence on key personnel;
- our ability to execute our regulatory strategies: our products and tissues are highly regulated and subjected to significant quality and regulatory risks, which may impact their successful commercialization;
- our ability to execute our clinical strategies: we may not be successful in obtaining necessary clinical results or approvals for new and existing products and services;
- · our ability to adequately minimize disruptions to our information technology systems;
- · our ability to manage the legal, quality, and regulatory risks we face;
- · healthcare policy changes;
- · shareholder activism; and
- · collateral pledged under, and restrictions imposed by, the agreements governing our indebtedness.

OUR COMPANY

CryoLife, Inc. ("CryoLife," the "Company," "we," or "us") is a leader in the manufacturing, processing, and distribution of medical devices and implantable human tissues used in cardiac and vascular surgical procedures for patients with aortic disease. We have four major product families: aortic stents and stent grafts, surgical sealants, On-X[®] mechanical heart valves and related surgical products, and implantable human tissues. Aortic stents and stent grafts include JOTEC® stent grafts and surgical products ("JOTEC" products), the Ascyrus Medical Dissection Stent hybrid prosthesis ("AMDS"), and the NEXUS™ endovascular stent graft system ("NEXUS"). Surgical sealants includes BioGlue® Surgical Adhesive ("BioGlue"). In addition to these four major product families, we sell or distribute PhotoFix® bovine surgical patches, CardioGenesis® cardiac laser therapy equipment, chorioamniotic allografts (previously marketed as NeoPatch®), and PerClot® hemostatic powder (through our relationship with Baxter Healthcare Corp.). We have two reportable segments organized according to our products and services: Medical Devices and Preservation Services.

Our main operating subsidiaries include JOTEC GmbH, a Hechingen, Germany-based endovascular and surgical products company acquired on December 1, 2017, and On-X Life Technologies Holdings, Inc., an Austin, Texas-based mechanical heart valve company acquired on January 20, 2016, as well as Ascyrus Medical, GmbH, acquired on September 2, 2020, and separate country entities to support direct sales operations in Brazil, Canada, France, Italy, Poland, Spain, Switzerland, and the U.K. Additionally, we have entities in Australia, China, Korea, Singapore, Thailand, and Vietnam to provide sales and marketing support for the Asia Pacific region. The Medical Devices segment includes revenues from sales of BioGlue products, aortic stents and stent grafts, On-X products, CardioGenesis cardiac laser therapy equipment, PerClot, and PhotoFix. The Preservation Services segment includes services revenue from the preservation of cardiac and vascular implantable human tissues.

CryoLife is a Florida corporation established in 1984. Our principal executive offices are located at 1655 Roberts Boulevard, NW, Kennesaw, Georgia 30144. Our telephone number is (770) 419-3355 and our website is located at *www.cryolife.com*. The information contained on, or accessible through, our website is not incorporated into this prospectus and does not form a part hereof.

CryoLife, the snowflake design, and other trademarks or service marks of CryoLife appearing in this prospectus are the property of CryoLife or its subsidiaries.

USE OF PROCEEDS

The price to the public of our securities and the net proceeds we expect to receive from the sale of such securities will also be set forth in the applicable prospectus supplement. Unless otherwise specified in the applicable prospectus supplement, any proceeds we receive from the sale of the securities to which the prospectus relates will be used for general corporate purposes. We will have significant discretion in the use of any net proceeds we receive and may invest the net proceeds temporarily until we use them for their stated purpose.

DESCRIPTION OF CAPITAL STOCK

The following summarizes certain material terms and provisions of our common stock and our preferred stock. It does not purport to be complete, however, and is qualified in its entirety by reference to the Company's Amended and Restated Articles of Incorporation, as amended (the "Amended and Restated Articles of Incorporation") and the Company's Amended and Restated Bylaws, as amended (the "Amended and Restated Bylaws"), which are incorporated by reference as exhibits to the registration statement of which this prospectus forms a part, and the Florida Business Corporation Act (the "FBCA").

Overview - Authorized and Outstanding Shares

CryoLife is authorized to issue up to 75,000,000 shares of common stock, par value \$0.01 per share ("common stock"), and 5,000,000 shares of preferred stock.

As of June 30, 2021, there were 39,255,498 shares of common stock issued and outstanding and no shares of preferred stock issued and outstanding.

The following descriptions set forth certain general terms and provisions of our common stock and preferred stock to which a prospectus supplement may relate. The particular terms of the shares of common stock or preferred stock being offered and the extent to which the general provisions may apply will be described in the applicable prospectus supplement. If so indicated in the applicable prospectus supplement, the terms of any series of shares of capital stock may differ from the terms set forth below, except with respect to those terms required by our Amended and Restated Articles of Incorporation and Amended and Restated Bylaws.

Common Stock

Holders of common stock are entitled to one vote per share of common stock held of record on all matters to be voted upon by the Company's shareholders generally. Holders of common stock are not entitled to cumulative voting rights.

Holders of common stock are entitled to receive, on a pro rata basis, such dividends and distributions, if any, as may be declared from time to time by the Board of Directors of the Company (the "Board of Directors") out of funds legally available therefore, subject to any preferential dividend right of any issued and outstanding shares of preferred stock. In the event of liquidation, dissolution, or winding up of the Company, after payment to creditors, holders of common stock are entitled to share ratably in all assets of the Company, subject to the payment of any liquidation preference of any issued and outstanding shares of preferred stock. Furthermore, holders of common stock have no conversion, sinking fund or redemption rights, or preemptive rights to subscribe for any of the Company's securities. The shares of common stock currently outstanding are validly issued, fully paid, and non-assessable.

