UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934 (Amendment No. 2)

(Name of Issuer) COMMON STOCK (Title of Class of Securities) 20454B104 (CUSIP Number)
(Title of Class of Securities) 20454B104
20454B104
(CUSIP Number)
OrbiMed Advisors LLC
OrbiMed Capital GP V LLC
OrbiMed Genesis GP LLC
OrbiMed Capital LLC
601 Lexington Avenue, 54th Floor
New York, NY 10022
Telephone: (212) 739-6400
(Name, Address and Telephone Number of Person Authorized to
Receive Notices and Communications)
November 4, 2021
(Date of Event which Requires Filing of this Statement)

* The remainder of this cover page shall be filled out for a Reporting Person's initial filing on this form with respect to the subject class of securities, and

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7(b) for other

parties to whom copies are to be sent.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

1	Names of Reporting Persons. OrbiMed Advisors LLC			
2	Check the Appropriate Box if a Member of a Group (See Instructions). (a) o (b) o			
3	SEC Use Only			
4	Source of Funds (See Instructions) AF			
5	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) o			
6	Citizenship or Place of Organization Delaware			
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON		7	Sole Voting Power 0	
		8	Shared Voting Power 18,071,547	
		9	Sole Dispositive Power 0	
	WITH	10	Shared Dispositive Power 18,071,547	
11	Aggregate Amount Beneficially Owned by Each Reporting Person 18,071,547			
12	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)			
13	Percent of Class F 18.4%*	Represent	ed by Amount in Row (11)	
14	Type of Reporting Person (See Instructions) IA			

^{*} This percentage is calculated based upon 98,038,147 outstanding shares of common stock, par value \$0.0001 per share, of Compass Therapeutics, Inc. (the "Issuer"), as set forth in the Issuer's Rule 424(b)(5) Prospectus, filed with the Securities and Exchange Commission on November 3, 2021.

1		Names of Reporting Persons. OrbiMed Capital GP V LLC				
2	Check the Approp (a) o (b) o					
3	SEC Use Only	SEC Use Only				
4	Source of Funds (AF	Source of Funds (See Instructions) AF				
5	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)			0		
6	Citizenship or Place of Organization Delaware					
NUMBER OF SHARES		7	Sole Voting Power 0			
	NEFICIALLY WNED BY	8	Shared Voting Power 14,500,119			
	EACH EPORTING PERSON	9	Sole Dispositive Power 0			
	WITH	10	Shared Dispositive Power 14,500,119			
11	Aggregate Amous 14,500,119	nt Benefi	icially Owned by Each Reporting Person			
12	Check if the Agg	regate Ar	mount in Row (11) Excludes Certain Shares (See Instructions)	0		
13	Percent of Class I 14.8%*	Represent	ted by Amount in Row (11)			
14	Type of Reporting Person (See Instructions) OO					

^{*} This percentage is calculated based upon 98,038,147 outstanding shares of common stock, par value \$0.0001 per share, of Compass Therapeutics, Inc. (the "Issuer"), as set forth in the Issuer's Rule 424(b)(5) Prospectus, filed with the Securities and Exchange Commission on November 3, 2021.

1		Names of Reporting Persons. OrbiMed Genesis GP LLC			
2	Check the Approp (a) o (b) o				
3	SEC Use Only	SEC Use Only			
4	Source of Funds (See Instructions) AF				
5	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)				
6	Citizenship or Place of Organization Delaware				
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		7	Sole Voting Power 0		
		8	Shared Voting Power 3,571,428		
		9	Sole Dispositive Power 0		
		10	Shared Dispositive Power 3,571,428		
11	Aggregate Amount Beneficially Owned by Each Reporting Person 3,571,428				
12	Check if the Aggi	egate Ar	nount in Row (11) Excludes Certain Shares (See Instructions)	0	
13	Percent of Class Represented by Amount in Row (11) 3.6%*				
14	Type of Reporting Person (See Instructions) OO				

^{*} This percentage is calculated based upon 98,038,147 outstanding shares of common stock, par value \$0.0001 per share, of Compass Therapeutics, Inc. (the "Issuer"), as set forth in the Issuer's Rule 424(b)(5) Prospectus, filed with the Securities and Exchange Commission on November 3, 2021.

