PROSPECTUS SUPPLEMENT (to Prospectus dated November 13, 2024)



Common Stock

We have entered into a sales agreement, or the Sales Agreement, with TD Securities (USA) LLC, which we refer to as TD Cowen or the Sales Agent, relating to shares of our common stock, par value \$0.0001 per share, offered by this prospectus supplement and the accompanying prospectus. In accordance with the terms of the Sales Agreement, we may offer and sell shares of our common stock having an aggregate offering price of up to \$200,000,000 from time to time through the Sales Agent. Sales of the shares of common stock, if any, may be made on The Nasdaq Global Select Market at market prices and such other sales as agreed upon by us and the Sales Agent, as the case may be.

Our common stock is listed on The Nasdaq Global Select Market under the symbol "CCCC". On October 28, 2024, the closing price of our common stock, as reported on The Nasdaq Global Select Market, was \$6.00 per share.

Sales of our common stock, if any, under this prospectus supplement will 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, or the Securities Act. The Sales Agent is not required to sell any specific number or dollar amount of securities, but will use commercially reasonable efforts to sell on our behalf all of the shares of common stock requested to be sold by us, consistent with their normal trading and sales practices, on mutually agreed terms between the Sales Agent and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

The Sales Agent will be entitled to compensation at a commission rate of up to 3.0% of the gross sales price of common stock sold under the Sales Agreement. See "Plan of Distribution" beginning on page S-13 for additional information regarding the compensation to be paid to the Sales Agent. In connection with the sale of the common stock on our behalf, the Sales Agent will be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation of the Sales Agent will be deemed to be underwriting commissions or discounts. We have also agreed to provide indemnification and contribution to the Sales Agent with respect to certain liabilities, including liabilities under the Securities Act and the Securities Exchange Act of 1934, as amended, or the Exchange Act.

Investing in our common stock involves a high degree of risk. You should review carefully the risks and uncertainties referenced under the heading "Risk Factors" on page S-6 of this prospectus supplement and in the documents that are incorporated by reference into this prospectus supplement.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement is truthful or complete. Any representation to the contrary is a criminal offense.

TD Cowen

Prospectus Supplement dated November 13, 2024

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We are responsible for the information contained and incorporated by reference in this prospectus supplement and in any related free writing prospectus supplement we prepare or authorize. We have not authorized anyone to give you any other information, and we take no responsibility for any other information that others may give you. If you are in a jurisdiction where offers to sell, or solicitations of offers to purchase, the securities offered by this documentation are unlawful, or if you are a person to whom it is unlawful to direct these types of activities, then the offer presented in this document does not extend to you. The information contained in this document speaks only as of the date of this document, unless the information specifically indicates that another date applies. Our business, financial condition, results of operations and prospects may have changed since those dates.

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement is part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, using a "shelf" registration process. Under the shelf registration process, we may offer shares of our common stock having an aggregate offering price of up to \$200,000,000 from time to time under this prospectus supplement at prices and on terms to be determined by market conditions at the time of the offering.

To the extent the information contained in this prospectus supplement differs or varies from the information contained in any document incorporated by reference herein that was filed with the SEC before the date of this prospectus supplement, you should rely on the information set forth in this prospectus supplement. If any statement in one of these documents is inconsistent with a statement in another document having a later date (for example, a subsequently filed document deemed incorporated by reference in this prospectus supplement), the statement in the document having the later date modifies or supersedes the earlier statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement.

You should rely only on the information contained or incorporated by reference in this prospectus supplement. We have not, and the Sales Agent has not, authorized anyone to provide you with information that is in addition to or different from that contained or incorporated by reference in this prospectus supplement or contained in any permitted free writing prospectus supplements we have authorized for use in connection with this offering. We and the Sales Agent take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may provide.

The information contained in this prospectus supplement and the documents incorporated by reference herein is accurate only as of their respective dates, regardless of the time of delivery of any such document or the time of any sale of our common stock. Our business, financial condition, results of operations and prospects may have changed since those dates. It is important for you to read and consider all information contained or incorporated by reference in this prospectus supplement in making your investment decision. You should read this prospectus supplement, as well as the documents incorporated by reference herein, the additional information described under the section titled "Where You Can Find More Information" and "Incorporation of Certain Documents by Reference" in this prospectus supplement and any free writing prospectus supplement that we have authorized for use in connection with this offering, before investing in our common stock.

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 in this prospectus supplement 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.

We own or have rights to various trademarks, service marks and trade names that are used in connection with the operation of our business, including our company name, C4 Therapeutics, our logo, the name of our TORPEDO technology platform and the names of our BIDAC and MONODAC protein degrader product candidates. This prospectus supplement may also contain trademarks, service marks and trade names of third parties, which are the property of their respective owners. Our use or display of third parties' trademarks, service marks, trade names or products in this prospectus supplement is not intended to and does not imply a relationship with, or endorsement or sponsorship by us. Solely for convenience, the trademarks, service marks and trade names referred to in this prospectus supplement may appear without the ®, TM or SM symbols, but the omission of such references is not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the right of the applicable owner of these trademarks, service marks and trade names.