Preferred Stock

The Board of Directors is empowered, without approval of the Company's shareholders, to cause shares of preferred stock to be issued in one or more series and to fix and determine the relative rights and preferences of the shares of any such series, subject to the limitations of the FBCA. Because the Board of Directors has the power to establish the preferences and rights of each series, it may afford the holders of any series of preferred stock rights and preferences, voting or otherwise, senior to the rights of holders of common stock.

While providing desirable flexibility for possible acquisitions and other corporate purposes, and eliminating delays associated with a shareholder vote on specific issuances, the issuance of preferred stock could adversely affect the voting, dividend, and liquidation rights of holders of common stock.

Amended and Restated Articles of Incorporation and Amended and Restated Bylaws

Certain provisions of the Amended and Restated Articles of Incorporation, the Amended and Restated Bylaws, and the FBCA, which are summarized below, could have the effect of making it more difficult to change the composition of the Board of Directors or for any person or entity to acquire control of the Company.

Preferred Stock

As noted above, the Board of Directors may issue preferred stock without shareholder approval. Consequently, the Company's preferred stock could be issued quickly and utilized, under certain circumstances, as a method of discouraging, delaying, or preventing a change in control of the Company or make removal of management and directors more difficult.

Special Meetings

Pursuant to the Amended and Restated Articles of Incorporation and Amended and Restated Bylaws, special meetings of the shareholders may be called only by the President or Secretary at the request in writing of a majority of the Board of Directors then in office or at the request in writing of shareholders owning not less than 50% of all votes entitled to be cast at the special meeting. Only business within the purpose or purposes described in the special meeting notice may be conducted at the special meeting.

Prohibition of Shareholder Action Without a Meeting

Under the Amended and Restated Articles of Incorporation, the Company's shareholders may not take action by written consent. Any and all action by the shareholders must be taken at either the annual shareholders' meeting or at a special shareholders' meeting.

Advance Notice of Shareholder Proposals and Nominations for Directors

Shareholders who seek to nominate directors or to bring business before a shareholder meeting must comply with specified timing requirements and submit to the Company certain information in advance of such meeting, as set forth in the Amended and Restated Bylaws. These provisions may impede a shareholder's ability to bring matters before an annual or special meeting or make nominations for directors.

Effect of Florida Affiliated Transactions and Anti-Takeover Statutes

As a Florida corporation, the Company is subject to certain anti-takeover provisions that apply to public corporations under Florida law. Pursuant to Section 607.0901 of the FBCA, a publicly held Florida corporation may not engage in a broad range of business combinations or other extraordinary corporate transactions with an interested shareholder for a period of three years following the time that such shareholder became an interested shareholder, unless:

- such business combination or other extraordinary corporate transaction (including a transaction which resulted in the shareholder becoming an interested shareholder) is approved by a majority of disinterested directors before the subject shareholder becomes an interested shareholder;
- · upon consummation of such a business combination or extraordinary corporate transaction that resulted in the subject shareholder becoming an interested shareholder, such shareholder owned at least 85% of the outstanding voting shares of the corporation at the time such transaction commenced, exclusive of shares owned by directors, officers, and certain employee stock plans; or
- at or subsequent to the time the subject shareholder became an interested shareholder, such business combination or
 other extraordinary corporate transaction is approved by the board of directors and authorized by an affirmative vote of
 the holders of two-thirds of the voting shares of the corporation (excluding shares held by the interested shareholder) at
 an annual or special meeting of shareholders, and not by written consent.

The above requirements do not apply to such business combinations or other extraordinary corporate transactions with an interested shareholder if:

- the corporation has not had more than 300 shareholders of record at any time during the three years preceding the announcement date of any such business combination;
- the interested shareholder has owned at least 80% of the corporation's outstanding voting shares for at least three years preceding the announcement date of any such business combination;
- the interested shareholder is the beneficial owner of at least 90% of the outstanding voting shares of the corporation, exclusive of shares acquired directly from the corporation in a transaction not approved by a majority of the disinterested directors; or
- the consideration paid to the holders of the corporation's voting stock is at least equal to certain fair price criteria.

An interested shareholder is defined as a person who, together with affiliates and associates, beneficially owns more than 15% of a corporation's outstanding voting shares.

In addition, the Company is subject to Section 607.0902 of the FBCA, which prohibits the voting of shares in a publicly held Florida corporation that are acquired in a control share acquisition unless (i) our Board of Directors approved such acquisition prior to its consummation or (ii) after such acquisition, in lieu of prior approval by our Board of Directors, the holders of a majority of the corporation's voting shares, exclusive of shares owned by officers of the corporation, employee directors or the acquiring party, approve the granting of voting rights as to the shares acquired in the control share acquisition. A control share acquisition is defined as an acquisition that immediately thereafter entitles the acquiring party to 20% or more of the total voting power in an election of directors.

Although the FBCA permits a corporation to opt out of these requirements, the Company has not elected to opt out, which may have the effect of making it more difficult for any person or group to acquire the Company or substantial amounts of the Company's common stock, or engage in any "affiliated transaction," including the acquisition of a substantial amount of the Company's assets.

Ability to Consider Other Constituencies

The directors of the Company are subject to the "general standards for directors" provisions set forth in Section 607.0830 of the FBCA. These provisions provide that, among other things, in discharging his or her duties and determining what is in the best interests of the Company, a director may consider such factors as the director deems relevant, including the long-term prospects and interests of the Company and its shareholders, and the social, economic, legal, or other effects of any proposed action on the employees, suppliers, or customers of the Company or its subsidiaries, the communities and society in which the Company or its subsidiaries operate, and the economy of the state and the nation. Consequently, in connection with any proposed corporate action, the Board of Directors is empowered to consider interests of other constituencies in addition to the interests of the Company's shareholders. Shareholders should be aware that directors who take into account these other factors may make decisions which are less beneficial to the shareholders than if the law did not permit consideration of such other factors.

