
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934

FibroBiologics, Inc.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

31573L204

(CUSIP Number)

**Pete O'Heeron
9350 Kirby Drive, Suite 300
Houston, TX, 77054
(281) 671-5150**

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

09/15/2026

(Date of Event Which Requires Filing of This Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§ 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box. ☐

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).

SCHEDULE 13D

CUSIP 31573L204
Number(s):

1	Name of reporting person Hamid Khoja
2	Check the appropriate box if a member of a Group (See Instructions) ☐ (a) ☐ (b)
3	SEC use only

4	Source of funds (See Instructions) PF	
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) ☐	
6	Citizenship or place of organization UNITED STATES	
Number of Shares Beneficially Owned by Each Reporting Person With:	7	Sole Voting Power 630,009.00
	8	Shared Voting Power 0.00
	9	Sole Dispositive Power 630,009.00
	10	Shared Dispositive Power 0.00
11	Aggregate amount beneficially owned by each reporting person 630,009.00	
12	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions) ☐	
13	Percent of class represented by amount in Row (11) 7.5 %	
14	Type of Reporting Person (See Instructions) IN	

SCHEDULE 13D

Item 1. Security and Issuer

- (a) Title of Class of Securities:
Common Stock
- (b) Name of Issuer:
FibroBiologics, Inc.
- (c) Address of Issuer's Principal Executive Offices:
9350 Kirby Drive, Suite 300, Houston, TEXAS , 77054.

Item 2. Identity and Background

- (a) Hamid Khoja
- (b) c/o FibroBiologics, Inc., 9350 Kirby Drive, Suite 300, Houston, Texas 77054
- (c) Dr. Khoja's principal occupation is Chief Scientific Officer of FibroBiologics, Inc, a clinical-stage biotechnology company, 9350 Kirby Drive, Suite 300, Houston, Texas 77054
- (d) Not Applicable
- (e) Not Applicable
- (f) United States

Item 3. Source and Amount of Funds or Other Consideration

The source of funds used by the reporting person to acquire the securities reported on this Schedule 13D was personal funds. See also Item 4 of this Schedule 13D, which information is incorporated herein by reference.

Item 4. Purpose of Transaction

On September 15, 2026, the Issuer and the reporting person entered into a securities purchase agreement relating to the issuance and sale of 298,508 shares of the Issuer's common stock and accompanying warrants to purchase up to 298,508 shares of common stock in a private placement. The transaction closed on September 15, 2026. The warrants are exercisable at any time, have an exercise price of \$1.55 per share, and expire on the five-year anniversary of the date of issuance. The warrants also contain standard anti-dilution adjustments to the exercise price including for stock splits, stock dividends, rights offerings and pro rata distributions. The Issuer issued the shares and warrants to the reporting person at an offering price of \$1.675 per share and accompanying warrant for gross proceeds of approximately \$0.5 million.

The reporting person made the acquisition described above in support of the Issuer's business plan and for investment purposes. The reporting person may acquire or dispose of additional securities or sell securities of the Issuer from time to time in the market or in private transactions, including as a result of ownership of the warrants referred to above. However, the reporting person does not have any other agreements to acquire additional shares of common stock at this time, except for option agreements governing 102,965 outstanding options granted to the reporting person in the course of his employment with the Issuer. As Chief Scientific Officer of the Issuer, the reporting person is involved in making material business decisions regarding the Issuer's policies and practices and may be involved in the consideration of various proposals considered by the Issuer's board of directors.

Item 5. Interest in Securities of the Issuer

- (a) The reporting person beneficially owns 630,009 shares, which represents approximately 7.5% of the outstanding shares of common stock. The 630,009 shares comprise 301,571 shares, 298,508 shares issuable upon the exercise of warrants, and 29,930 shares issuable upon the exercise of vested stock options.
- (b) Sole power to vote or to direct the vote: 630,009
Shared power to vote or to direct the vote: 0
Sole power to dispose or to direct the disposition: 630,009
Shared power to dispose or to direct the disposition: 0
- (c) Not Applicable.
- (d) Not Applicable
- (e) Not Applicable

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

The information set forth in Items 3, 4 and 5 of this Schedule 13D is incorporated by reference herein.

The Issuer entered into an employment agreement with Dr. Khoja, dated July 20, 2021, pursuant to which he serves as the Issuer's Chief Scientific Officer. Dr. Khoja's employment pursuant to the agreement is "at-will" and is terminable by either party for any reason and with or without notice. Pursuant to the agreement, Dr. Khoja is entitled to receive a base salary and an annual performance bonus, to be paid based on the achievement of company and/or individual performance goals. In connection with his entry into the agreement, Dr. Khoja was granted a stock option award for 375 stock options (post-split), which vested as to 1/3 of the shares underlying the stock option on the first anniversary of the date of hire and 1/36th per month thereafter until fully vested. Pursuant to the agreement, Dr. Khoja was also paid a one-time cash bonus equal to \$15,000 in connection with his commencement of employment and was entitled to payment of up to \$45,000 of relocation expenses. The agreement also provides that Dr. Khoja is eligible to participate in the health and welfare benefit plans and programs maintained by the Issuer for the benefit of its employees. Pursuant to the agreement, if Dr. Khoja's employment is terminated by the Issuer without cause, he will be eligible to receive severance in an amount equal to nine months' base salary.

Dr. Khoja is party to stock option agreements with the Issuer covering 102,965 outstanding stock options (73,035 of which are unvested) granted to the reporting person under the Issuer's 2022 Stock Plan. From time to time, Dr. Khoja may receive stock options or other awards of equity-based compensation pursuant to the Issuer's compensation arrangements.

Except as disclosed herein, the Reporting Person does not have any contract, arrangement, understanding or relationship with respect to securities of the Issuer including, but not limited to, transfer or voting of any of the securities, finder's fees, joint ventures, loan or option arrangements, puts or calls, guarantees of profits, division of profits or loss, or the giving or withholding of proxies. The Reporting Person has not pledged securities of the Issuer nor are the securities of the Issuer held by the Reporting Person subject to a contingency, the occurrence of which would give another person voting power or investment power over such securities.

Item 7. Material to be Filed as Exhibits.

Exhibit 4.1 Form of Common Stock Purchase Warrant (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K (File No. 001-41934) filed on September 15, 2026).

Exhibit 10.1 Securities Purchase Agreement dated September 15, 2026, between FibroBiologics, Inc. and Hamid Khoja, Ph.D. (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K (File No. 001-41934) filed on September 15, 2026).

Exhibit 10.2 Form of Stock Option Notice and Grant Agreement (incorporated by reference to Exhibit 10.20 to the Registration Statement on Form S-1/A (File No. 333-275361) filed on December 4, 2023).

Exhibit 10.3 Employment Agreement effective from July 20, 2021, between FibroBiologics, LLC and Hamid Khoja (incorporated by reference to Exhibit 10.13 to the Registration Statement on Form S-1/A (File No. 333-275361) filed on December 4, 2023).

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.

Hamid Khoja

Signature: /s/ Hamid Khoja

Name/Title: Hamid Khoja

Date: 09/17/2026