UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13G

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

INOTEK PHARMACEUTICALS CORPORATION

(Name of Issuer)

COMMON STOCK, \$0.01 PAR VALUE (Title of Class of Securities)

> 45780V102 (CUSIP Number)

Katie Jackson-Turner AstraZeneca PLC 2 Kingdom Street, London W2 6BD Telephone: +44 20 7604 8000 (Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

> **December 31, 2015** (Date of Event which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

□ Rule 13d-1(b)

 \Box Rule 13d-1(c)

⊠ Rule 13d-1(d)

* 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).

I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) ASTRAZENECA PLC 2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions) (a) □ (b) □ 3. SEC USE ONLY			~-			
ASTRAZENECA PLC 2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions) (a) □ (b) □ 3. SEC USE ONLY	1.	NAMES OF REPORTING PERSONS				
2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions) (a) □ (b) □ 3. SEC USE ONLY		I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)				
2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions) (a) □ (b) □ 3. SEC USE ONLY						
(a) □ (b) □ 3. SEC USE ONLY 4. CITIZENSHIP OR PLACE OF ORGANIZATION ENGLAND AND WALES 5. SOLE VOTING POWER NUMBER OF 6. SHARES BENEFICIALLY 0WNED BY CACH REPORTING PERSON WITH 8. SHARED DISPOSITIVE POWER 1,917,906 9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,917,906 10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) □ 11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 7.3%1 12. TYPE OF REPORTING PERSON (see instructions)		ASTRA	ΔZE	NECA PLC		
3. SEC USE ONLY 4. CITIZENSHIP OR PLACE OF ORGANIZATION ENGLAND AND WALES 5. SOLE VOTING POWER NUMBER OF SHARES 6. BENEFICIALLY OWNED BY EACH REPORTING 1.917,906 7. SOLE DISPOSITIVE POWER 1,917,906 3. 9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,917,906 10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) 11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 7.3%1 12. TYPE OF REPORTING PERSON (see instructions)	2.	CHECK	THE	E APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)		
4. CITIZENSHIP OR PLACE OF ORGANIZATION ENGLAND AND WALES NUMBER OF SHARES 5. SOLE VOTING POWER BENEFICIALLY 1,917,906 1,917,906 OWNED BY EACH REPORTING 7. SOLE DISPOSITIVE POWER 1,917,906 9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,917,906 10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) 11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 7.3%1		(a) 🗆	(b			
4. CITIZENSHIP OR PLACE OF ORGANIZATION ENGLAND AND WALES NUMBER OF SHARES 5. SOLE VOTING POWER BENEFICIALLY 1,917,906 1,917,906 OWNED BY EACH REPORTING 7. SOLE DISPOSITIVE POWER 1,917,906 9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,917,906 10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) 11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 7.3%1						
ENGLAND AND WALES NUMBER OF 5. SOLE VOTING POWER SHARES 6. SHARED VOTING POWER DOWNED BY 1,917,906 1,917,906 OWNED BY 7. SOLE DISPOSITIVE POWER REPORTING 8. SHARED DISPOSITIVE POWER 1,917,906 9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,917,906 1. 10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) I 11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 1.3%1 12. TYPE OF REPORTING PERSON (see instructions) I	3.	SEC USE	E ON	NLY		
ENGLAND AND WALES NUMBER OF 5. SOLE VOTING POWER SHARES 6. SHARED VOTING POWER DOWNED BY 1,917,906 1,917,906 OWNED BY 7. SOLE DISPOSITIVE POWER REPORTING 8. SHARED DISPOSITIVE POWER 1,917,906 9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,917,906 1. 10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) I 11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 1.3%1 12. TYPE OF REPORTING PERSON (see instructions) I						
ENGLAND AND WALES NUMBER OF 5. SOLE VOTING POWER SHARES 6. SHARED VOTING POWER DOWNED BY 1,917,906 1,917,906 OWNED BY 7. SOLE DISPOSITIVE POWER REPORTING 8. SHARED DISPOSITIVE POWER 1,917,906 9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,917,906 1. 10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) I 11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 1.3%1 12. TYPE OF REPORTING PERSON (see instructions) I	4	CITIZENSHIP OR PLACE OF ORGANIZATION				
NUMBER OF 5. SOLE VOTING POWER SHARES 6. SHARED VOTING POWER BENEFICIALLY 1,917,906 OWNED BY F. SOLE DISPOSITIVE POWER REPORTING 8. SHARED DISPOSITIVE POWER 1,917,906 1,917,906 9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,917,906 10. 10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) 11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 7.3%1 12. TYPE OF REPORTING PERSON (see instructions)						