Shareholder Action

Except as otherwise provided by the FBCA or in the Amended and Restated Articles of Incorporation or Amended and Restated Bylaws, if a quorum is present at any annual or special meeting of shareholders, the approval by holders of a majority of the shares of common stock present in person or represented by proxy at such meeting and entitled to vote is sufficient to authorize, affirm, ratify, or consent to a matter voted on by shareholders. The FBCA requires the approval of the holders of a majority of the outstanding stock entitled to vote for certain extraordinary corporate transactions, such as a merger, share exchange, conversion, sale of substantially all assets, or dissolution.

Transfer Agent and Registrar

The Transfer Agent and Registrar for the common stock is American Stock Transfer & Trust Company, LLC. It is located at 6201 15th Avenue, Brooklyn, NY 11219, and its telephone number is (718) 921-8124.

Listing

The common stock is listed on the New York Stock Exchange under the symbol "CRY."

DESCRIPTION OF OTHER SECURITIES

We will set forth in the applicable prospectus supplement a description of any debt securities, preferred stock, warrants, or units issued by us that may be offered and sold pursuant to this prospectus. The terms of the offering of any such securities, including the initial offering price and the net proceeds to us, will be contained in the applicable prospectus supplement.

PLAN OF DISTRIBUTION

We may sell the securities from time to time pursuant to underwritten public offerings, "at-the-market" offerings, negotiated transactions, block trades, or a combination of these methods. We may sell the securities to or through one or more underwriters or dealers (acting as principal or agent), through agents, or directly to one or more purchasers. We may distribute securities from time to time in one or more transactions:

- · at a fixed price or prices, which may be changed;
- at market prices prevailing at the time of sale;
- · at prices related to such prevailing market prices; or
- · at negotiated prices.

A prospectus supplement or supplements (and any related free writing prospectus that we may authorize to be provided to you) will describe the terms of the offering of the securities, including, to the extent applicable:

- the name or names of the underwriters, dealers, or agents, if any;
- the purchase price of the securities or other consideration therefore, and the proceeds, we will receive from the sale;
- · any over-allotment or other options under which underwriters may purchase additional securities from us;
- · any agency fees or underwriting discounts and other items constituting agents' or underwriters' compensation;
- · any public offering price;
- · any discounts or concessions allowed or reallowed or paid to dealers; and
- · any securities exchange or market on which the securities may be listed.

Only underwriters named in the prospectus supplement will be underwriters of the securities offered by the prospectus supplement. Dealers and agents participating in the distribution of the securities may be deemed to be underwriters, and compensation received by them on resale of the securities may be deemed to be underwriting discounts. If such dealers or agents were deemed to be underwriters, they may be subject to statutory liabilities under the Securities Act.

If underwriters are used in the sale, they will acquire the securities for their own account and may resell the securities from time to time in one or more transactions at a fixed public offering price or at varying prices determined at the time of sale. The obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. Subject to certain conditions, the underwriters will be obligated to purchase all of the securities offered by the prospectus supplement, other than securities covered by any over-allotment option. If a dealer is used in the sale of securities, we or an underwriter will sell the securities to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale. To the extent required, we will set forth in the prospectus supplement the name of the dealer and the terms of the transaction. Any public offering price and any discounts or concessions allowed or reallowed or paid to dealers may change from time to time.

We may use underwriters, dealers, or agents with whom we have a material relationship. We will describe in the prospectus supplement, naming the underwriter, dealer, or agent, the nature of any such relationship. We may sell securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities and we will describe any commissions payable to the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, the agent will act on a best-efforts basis for the period of its appointment.

We may provide agents, underwriters, and dealers with indemnification against civil liabilities, including liabilities under the Securities Act, or contribution with respect to payments that the agents, underwriters, or dealers may make with respect to these liabilities. Agents, underwriters, and dealers, or their affiliates, may engage in transactions with, or perform services for, us in the ordinary course of business.

All securities we may offer, other than common stock, will be new issues of securities with no established trading market. Any underwriters may make a market in these securities, but they will not be obligated to do so and may discontinue any market making at any time without notice. We cannot guarantee the liquidity of the trading markets for any securities.

LEGAL MATTERS

The validity of the securities will be passed upon for us by Greenberg Traurig, P.A., Miami, Florida and for any underwriters or agents by counsel named in the applicable prospectus supplement.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2020, and the effectiveness of our internal control over financial reporting as of December 31, 2020, as set forth in their reports, which are incorporated by reference in this prospectus and elsewhere in the registration statement. Our consolidated financial statements are incorporated by reference in reliance on Ernst & Young LLP's reports, given on their authority as experts in accounting and auditing.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to "incorporate by reference" information into this prospectus, which means that we can disclose important information to you by referring to those documents. We hereby "incorporate by reference" the documents listed below, which means that we are disclosing important information to you by referring you to those documents. The information that we file later with the SEC will automatically update and in some cases supersede this information. Specifically, we incorporate by reference the following documents or information filed with the SEC (other than, in each case, documents or information deemed to have been furnished and not filed in accordance with SEC rules):

- a) our Annual Report on Form 10-K for the fiscal year ended December 31, 2020;
- b) our Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2021 and June 30, 2021;
- c) our Current Reports on Form 8-K filed with the SEC on March 8, 2021, March 23, 2021, March 29, 2021, May 25, 2021, June 2, 2021, and July 29, 2021 (not including any information furnished under Item 2.02, 7.01 or 9.01 of such Form 8-K or any other information that is identified as "furnished" rather than filed, which information is not incorporated by reference herein);
- d) our Definitive Proxy Statement on Schedule 14A filed in connection with our Annual Meeting of Shareholders held on May 19, 2021;
- e) The description of our common stock contained in our registration statement on Form 8-A, filed on July 2, 1997, and any amendment or report filed for the purpose of updating such description, including without limitation, our Amendment No. 1 to Form 8-A/A filed on November 3, 2005, and Exhibit 4.2 of our Annual Report on Form 10-K for the year ended December 31, 2020.