This prospectus supplement and the documents incorporated by reference herein also contain estimates, projections and other information concerning our industry, our business, and the markets for certain diseases, including data regarding the estimated size of those markets, and the incidence and prevalence of certain medical conditions. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances

reflected in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources.

We are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where such offers and sales are permitted. The distribution of this prospectus supplement and the offering of our common stock in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement must inform themselves about, and observe any restrictions relating to, the offering of our common stock and the distribution of this prospectus supplement outside the United States. This prospectus supplement does not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

As used in this prospectus supplement, unless the context otherwise requires, references to the "company," "C4T," "we," "us" and "our" refer to C4 Therapeutics, Inc. and, where appropriate, our wholly owned, consolidated subsidiaries.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information about us and this offering and does not contain all of the information that you should consider before investing in our securities. Before investing in our common stock, you should carefully read the information contained and incorporated by reference in this prospectus supplement, including the sections titled "Risk Factors" and the financial statements and accompanying notes.

Our Company

We are a clinical-stage biopharmaceutical company dedicated to delivering on the promise of targeted protein degradation, or TPD, science to create a new generation of small-molecule medicines that transforms patients' lives. By leveraging our proprietary TORPEDO platform, we have the capability to efficiently design and optimize small molecule protein degraders that are highly active against their desired targets by harnessing the body's natural process for destroying unwanted proteins. We believe our novel oral product candidates have the potential to overcome drug resistance often seen with inhibitors, target currently "undruggable" targets and improve patient outcomes. To date, we have successfully designed and advanced several protein degraders into the clinic across a range of target classes and, based on data from our clinical trials, our product candidates have demonstrated robust target degradation.

One of our most advanced product candidates, cemsidomide (CFT7455), is an orally bioavailable MonoDAC degrader of protein targets called IKZF1 and IKZF3, currently in clinical development for multiple myeloma, or MM, and non-Hodgkin lymphomas, or NHLs. The United States Food and Drug Administration, or FDA, has granted orphan drug designation to cemsidomide (CFT7455) for the treatment of MM. In December 2023, we presented positive clinical data from the dose escalation portion of the cemsidomide (CFT7455) Phase 1/2 trial as a monotherapy and in combination with dexamethasone in MM. We continue to progress the ongoing Phase 1/2 clinical trial of cemsidomide in MM and NHL.

Our other most advanced product candidate, CFT1946, is an orally bioavailable BiDAC degrader designed to be potent and selective against BRAF V600X mutant targets to treat melanoma, non-small cell lung cancer, or NSCLC, colorectal cancer, or CRC, and other malignancies that harbor this mutation. In January 2023, we initiated a first-in-human Phase 1/2 clinical trial of CFT1946 for the treatment of BRAF V600X mutant solid tumors including NSCLC, colorectal cancer and melanoma. In September 2024, we presented initial monotherapy CFT1946 data demonstrating proof of mechanism and early evidence of proof of concept in BRAF V600 mutant solid tumors at the European Society for Medical Oncology (ESMO) Congress 2024. We continue to progress the ongoing Phase 1/2 clinical trial of CFT1946.

Additionally, we are developing CFT8919, an orally bioavailable, allosteric, mutant-selective BiDAC degrader of epidermal growth factor receptor, or EGFR, with an L858R mutation in NSCLC. In May 2023, we entered into an exclusive licensing agreement for the development and commercialization of CFT8919 in Greater China, including Hong Kong SAR, Macau SAR and Taiwan, with Betta Pharmaceuticals, Co., Ltd, or Betta Pharma. Additionally, the FDA cleared the investigational new drug, or IND, application for CFT8919 and Betta Pharma received clinical trial application clearance for CFT8919 from China's National Medical Product Administration. We expect to initiate clinical trial activities outside Greater China following the completion of Betta Pharma's Phase 1 dose escalation trial in Greater China.

Beyond these initial product candidates, we are further diversifying our pipeline by developing new degraders against both clinically validated and currently undruggable targets for our own proprietary programs, as well as for programs we are developing in collaboration with MKDG, Merck, and Roche.

Corporate Information

We were incorporated under the laws of Delaware in October 2015 under the laws of the State of Delaware. Our principal executive offices are located at 490 Arsenal Way, Suite 120, Watertown, MA 02472 and our telephone number is (617) 231-0700. Our website address is www.c4therapeutics.com. We have one wholly owned subsidiary, C4T Securities Corporation, a Massachusetts corporation. Our website address is www.c4therapeutics.com. Information contained on our website is not incorporated by reference into this prospectus supplement and should not be considered to be a part of this prospectus supplement or the registration statement of which it forms a part.

