

**MATERIALS LICENSE**

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 37, 39, 40, 70 and 71, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

<p style="text-align: center;">Licensee</p> <p>1. Alexion Pharmaceuticals, Inc.</p> <p>2. 100 College Street New Haven, CT 06510</p>	<p>In accordance with the letter dated March 05, 2018,</p>	<p>4. Expiration Date: January 31, 2023</p>
	<p>3. License number: 06-28799-01 is amended in its entirety to read as follows:</p>	<p>5. Docket No.: 030-32976 Reference No.:</p>

<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Hydrogen-3</p>	<p>7. Chemical and/or physical form</p> <p>A. Any</p>	<p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. 180 millicuries total</p>	<p>9. Authorized use</p> <p>A. For research and development as defined in 10 CFR 30.4.</p>
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**CONDITIONS**

- 10. Licensed material may be used or stored only at the licensee's facilities located at 100 College Street, New Haven, Connecticut.
- 11. The Radiation Safety Officer (RSO) for this license is Joseph J. Paradiso.
- 12. Licensed material shall only be used by or under the supervision of Sharon Barr, Ph.D.
- 13. The licensee shall not use the licensed material in or on humans.

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SUPPLEMENTARY SHEET**License Number  
06-28799-01Docket or Reference Number  
030-32976

Amendment No. 21

14. Experimental animals, or the products from experimental animals, that have been administered licensed material shall not be used for human consumption.
15. The licensee shall not use licensed material in field applications where activity is released except as provided otherwise by specific condition of this license.
16. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. This license condition applies only to those procedures that are required to be submitted in accordance with the regulations. The U.S. Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.
- A. Application dated December 18, 2012 (ML13009A044)
  - B. Letter dated January 27, 2016 (ML16050A338)
  - C. Letter dated May 22, 2017 (ML17151A395)
  - D. Letter dated March 5, 2018 (ML18074A206)

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date: April 11, 2018By: Dennis Lawyer  
Region 1