1		Names of Reporting Persons. OrbiMed Capital LLC			
2	Check the Approp (a) o (b) o				
3	SEC Use Only	SEC Use Only			
4	Source of Funds (AF	Source of Funds (See Instructions) AF			
5	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)				
6	Citizenship or Place of Organization Delaware				
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		7	Sole Voting Power 3,571,428		
		8	Shared Voting Power 0		
		9	Sole Dispositive Power 3,571,428		
		10	Shared Dispositive Power		
11	Aggregate Amount Beneficially Owned by Each Reporting Person 3,571,428				
12	Check if the Aggr	regate Ar	nount in Row (11) Excludes Certain Shares (See Instructions)	0	
13	Percent of Class Represented by Amount in Row (11) 3.6%*				
14	Type of Reporting Person (See Instructions) IA				

^{*} This percentage is calculated based upon 98,038,147 outstanding shares of common stock, par value \$0.0001 per share, of Compass Therapeutics, Inc. (the "Issuer"), as set forth in the Issuer's Rule 424(b)(5) Prospectus, filed with the Securities and Exchange Commission on November 3, 2021.

Item 1. Security and Issuer

This Amendment No. 2 to Schedule 13D supplements and amends the Statement on Schedule 13D of OrbiMed Advisors LLC and OrbiMed Capital GP V LLC (the "Statement") originally filed with the Securities and Exchange Commission (the "SEC") on June 29, 2020 and amended by Amendment No. 1 thereto filed with the SEC on July 14, 2021 ("Amendment No. 1"). The Statement relates to the common stock, par value \$0.0001 per share (the "Shares"), of Compass Therapeutics, Inc., a corporation organized under the laws of Delaware (the "Issuer"), with its principal executive offices located at 245 First Street, 3rd Floor, Cambridge, Massachusetts 02142. Information given in response to each item shall be deemed incorporated by reference in all other items, as applicable.

On November 4, 2021, the issuer completed an underwritten public offering of 35,715,000 Shares (the "Offering"). In addition, the Issuer granted the underwriters an option to purchase, at the public offering price less any underwriting discounts and commissions, up to an additional 5,357,250 Shares. As a result of the Offering, the percentage of outstanding Shares that the Reporting Persons may be deemed to beneficially own was reduced by more than one percent of the Issuer's Shares outstanding since the filing of Amendment No. 1.

Item 2. Identity and Background

- (a) This Schedule 13D is being filed by OrbiMed Advisors LLC ("<u>OrbiMed Advisors</u>"), OrbiMed Capital GP V LLC ("<u>OrbiMed GP</u>"), OrbiMed Genesis GP LLC ("<u>OrbiMed Genesis</u>"), and OrbiMed Capital LLC ("<u>OrbiMed Capital</u>") (collectively, the "<u>Reporting Persons</u>").
- (b) (c), (f) OrbiMed Advisors, a limited liability company organized under the laws of Delaware and a registered investment adviser under the Investment Advisers Act of 1940, as amended, is the managing member of OrbiMed GP and OrbiMed Genesis, as more particularly described in Item 6 below. OrbiMed Advisors has its principal offices at 601 Lexington Avenue, 54th Floor, New York, New York 10022.

OrbiMed GP, a limited liability company organized under the laws of Delaware, is the general partner of OrbiMed Private Investments V - KA, LP ("OPI V-KA"), a limited partnership organized under the laws of Delaware, as more particularly described in Item 6 below. OrbiMed GP has its principal offices at 601 Lexington Avenue, 54th Floor, New York, New York 10022.

OrbiMed Genesis, a limited liability company organized under the laws of Delaware, is the general partner of OrbiMed Genesis Master, L.P. ("<u>Genesis Master Fund</u>"), a limited partnership organized under the laws of the Cayman Islands, as more particularly described in Item 6 below. OrbiMed Genesis has its principal offices at 601 Lexington Avenue, 54th Floor, New York, New York 10022.

