

AMENDMENT NO. 2 DATED AUGUST 6, 2026
To Prospectus dated March 28, 2025



Up to \$500,000,000

Common Stock

This Amendment No. 2 to Prospectus (this amendment) amends and supplements the information in the prospectus dated March 28, 2025 (the prospectus), filed with the Securities and Exchange Commission (the SEC) as part of our registration statement on Form S-3ASR (File No. 333-286230) (the registration statement) and the Amendment No. 1 to the prospectus filed with the SEC on January 13, 2026, relating to the offer and sale of shares of our common stock, \$0.0001 par value per share, having an aggregate offering price of up to \$550.0 million pursuant to the terms of that certain Open Market Sale AgreementSM (the sales agreement) dated March 28, 2025, with Jefferies LLC (Jefferies). This amendment amends only those sections of the prospectus listed in this amendment; all other sections of the prospectus remain as is.

As of the date of this amendment, we have sold an aggregate of 10,800,525 shares of our common stock for gross proceeds of approximately \$550.0 million. As a result, we are filing this amendment to amend the prospectus to increase the offering price of shares of our common stock available to be sold pursuant to the terms of the sales agreement by an additional \$500.0 million, for an aggregate offering price of up to \$1,050.0 million.

This amendment should be read in conjunction with the prospectus, and is qualified by reference thereto, except to the extent that the information herein amends or supersedes the information contained in the prospectus. This amendment is not complete without, and may only be delivered or utilized in connection with, the prospectus, and any future amendments or supplements thereto.

Our common stock is listed on the Nasdaq Global Select Market under the symbol "CGON." On August 5, 2026, the last reported sale price of our common stock as reported on the Nasdaq Global Select Market was \$72.42 per share.

Sales of our common stock, if any, under the prospectus, as amended by this amendment, may be made in sales deemed to be an "at the market offering" as defined in Rule 415(a)(4) promulgated under the Securities Act of 1933, as amended (the Securities Act). Jefferies is not required to sell any specific number or dollar amount of securities but will act as our sales agent using commercially reasonable efforts consistent with its normal trading and sales practices, on mutually agreed terms between Jefferies and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

Jefferies will be entitled to a commission of up to 3.0% of the gross proceeds of any shares sold under the sales agreement. In connection with the sale of our common stock on our behalf, Jefferies will be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation of Jefferies will be deemed to be underwriting commissions or discounts. We have also agreed to provide indemnification and contributions to Jefferies against certain civil liabilities, including liabilities under the Securities Act and the Securities Exchange Act of 1934, as amended (the Exchange Act).

Investing in our common stock involves a high degree of risk. You should review carefully the risks and uncertainties described in the section titled "[Risk Factors](#)" beginning on page S-2 of the prospectus, S-2 of this amendment, and under similar headings in the documents that are incorporated by reference into the prospectus concerning factors you should consider before investing in our common stock.

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 the disclosures in the prospectus and this amendment. Any representation to the contrary is a criminal offense.

Jefferies

The date of this Amendment No. 2 to Prospectus is August 6, 2026

TABLE OF CONTENTS
Amendment No. 2 to Prospectus

<u>ABOUT THIS AMENDMENT NO. 2 TO PROSPECTUS</u>	S-ii
<u>THE OFFERING</u>	S-1
<u>RISK FACTORS</u>	S-2
<u>DILUTION</u>	S-3
<u>PLAN OF DISTRIBUTION</u>	S-5
<u>LEGAL MATTERS</u>	S-7

ABOUT THIS AMENDMENT NO. 2 TO PROSPECTUS

This Amendment No. 2 to Prospectus (this amendment) amends and supplements the information in the prospectus dated March 28, 2025 (the prospectus), filed with the Securities and Exchange Commission (the SEC) as part of our registration statement on Form S-3ASR (File No. 333-286230) (the registration statement) and the Amendment No. 1 to the prospectus filed with the SEC on January 13, 2026, relating to the offer and sale of shares of our common stock, \$0.0001 par value per share, having an aggregate offering price of up to \$550.0 million pursuant to the terms of that certain Open Market Sale AgreementSM (the sales agreement) dated March 28, 2025, with Jefferies LLC (Jefferies). As of the date of this amendment, we have sold an aggregate of 10,800,525 shares of our common stock for gross proceeds of approximately \$550.0 million. As a result, we are filing this amendment to amend the prospectus to increase the offering price of shares of our common stock available to be sold pursuant to the terms of the sales agreement by an additional \$500.0 million, for an aggregate offering price of up to \$1,050.0 million.

