May 30, 2017

VIA EDGAR

Suzanne Hayes Assistant Director Division of Corporation Finance U.S. Securities & Exchange Commission 100 F Street, NE Washington, D.C. 20549

Diffusion Pharmaceuticals Inc.

Registration Statement on Form S-3 (File No. 333-218062)

Dear Ms. Hayes:

Pursuant to Rule 461 of the General Rules and Regulations under the Securities Act of 1933, as amended, Diffusion Pharmaceuticals Inc. (the "Company") hereby requests that the effectiveness of the above-captioned Registration Statement be accelerated so that it will become effective as of 4:00 p.m. Eastern Time on June 1, 2017, or as soon thereafter as practicable.

If you have any questions, or if you require additional information, please do not hesitate to contact me at (212) 698-3616.

Sincerely,

/s/ David S. Rosenthal

David S. Rosenthal

Cc: Dorrie Yale

> David G. Kalergis Ben L. Shealy Diffusion Pharmaceuticals Inc.