OrbiMed Capital, a limited liability company organized under the laws of Delaware and a registered investment adviser under the Investment Advisers Act of 1940, as amended, is the investment advisor of The Biotech Growth Trust PLC ("BIOG"), a publicly-listed investment trust organized under the laws of England, as more particularly described in Item 6 below. OrbiMed Capital has its principal offices at 601 Lexington Avenue, 54th Floor, New York, New York 10022.

The directors and executive officers of OrbiMed Advisors, OrbiMed GP, OrbiMed Genesis, and OrbiMed Capital are set forth on Schedules I, II, III, and IV, respectively, attached hereto. Schedules I, II, III, and IV set forth the following information with respect to each such person:

- (i) name;
- (ii) business address;
- (iii) present principal occupation of employment and the name, principal business and address of any corporation or other organization in which such employment is conducted; and

(iv) citizenship.

(d) — (e) During the last five years, neither the Reporting Persons nor any Person named in Schedules I, II, III, and IV has been (i) convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) or (ii) a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

Item 3. Source and Amount of Funds or Other Consideration

On November 4, 2021, OrbiMed Advisors and OrbiMed GP, pursuant to their authority under the limited partnership agreement of OPI V-KA, as more particularly referred to in Item 6 below, caused OPI V-KA to purchase 1,785,715 Shares in the Offering.

On November 4, 2021, OrbiMed Advisors and OrbiMed Genesis, pursuant to their authority under the limited partnership agreement of Genesis Master Fund, as more particularly referred to in Item 6 below, caused Genesis Master Fund to purchase 3,571,428 Shares in the Offering.

On November 4, 2021, OrbiMed Capital, as the investment advisor to BIOG, as more particularly referred to in Item 6 below, caused BIOG to purchase 3,571,428 Shares in the Offering.

The source of funds for such purchases was the working capital of OPI V-KA, Genesis Master Fund, and BIOG.

Item 4. Purpose of Transaction

The Shares were acquired for the purpose of making an investment in the Issuer and not with the intention of acquiring control of the Issuer's business on behalf of the Reporting Persons' respective advisory clients.

The Reporting Persons from time to time intend to review their investment in the Issuer on the basis of various factors, including the Issuer's business, financial condition, results of operations and prospects, general economic and industry conditions, the securities markets in general and those for the Issuer's Shares in particular, as well as other developments and other investment opportunities. Based upon such review, the Reporting Persons will take such actions in the future as the Reporting Persons may deem appropriate in light of the circumstances existing from time to time. If the Reporting Persons believe that further investment in the Issuer is attractive, whether because of the market price of Shares or otherwise, they may acquire Shares or other securities of the Issuer either in the open market or in privately negotiated transactions. Similarly, depending on market and other factors, the Reporting Persons may determine to dispose of some or all of the Shares currently owned by the Reporting Persons or otherwise acquired by the Reporting Persons either in the open market or in privately negotiated transactions.

Except as set forth in this Schedule 13D, the Reporting Persons have not formulated any plans or proposals which relate to or would result in: (a) the acquisition by any person of additional securities of the Issuer or the disposition of securities of the Issuer, (b) an extraordinary corporate transaction, such as a merger, reorganization or liquidation, involving the Issuer or any of its subsidiaries, (c) a sale or transfer of a material amount of the assets of the Issuer or any of its subsidiaries, (d) any change in the present Board of Directors or management of the Issuer, including any plans or proposals to change the number or term of directors or to fill any existing vacancies on the board, (e) any material change in the Issuer's capitalization or dividend policy of the Issuer, (f) any other material change in the Issuer's business or corporate structure, (g) any change in the Issuer's charter or bylaws or other instrument corresponding thereto or other action which may impede the acquisition of control of the Issuer by any person, (h) causing a class of the Issuer's securities to be deregistered or delisted from a national securities exchange or to cease to be authorized to be quoted in an inter-dealer quotation system of a registered national securities association, (i) a class of equity securities of the Issuer becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Act or (j) any action similar to any of those enumerated above.

Item 5. Interest in Securities of the Issuer

(a) — (b) The following disclosure is based upon 98,038,147 outstanding Shares, as set forth in the Issuer's Registration Statement on Form S-3 filed with the Securities and Exchange Commission (the "SEC") on November 3, 2021.