This amendment should be read in conjunction with the prospectus, and is qualified by reference thereto, except to the extent that the information herein amends or supersedes the information contained in the prospectus. This amendment is not complete without, and may only be delivered or utilized in connection with, the prospectus, and any future amendments or supplements thereto.

Before buying any of the common stock that we are offering, we urge you to carefully read the prospectus, together with the information incorporated by reference as described in the section titled “Where You Can Find More Information” and “Incorporation of Certain Information by Reference” in the prospectus. These documents contain important information that you should consider when making your investment decision.

Unless the context indicates otherwise, as used in the prospectus and this amendment, all references to “CG Oncology,” the “Company,” “we,” “us,” “our,” or similar references refer to CG Oncology, Inc., a Delaware corporation, as well as its consolidated subsidiaries, except where the context otherwise requires or as otherwise indicated.

The prospectus, as amended by this amendment, describes the terms of this offering of common stock and also adds to, updates and changes information contained in the documents incorporated by reference into the prospectus. To the extent there is a conflict between the information contained in this amendment or the prospectus, on the one hand, and the information contained in any document incorporated by reference that was filed with the SEC, before the date of this amendment or the prospectus, on the other hand, you should rely on the information in this amendment or the prospectus. If any statement in one of these documents is inconsistent with a statement in another document having a later date—for example, a document incorporated by reference into the prospectus—the statement in the document having the later date modifies or supersedes the earlier statement.

We have not, and Jefferies has not, authorized anyone to provide you with information different from that which is contained in or incorporated by reference in the prospectus and in any free writing prospectus that we may authorize for use in connection with this offering. We and Jefferies take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. No one is making offers to sell or seeking offers to buy these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information contained in the prospectus is accurate as of the date on the front cover of the prospectus only and that any information we have incorporated by reference is accurate only as of the date given in the document incorporated by reference or as of the date of the prospectus, as applicable, regardless of the time of delivery of the prospectus, any related free writing prospectus, or any sale of our common stock. Our business, financial condition, results of operations and prospects may have changed since those dates.

The prospectus contains and incorporates by reference industry, market and competitive position data from our own internal estimates and research, as well as from independent market research, industry and general

publications and surveys, governmental agencies and publicly available information in addition to research, surveys and studies conducted by third parties. The content of these third-party sources, except to the extent specifically set forth in the prospectus and the documents incorporated by reference in the prospectus, does not constitute a portion of the prospectus or the documents incorporated by reference in the prospectus and is not incorporated herein or therein. Internal estimates are derived from publicly available information released by industry analysts and third-party sources, our internal research and our industry experience, and are based on assumptions made by us based on such data and our knowledge of our industry and market, which we believe to be reasonable. In some cases, we do not expressly refer to the sources from which this data is derived. In that regard, when we refer to one or more sources of this type of data in any paragraph, you should assume that other data of this type appearing in the same paragraph is derived from the same sources, unless otherwise expressly stated or the context otherwise requires.

In addition, while we are responsible for all of the disclosure contained in the prospectus and the documents incorporated by reference in the prospectus and we believe the industry, market and competitive position data included in the prospectus and the documents incorporated by reference in the prospectus is reliable and based on reasonable assumptions, such data involve risks and uncertainties and are subject to change based on various factors, including those discussed in the section titled “Special Note Regarding Forward-Looking Statements” in the prospectus and in the section titled “Risk Factors” incorporated by reference in the prospectus from our most recent Annual Report on Form 10-K and subsequent Quarterly Reports on Form 10-Q. These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties or by us. Accordingly, investors should not place undue reliance on this information.

The prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which the prospectus is a part, and you may obtain copies of those documents as described below under the section entitled “Where You Can Find More Information.”

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference into the prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

This amendment, the prospectus and the information incorporated herein by reference include trademarks, servicemarks and tradenames owned by us or other companies. All trademarks, servicemarks and tradenames included or incorporated by reference in this amendment and the prospectus are the property of their respective owners.