In addition, all documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act (not including any information furnished under Item 2.02, 7.01, or 9.01 of Form 8-K or any other information that is identified as "furnished" rather than filed, which information is not incorporated by reference herein), prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this registration statement and to be a part hereof from the date of filing of such documents.

Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this registration statement to the extent that a statement contained herein, or in any other subsequently filed document that also is deemed to be incorporated by reference herein, modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this registration statement.

We will provide without charge to each person, including any shareholder, to whom a prospectus is delivered, upon written or oral request of that person, a copy of any and all of the information that has been incorporated by reference in this prospectus (excluding exhibits unless specifically incorporated by reference into those documents). Please direct requests to us at the following address:

CryoLife, Inc. Attn: Corporate Secretary 1655 Roberts Boulevard, NW Kennesaw, Georgia 30144 (770) 419-3355

WHERE YOU CAN FIND MORE INFORMATION

This prospectus is part of the registration statement on Form S-3 we filed with the SEC under the Securities Act and does not contain all the information set forth or incorporated by reference in the registration statement. Whenever a reference is made in this prospectus to any of our contracts, agreements, or other documents, the reference may not be complete and you should refer to the exhibits that are a part of the registration statement or the exhibits to the reports or other documents incorporated by reference into this prospectus for a copy of such contract, agreement, or other document. Because we are subject to the information and reporting requirements of the Exchange Act, we file annual, quarterly, and current reports, proxy statements, and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at http://www.sec.gov.

Our website address is www.cryolife.com. The information contained on, or accessible through, our website is not incorporated into this prospectus and does not form a part hereof.

PART II INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.

The following table sets forth the estimated expenses, all of which are to be paid by us, in connection with the sale and distribution of the securities being registered:

	Amount to be Paid*
SEC registration fee	(1)
Printing fees	(1)
Legal fees and expenses	(1)
Accounting fees and expenses	(1)
Miscellaneous	(1)
Total	(1)

- * In accordance with Rules 456(b) and 457(r), CryoLife is deferring payment of the registration fee for the securities offered by this prospectus.
- (1) These fees are calculated based on the securities offered and the number of issuances and accordingly cannot be estimated at this time.

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

As a corporation incorporated in the State of Florida, we are subject to the Florida Business Corporation Act (the "FBCA"). Section 607.0831 of the FBCA provides that a director is not personally liable for monetary damages to the corporation or any other person for any statement, vote, decision to take or not to take action, or any failure to take any action, as a director, unless (1) the director breached or failed to perform his or her duties as a director and (2) the director's breach of, or failure to perform, those duties constitutes (a) a violation of the criminal law, unless the director had reasonable cause to believe his or her conduct was lawful or had no reasonable cause to believe his or her conduct was unlawful, (b) a circumstance under which the transaction at issue is one from which the director derived an improper personal benefit, either directly or indirectly, (c) a circumstance under which the liability provisions of Section 607.0834 are applicable, (d) in a proceeding by or in the right of the corporation to procure a judgment in its favor or by or in the right of a shareholder, conscious disregard for the best interest of the corporation, or willful or intentional misconduct, or (e) in a proceeding by or in the right of someone other than the corporation or a shareholder, recklessness or an act or omission which was committed in bad faith or with malicious purpose or in a manner exhibiting wanton and willful disregard of human rights, safety, or property. A judgment or other final adjudication against a director in any criminal proceeding for a violation of the criminal law; but does not estop the director from contesting the fact that his or her breach, or failure to perform, constitutes a violation of the criminal law; but does not estop the director from establishing that he or she had reasonable cause to believe that his or her conduct was unlawful.

Section 607.0851(1) of the FBCA permits, in general, a Florida corporation to indemnify any individual who is a party to a proceeding (other than a proceeding by, or in the right of, the corporation) because the individual is or was a director or officer of the corporation, or served another entity in any capacity at the request of the corporation, against liability incurred in such proceeding, if the director or officer acted in good faith, in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the corporation and, in the case of any criminal proceeding, had no reasonable cause to believe that his or her conduct was unlawful. Section 607.0851(4) of the FBCA provides that a corporation may not indemnify a director or an officer in connection with a proceeding by or in the right of the corporation except for expenses and amounts paid in settlement not exceeding, in the judgment of the board of directors, the estimated expense of litigating the proceeding to conclusion, actually and reasonably incurred in connection with the defense or settlement of such proceeding, including any appeal thereof, where such person acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the corporation, unless ordered to provide indemnification or advance expenses to such director or officer by a court, pursuant to Section 607.0854(1)(c) of the FBCA, if the court determines, in view of all the relevant circumstances, that it is fair and reasonable to indemnify or to advance expenses to the director or officer. If the director or officer was adjudged liable, indemnification shall be limited to expenses incurred in connection with the proceeding. Section 607.0853(1) of the FBCA permits the corporation, before final disposition of a proceeding, to advance funds to pay for or reimburse expenses incurred in connection with the proceeding by an individual who is a party to the proceeding because that individual is or was a director or an officer if the director or officer delivers to the corporation a signed written undertaking of the director or officer to repay any funds advanced. Section 607.0858(1) of the FBCA provides that the indemnification and advancement of expense provisions contained in the FBCA are not exclusive, and a corporation may, by a provision in its articles of incorporation, bylaws, or any agreement, or by vote of shareholders or disinterested directors, or otherwise, obligate itself in advance of the act or omission giving rise to a proceeding to provide any other or further indemnification or advancement of expenses