As of the date of this filing, OPI V-KA holds 14,500,119 Shares constituting approximately 14.8% of the issued and outstanding Shares. OrbiMed GP is the general partner of OPI V-KA, pursuant to the terms of the limited partnership agreement of OPI V-KA, and OrbiMed Advisors is the managing member of OrbiMed GP, pursuant to the terms of the limited liability company agreement of OrbiMed GP. As a result, OrbiMed Advisors and OrbiMed GP share power to direct the vote and disposition of the Shares held by OPI V-KA and may be deemed directly or indirectly, including by reason of their mutual affiliation, to be the beneficial owners of the Shares held by OPI V-KA. OrbiMed Advisors exercises this investment and voting power through a management committee comprised of Carl L. Gordon, Sven H. Borho, and W. Carter Neild, each of whom disclaims beneficial ownership of the Shares held by OPI V-KA.

As of the date of this filing, Genesis Master Fund holds 3,571,428 Shares constituting approximately 3.6% of the issued and outstanding Shares. OrbiMed Genesis is the general partner of Genesis Master Fund, pursuant to the terms of the limited partnership agreement of Genesis Master Fund, and OrbiMed Advisors is the managing member of OrbiMed Genesis, pursuant to the terms of the limited liability company agreement of OrbiMed Genesis. As a result, OrbiMed Advisors and OrbiMed Genesis share power to direct the vote and disposition of the Shares held by Genesis Master Fund and may be deemed, directly or indirectly, including by reason of their mutual affiliation, to be the beneficial owners of the Shares held by Genesis Master Fund. OrbiMed Advisors exercises this investment and voting power through a management committee comprised of Carl L. Gordon, Sven H. Borho, and W. Carter Neild, each of whom disclaims beneficial ownership of the Shares held by Genesis Mater Fund.

As of the date of this filing, BIOG holds 3,571,428 Shares constituting approximately 3.6% of the issued and outstanding Shares. OrbiMed Capital is the investment advisor of BIOG. As a result, OrbiMed Capital has the power to direct the vote and disposition of the Shares held by BIOG and may be deemed directly or indirectly, including by reason of mutual affiliation, to be the beneficial owner of the Shares held by BIOG. OrbiMed Capital disclaims any beneficial ownership over the shares of the other Reporting Persons. OrbiMed Capital exercises this investment and voting power through a management committee comprised of Carl L. Gordon, Sven H. Borho, and W. Carter Neild, each of whom disclaims beneficial ownership of the Shares held by BIOG.

In addition, OrbiMed Advisors and OrbiMed GP, pursuant to their authority under the limited partnership agreements of OPI V-KA, caused OPI V-KA to enter into the agreements referred to in Item 6 below.

- (c) Except as set forth in Item 3, the Reporting Persons have not effected any transactions during the past sixty (60) days in any Shares.
- (d) Not applicable.
- (e) Not applicable.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

In addition to the relationships between the Reporting Persons described in Items 2 and 5 above, OrbiMed GP is the general partner of OPI V-KA, pursuant to the terms of the limited partnership agreement of OPI V-KA. Pursuant to this agreement and relationship, OrbiMed GP has discretionary investment management authority with respect to the assets of OPI V-KA. Such authority includes the power to vote and otherwise dispose of securities held by OPI V-KA. The number of outstanding Shares of the Issuer attributable to OPI V-KA is 14,500,119. OrbiMed GP, pursuant to its authority under the limited partnership agreement of OPI V-KA, may be considered to hold indirectly 14,500,119 Shares.

OrbiMed Genesis is the general partner of Genesis Master Fund, pursuant to the terms of the limited partnership agreement of Genesis Master Fund. Pursuant to this agreement and relationship, OrbiMed Genesis has discretionary investment management authority with respect to the assets of Genesis Master Fund. Such authority includes the power to vote and otherwise dispose of securities held by Genesis Master Fund. The number of outstanding Shares of the Issuer attributable to Genesis Master Fund is 3,571,428. OrbiMed Genesis, pursuant to its authority under the limited partnership agreement of Genesis, may be considered to hold indirectly 3,571,428 Shares.