The Offering

Common stock offered by us	Shares of our common stock having an aggregate offering price of up to \$1,050.0 million, which includes \$550.0 million in gross proceeds from the prior sale of common stock under the sales agreement.
Common stock to be outstanding after this offering	Up to 94,911,931 shares of our common stock, assuming sales of 6,904,170 shares of our common stock in this offering, at an offering price of \$72.42 per share, which was the last reported sale price of our common stock on The Nasdaq Global Select Market on August 5, 2026, for gross proceeds of \$500.0 million, which represents the amount available to be issued and sold under the sales agreement after giving effect to this amendment. The actual number of shares of common stock issued in this offering will vary depending on the sales price.
Plan of Distribution	“At the market offering” that may be made from time to time through our sales agent, Jefferies. See “Plan of Distribution” on page S-5 of this amendment.
Use of Proceeds	We currently intend to use the net proceeds from this offering for general corporate purposes, which may include costs associated with the research and development of cretostimogene, including seeking regulatory approval to market cretostimogene for approved indications; preparation for and costs associated with commercialization of cretostimogene, subject to regulatory approval; capital expenditure; general and administrative costs; and working capital. See “Use of Proceeds” on page S-7 of the prospectus.
Risk Factors	Investing in our common stock involves a high degree of risk. See the information contained in or incorporated by reference in the section titled “Risk Factors” beginning on page S-2 of this amendment and page S-4 of the prospectus and in the documents incorporated by reference into the prospectus and any free writing prospectus that we authorize for use in connection with this offering.
Nasdaq Global Select Market symbol	“CGON”

The number of shares of our common stock to be outstanding after this offering set forth above is based on 88,007,761 shares of our common stock outstanding as of March 31, 2026, and excludes:

- 7,588,841 shares of common stock issuable upon the exercise of stock options outstanding as of March 31, 2026, with a weighted-average exercise price of \$17.23 per share;
- 1,158,768 shares of common stock issuable upon the exercise of stock options granted subsequent to March 31, 2026, with a weighted-average exercise price of \$66.83 per share;
- 165,373 shares of common stock issuable upon the vesting and settlement of outstanding performance stock units as of March 31, 2026;
- 22,643 shares of common stock issuable upon the vesting and settlement of performance stock units granted subsequent to March 31, 2026;
- 7,309,118 shares of common stock reserved for future issuance under our 2024 Incentive Award Plan (the 2024 Plan), as well as any potential evergreen increases pursuant to the terms of the 2024 Plan; and
- 1,481,534 shares of our common stock reserved for future issuance under our 2024 Employee Stock Purchase Plan (the ESPP), as well as any potential evergreen increases pursuant to the terms of the ESPP.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks described below and discussed under the section captioned “Risk Factors” contained in our most recent Annual Report on Form 10-K and subsequent Quarterly Reports on Form 10-Q, as well as any amendments thereto reflected in subsequent filings with the SEC that are incorporated by reference into the prospectus, and all other information contained in the prospectus and incorporated by reference in the prospectus, and in any free writing prospectus that we have authorized for use in connection with this offering, before purchasing shares of our common stock. These risks and uncertainties are not the only ones facing us. Additional risks and uncertainties that we are unaware of, or that we currently deem immaterial, also may become important factors that affect us. If any of such risks or the risks described below, in the prospectus or in our SEC filings occur, our business, financial condition or results of operations could be materially and adversely affected. In that case, the trading price of our common stock could decline, and you may lose some or all of your investment.

Additional Risks Related to This Offering

You may experience immediate and substantial dilution.

The offering price per share in this offering may exceed the net tangible book value per share of our common stock outstanding prior to this offering. Assuming that an aggregate of 6,904,170 shares of our common stock are sold at an assumed offering price of \$72.42 per share, which was the last reported sale price of our common stock on the Nasdaq Global Select Market on August 5, 2026, for aggregate gross proceeds of approximately \$500.0 million (which represents the amount available to be sold under the sales agreement after giving effect to this amendment), and after deducting commissions and estimated aggregate offering expenses payable by us, you would experience immediate dilution of \$55.92 per share, representing the difference between our as adjusted net tangible book value per share as of March 31, 2026 after giving effect to this offering with respect to the available \$500.0 million at the assumed offering price. The exercise of outstanding stock options may result in further dilution of your investment. See the section titled “Dilution” in this amendment for a more detailed illustration of the dilution you would incur if you participate in this offering.