Implications of Being a Smaller Reporting Company

As of the end of our fiscal year ended December 31, 2023, we qualified as a "non-accelerated filer" as defined in the Securities Exchange Act of 1934, as amended, or the Exchange Act and as a "smaller reporting company." As a smaller reporting company, we are allowed reduced disclosure and other requirements that are otherwise generally applicable to large accelerated filers. These reduced requirements include:

- two years of audited financial statements in addition to any required unaudited interim financial statements with correspondingly reduced "Management's Discussion and Analysis of Financial Condition and Results of Operations" disclosure;
- reduced disclosure about our executive compensation arrangements;
- · exemption from the auditor attestation requirement in the assessment of our internal control over financial reporting; and
- · delayed adoption of certain accounting pronouncements.

We may take advantage of these and other scaled disclosures available to smaller reporting companies until the fiscal year following the determination that we no longer qualify as a "smaller reporting company." A company will qualify as a "smaller reporting company," if, as of the last day of the company's second fiscal quarter, it has (1) a public float of less than \$250 million or (2) less than \$100 million in annual revenues and either (i) no public float or (ii) public float of less than \$700 million.

THE OFFERING

Common stock offered by us:

Shares of our common stock having an aggregate offering price of up to \$200,000,000.

Common stock to be outstanding immediately after this offering:

Up to 103,922,292 shares (as more fully described in the notes following this table), assuming sales of 33,333,333 shares of our common stock in this offering at an offering price of \$6.00 per share, which was the last reported sale price of our common stock on The Nasdaq Global Select Market on October 28, 2024. The actual number of shares issued will vary depending on how many shares of our common stock we choose to sell and the prices at which such sales occur.

Plan of Distribution:

"At the market offering" that may be made from time to time on The Nasdag Global Select Market or other existing trading market for our common stock through our sales agent TD Securities (USA) LLC. See "Plan of

Distribution" on page S-13 of this prospectus.

Use of Proceeds:

Our management will retain broad discretion regarding the allocation and use of the net proceeds. We currently intend to use the net proceeds from this offering, together with our existing cash, cash equivalents and marketable securities, to fund research and clinical development of current or additional pipeline candidates, and the remainder for working capital and other general corporate purposes. See "Use of Proceeds" on page S-7 of

this prospectus.

Risk Factors:

Investing in our common stock involves significant risks. See "Risk Factors" on page S-6 of this prospectus and under similar headings in the documents incorporated by reference into this prospectus supplement for a discussion of the factors you should carefully consider before deciding to invest in our common stock.

Nasdaq Global Select Market symbol: "CCCC"

All information in this prospectus supplement related to the number of shares of our common stock to be outstanding immediately after this offering is based on 70,562,901 shares of our common stock outstanding as of September 30, 2024. The number of shares outstanding as of September 30, 2024 as used throughout this prospectus supplement, unless otherwise indicated, excludes:

- 11,555,851 shares of common stock issuable upon the exercise of stock options outstanding as of September 30, 2024 under our 2015 Stock Option and Grant Plan, or the 2015 Plan, and under our 2020 Stock Option and Incentive Plan, or the 2020 Plan, at a weighted-average exercise price of \$12.19 per share;
- 644,760 shares of common stock issuable upon the exercise of stock options outstanding as of September 30, 2024 issued pursuant to the employment inducement award exemption provided by Nasdaq Listing Rule 5635(c)(4) at a weighted-average exercise price of \$4.64 per share;
- 3,330,625 shares of common stock reserved for future issuance as of September 30, 2024 under our 2020 Plan; and
- 2,166,905 shares of common stock reserved for future issuance as of September 30, 2024 under our 2020 Employee Stock Purchase Plan.

Unless otherwise stated, all information contained in this prospectus supplement assumes no exercise of stock options after September 30, 2024 and reflects an assumed public offering minimum price of \$6.00, which was the last reported sale price of our common stock on The Nasdaq Global Select Market on October 28, 2024.

RISK FACTORS

Investing in our common stock involves a high degree of risk. Before making an investment decision, you should carefully consider the risks described below and in our most recent Annual Report on Form 10-K and any subsequent Quarterly Reports on Form 10-Q or Current Reports on Form 8-K, as well as any amendments thereto reflected in subsequent filings with the SEC, each of which are incorporated by reference in this prospectus supplement, and all of the other information in this prospectus supplement, including our financial statements and related notes incorporated by reference herein. If any of these risks is realized, our business, financial condition, results of operations and prospects could be materially and adversely affected. In that event, the trading price of our common stock could decline and you could lose part or all of your investment. Additional risks and uncertainties that are not yet identified or that we currently believe to be immaterial may also materially harm our business, financial condition, results of operations and prospects and could result in a complete loss of your investment.