OrbiMed Advisors is the managing member of OrbiMed GP and OrbiMed Genesis, pursuant to the terms of the limited liability company agreements of OrbiMed GP and OrbiMed Genesis. Pursuant to these agreements and relationships, OrbiMed Advisors and OrbiMed GP have discretionary investment management authority with respect to the assets of OPI V-KA. OrbiMed Advisors and OrbiMed Genesis have discretionary investment management authority with respect to the assets of Genesis Master Fund. Such authority includes the power of OrbiMed GP to vote and otherwise dispose of securities held by OPI V-KA and the power of OrbiMed Genesis to vote and otherwise dispose of the securities held by Genesis Master Fund. The number of outstanding Shares attributable to OPI V-KA is 14,500,119 Shares and the number of Shares attributed to Genesis Master Fund is 3,571,428 Shares. OrbiMed Advisors, pursuant to its authority under the terms of the limited liability company agreements of OrbiMed GP and OrbiMed Genesis, may also be considered to hold indirectly 18,071,547 Shares.

Carl L. Gordon ("<u>Gordon</u>"), a member of OrbiMed Advisors, is a member of the Board of Directors of the Issuer and, accordingly, OrbiMed Advisors and OrbiMed GP may have the ability to affect and influence control of the Issuer. From time to time, Gordon may receive stock options or other awards of equity-based compensation pursuant to the Issuer's compensation arrangements for non-employee directors. Pursuant to an agreement with OrbiMed Advisors and OrbiMed GP, Gordon is obligated to transfer any securities issued under any such stock options or other awards, or the economic benefit thereof, to OrbiMed Advisors and OrbiMed GP, which will in turn ensure that such securities or economic benefits are provided to OPI V-KA.

Registration Rights Agreement

OPI V-KA is party to a registration rights agreement with the Issuer (the "<u>Registration Rights Agreement</u>") for purposes of registering the resale of its Shares. A registration statement was subsequently declared effective by the SEC on September 25, 2020. The Issuer agreed to use its commercially reasonable efforts to maintain the effectiveness of the registration statement for a period of five years or until the Shares registered thereunder have been sold in accordance with the registration statement or Rule 144 promulgated under the Securities Act of 1933.

Lock-Up Agreement

In connection with the Offering, OPI V-KA, Genesis Master Fund, and BIOG, and certain other stockholders entered into Lock-Up Agreements with the Issuer's underwriters. Pursuant to its Lock-Up Agreement, OPI V-KA, Genesis Master Fund, and BIOG agreed that they will not, during the period ending 90 days after the date of the underwriting agreement (the "Lock-Up Period"), directly or indirectly (1) sell, assign, transfer, pledge, contract to sell, or otherwise dispose of, any Shares or securities convertible into or exercisable or exchangeable for Shares with respect to which OPI V-KA, Genesis Master Fund, or BIOG has or acquires the power of disposition or (2) enter into any swap or other agreement that transfers, in whole or in part, the economic risk of ownership of any such Shares.

After the Lock-Up Period expires, the Reporting Persons' Shares will be eligible for sale in the public market, subject to any applicable limitations under Rule 144 under the Securities Act, and other applicable U.S. securities laws.

The foregoing description of the Registration Rights Agreement and Lock-Up Agreement do not purport to be complete and are qualified in their entirety by reference to the full text of the Registration Rights Agreement and Lock-Up Agreement, copies of which are included as Exhibits 2 and 3 and incorporated herein by reference.

Item 7. Material to Be Filed as Exhibits

Exhibit	Description
1.	Joint Filing Agreement among OrbiMed Advisors LLC, OrbiMed Capital GP V LLC, OrbiMed Genesis GP LLC, and OrbiMed Capital LLC.
2.	Registration Rights Agreement by and among the Issuer and the investors signatory thereto dated June 19, 2020 (incorporated by reference to Exhibit 10.7 to the Issuer's From 8-K (SEC 000-55939) filed with the SEC on June 23, 2020).
3.	Form of Lock-Up Agreement.

