

**CERTIFICATE OF AMENDMENT  
OF  
RESTATED CERTIFICATE OF INCORPORATION  
OF  
ACCELERON PHARMA INC.**

Acceleron Pharma Inc. (the "Corporation"), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, does hereby certify as follows:

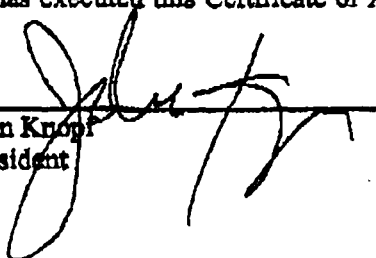
1. This Corporation's original Certificate of Incorporation was filed with the Secretary of State of Delaware on June 13, 2003 under the name "phoenix pharma, Inc."
2. This Corporation's Certificate of Incorporation was amended and restated on February 4, 2004.
3. This Corporation's Amended and Restated Certificate of Incorporation was further amended on July 20, 2004 and December 19, 2005 and amended and restated on July 28, 2006, and further amended and restated on October 23, 2007 and March 10, 2008 and restated on March 24, 2008, and further amended on June 25, 2009.
4. This Certificate of Amendment has been duly adopted by this Corporation's Board of Directors and stockholders in accordance with the applicable provisions of Sections 228 and 242 of the General Corporation Law of the State of Delaware.
5. Article FOURTH, Section 3(d) of the Certificate of Incorporation of the Corporation is hereby amended to read in its entirety as follows:

"[Intentionally Omitted.]"

IN WITNESS WHEREOF, the undersigned has executed this Certificate of Amendment  
as of the 6th day of November, 2009.

By: \_\_\_\_\_

John Knopf  
President

A handwritten signature in black ink, appearing to read 'John Knopf', is written over a horizontal line. The signature is stylized with a large initial 'J' and a long, sweeping horizontal stroke at the end.