to any of its directors or officers. Section 607.0859 of the FBCA provides that a corporation may not indemnify or advance expenses to a director or officer if a judgment or other final adjudication establishes that his or her actions, or omissions to act, were material to the cause of action so adjudicated and constitute: (i) willful or intentional misconduct or a conscious disregard for the best interests of the corporation in a proceeding by or in the right of the corporation to procure a judgment in its favor or in a proceeding by or in the right of a shareholder; (ii) a transaction in which a director or officer derived an improper personal benefit; (iii) a violation of the criminal law, unless the director or officer had reasonable cause to believe his or her conduct was lawful or had no reasonable cause to believe his or her conduct was unlawful; or (iv) in the case of a director, a circumstance under which the liability provisions of Section 607.0834 are applicable, unless ordered to provide indemnification or advance expenses to such director or officer by a court, pursuant to Section 607.0854(1)(c) of the FBCA, if the court determines, in view of all the relevant circumstances, that it is fair and reasonable to indemnify or to advance expenses to the director or officer.

Section 607.0852 of the FBCA provides that a corporation must indemnify an individual who is or was a director or officer who was wholly successful, on the merits or otherwise, in the defense of any proceeding to which the individual was a party because he or she is or was a director or officer of the corporation against expenses incurred by the individual in connection with the proceeding.

Section 607.0857 of the FBCA provides that a corporation shall have the power to purchase and maintain insurance on behalf of and for the benefit of an individual who is or was a director or officer of the corporation, or who, while a director or officer of the corporation, is or was serving at the corporation's request as a director, officer, manager, member, partner, trustee, employee, or agent of another domestic or foreign corporation, limited liability company, partnership, joint venture, trust, employee benefit plan, or other enterprise or entity, against liability asserted against or incurred by the individual in that capacity or arising from his or her status as a director or officer, whether or not the corporation would have power to indemnify or advance expenses to the individual against the same liability under the FBCA.

Article VII of our Amended and Restated Articles of Incorporation requires that, if in the judgment of the majority of the entire Board of Directors (excluding from such majority any director under consideration for indemnification), the criteria set forth under Sections 607.0850(1) and (2) of the FBCA have been met, then we shall indemnify our directors and officers in the manner and to the extent contemplated by Sections 607.0850(1) and (2) of the FBCA.

Our Amended and Restated Bylaws similarly provide that, subject to limited exceptions, we must indemnify any of our directors or officers who is or was a party, or is threatened to be made a party, to any proceeding by reason of the fact that such person is or was a director or officer of us or is or was serving at the request of us as a director, officer, employee, or agent of another corporation, partnership, joint venture, trust, or other enterprise. Indemnification under our Amended and Restated Bylaws is available only if the person to be indemnified acted in good faith and in a manner such person reasonably believed to be in, or not opposed to, our best interests and, with respect to any criminal action or proceeding, had no reasonable cause to believe such person's conduct was unlawful. Additionally, our Amended and Restated Bylaws provide that expenses (including reasonable attorneys' fees, paralegals' fees, and court costs) incurred by a director or officer in defending a proceeding to which indemnification applies shall be paid by us in advance of the final disposition thereof upon receipt by us of: (a) a representation by or on behalf of such director or officer that all actions taken by him or her which form the basis of the proceeding met the applicable standard of conduct set forth in our Amended and Restated Bylaws, as applicable; and (b) an undertaking by or on behalf of such director or repay such amount if he or she is ultimately found not to be entitled to indemnification by us pursuant to our Amended and Restated Bylaws.

Our Amended and Restated Bylaws also state that the rights to indemnification are binding contract rights which are binding on the registrant with respect to any conduct that takes place while the provision remains in place, even if the provision is later amended, and that the rights continue as to a person who has ceased to be an officer or director.

We have purchased insurance to insure (i) our directors and officers against damages from actions and claims incurred in the course of their duties, and (ii) us against expenses incurred in defending lawsuits arising from certain alleged acts of our directors and officers.

We have also entered into indemnification agreements with each of our directors and our Chief Executive Officer, Chief Financial Officer, Chief Accounting Officer, and certain of our Senior Vice Presidents ("Indemnitees"). Pursuant to such agreements, we have agreed to indemnify the Indemnitees to the fullest extent permitted by the FBCA. The agreements further provide that unless a determination has been made that an Indemnitee is not entitled to indemnification pursuant to such Indemnitee's agreement, all reasonable expenses incurred by or on behalf of such Indemnitee will be advanced from time to time by us to the Indemnitee within 20 days after our receipt of a written request for an advance of expenses by such Indemnitee, whether prior to or after final disposition of a proceeding. The Indemnitee must agree, at the time of such advance, to repay the amounts advanced if it is ultimately determined that such Indemnitee is not entitled to be indemnified under the terms of the agreement. Any advances made will be unsecured, and no interest will be charged on such advances.