Signature

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: November 9, 2021 ORBIMED ADVISORS LLC

By: /s/ Carl L. Gordon

Name: Carl L. Gordon

Title: Member

ORBIMED CAPITAL GP V LLC

By: ORBIMED ADVISORS LLC, its managing member

By: /s/ Carl L. Gordon

Name: Carl L. Gordon

Title: Member of OrbiMed Advisors LLC

ORBIMED GENESIS GP LLC

By: ORBIMED ADVISORS LLC, its managing

member

By: /s/ Carl L. Gordon

Name: Carl L. Gordon

Title: Member of OrbiMed Advisors LLC

ORBIMED CAPITAL LLC

By: /s/ Carl L. Gordon

Name: Carl L. Gordon

Title: Member

SCHEDULE I

The names and present principal occupations of each of the executive officers and directors of OrbiMed Advisors LLC are set forth below. Unless otherwise noted, each of these persons is a United States citizen and has a business address of 601 Lexington Avenue, 54th Floor, New York, NY 10022.

<u>Name</u>	Position with Reporting Person	Principal Occupation
Carl L. Gordon	Member	Member OrbiMed Advisors LLC
Sven H. Borho German and Swedish Citizen	Member	Member OrbiMed Advisors LLC
Jonathan T. Silverstein	Member	Member OrbiMed Advisors LLC
W. Carter Neild	Member	Member OrbiMed Advisors LLC
Geoffrey C. Hsu	Member	Member OrbiMed Advisors LLC
C. Scotland Stevens	Member	Member OrbiMed Advisors LLC
David P. Bonita	Member	Member OrbiMed Advisors LLC
Trey Block	Chief Financial Officer	Chief Financial Officer OrbiMed Advisors LLC

SCHEDULE II

The business and operations of OrbiMed Capital GP V LLC are managed by the executive officers and directors of its managing member, OrbiMed Advisors LLC, set forth in Schedule I attached hereto.				

SCHEDULE III

The business and operations of OrbiMed Genesis GP LLC are managed by the executive officers and directors of its managing member, OrbiMed Advisors LLC, set forth in Schedule I attached hereto.				

SCHEDULE IV

The names and present principal occupations of each of the executive officers and directors of OrbiMed Capital LLC are set forth below. Unless otherwise noted, each of these persons is a United States citizen and has a business address of 601 Lexington Avenue, 54th Floor, New York, NY 10022.

<u>Name</u>	Position with Reporting Person	Principal Occupation
Carl L. Gordon	Member	Member OrbiMed Capital LLC
Sven H. Borho German and Swedish Citizen	Member	Member OrbiMed Capital LLC
Jonathan T. Silverstein	Member	Member OrbiMed Capital LLC
W. Carter Neild	Member	Member OrbiMed Capital LLC
Geoffrey C. Hsu	Member	Member OrbiMed Capital LLC
C. Scotland Stevens	Member	Member OrbiMed Capital LLC
David P. Bonita	Member	Member OrbiMed Capital LLC
Trey Block	Chief Financial Officer	Chief Financial Officer OrbiMed Capital LLC

EXHIBIT INDEX

Exhibit	Description
1.	Joint Filing Agreement among OrbiMed Advisors LLC, OrbiMed Capital GP V LLC, OrbiMed Genesis GP LLC, and OrbiMed Capital LLC.
2.	Registration Rights Agreement by and among the Issuer and the investors signatory thereto dated June 19, 2020 (incorporated by reference to Exhibit 10.7 to the Issuer's From 8-K (SEC 000-55939) filed with the SEC on June 23, 2020).
3.	Form of Lock-Up Agreement.

JOINT FILING AGREEMENT

The undersigned hereby agree that the Statement on Schedule 13D, dated November 9, 2021, with respect to the common shares of Compass Therapeutics, Inc. is filed on behalf of each of us pursuant to and in accordance with the provisions of Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended. Each of the undersigned agrees to be responsible for the timely filing of this Statement, and for the completeness and accuracy of the information concerning itself contained therein. This Agreement may be executed in any number of counterparts, all of which taken together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the undersigned have executed this Agreement as of the 9th day of November 2021.

