

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person* <u>Vittiglio Joseph</u> <hr/> (Last) (First) (Middle) <u>C/O AMAG PHARMACEUTICALS, INC.</u> <u>1100 WINTER STREET</u> <hr/> (Street) <u>WALTHAM MA 02451</u> <hr/> (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>AMAG PHARMACEUTICALS INC. [AMAG]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>EVP, General Counsel</u>
	3. Date of Earliest Transaction (Month/Day/Year) <u>02/25/2019</u>	
4. If Amendment, Date of Original Filed (Month/Day/Year)		

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	02/25/2019		A		20,000 ⁽¹⁾⁽²⁾	A	(3)	70,512	D	
Common Stock	02/25/2019		A		12,000 ⁽¹⁾⁽⁴⁾	A	(3)	82,512	D	

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
				Code	V	(A)	(D)	Date Exercisable	Expiration Date						Title
Stock Option (Right to Buy)	\$15.51	02/25/2019		A		25,000		(5)	02/25/2029	Common Stock	25,000	(3)	25,000	D	

Explanation of Responses:

- Each restricted stock unit ("RSU") represents a contingent right to receive one share of Common Stock of AMAG Pharmaceuticals, Inc. (the "Issuer").
- These shares of Common Stock are issuable pursuant to a grant of RSUs pursuant to the Issuer's Fourth Amended & Restated 2007 Equity Incentive Plan, as amended (the "Plan") that will vest in three equal annual installments with the first installment vesting on February 25, 2020.
- Not applicable.
- These shares of Common Stock are issuable pursuant to a performance-based RSU grant under a long-term incentive program under the Plan and will be earned, if at all, based on achievement of certain relative total stockholder return targets over the three year performance period ending February 25, 2022 subject to continuation of a business relationship with the grantee through the conclusion of the performance period. The number above represents the target number of shares that may be delivered pursuant to the award ("Target Award"); however, the amount that vests could range from zero to 150% of the Target Award.
- Grant of stock option pursuant to the Plan. This option will vest and become exercisable over four years after the grant date as follows: (i) 25% on the first anniversary of the grant date and (ii) the balance vesting in equal quarterly installments over the next three years thereafter.

Remarks:

/s/ Nancy R. Smith, attorney-in-fact 02/27/2019

** Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.