Richard Christopher Chief Financial Officer INVIVO THERAPEUTICS HOLDINGS CORP. One Kendall Square Suite B14402 Cambridge, MA 02139 Re: INVIVO THERAPEUTICS HOLDINGS CORP. Form 10-K for the Year Ended December 31, 2018 Filed April 1, 2019 File No. 001-37350 Dear Mr. Christopher: We have completed our review of your filings. We remind you that the company and its

management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Sincerely,

Division of

Corporation Finance

and Machinery

Office of Electronics