Additionally, the Company's 2020 Equity and Cash Incentive Plan, as amended (the "2020 ECIP") provides that each person who is or shall have been a member of the committee (or the full Board of Directors) administering the 2020 ECIP shall be indemnified and held harmless by the Company against and from any loss, cost, liability, or expense that may be imposed upon or reasonably incurred by him or her in connection with or resulting from any claim, action, suit, or proceeding to which he or she may be a party or in which he or she may be involved by reason of any action taken or failure to act under the 2020 ECIP and against and from any and all amounts paid by him or her in settlement thereof, with the Company's approval, or paid by him or her in satisfaction of any judgment in any such action, suit, or proceeding against him or her, provided he or she shall give the Company an opportunity, at its own expense, to handle and defend the same before he or she undertakes to handle and defend it on his or her own behalf. The foregoing right of indemnification provided in the 2020 ECIP is in addition to any other rights of indemnification or elimination of liability to which such persons may be entitled under the Company's organizational documents, as a matter of law, or otherwise, or any power that the Company may have to indemnify them or hold them harmless.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers, or persons controlling the Registrant pursuant to the foregoing provisions, the Registrant has been informed that in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

ITEM 16. EXHIBITS.

The following exhibits are included herein or incorporated herein by reference:

Exhibit Number	Description
1.1†	Form of Underwriting Agreement
4.1*	
4.1	Amended and Restated Articles of Incorporation of CryoLife, Inc. (Incorporated herein by reference to Exhibit 3.1 to the
4 Odle	Registrant's Quarterly Report on Form 10-Q filed July 31, 2020)
4.2*	Amended and Restated By-Laws of CryoLife, Inc. (Incorporated herein by reference to Exhibit 3.2 to the Registrant's
	Current Report on Form 8-K filed February 22, 2018)
4.3*	Form of Certificate for our Common Stock. (Incorporated herein by reference to Exhibit 4.2 to the Registrant's Annual
	Report on Form 10-K for the fiscal year ended December 31, 1997)
4.4†	Form of Indenture for Senior Debt Securities
4.5†	Form of Indenture for Subordinated Debt Securities
4.6†	Form of Senior Debt Security
4.7†	Form of Subordinated Debt Security
4.8†	Form of Warrant
4.9†	Form of Warrant Agreement
4.10†	Form of Unit Agreement and Unit Certificate
4.11†	Form of Specimen Preferred Stock Certificate and Designation of Preferred Stock
5.1**	Opinion of Greenberg Traurig, P.A.
23.1**	Consent of Greenberg Traurig, P.A. (contained in Exhibit 5.1)
23.2**	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm
24.1**	Power of Attorney (set forth on the signature page of this registration statement).
25.1+	Form T-1 Statement of Eligibility of Trustee for Senior Indenture under the Trust Indenture Act of 1939
25.2+	Form T-1 Statement of Eligibility of Trustee for Subordinated Indenture under the Trust Indenture Act of 1939

Incorporated by reference herein.

^{**} Filed herewith.

To be filed by amendment or as an exhibit to a document to be incorporated by reference herein in connection with an offering of the offered securities.

⁺ To be incorporated herein by reference from a subsequent filing in accordance with Section 305(b)(2) of the Trust Indenture Act of 1939, as amended, if applicable.

ITEM 17. UNDERTAKINGS.

- (a) The undersigned registrant hereby undertakes:
- (1) To file, during any period in which offers or sales are being made of securities registered hereby, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (a)(1)(i), (a)(1)(ii), and (a)(1)(iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is a part of the registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered herein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
 - (4) That, for the purpose of determining liability under the Securities Act to any purchaser:
 - (i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
 - (ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5) or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415 (a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.
- (5) That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer and sell such securities to such purchaser:

- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (b) The undersigned registrant hereby undertakes that, for the purpose of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers, and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer, or controlling person of the registrant in the successful defense of any action, suit, or proceeding) is asserted by such director, officer, or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.
- (d) The undersigned registrant hereby undertakes to file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of Section 310 of the Trust Indenture Act (the "Act"), in accordance with the rules and regulations prescribed by the SEC under Section 305(b)(2) of the Act.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Kennesaw, State of Georgia, on August 11, 2021.

CryoLife, Inc.

By:

/s/ D. Ashley Lee

Executive Vice President, Chief Operating Officer, Chief Financial Officer, and Treasurer

II-7

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENT, that each person whose signature appears below hereby constitutes and appoints J. Patrick Mackin and D. Ashley Lee, and each of them, as his or her true and lawful attorney in fact and agent with full power of substitution, for him or her in any and all capacities, to sign any and all amendments to this Registration Statement on Form S-3, including post-effective amendments to this Registration Statement on Form S-3 and any registration statement for an offering pursuant to this Registration Statement on Form S-3 that is to be effective under Rule 462(b) of the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys in fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully for all intents and purposes as each of them might or could do in person, hereby ratifying and confirming all that said attorneys in fact and agents, or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof. This power of attorney shall be governed by and construed with the laws of the State of Delaware and applicable federal securities laws.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement on Form S-3 has been signed by the following persons in the capacities and on the dates indicated.