ORBIMED ADVISORS LLC

By: /s/ Carl L. Gordon

Name: Carl L. Gordon Title: Member

ORBIMED CAPITAL GP V LLC

By: ORBIMED ADVISORS LLC, its managing member

By: /s/ Carl L. Gordon

Name: Carl L. Gordon

Title: Member of OrbiMed Advisors LLC

ORBIMED GENESIS GP LLC

By: ORBIMED ADVISORS LLC, its managing

member

By: /s/ Carl L. Gordon

Name: Carl L. Gordon

Title: Member of OrbiMed Advisors LLC

ORBIMED CAPITAL LLC

By: /s/ Carl L. Gordon

Name: Carl L. Gordon

Title: Member

Compass Therapeutics, Inc.Public Offering of Common Stock

October 31, 2021

SVB Leerink LLC
As Representative of the several Underwriters,

c/o SVB Leerink LLC 53 State Street, 40th Floor Boston, MA 02109

Ladies and Gentlemen:

This letter is being delivered to you in connection with the proposed underwriting agreement (the "<u>Underwriting Agreement</u>"), between Compass Therapeutics, Inc., a Delaware corporation (the "<u>Company</u>"), and you as representative (the "<u>Representative</u>") of a group of Underwriters named therein, relating to an underwritten public offering of Common Stock, \$0.0001 par value (the "<u>Common Stock</u>"), of the Company (the "<u>Offering</u>").

In order to induce you and the other Underwriters to enter into the Underwriting Agreement, the undersigned will not, without the prior written consent of the Representative, offer, sell, contract to sell, pledge or otherwise dispose of, (or enter into any transaction which is designed to, or might reasonably be expected to, result in the disposition (whether by actual disposition or effective economic disposition due to cash settlement or otherwise) by the undersigned or any affiliate of the undersigned or any person in privity with the undersigned or any affiliate of the undersigned), directly or indirectly, including the filing (or participation in the filing) of a registration statement with the Securities and Exchange Commission in respect of, or establish or increase a put equivalent position or liquidate or decrease a call equivalent position within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the rules and regulations of the Securities and Exchange Commission promulgated thereunder with respect to, any shares of capital stock of the Company or any securities convertible into, or exercisable or exchangeable for such capital stock (the "Lock-Up Securities"), or publicly announce an intention to effect any such transaction, for a period from the date hereof until 90 days after the date of the Underwriting Agreement (the "Lock-Up Period"). The undersigned acknowledges and agrees that the foregoing precludes the undersigned from engaging in any hedging or other transactions designed or intended, or which could reasonably be expected to lead to or result in, a sale or disposition of any shares of Common Stock, or securities convertible into or exercisable or exchangeable for Common Stock, even if any such sale or disposition transaction or transactions would be made or executed by or on behalf of someone other than the undersigned. If the undersigned is an officer or director of the Company, the undersigned further agrees that the foregoing restriction

The foregoing restrictions shall not apply to:

- (i) transactions relating to shares of Common Stock or other securities acquired in the Offering or in open market transactions after the completion of the Offering;
 - (ii) transfers of Lock-Up Securities as a bona fide gift or charitable contribution;
- (iii) exercise of stock options or warrants to purchase shares of Common Stock or the vesting of stock awards of Common Stock and any related transfer of shares of Common Stock to the Company in connection therewith (x) deemed to occur upon the "cashless" or "net" exercise of such options or warrants or (y) for the purpose of paying the exercise price of such options or warrants or for paying taxes due as a result of the exercise of such options or warrants, the vesting of such options, warrants or stock awards, or as a result of the vesting of such shares of Common Stock, it being understood that all shares of Common Stock received upon such exercise, vesting or transfer will remain subject to the restrictions of this lock-up agreement during the Lock-Up Period, and *provided*,

if the undersigned is required to file a report under the Exchange Act reporting a reduction in beneficial ownership of shares of Common Stock during the Lock-Up Period, the undersigned shall clearly indicate in the footnotes thereto that the filing relates to the circumstances described in this paragraph and no other filing or public announcement shall be made voluntarily during the Lock-Up Period in connection with such exercise, vesting or transfer;

