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

#### **SCHEDULE 13D**

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

#### Arrowhead Pharmaceuticals, Inc.

(Name of Issuer)

#### Common Stock, par value \$0.001 per share

(Title of Class of Securities)

#### 042797209

(CUSIP Number)

David Ellam Chief Financial Officer Silence Therapeutics Plc 72 Hammersmith Road London W14 8TH United Kingdom +44 (0)20 3457 6900

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

#### **January 3, 2017**

(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  $[\ ]$ .

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

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 No.			042797209		
1	NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)				
	Silence Therapeutics Plc				
2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*			R OF A GROUP*		
_	(a) [ ]				
	(b) [ ]				
3 SEC USE ONLY					
4 SOURCE OF FUNDS (See Instructions)					
WC					
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(D) OR 2(E)				
C CITIZENSHIP OR PLACE OF ORGANIZATION					
6					
N	England and V	7	SOLE VOTING POWER		
	SHARES	/	0.004.050		
	SHAKES		6,831,359		
BE	NEFICIALLY	8	SHARED VOTING POWER		
C	OWNED BY		None		
EACH		9	SOLE DISPOSITIVE POWER		
	EDODENIC		6,831,359		
REPORTING			SHARED DISPOSITIVE POWER		
	PERSON	10	SHARED DISPOSITIVE FOWER		
	WITH		None		
11		T BENEFICIALLY OWN	ED BY EACH REPORTING PERSON		
11	6,831,359				
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (See Instructions)				
12					
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)				
1.5	9.21%				
14	TYPE OF REPORTING PERSON (See Instructions)				
	00				

#### **Item 1. Security and Issuer**

This Statement on Schedule 13D relates to the common stock, par value \$0.001 per share (the "Common Stock") of Arrowhead Pharmaceuticals, Inc., a Delaware corporation (the "Issuer"). The Issuer's principal executive offices are located at 225 S. Lake Avenue, Suite 1050, Pasadena, California 91101.

#### Item 2. Identity and Background

- (a) This Schedule 13D is being filed by Silence Therapeutics Plc (the "Reporting Person").
- (b) The principal business address of the Reporting Person is 72 Hammersmith Road, London W14 8TH, United Kingdom.
- (c) The Reporting Person is a biotechnology company focused on the discovery, delivery and development of novel RNA therapeutics for the treatment of serious diseases with unmet medical need.
- (d) During the five years prior to the date hereof, the Reporting Person has not been convicted in a criminal proceeding.
- (e) During the five years prior to the date hereof, the Reporting Person has not been a party to a civil proceeding ending in 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.
- (f) The Reporting Person is a public limited company organized under the laws of England and Wales.

#### Item 3. Source and Amount of Funds or Other Considerations

The purchases of Common Stock reported herein were made using funds from the working capital of the Reporting Person. A total of \$11.3 million was paid to acquire the 6,831,359 shares of Common Stock.

#### **Item 4. Purpose of Transaction**

The Reporting Person has acquired the Common Stock of the Issuer to which this Schedule 13D relates in order to facilitate discussions regarding a possible transaction with the Issuer, which could include, but is not limited to, product licensing, R&D collaboration, technology sharing or a potential corporate transaction.

The Reporting Person intends to review its investment in the Issuer on a continuing basis. Depending on various factors, including, without limitation, the Issuer's operating results, strategic direction and financial and competitive position, the trading price of the Common Stock, and general economic, financial market and industry conditions, the Reporting Person may in the future take such actions with respect to the Issuer as it deems appropriate, including, without limitation, acquiring additional Common Stock and/or other equity, debt, notes, or other securities of the Issuer (collectively "Securities") or disposing of some or all of the Securities beneficially owned by it, in public markets or privately negotiated transactions; and engaging in discussions with members of management and the board of directors of the Issuer or third parties regarding a variety of matters relating to the Issuer including strategic alternatives available to the Issuer, which may involve transactions with the Reporting Person or others, including, but not limited to, the transactions mentioned in the immediately preceding paragraph.

#### Item 5. Interest in Securities of the Issuer

- (a) As of January 13, 2017, the Reporting Person directly owns 6,831,359 shares of the Issuer's Common Stock.
- (b) The Reporting Person has sole voting and dispositive power with respect to the 6,831,359 shares of the Issuer's Common Stock referred to in Item 5(a).
- (c) During the 60 days prior to the date hereof, the Reporting Person effected the following transactions:

Date of Transaction	Nature of Transaction	Quantity of Shares	Price per Share
January 12, 2017	Open Market	300,000	\$ 2.1528
January 11, 2017	Open Market	250,000	\$ 2.1815
January 10, 2017	Open Market	275,000	\$ 1.9411
January 6, 2017	Open Market	1,516,876	\$ 1.7658
January 4, 2017	Open Market	630,000	\$ 1.6805
January 3, 2017	Open Market	359,483	\$ 1.5913
December 30, 2016	Open Market	809,745	\$ 1.5819
December 29, 2016	Open Market	844,647	\$ 1.5867
December 28, 2016	Open Market	318,816	\$ 1.5133
December 27, 2016	Open Market	536,656	\$ 1.5019
December 23, 2016	Open Market	366,493	\$ 1.5176
December 22, 2016	Open Market	500,000	\$ 1.3152
December 21, 2016	Open Market	123,643	\$ 1.2615

- (d) No person other than the Reporting Person has the right to receive, or the power to direct the receipt of, dividends from, or the proceeds from the sale of, the shares of Common Stock referred to in Item 5(a).
- (e) Not applicable.

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

There are no contracts, arrangements, understandings or relationships (legal or otherwise) between the Reporting Person and any other person with respect to the shares of Common Stock referred to in Item 5(a).

#### Item 7. Material to Be Filed as Exhibits

None.

## **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, con	ıplete
and correct		

January 13, 2017		
Dated		
/s/ David Ellam		
Signature		
David Ellam, Chief Financial Officer		
Name/Title		

The original statement shall be signed by each person on whose behalf the statement is filed or his authorized representative. If the statement is signed on behalf of a person by his authorized representative (other than an executive officer or general partner of this filing person), evidence of the representative's authority to sign on behalf of such person shall be filed with the statement, provided, however, that a power of attorney for this purpose which is already on file with the Commission may be incorporated by reference. The name and any title of each person who signs the statement shall be typed or printed beneath his signature.

Attention: Intentional misstatements or omissions of fact constitute Federal criminal violations (See 18 U.S.C. 1001).