

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

OMB APPROVAL	
OMB Number:	3235-0104
Estimated average burden hours per response:	0.5

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>ONSI DOUGLAS E</u> (Last) (First) (Middle) <u>C/O LEAP THERAPEUTICS, INC.</u> <u>47 THORNDIKE STREET SUITE B1-1</u> (Street) <u>CAMBRIDGE MA 02141</u> (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) <u>01/20/2017</u>	3. Issuer Name and Ticker or Trading Symbol <u>LEAP THERAPEUTICS, INC. [LPTX]</u>	
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director <input checked="" type="checkbox"/> 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>CFO, Gen Counsel, Treas, Sec.</u>	5. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
<u>Common Stock</u>	<u>2,859,496⁽¹⁾⁽²⁾</u>	<u>I</u>	<u>See Footnotes⁽¹⁾⁽²⁾</u>

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

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)	4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date				

Explanation of Responses:

1. Consists of (i) 2,515,607 held by HealthCare Ventures IX, L.P. and (ii) 343,889 shares held by HealthCare Ventures Strategic Fund, L.P. Christopher K. Mirabelli, Douglas E. Onsi and Augustine Lawlor (collectively, the "HCVIX Directors") are the Managing Directors of HealthCare Partners IX, LLC ("HCPIX LLC"), which is the General Partner of HealthCare Partners IX, L.P. ("HCPIX"), which is the General Partner of HealthCare Ventures IX, L.P. Each of the HCVIX Directors, HCPIX LLC and HCPIX beneficially own and share voting and dispositive power with respect to all of the securities owned by HealthCare Ventures IX, L.P. Douglas E. Onsi disclaims beneficial ownership of these shares except to the extent of his proportionate pecuniary interest in these securities.

2. Christopher K. Mirabelli, Douglas E. Onsi and Augustine Lawlor (collectively, the "HCSP Directors") are the Managing Directors of HealthCare Strategic Partners, LLC ("HCV Strategic LLC"), which is the General Partner of HealthCare Ventures Strategic Fund, L.P. Each of the HCSP Directors, and HCV Strategic LLC beneficially own and share voting and dispositive power with respect to all of the securities owned by HCV Strategic Fund, L.P. Douglas E. Onsi disclaims beneficial ownership of these shares except to the extent of his proportionate pecuniary interest in these securities.

/s/ Douglas E. Onsi

01/23/2017

** 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 5 (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.