Risks Related to This Offering

We have broad discretion in the use of the net proceeds from this offering and may invest or spend the proceeds in ways with which you do not agree and in ways that may not yield a return on your investment.

Our management will have broad discretion in the application of the net proceeds from this offering, including for any of the purposes described in the section titled "<u>Use of Proceeds</u>," as well as our existing cash, and you will be relying on the judgment of our management regarding such application. You will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used effectively. Our management might not apply the net proceeds or our existing cash in ways that ultimately increase the value of your investment. If we do not invest or apply the net proceeds from this offering or our existing cash in ways that enhance stockholder value, we may fail to achieve expected results, which could cause our stock price to decline. Pending their use, we may invest the net proceeds from this offering in short-term U.S. Treasury securities with insignificant rates of return. These investments may not yield a favorable return to our stockholders.

If you purchase our common stock in this offering, you will incur immediate and substantial dilution in the net tangible book value of your shares.

The offering price per share in this offering may exceed the net tangible book value per share of our common stock outstanding prior at the time of sale. Assuming that an aggregate of 33,333,333 shares of our common stock are sold at a minimum price of \$6.00 per share, which was the last reported sale price of our common stock on The Nasdaq Global Select Market on October 28, 2024, for aggregate gross proceeds of \$200.0 million, after deducting commissions and estimated offering expenses payable by us, investors in this offering would experience immediate dilution of \$1.80 per share, representing the difference between our as adjusted net tangible book value per share as of September 30, 2024 of \$4.20, after giving effect to this offering, and the assumed offering price.

This dilution is due to the substantially lower price paid by some of our investors who purchased shares prior to this offering as compared to the price offered to the public in this offering and the exercise of stock options granted to our employees, directors and consultants. In addition, we have a significant number of stock options outstanding. The exercise of any of these outstanding options would result in further dilution. As a result of the dilution to investors purchasing shares in this offering, investors may receive significantly less than the purchase price paid in this offering, if anything, in the event of our liquidation. Further, because we expect we will need to raise additional capital to fund our future activities, we may in the future sell substantial amounts of common stock or securities convertible into or exchangeable for common stock.

Future issuances of common stock or common stock-related securities, together with the exercise of outstanding stock options, if any, may result in further dilution. For a further description of the dilution that you will experience immediately after this offering, see the section titled "Dilution."

Future sales and issuances of our common stock or rights to purchase common stock, including pursuant to our equity incentive plans, could result in additional dilution of the percentage ownership of our stockholders and could cause our stock price to fall.

Additional capital will be needed in the future to continue our planned operations. To the extent we issue additional equity securities to raise capital or pursuant to our equity incentive plans or other contractual obligations, our stockholders may experience substantial dilution. We may sell common stock, convertible securities or other equity

securities in one or more transactions at prices and in a manner we determine from time to time. If we sell or issue common stock, convertible securities or other equity securities in more than one transaction, investors may be materially diluted by subsequent sales. These sales may also result in material dilution to our existing stockholders, and new investors could gain rights superior to our existing stockholders.

In addition, sales of a substantial number of shares of our outstanding common stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares of common stock intend to sell shares, could reduce the market price of our common stock. Persons who were our stockholders prior to our initial public offering continue to hold a substantial number of shares of our common stock that many of them are now able to sell in the public market. Significant portions of these shares are held by a relatively small number of stockholders. Sales by our stockholders of a substantial number of shares, or the expectation that such sales may occur, could significantly reduce the market price of our common stock

The actual number of shares we will issue under the Sales Agreement, at any one time or in total, is uncertain.

Subject to certain limitations in the Sales Agreement and compliance with applicable law, we have the discretion to deliver a transaction proposal to any Sales Agent at any time throughout the term of the Sales Agreement. The number of shares that are sold by any such Sales Agent after delivering a transaction proposal will fluctuate based on the market price of our common stock during the sales period and limits we set with such Sales Agent. Because the price per share of each share sold will fluctuate based on the market price of our common stock during the sales period, it is not possible at this stage to predict the number of shares that will be ultimately issued.

The common stock offered hereby will be sold in "at the market offerings," and investors who buy shares at different times will likely pay different prices.

