

One Kendall Square, Suite B14402 Cambridge, MA 02139

August 18, 2022

VIA ELECTRONIC SUBMISSION

Securities and Exchange Commission 100 F Street, N.E. Washington, D.C. 20549

> Re: InVivo Therapeutics Holdings Corp. Commission File No. 001-37350 Definitive Proxy Materials

Ladies and Gentlemen:

On behalf of InVivo Therapeutics Holdings Corp. (the "Company"), transmitted herewith for filing pursuant to Rule 14a-6(b) promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), are definitive copies of the Notice of Annual Meeting of Stockholders, Proxy Statement and Proxy relating to the Company's 2022 Annual Meeting of Stockholders to be held on September 9, 2022 (the "Annual Meeting"). The Company expects to begin mailing its definitive proxy materials to its stockholders on or about August 18, 2022.

In accordance with Rule 14a-6(h), these materials are marked to indicate changes from the preliminary materials filed by the Company with the Commission on July 8, 2022, July 25, 2022 and August 11, 2022. The Company has revised certain information in response to the Commission's comments. The revised material does not contain material revisions or material new proposals that constitute a fundamental change in the proxy material.

Please call the undersigned if you have any questions regarding this matter.

Very truly yours,

/s/ Richard Toselli

Richard Toselli Chief Executive Officer InVivo Therapeutics Holdings Corp.

Attachments