Name	Title	Date
/s/ J. Patrick Mackin J. Patrick Mackin	Chairman of the Board, Chief Executive Officer, President and Director (Principal Executive Officer)	August 11, 2021
/s/ D. Ashley Lee D. Ashley Lee	Executive Vice President, Chief Operating Officer, and Chief Financial Officer (Principal Financial Officer)	August 11, 2021
/s/ Amy D. Horton Amy D. Horton	Vice President, Chief Accounting Officer (Principal Accounting Officer)	August 11, 2021
/s/ Thomas F. Ackerman Thomas F. Ackerman	Director	August 11, 2021
/s/ Daniel J. Bevevino Daniel J. Bevevino	Director	August 11, 2021
/s/ Marna P. Borgstrom Marna P. Borgstrom	Director	August 11, 2021
/s/ James W. Bullock James W. Bullock	Director	August 11, 2021
/s/ Jeffrey H. Burbank Jeffrey H. Burbank	Director	August 11, 2021
/s/ Ronald D. McCall Ronald D. McCall	Director	August 11 2021
/s/ Harvey Morgan Harvey Morgan	Director	August 11, 2021
/s/ Jon W. Salveson Jon W. Salveson	Director	August 11, 2021

CryoLife, Inc. 1655 Roberts Boulevard, NW Kennesaw, Georgia 30144

Re: CryoLife, Inc. Shelf Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as legal counsel for CryoLife, Inc., a Florida corporation (the "Company"), in connection with the preparation of a Shelf Registration Statement on Form S-3, including the prospectus constituting a part thereof (the "Registration Statement"), being filed by the Company with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), relating to an unspecified number or amount of: (i) shares of common stock, par value \$0.01 per share, of the Company ("Common Stock"); (ii) one or more classes or series of shares of preferred stock, par value \$0.01 per share, of the Company ("Preferred Stock"); (iii) one or more series of debt securities of the Company ("Debt Securities"); (iv) warrants to purchase Common Stock, Preferred Stock, Debt Securities or any combination of those securities ("Warrants"); (v) purchase units consisting of Common Stock, Preferred Stock, Debt Securities, Warrants or any combination of those securities ("Units"); and (viii) the Common Stock, Preferred Stock and Debt Securities that may be issued upon the exercise of the Warrants or in connection with the Units, as applicable. The Common Stock, Preferred Stock, Debt Securities, Warrants and Units are referred to herein collectively as the "Securities." The Securities may be issued and sold or delivered from time to time as set forth in the Registration Statement, any amendment thereto, the prospectus contained therein (the "Prospectus") and supplements to the prospectus (the "Prospectus Supplements") and pursuant to Rule 415 under the Securities Act.

The Debt Securities will be issued pursuant to one or more indentures (each, an "<u>Indenture</u>") by and between the Company and a financial institution identified therein as the trustee (the "<u>Trustee</u>").

The Warrants will be issued under one or more Warrant Agreements (each, a "<u>Warrant Agreement</u>"), each to be between the Company and a counterparty or counterparties identified therein (each, a "<u>Counterparty</u>"). The Units will be issued under a unit agreement (each, a "<u>Unit Agreement</u>"), each to be between the Company and a Counterparty.

In connection with our representation of the Company, and as a basis for the opinions hereinafter set forth, we have examined originals, or copies certified or otherwise identified to our satisfaction, of the following:

- (1) the Registration Statement;
- (2) the Company's Articles of Incorporation, as amended to the date hereof (the "Charter");
- (3) the Company's Bylaws, as amended to the date hereof (the "Bylaws"); and
- (4) such other documents and records and other certificates and instruments and matters of law as we have deemed necessary or appropriate to express the opinions set forth below, in each case subject to the assumptions, limitations and qualifications stated herein.

In rendering the opinions set forth below, we have assumed the genuineness of all signatures, the legal capacity of natural persons, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as duplicates or certified or conformed copies and the authenticity of the originals of such latter documents. We have also assumed that (i) at the time of execution, authentication, issuance and delivery of the Debt Securities, the applicable Indenture will be the valid and legally binding obligation of the Trustee, (ii) at the time of execution, countersignature, issuance and delivery of any Warrants, each Warrant Agreement will be the valid and legally binding obligation of each Counterparty thereto and (iii) at the time of execution, countersignature, and issuance and delivery of any Units, each Unit Agreement will be the valid and legally binding obligation of each Counterparty thereto.

As to matters of fact material to this opinion, we have relied to the extent we deemed reasonably appropriate upon representations or certificates of officers or directors of the Company, without independently verifying the accuracy of such documents, records and instruments.

In connection with the issuance of the Debt Securities, we have assumed further that (i) at the time of the execution and delivery of an Indenture, such Indenture will have been duly authorized, executed and delivered by the Company, (ii) at the time of execution,

authentication, issuance and delivery of the Debt Securities, such Debt Securities will have been duly authorized, executed and delivered by the Company, and (iii) the execution, delivery and performance by the Company of each Indenture and the Debt Securities, as the case may be, will not violate the laws of any jurisdiction (provided that as to the laws of the State of Florida and the federal securities laws of the United States we make no such assumption).

In connection with the issuance of Warrants, we have assumed further that (i) at the time of execution, countersignature, issuance and delivery of any Warrant Agreement, such Warrant Agreement will have been duly authorized, executed and delivered by the Company, and (ii) the execution, delivery and performance by the Company of such Warrant Agreement will not violate the laws of any jurisdiction (provided that as to the laws of the State of Florida and the federal securities laws of the United States we make no such assumption).

In connection with the issuance of Units, we have assumed further that (i) at the time of execution, countersignature, issuance and delivery of any Unit Agreement, such Unit Agreement will have been duly authorized, executed and delivered by the Company, and (ii) the execution, delivery and performance by the Company of such Unit Agreement will not violate the laws of any jurisdiction (provided that as to the laws of the State of Florida and the federal securities laws of the United States we make no such assumption).