Investors who purchase shares in this offering at different times will likely pay different prices, and so may experience different outcomes in their investment results. We will have discretion, subject to market demand, to vary the timing, prices, and numbers of shares sold, and there is no minimum or maximum sales price. Investors may experience a decline in the value of their shares as a result of share sales made at prices lower than the prices they paid.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, any related free writing prospectus supplement and the documents that we incorporate by reference herein or therein contain forward-looking statements within the meaning of Section 27A of the Securities Act, as amended, or Securities Act, and Section 21E of the Exchange Act. Any statements about our expectations, beliefs, plans, objectives, assumptions or future events or performance are not historical facts and may be forward-looking. These statements are often, but are not always, made through the use of words or phrases such as "may," "will," "could," "should," "expects," "intends," "plans," "anticipates," "believes," "estimates," "predicts," "projects," "potential," "continue," and similar expressions, or the negative of these terms, or similar expressions. Accordingly, these statements involve estimates, assumptions, risks and uncertainties which could cause actual results to differ materially from those expressed in them. Any forward-looking statements are qualified in their entirety by reference to the factors discussed throughout this prospectus supplement and the information incorporated by reference in this prospectus supplement, and in particular those factors referenced in the section "Risk Factors."

This prospectus supplement contains forward-looking statements that are based on our management's belief and assumptions and on information currently available to our management. These statements relate to future events or our future financial performance, and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. Forward-looking statements include, but are not limited to, express or implied statements about:

- the initiation, timing, progress, results, safety and efficacy, and cost of our research and development programs and our current and future preclinical studies and clinical trials, including statements regarding the timing of initiation and completion of studies or trials, the period during which the results of the trials will become available, and our research and development programs;
- our ability to obtain funding for our operations necessary to complete further development, manufacturing and commercialization of our product candidates;
- our ability to obtain and maintain regulatory approval for any of our current or future product candidates;
- the period of time over which we anticipate our existing cash and cash equivalents, and marketable securities will be sufficient to fund our
 operating expenses and capital expenditure requirements;
- our ability to identify and develop product candidates for treatment of additional disease indications;
- the potential attributes and benefits of our product candidates;
- the rate and degree of market acceptance and clinical utility for any product candidates we may develop;
- the pricing and reimbursement of our product candidates, if approved, including the possibility for reduced pricing of our products, once approved, if they are later subject to mandatory price negotiation with the Centers for Medicare and Medicaid Services under the Inflation Reduction Act of 2022 or other applicable laws;
- the effects of competition with respect to any of our current or future product candidates, as well as innovations by current and future competitors in our industry;
- the implementation of our strategic plans for our business, any product candidates we may develop, and our TORPEDO® (<u>Target OR</u>iented <u>ProtEin Degrader Optimizer</u>) platform;
- the ability and willingness of our third-party strategic collaborators to continue research, development, and manufacturing activities relating to our product candidates, including our ability to advance programs under our existing collaboration agreements with F. Hoffmann-La Roche Ltd and Hoffmann-La Roche Inc., or Roche, Betta Pharmaceuticals, Co., Ltd., or Betta Pharma, Merck Sharp & Dohme, LLC, or Merck, and Merck KGaA, Darmstadt, Germany, or MKDG, or other new collaboration agreements;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates;

- estimates of our future expenses, revenues, capital requirements, and our needs for additional financing;
- future agreements with third parties in connection with the manufacturing and commercialization of our product candidates, if approved;
- the size and growth potential of the markets for our product candidates and our ability to serve those markets;
- · our financial performance;
- regulatory developments in the United States and foreign countries;
- our ability to contract with third-party suppliers and manufacturers and their ability to perform adequately;
- the success of competing therapies that are or may become available;
- our ability to attract and retain key scientific or management personnel;
- developments relating to our competitors and our industry; and
- other risks and uncertainties, including those listed under the caption "Risk Factors" in our Annual Report on Form 10-K, for the year ended December 31, 2023 and in Part II, Item 1A Risk Factors in our Form 10-Q for the quarters ended March 31, 2024, June 30, 2024, and September 30, 2024.

These forward-looking statements are neither promises nor guarantees of future performance due to a variety of risks and uncertainties, many of which are beyond our control, which could cause actual results to differ materially from those indicated by these forward-looking statements, including, without limitation the risk factors and cautionary statements described in other documents that we file from time to time with the SEC, specifically under "Item 1A: Risk Factors" and elsewhere in our most recent Annual Report on Form 10-K for the year ended December 31, 2023 and any other Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K that are incorporated herein by reference, and the section of any accompanying prospectus supplement entitled "Risk Factors."

You should read this prospectus supplement and the documents that we incorporate by reference in this prospectus completely and with the understanding that our actual future results may be materially different from what we expect. The forward-looking statements in this prospectus supplement and the documents incorporated by reference represent our views as of their respective dates. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we assume no obligation to update or revise any forward-looking statements except to the extent required by applicable law. You should, therefore, not rely on these forward-looking statements as representing our views as of any date subsequent to the dates on which they were made.

This prospectus supplement and the documents incorporated by reference also contain estimates, projections and other information concerning our industry, our business, and the markets for certain diseases, including data regarding the estimated size of those markets, and the incidence and prevalence of certain medical conditions. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources.

