ELOXX PHARMACEUTICALS, INC. 480 ARSENAL WAY WATERTOWN, MA 02472

August 26, 2021

VIA EDGAR TRANSMISSION

Securities and Exchange Commission Division of Corporation Finance Mail Stop 4720 100 F Street, N.E. Washington, D.C. 20549

Re: ELOXX PHARMACEUTICALS, INC.

Registration Statement on Form S-3 (Registration No. 333-258994)

Ladies and Gentlemen:

In accordance with Rule 461 under the Securities Act of 1933, as amended, we hereby request acceleration of the effective date of the Registration Statement on Form S-3 (Registration No. 333-258994) (the "Registration Statement") of Eloxx Pharmaceuticals, Inc. (the "Company"). We respectfully request that the Registration Statement become effective as of 4:30 p.m., Eastern Time, on August 30, 2021, or at such later time as the Company or its counsel may orally request via telephone call to the staff. Please contact Wesley C. Holmes of Latham & Watkins LLP, counsel to the Company, at (617) 948-6027, or in his absence, Peter Handrinos at (617) 948-6060, to provide notice of effectiveness, or if you have any other questions or concerns regarding this matter.

Very truly yours,

ELOXX PHARMACEUTICALS, INC.

By: /s/ Sumit Aggarwal

Name: Sumit Aggarwal Title: Chief Executive Officer

cc: Daniel E. Geffken, Eloxx Pharmaceuticals, Inc. Peter N. Handrinos, Latham & Watkins LLP Wesley C. Holmes, Latham & Watkins LLP