

InVivo Therapeutics Holdings Corp.
One Kendall Square, Suite B14402
Cambridge, MA 02139

June 19, 2018

VIA EDGAR

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

Re: InVivo Therapeutics Holdings Corp.
Registration Statement on Form S-1
File No. 333-224424
Request for Acceleration

Ladies and Gentlemen:

Pursuant to Rule 461 promulgated under the Securities Act of 1933, as amended, InVivo Therapeutics Holdings Corp. hereby requests acceleration of the effective date of its Registration Statement on Form S-1 (File No. 333-224424), so that it may become effective at 4:30 p.m. on June 20, 2018, or as soon thereafter as practicable.

Very truly yours,

INVIVO THERAPEUTICS HOLDINGS CORP.

By: /s/ Richard Toselli

Name: Richard Toselli

Title: President and Chief Executive Officer