DILUTION

Our net tangible book value as of March 31, 2026 was approximately \$1,080.9 million, or \$12.28 per share. We calculate net tangible book value per share by dividing the net tangible book value, which is tangible assets less total liabilities, by the number of outstanding shares of our common stock. Dilution represents the difference between the portion of the amount per share paid by purchasers of shares in this offering and the as adjusted net tangible book value per share of our common stock immediately after giving effect to this offering.

After giving effect to the assumed sale by us of 6,904,170 shares of our common stock in the aggregate amount of approximately \$500.0 million in this offering (which represents the amount available to be sold under the sales agreement after giving effect to this amendment) at an assumed offering price of \$72.42 per share, which was the last reported sale price of our common stock on the Nasdaq Global Select Market on August 5, 2026, and after deducting commissions and estimated aggregate offering expenses payable by us, our as adjusted net tangible book value as of March 31, 2026 would have been approximately \$1,565.8 million, or \$16.50 per share of common stock. This represents an immediate increase in net tangible book value per share of \$4.22 to our existing stockholders and an immediate dilution in net tangible book value per share of \$55.92 to new investors purchasing common stock in this offering.

The following table illustrates this dilution on a per share basis to new investors participating in this offering. The as adjusted information is illustrative only and will adjust based on the actual price to the public, the actual number of shares sold and other terms of the offering determined at the time shares of our common stock are sold pursuant to this offering.

Assumed offering price per share	\$72.42
Net tangible book value per share as of March 31, 2026	\$12.28
Increase in as adjusted net tangible book value per share attributable to new investors purchasing shares in this offering	\$ 4.22
As adjusted net tangible book value per share after giving effect to this offering	\$16.50
Dilution per share to new investors in this offering	\$55.92

The table above assumes, for illustrative purposes, that an aggregate of 6,904,170 shares of our common stock are sold at a price of \$72.42 per share, the last reported sale price of our common stock on the Nasdaq Global Select Market on August 5, 2026, for aggregate gross proceeds of approximately \$500.0 million (which represents the amount available to be sold under the sales agreement after giving effect to this amendment). The shares sold in this offering, if any, will be sold from time to time at various prices. An increase of \$1.00 per share in the price at which the shares are sold from the assumed offering price of \$72.42 per share shown in the table above, assuming all of our common stock in the aggregate amount of \$500.0 million (which represents the amount available to be sold under the sales agreement after giving effect to this amendment) during the term of the offering under the prospectus, as amended by this amendment, is sold at that price, would result in our as adjusted net tangible book value per share after this offering being \$16.51 per share and would increase the dilution in net tangible book value per share to new investors in this offering to \$56.91 per share, after deducting commissions and estimated aggregate offering expenses payable by us. A decrease of \$1.00 per share in the price at which the shares are sold from the assumed offering price of \$72.42 per share shown in the table above, assuming all of our common stock in the aggregate amount of \$500.0 million (which represents the amount available to be sold under the sales agreement after giving effect to this amendment) during the term of the offering under the prospectus, as amended by this amendment, is sold at that price, would result in our as adjusted net tangible book value per share after this offering being \$16.48 per share and would decrease the dilution in net tangible book value per share to new investors in this offering to \$54.94 per share, after deducting commissions and estimated aggregate offering expenses payable by us. This information is supplied for illustrative purposes only and may differ based on the actual offering price and the actual number of shares offered.

The above discussion and table are based on 88,007,761 shares of our common stock outstanding as of March 31, 2026 and excludes:

- 7,588,841 shares of common stock issuable upon the exercise of stock options outstanding as of March 31, 2026, with a weighted-average exercise price of \$17.23 per share;
- 1,158,768 shares of common stock issuable upon the exercise of stock options granted subsequent to March 31, 2026, with a weighted-average exercise price of \$66.83 per share;
- 165,373 shares of common stock issuable upon the vesting and settlement of outstanding performance stock units as of March 31, 2026;
- 22,643 shares of common stock issuable upon the vesting and settlement of performance stock units granted subsequent to March 31, 2026;
- 7,309,118 shares of common stock reserved for future issuance under the 2024 Plan, as well as any potential evergreen increases pursuant to the terms of the 2024 Plan; and
- 1,481,534 shares of our common stock reserved for future issuance under the ESPP, as well as any potential evergreen increases pursuant to the terms of the ESPP.

To the extent that outstanding options are exercised, investors purchasing shares in this offering could experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or equity-based securities, the issuance of these securities could result in further dilution to our stockholders.

