August 19, 2022

Richard Toselli, M.D. President and Chief Executive Officer INVIVO THERAPEUTICS HOLDINGS CORP. One Kendall Square, Suite B14402 Cambridge, MA 02139

HOLDINGS CORP.

Re: INVIVO THERAPEUTICS

Preliminary Proxy

Statement on Schedule 14A

Filed July 8, 2022 File No. 001-37350

Dear Dr. Toselli:

 $$\operatorname{\textsc{We}}$ have completed our review of your filing. 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

Office of Life Sciences

cc: Rosemary Reilly, Esq.