USE OF PROCEEDS

We may issue and sell shares of our common stock having aggregate sales proceeds of up to \$200.0 million from time to time. 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. There can be no assurance that we will sell any shares under or fully utilize our sales agreement with TD Securities (USA) LLC as a source of financing.

We currently intend to use potential proceeds from this offering, together with our existing cash and cash equivalents, to fund research and development and clinical development costs to support the advancement of current or additional product candidates and the expansion of our research and development programs, working capital, capital expenditures and general corporate purposes. The expected use of the net proceeds from this offering, if any, represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. The amounts and timing of our actual expenditures will depend on numerous factors, including the factors described under "Risk Factors" in this prospectus supplement and in the documents incorporated by reference herein, as well as the amount of cash used in our operations. We may find it necessary or advisable to use the net proceeds for other purposes, and we will have broad discretion in the application of the net proceeds. Pending the uses described above, we plan to invest the net proceeds from this offering in short- and intermediate-term, interest-bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government.

DIVIDEND POLICY

We have never declared or paid cash dividends on our capital stock. We intend to retain all of our future earnings, if any, to finance the growth and development of our business. We do not intend to pay cash dividends to our stockholders in the foreseeable future.

DILUTION

If you invest in our common stock in this offering, your ownership interest will be diluted to the extent of the difference between the public offering price per share of our common stock in this offering and the as adjusted net tangible book value per share of our common stock immediately after this offering. Our net tangible book value as of September 30, 2024 was approximately \$242.7 million, or approximately \$3.44 per share of common stock. Net tangible book value per share represents the amount of total tangible assets (total assets less intangible assets) less total liabilities, divided by the number of shares of our common stock outstanding as of September 30, 2024.

Dilution in net tangible book value per share to new investors participating in this offering represents the difference between the amount per share paid by purchasers 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 of 33,333,333 shares of our common stock in the aggregate amount of approximately \$200.0 million at a minimum offering price of \$6.00 per share, which the last reported sale price of our common stock on October 28, 2024, and after deducting commissions and estimated offering expenses payable by us, our as adjusted net tangible book value as of September 30, 2024 would have been approximately \$436.6 million, or approximately \$4.20 per share of common stock. This represents an immediate decrease in net tangible book value of \$0.76 per share of common stock to our existing stockholders and immediate dilution in net tangible book value of \$1.80 per share of common stock to investors participating in this offering at the assumed offering price.

Dilution per share to new investors is determined by subtracting as adjusted net tangible book value per share after this offering from the assumed public offering price per share paid by new investors. The following table illustrates this per share dilution:

Assumed offering price per share		\$	6.00
Historical net tangible book value per share as of September 30, 2024	\$ 3.44		
Decrease in net tangible book value per share attributable to new investors participating in this offering	0.76		
As adjusted net tangible book value per share as of September 30, 2024, after giving effect to this offering		_	4.20
Dilution per share to new investors participating in this offering		\$	1.80

The table above assumes for illustrative purposes that an aggregate of 33,333,333 shares of our common stock are sold at a price of \$6.00 per share, the last reported sale price of our common stock on The Nasdaq Global Select Market on October 28, 2024, for aggregate gross proceeds of approximately \$200.0 million. 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 \$6.00 per share shown in the table above, assuming all of our common stock in the aggregate amount of approximately \$200.0 million is sold at that price, would result in an increase to our as adjusted net tangible book value per share after the 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 \$6.00 per share shown in the table above, assuming all of our common stock in the aggregate amount of approximately \$200.0 million is sold at that price, would result in a decrease to our as adjusted net tangible book value per share after the offering to be \$3.95 and a decrease in dilution per share to new investors participating in this offering to \$1.05, after deducting commissions and estimated offering expenses payable by us. This information is supplied for illustrative purposes only, and will adjust based on the actual offering prices, the actual number of shares that we offer and sell in this offering and other terms of each sale of shares in this offering.

The information above and in the foregoing table is based upon 70,562,901 shares of our common stock outstanding as of September 30, 2024. The information above and in the foregoing table excludes:

• 11,555,851 shares of common stock issuable upon the exercise of stock options outstanding as of September 30, 2024 under our 2015 Plan and our 2020 Plan, at a weighted-average exercise price of \$12.19 per share;

- 644,760 shares of common stock issuable upon the exercise of stock options outstanding as of September 30, 2024 issued pursuant to the employment inducement award exemption provided by Nasdaq Listing Rule 5635(c)(4) at a weighted-average exercise price of \$4.64 per share;
- 3,330,625 shares of common stock reserved for future issuance as of September 30, 2024 under our 2020 Plan; and
- 2,166,905 shares of common stock reserved for future issuance as of September 30, 2024 under our 2020 Employee Stock Purchase Plan.

