

Phio Pharmaceuticals Corp.  
257 Simarano Drive, Suite 101 | Marlborough, MA 01752

May 19, 2021

**VIA EDGAR**

Securities and Exchange Commission  
Division of Corporation Finance  
100 F Street, N.E.  
Washington, DC 20549  
Attn: Jeff Gabor

**Re: Phio Pharmaceuticals Corp.  
Registration Statement on Form S-3 (File No. 333-256100)**

Ladies and Gentlemen:

Pursuant to Rule 461 under the Securities Act of 1933, as amended, Phio Pharmaceuticals Corp. (the “**Company**”) hereby respectfully requests that the effective date of the above-referenced registration statement on Form S-3 filed by the Company (the “**Registration Statement**”) be accelerated so that it will be declared effective at 5:00 p.m., Eastern Time, on May 21, 2021, or as soon thereafter as practicable.

Very truly yours,

**PHIO PHARMACEUTICALS CORP.**

/s/ Gerrit Dispersyn  
Gerrit Dispersyn, Dr. Med. Sc.  
President and Chief Executive Officer

cc: Ryan A. Murr, Gibson, Dunn & Crutcher LLP