We have further assumed that: (i) the Registration Statement and any amendments thereto will be effective under the Securities Act, that no stop orders will have been issued by the Commission with respect to the Registration Statement and that the Registration Statement will comply with all applicable laws at the time the Securities are offered or issued as contemplated by the Registration Statement; (ii) an appropriate Prospectus Supplement, free writing prospectus or term sheet relating to the Securities offered thereby will have been prepared and filed with the Commission in compliance with the Securities Act and will comply with all applicable laws at the time the Securities are offered or issued as contemplated by the Registration Statement; (iii) all Securities will be issued and sold in compliance with the applicable provisions of the Securities Act, the Trust Indenture Act of 1939, as amended, and the securities or blue sky laws of various states and in the manner stated in the Registration Statement and the applicable Prospectus Supplement; (iv) any purchase, underwriting or similar agreement relating to Securities being offered will have been duly authorized, executed and delivered by the Company and the other parties thereto; and (v) in connection with the issuance of any Securities, an adequate number of authorized and unissued shares of Common Stock or Preferred Stock, as applicable, will be available for issuance under the Charter, as then in effect.

Based upon and subject to the foregoing, and subject to the assumptions, limitations and qualifications stated herein, we are of the opinion that:

- (1) With respect to the Common Stock, assuming (i) the taking by the Company's board of directors (the "Board") of all necessary corporate action to authorize and approve the issuance of the Common Stock and (ii) the due issuance and delivery of the Common Stock upon payment therefor in accordance with the applicable definitive purchase, underwriting or similar agreement, or the Prospectus or a Prospectus Supplement approved by the Board, the Common Stock will be validly issued, fully paid and nonassessable.
- With respect to the Preferred Stock, assuming (i) the taking by the Board of all necessary corporate action to authorize and approve the issuance and terms of the Preferred Stock and the terms of the offering thereof, (ii) the due filing of the applicable articles of amendment with the Florida Department of State, setting forth the terms of such Preferred Stock and (iii) the due issuance and delivery of the Preferred Stock upon payment therefor in accordance with the applicable definitive purchase, underwriting or similar agreement, or the Prospectus or a Prospectus Supplement approved by the Board, the Preferred Stock will be validly issued, fully paid and nonassessable.
- (3) With respect to the Debt Securities, assuming (i) the taking of all necessary corporate action to approve the issuance and terms of the Debt Securities, the terms of the offering thereof and related matters by the Board and (ii) the due execution, authentication, issuance and delivery of such Debt Securities, upon payment of the consideration therefor provided for in the applicable definitive purchase, underwriting or similar agreement, or the Prospectus or a Prospectus Supplement approved by the Board, and otherwise in accordance with the provisions of the applicable Indenture and such agreement, such Debt Securities will constitute valid and legally binding obligations of the Company, enforceable against the Company in accordance with their respective terms.
- (4) With respect to the Warrants, assuming (i) the taking of all necessary corporate action by the Board to approve the execution and delivery of each Warrant Agreement and (ii) the due execution, countersignature, issuance and delivery of such Warrant Agreement upon payment of the consideration therefor provided for in the applicable definitive purchase, underwriting or similar agreement, or the Prospectus or a Prospectus Supplement approved by the Board and otherwise in accordance with the provisions of the applicable Warrant Agreement and such agreement, such Warrants will constitute valid and legally binding obligations of the Company enforceable against the Company in accordance with their terms.

(5) With respect to the Units, assuming (i) the taking of all necessary corporate action by the Board to approve (x) the execution and delivery of the applicable Unit Agreements and (y) any Securities to be issued separately or as part of any such Units and (ii) the due execution, countersignature, issuance and delivery of such Unit Agreements upon payment of the consideration therefor provided for in the applicable definitive purchase, underwriting or similar agreement, or the Prospectus or a Prospectus Supplement approved by the Board and otherwise in accordance with the provisions of the applicable Unit Agreements and such agreement, such Units will constitute valid and legally binding obligations of the Company enforceable against the Company in accordance with their respective terms.

The opinions set forth above are subject to (i) the effects of bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium and other laws now or hereafter in effect relating to or affecting creditors' rights generally, (ii) the effects of general equitable principles, whether enforcement is considered in a proceeding in equity or law, (iii) an implied covenant of good faith and fair dealing, (iv) the discretion of the court before which any proceeding for enforcement may be brought and (v) the unenforceability under certain circumstances under law or court decisions of provisions providing for the indemnification of or contribution to a party with respect to a liability where such indemnification or contribution is contrary to the public policy.

This opinion letter is limited to the matters stated herein, and no opinions may be implied or inferred beyond the matters expressly stated herein. We assume no obligation to supplement this opinion if any applicable law changes after the date hereof or if we become aware of any fact that might change the opinion expressed herein after the date hereof.

We do not express any opinion herein concerning any law other than the laws of the State of Florida and the federal securities laws of the United States.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and to the use of the name of our firm therein. In giving this consent, we do not admit that we are within the category of persons whose consent is required by Section 7 of the Securities Act.

Very truly yours,

GREENBERG TRAURIG, P.A.

By:/s/ Drew M. Altman
Drew M. Altman, Esq.

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption "Experts" in the Registration Statement (Form S-3) and related Prospectus of CryoLife, Inc. for the registration of common stock, preferred stock, debt securities, warrants and units and to the incorporation by reference therein of our reports dated February 22, 2021, with respect to the consolidated financial statements of CryoLife, Inc., and the effectiveness of internal control over financial reporting of CryoLife, Inc., included in its Annual Report (Form 10-K) for the year ended December 31, 2020, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Atlanta, Georgia August 11, 2021