

J.P. Morgan Securities LLC  
383 Madison Avenue  
New York, NY 10179

Citigroup Global Markets Inc.  
388 Greenwich Street  
New York, New York 10013

May 4, 2015

Securities and Exchange Commission  
Division of Corporation Finance  
100 F Street, N.E.  
Washington, D.C. 20549-3720

Attention: Jeffrey P. Riedler, Assistant Director  
Bryan J. Pitko  
Matthew Jones

**Re: aTyr Pharma, Inc.**  
**Registration Statement on Form S-1**  
**Filed on April 6, 2015**  
**Registration File No. 333-203272**

Ladies and Gentlemen:

Pursuant to Rule 461 under the Securities Act of 1933, as amended (the "Act"), the undersigned, as representatives of the several underwriters (the "Underwriters"), hereby join in the request of aTyr Pharma, Inc. (the "Company") for acceleration of the effective date of the above-referenced registration statement so that it becomes effective at 4:00 p.m., Eastern time, on May 6, 2015, or as soon thereafter as practicable.

Pursuant to Rule 460 under the Act, we, as representatives of the several underwriters, wish to advise you that we have effected the following distribution of the Company's Preliminary Prospectus dated April 27, 2015:

- (i) Dates of distribution: April 27, 2015 through the date hereof
- (ii) Number of prospective underwriters to which the preliminary prospectus was furnished: 4
- (iii) Number of prospectuses furnished to investors: approximately 646
- (iv) Number of prospectuses distributed to others, including the Company, the Company's counsel, independent accountants, and underwriters' counsel: approximately 40

The undersigned advise that they have complied and will continue to comply, and each Underwriter and dealer has advised the undersigned that it has complied and will continue to comply, with Rule 15c2-8 under the Securities Exchange Act of 1934.

*[Signature page follows]*

Very truly yours,

J.P. MORGAN SECURITIES LLC  
CITIGROUP GLOBAL MARKETS INC.

Acting severally on behalf of themselves and the  
several Underwriters

By: J.P. MORGAN SECURITIES LLC

By: /s/ Phillip Ross  
Name: Phillip Ross  
Title: Managing Director

By: CITIGROUP GLOBAL MARKETS INC.

By: /s/ Jennifer Jarrett  
Name: Jennifer Jarrett  
Title: Managing Director

*[Signature page to Underwriters' Acceleration Request]*