- (iv) transfers of Lock-Up Securities to the Company pursuant to any contractual arrangement that provides the Company with an option to repurchase such shares of Common Stock or for the forfeiture to the Company of such shares of Common Stock in the event the undersigned ceases to provide services to the Company, *provided* that, if the undersigned is required to file a report under the Exchange Act reporting a reduction in beneficial ownership of shares of Common Stock during the Lock-Up Period, the undersigned shall clearly indicate in the footnotes thereto that the filing relates to the termination of the undersigned's employment or other services and no other filing or public announcement shall be made voluntarily during the Lock-Up Period in connection with such transfer;
- (v) transfers to the spouse, domestic partner, parent, child (including stepchild or adopted child) or grandchild or first cousin of the undersigned (each, an "Immediate Family Member") or to a trust formed for the direct or indirect benefit of the undersigned or an Immediate Family Member;
- (vi) transfers by will, other testamentary document or intestate succession to the legal representative, heir, beneficiary, trustee or Immediate Family Member of the undersigned;
- (vii) transfers pursuant to a divorce settlement agreement or decree or a qualified domestic relations order;
- (viii) transfers of Lock-Up Securities to any affiliate (as such term is defined in Rule 405 of the Securities Act of 1933, as amended), limited partners, general partners, limited liability company members or stockholders of the undersigned, or if the undersigned is a corporation to any wholly owned subsidiary of such corporation;
- (ix) the establishment of a trading plan pursuant to Rule 10b-5-1 under the Exchange Act for the transfer of Lock-Up Securities, *provided* that such plan does not provide for the transfer of shares of Common Stock during the Lock-Up Period and no filing or other public announcement shall be made during the Lock-Up Period; and
- (x) transfer of Lock-Up Securities pursuant to a bona fide third-party tender offer for securities of the Company, merger, consolidation or other similar transaction that is approved by the Board of Directors of the Company, made to all holders of Common Stock involving a transaction or a series of related transactions, the result of which is that any "person" (as defined in Section 13(d)(3) of the Exchange Act), or group of persons, other than the Company, becomes the beneficial owner (as defined in Rules 13d-3 and 13d-5 of the Exchange Act) of 75% or more of the total voting power of the voting stock of the Company (or the surviving entity), *provided* that in the event that such tender offer, merger, consolidation or other such transaction is not completed, the Lock-

Up Securities shall remain subject to the provisions of this lock-up agreement;

provided, that, in the case of clause (i), no filing under the Exchange Act reporting a reduction in beneficial ownership of shares of Common Stock shall be required or voluntarily made during the Lock-Up Period, other than Forms 5 and Schedule 13F; provided further that in the case of any transfer or distribution pursuant to clauses (ii), (v), (vii), (vii) and (viii), (a) the recipient agrees to be bound in writing by the same restrictions set forth herein for the duration of the Lock-Up Period, (b) no filing under the Exchange Act reporting a reduction in beneficial ownership of shares of Common Stock shall be required or voluntarily made during the Lock-Up Period, other than Forms 5 and Schedule 13F, and (c) any such transfer shall not involve a disposition for value.

This lock-up agreement shall automatically terminate, and the undersigned shall be released from its obligations hereunder, upon the earliest to occur, if any, of (1) the execution of the Underwriting Agreement in connection with the Offering shall not have occurred on or before December 31, 2021 (provided that the Company

may by written notice to the undersigned prior to December 31, 2021 extend such date for a period of up to three additional months), (2) the Company files an application to withdraw the registration statement relating to the Offering, (3) the Underwriting Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated prior to payment for and delivery of the Common Stock to be sold thereunder or (4) the Representative, on behalf of the Underwriters, advises the Company, or the Company advises the Representative, in writing, prior to the execution of the Underwriting Agreement, that they have determined not to proceed with the Offering.

The undersigned hereby represents and warrants that the undersigned has full power, capacity and authority to enter into this lock-up agreement. This lock-up agreement is irrevocable and will be binding on the undersigned and the successors, heirs, personal representatives and assigns of the undersigned.

This lock-up agreement shall be governed by, and construed in accordance with, the laws of the State of New York.

Yours very truly,	
By:	
Title:	
On behalf of: Entity Name	