NUMBER OF 5. SOLE VOTING POWER SHARES 6. SHARED VOTING POWER BENEFICIALLY 1,917,906 OWNED BY F. SOLE DISPOSITIVE POWER REPORTING 8. SHARED DISPOSITIVE POWER 1,917,906 1,917,906 9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,917,906 10. 10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) 11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 7.3%1 12. TYPE OF REPORTING PERSON (see instructions)						
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING 6. SHARED VOTING POWER 7. SOLE DISPOSITIVE POWER 8. SHARED DISPOSITIVE POWER 1.917,906 1.917,906 9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1.917,906 10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) 11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 7.3%1 12. TYPE OF REPORTING PERSON (see instructions)		LINGL				
SHARES 0. DIFNED FORMATION FOR			э.	SOLE VOTING POWER		
SHARES 0. DIFNED FORMATION FOR	NILIM		6			
BENEFICIALLY OWNED BY EACH REPORTING 1,917,906 7. SOLE DISPOSITIVE POWER REPORTING 8. 9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,917,906 10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) 11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 12. TYPE OF REPORTING PERSON (see instructions)			6.	SHARED VOTING POWER		
OWNED BY EACH REPORTING 1,917,906 9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,917,906 9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,917,906 10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) 11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 7.3%1 12. TYPE OF REPORTING PERSON (see instructions)	_	-				
EACH REPORTING PERSON WITH 7. SOLE DISPOSITIVE POWER 8. SHARED DISPOSITIVE POWER 1,917,906 1,917,906 9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,917,906 10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) 11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 7.3%1 12. TYPE OF REPORTING PERSON (see instructions)						
REPORTING PERSON WITH 8. SHARED DISPOSITIVE POWER 1,917,906 9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,917,906 10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) 11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 7.3%1 12. TYPE OF REPORTING PERSON (see instructions)			7.	SOLE DISPOSITIVE POWER		
PERSON WITH 8. SHARED DISPOSITIVE POWER 1,917,906 1,917,906 9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) 11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 7.3%1 12. TYPE OF REPORTING PERSON (see instructions)		-				
1,917,906 9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,917,906 10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) 11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 7.3%1 12. TYPE OF REPORTING PERSON (see instructions)			8.	SHARED DISPOSITIVE POWER		
9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,917,906 10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) 11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 7.3%1 12. TYPE OF REPORTING PERSON (see instructions)	I LIKOV	011 11111				
9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,917,906 10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) 11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 7.3%1 12. TYPE OF REPORTING PERSON (see instructions)				1 917 906		
1,917,906 10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) 11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 7.3%1 12. TYPE OF REPORTING PERSON (see instructions)	9	AGGRE	Сат			
10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) 11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 7.3%1 12. TYPE OF REPORTING PERSON (see instructions)	5.	noon	J/ 11			
10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) 11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 7.3%1 12. TYPE OF REPORTING PERSON (see instructions)		1 017 0	06			
11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 7.3%1 12. TYPE OF REPORTING PERSON (see instructions)	10					
7.3%1 12. TYPE OF REPORTING PERSON (see instructions)	10.	CHECK	IF I	HE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) \Box		
7.3%1 12. TYPE OF REPORTING PERSON (see instructions)						
7.3%1 12. TYPE OF REPORTING PERSON (see instructions)						
12. TYPE OF REPORTING PERSON (see instructions)	11.	PERCEN	IT O	F CLASS REPRESENTED BY AMOUNT IN ROW (9)		
12. TYPE OF REPORTING PERSON (see instructions)						
		7.3%1				
	12.	TYPE OF REPORTING PERSON (see instructions)				
		CO				