In addition, we may choose to raise additional capital in the future through the sale of equity or convertible debt securities 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 any of our outstanding options are exercised, new options are issued under our equity incentive plans or we issue additional shares of common stock or other equity or convertible debt securities in the future, there will be further dilution to investors participating in this offering.

PLAN OF DISTRIBUTION

We have entered into a Sales Agreement with TD Cowen under which we may issue and sell from time to time up to \$200,000,000 of our common stock through or to TD Cowen as our sales agent or principal. Sales of our common stock, if any, will be made at market prices by any method that is deemed to be an "at the market offering" as defined in Rule 415(a)(4) under the Securities Act.

TD Cowen will offer our common stock subject to the terms and conditions of the Sales Agreement on a daily basis or as otherwise agreed upon by us and TD Cowen. We will designate the maximum amount of common stock to be sold through TD Cowen on a daily basis or otherwise determine such maximum amount together with TD Cowen. Subject to the terms and conditions of the Sales Agreement, TD Cowen will use its commercially reasonable efforts to sell on our behalf all of the shares of common stock requested to be sold by us. We may instruct TD Cowen not to sell common stock if the sales cannot be effected at or above the price designated by us in any such instruction. TD Cowen or we may suspend the offering of our common stock being made through TD Cowen under the Sales Agreement upon proper notice to the other party. TD Cowen and we each have the right, by giving written notice as specified in the Sales Agreement, to terminate the Sales Agreement in each party's sole discretion at any time.

The aggregate compensation payable to TD Cowen as Sales Agent will be an amount up to 3.0% of the gross sales price of the shares sold through it pursuant to the Sales Agreement. We have also agreed to reimburse TD Cowen up to \$75,000 of TD Cowen's actual outside legal expenses incurred by TD Cowen in connection with this offering. We estimate that the total expenses of the offering payable by us, excluding commissions payable to TD Cowen under the Sales Agreement, will be approximately \$17,638.

The remaining sales proceeds, after deducting any expenses payable by us and any transaction fees imposed by any governmental, regulatory, or self-regulatory organization in connection with the sales, will equal our net proceeds for the sale of such common stock.

TD Cowen will provide written confirmation to us following the close of trading on The Nasdaq Global Select Market on each day in which common stock is sold through it as Sales Agent under the Sales Agreement. Each confirmation will include the number of shares of common stock sold through it as Sales Agent on that day, the volume weighted average price of the shares sold, the percentage of the daily trading volume and the net proceeds to us.

We will report at least quarterly the number of shares of common stock sold through TD Cowen under the Sales Agreement and the gross proceeds to us in connection with the sales of common stock.

Settlement for sales of common stock will occur, unless the parties agree otherwise, on the first business day that is also a trading day following the date on which any sales were made in return for payment of the net proceeds to us. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

In connection with the sales of our common stock on our behalf, TD Cowen will be deemed to be an "underwriter" within the meaning of the Securities Act, and the compensation paid to TD Cowen will be deemed to be underwriting commissions or discounts. We have agreed in the Sales Agreement to provide indemnification and contribution to TD Cowen against certain liabilities, including liabilities under the Securities Act. As Sales Agent, TD Cowen will not engage in any transactions that stabilizes our common stock.

Our common stock is listed on The Nasdaq Global Select Market and trades under the symbol "CCCC." The transfer agent of our common stock is Computershare Trust Company, N.A.

TD Cowen and/or its affiliates have provided, and may in the future provide, various investment banking and other financial services for us for which services they have received and, may in the future receive, customary fees.

LEGAL MATTERS

The validity of the shares of common stock to be offered by this prospectus supplement will be passed upon for us by Goodwin Procter LLP, Boston, Massachusetts. TD Securities (USA) LLC is being represented in connection with this offering by Cooley, LLP, New York, New York.

EXPERTS

The consolidated financial statements of C4 Therapeutics, Inc. and subsidiary as of December 31, 2023 and 2022, and for each of the years in the two-year period ended December 31, 2023, have been incorporated by reference herein and in the registration statement in reliance upon the report of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus supplement is part of a registration statement on Form S-3 that we have filed with the SEC. This prospectus, filed as part of the registration statement, does not contain all the information set forth in the registration statement and its exhibits and schedules, portions of which have been omitted as permitted by the rules and regulations of the SEC. For further information about us, we refer you to the registration statement and to its exhibits and schedules. Certain information in the registration statement has been omitted from this prospectus supplement in accordance with the rules of the SEC.