PLAN OF DISTRIBUTION

We have entered into a sales agreement with Jefferies, under which we may offer and sell up to \$1,050.0 million of our shares of common stock from time to time through Jefferies acting as agent. As of the date of this amendment, we have sold an aggregate of 10,800,525 shares of our common stock pursuant to the sales agreement for gross proceeds of \$550.0 million. Additional sales of our shares of common stock, if any, under the prospectus, as amended by this amendment, will be made by any method that is deemed to be an “at the market offering” as defined in Rule 415(a)(4) under the Securities Act.

Each time we wish to issue and sell our shares of common stock under the sales agreement, we will notify Jefferies of the number of shares to be issued, the dates on which such sales are anticipated to be made, any limitation on the number of shares to be sold in any one day and any minimum price below which sales may not be made. Once we have so instructed Jefferies, unless Jefferies declines to accept the terms of such notice, Jefferies has agreed to use its commercially reasonable efforts consistent with its normal trading and sales practices to sell such shares up to the amount specified on such terms. The obligations of Jefferies under the sales agreement to sell our shares of common stock are subject to a number of conditions that we must meet.

The settlement of sales of shares between us and Jefferies is generally anticipated to occur on the first trading day following the date on which the sale was made. Sales of our shares of common stock as contemplated in the prospectus, as amended by this amendment, will be settled through the facilities of The Depository Trust Company or by such other means as we and Jefferies may agree upon. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

We will pay Jefferies a commission of up to 3.0% of the aggregate gross proceeds we receive from each sale of our shares of common stock. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. In addition, we have agreed to reimburse Jefferies for the fees and disbursements of its counsel, payable upon execution of the sales agreement, in an amount not to exceed \$100,000, in addition to certain ongoing disbursements of its legal counsel. We estimate that the total expenses for the offering, excluding any commissions or expense reimbursement payable to Jefferies under the terms of the sales agreement, will be approximately \$600,000. The remaining sale proceeds, after deducting any other transaction fees, will equal our net proceeds from the sale of such shares.

Jefferies will provide written confirmation to us before the open on The Nasdaq Global Select Market on the day following each day on which our shares of common stock are sold under the sales agreement. Each confirmation will include the number of shares sold on that day, the aggregate gross proceeds of such sales and the proceeds to us.

In connection with the sale of our shares of common stock on our behalf, Jefferies will be deemed to be an “underwriter” within the meaning of the Securities Act, and the compensation of Jefferies will be deemed to be underwriting commissions or discounts. We have agreed to indemnify Jefferies against certain civil liabilities, including liabilities under the Securities Act. We have also agreed to contribute to payments Jefferies may be required to make in respect of such liabilities.

The offering of our shares of common stock pursuant to the sales agreement will terminate upon the earlier of (i) the sale of all shares of common stock subject to the sales agreement and (ii) the termination of the sales agreement as permitted therein. We and Jefferies may each terminate the sales agreement at any time upon ten days’ prior notice.

This summary of the material provisions of the sales agreement does not purport to be a complete statement of its terms and conditions. A copy of the sales agreement is filed as an exhibit to the registration statement of which the prospectus forms a part.

Jefferies and its affiliates may in the future provide various investment banking, commercial banking, financial advisory and other financial services for us and our affiliates, for which services they may in the future receive customary fees. In the course of its business, Jefferies may actively trade our securities for its own account or for the accounts of customers, and, accordingly, Jefferies may at any time hold long or short positions in such securities.

A prospectus in electronic format may be made available on a website maintained by Jefferies, and Jefferies may distribute the prospectus electronically.

LEGAL MATTERS

The validity of the issuance of the common stock offered by this amendment and the prospectus will be passed upon for us by Cooley LLP, New York, New York. Jefferies LLC is being represented in connection with this offering by Latham & Watkins LLP, San Diego, California.

CG Oncology, Inc.

☐ Not Applicable☒ Not Applicable[illegible]

Sources												
Rule 457(p)												
Fee Offset Claims												
Fee Offset Sources												

Table 3: Combined Prospectuses

☒Not Applicable

	Security Type	Security Class Title	Amount of Securities Previously Registered	Maximum Aggregate Offering Price of Securities Previously Registered	Form Type	File Number	Initial Effective Date
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Narrative Disclosure

The maximum aggregate offering price of the securities to which the prospectus relates is \$1,050,000,000.00. The prospectus is a final prospectus for the related offering.