¹ The percentage set forth on the cover sheets is calculated based on 26,410,251 shares of Common Stock reported to be outstanding as of November 11, 2015 as set forth in the Issuer's Form 10-Q for the quarter ended September 30, 2015 as filed with the Securities and Exchange Commission ("SEC") on November 12, 2015.

CUSIP No. 45780V102

1.	NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)			
	I.A.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)			
	MEDIMMUNE VENTURES, INC.			
	EIN # 06-1641145			
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions) (a) □ (b) □			
3.	SEC USE ONLY			
4.	4. CITIZENSHIP OR PLACE OF ORGANIZATION			
	DELAWARE			
	5. SOLE VOTING POWER			
	IBER OF 6. SHARED VOTING POWER			
BENE	IARES FICIALLY 1,917,906			
	ACH 7. SOLE DISPOSITIVE POWER			
	ORTING ON WITH 8. SHARED DISPOSITIVE POWER			
PERS	ON WITH 0. SIMILED DISCONTINE FOWER			
	1,917,906			
9.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON			
	1,917,906			
10.	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions)			
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)			
	7.3%1			
12.	TYPE OF REPORTING PERSON (see instructions)			
	СО			

¹ The percentage set forth on the cover sheets is calculated based on 26,410,251 shares of Common Stock reported to be outstanding as of November 11, 2015 as set forth in the Issuer's Form 10-Q for the quarter ended September 30, 2015 as filed with the Securities and Exchange Commission ("SEC") on November 12, 2015.

CUSIP No. 45780V102

Item 1.

- (a) Name of Issuer Inotek Pharmaceuticals Corporation, a corporation organized under the laws of Delaware
- (b) Address of Issuer's Principal Executive Offices 131 Hartwell Ave 1st floor, Suite 105 Lexington, MA 02421

Item 2.

(a),(c) Name and Citizenship of Person Filing AstraZeneca PLC, a corporation organized under the laws of England and Wales (the "Parent")

MedImmune Ventures, Inc., a corporation organized under the laws of Delaware and an indirect wholly-owned subsidiary of the Parent (the "Purchaser"). Note: See Exhibit A.

(b) Address of the Principal Office or, if none, residence

The address of the Parent is: 2 Kingdom Street London, W2 6BD

The address of the Purchaser is: One MedImmune Way Gaithersburg, MD 20878

- (d) Title of Class of Securities Common Stock, \$0.01 par value per share
- (e) CUSIP Number 45780V102

Item 3. If this statement is filed pursuant to §§240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

- (a) \Box Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o).
- (b) \Box Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c).
- (c) \Box Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c).
- (d) 🛛 Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8).
- (e) \Box An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E);
- (f) \Box An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F);
- (g) \Box A parent holding company or control person in accordance with §240.13d-1(b)(1)(ii)(G);
- (h) 🗆 A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i) 🗆 A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
- (j) \Box Group, in accordance with §240.13d-1(b)(1)(ii)(J).

Item 4. Ownership.

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

- (a) Amount beneficially owned: 1,917,906
- (b) Percent of class: 7.3%
- (c) Number of shares as to which the person has:
 - (i) Sole power to vote or to direct the vote
 - (ii) Shared power to vote or to direct the vote 1,917,906
 - (iii) Sole power to dispose or to direct the disposition of
 - (iv) Shared power to dispose or to direct the disposition of 1,917,906

CUSIP No. 45780V102

13G

Instruction. For computations regarding securities which represent a right to acquire an underlying security see §240.13d-3(d)(1).

Item 5. Ownership of Five Percent or Less of a Class.

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following \Box .

Instruction. Dissolution of a group requires a response to this item.

Item 6. Ownership of More than Five Percent on Behalf of Another Person.

NOT APPLICABLE

- Item 7.
 Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company.

 NOT APPLICABLE
- Item 8. Identification and Classification of Members of the Group. NOT APPLICABLE

Item 9. Notice of Dissolution of Group.

NOT APPLICABLE

Item 10. Certification.

NOT APPLICABLE

13G

SIGNATURES

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 as of February 16, 2016

ASTRAZENECA PLC

By:/s/ Katie Jackson-TurnerName:Katie Jackson-TurnerTitle:Deputy Company Secretary

MEDIMMUNE VENTURES, INC.

By: /s/ Samuel Wu

Name: Samuel Wu Title: Managing Director Exhibit A

13G

JOINT FILING AGREEMENT

In accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended, each of the persons named below agrees to the joint filing of a Statement on Schedule 13G (including amendments thereto) with respect to the common stock, \$0.01 par value per share, of Inotek Pharmaceuticals Corporation, a Delaware corporation, and further agrees that this Joint Filing Agreement be included as an exhibit to such filings provided that, as contemplated by Section 13d-1(k)(1)(ii), no person shall be responsible for the completeness or accuracy of the information concerning the other persons making the filing, unless such person knows or has reason to believe that such information is inaccurate. This Joint Filing Agreement may be executed in any number of counterparts, all of which together shall constitute one and the same instrument.

Dated as of February 16, 2016

ASTRAZENECA PLC

By: /s/ Katie Jackson-Turner

Name: Katie Jackson-Turner Title: Deputy Company Secretary

MEDIMMUNE VENTURES, INC.

By: /s/ Samuel Wu

Name: Samuel Wu Title: Managing Director