We are subject to the reporting and information requirements of the Exchange Act and, in accordance therewith, file annual, quarterly and special reports, proxy statements and other information with the SEC. These documents also may be accessed through the SEC's electronic data gathering, analysis and retrieval system, or EDGAR, via electronic means, including the SEC's home page on the Internet (www.sec.gov). Written requests for such copies should be directed to C4 Therapeutics, Inc., 490 Arsenal Way, Suite 120, Watertown, Massachusetts 02472; telephone: (617) 231-0700 and our website is located at www.c4therapeutics.com. We do not incorporate the information on or accessible through our website into this prospectus supplement, and you should not consider any information on, or that can be accessed through, our website to be part of this prospectus supplement. We have included our website address in this prospectus supplement solely as an inactive textual reference.

We have the authority to designate and issue more than one class or series of stock having various preferences, conversion and other rights, voting powers, restrictions, limitations as to dividends, qualifications, and terms and conditions of redemption. See "Description of Capital Stock" in the accompanying base prospectus supplement. We will furnish a full statement of the relative rights and preferences of each class or series of our stock which has been so designated and any restrictions on the ownership or transfer of our stock to any shareholder upon request and without charge.

INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference the information and reports we file with it, which means that we can disclose important information to you by referring you to these documents. The information incorporated by reference is considered to be a part of this prospectus supplement, and the information that we file later with the SEC will automatically update and, where applicable, supersede the information already incorporated by reference. We are incorporating by reference the documents listed below, which have already been filed with the SEC (SEC File No. 001-39567), and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, including all filings made after the date of the filing of this registration statement, except as to any portions of any future report or document that is not deemed filed under such provisions until we sell all of the securities:

- our Annual Report on Form 10-K for the year ended December 31, 2023, filed with the SEC on February 22, 2024;
- the information specifically incorporated by reference into our Annual Report on Form 10-K for the year ended December 31, 2023 from our
 definitive proxy statement on <u>Schedule 14A</u> (other than the information furnished rather than filed), which was filed with the SEC on April 29,
 2024:
- our Quarterly Reports on Form 10-Q filed with the SEC for the quarters ended March 31, 2024, June 30, 2024 and September 30, 2024, filed with the SEC on May 8, 2024, August 1, 2024, and October 31, 2024, respectively;
- our Current Reports on Form 8-K filed with the SEC on <u>January 9, 2024</u>, <u>March 4, 2024</u>, <u>March 8, 2024</u>, <u>June 10, 2024</u>, <u>June 21, 2024</u>, <u>September 3, 2024</u>, <u>October 11, 2024</u>, <u>October 15, 2024</u>, and <u>October 16, 2024</u>; and
- the description of our common stock contained in our Registration Statement on Form 8-A (File No. 001-39567) as filed with the SEC on September 28, 2020, including any amendments or reports filed for the purpose of updating this description, including Exhibit 4.4 to our Annual Report on Form 10-K for the year ended December 31, 2020, as filed with the SEC on March 11, 2021.

Upon request, we will provide, without charge, to each person, including any beneficial owner, to whom a copy of this prospectus supplement is delivered, a copy of the documents incorporated by reference into this prospectus but not delivered with the prospectus supplement. You may request a copy of these filings, and any exhibits we have specifically incorporated by reference as an exhibit in this prospectus supplement, at no cost by writing or telephoning us at the following address: C4 Therapeutics, Inc., 490 Arsenal Way, Suite 120, Watertown, Massachusetts 02472, telephone: (617) 231-0700.

You may also access these documents, free of charge on the SEC's website at www.sec.gov or on our website at www.c4therapeutics.com. Information contained on our website is not incorporated by reference into this prospectus supplement, and you should not consider any information on, or that can be accessed from, our website as part of this prospectus supplement or any accompanying prospectus supplement supplement.

Notwithstanding the foregoing, unless specifically stated to the contrary, information that we furnish (and that is not deemed "filed" with the SEC) under Items 2.02 and 7.01 of any Current Report on Form 8-K, including the related exhibits under Item 9.01, is not incorporated by reference into this prospectus supplement or the registration statement of which this prospectus supplement is a part.

This prospectus supplement is part of a registration statement we filed with the SEC. We have incorporated exhibits into this registration statement. You should read the exhibits carefully for provisions that may be important to you.

You should rely only on the information incorporated by reference or provided in this prospectus supplement or any prospectus supplement. We have not authorized anyone to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus supplement or in the documents incorporated by reference is accurate as of any date other than the date on the front of this prospectus supplement or those documents.

Any statement contained in a document that is incorporated by reference will be modified or superseded for all purposes to the extent that a statement contained in this prospectus supplement or in any other document that is

subsequently filed with the SEC and incorporated by reference into this prospectus supplement, modifies or is contrary to that previous statement. Any statement so modified or superseded will not be deemed a part of this prospectus supplement, except as so modified or superseded. Since information that we later file with the SEC will update and supersede previously incorporated information, you should look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus supplement or in any documents previously incorporated by reference have been modified or superseded.



Common Stock

PROSPECTUS SUPPLEMENT

TD Cowen

November 13, 2024