



DIVISION OF  
CORPORATION FINANCE

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

February 16, 2021

Ludwig Hantson, Ph.D.  
Chief Executive Officer  
Alexion Pharmaceuticals, Inc.  
121 Seaport Boulevard  
Boston, MA 02210

**Re: Alexion Pharmaceuticals, Inc.**  
**Form 10-K for the Fiscal Year Ended December 31, 2019**  
**Filed February 4, 2020**  
**File No. 000-27756**

Dear Dr. Hantson:

We have completed our review of your filing. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Sincerely,

Division of Corporation Finance  
Office of Life Sciences