



DIVISION OF  
CORPORATION FINANCE

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

August 19, 2022

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

**Re: INVIVO THERAPEUTICS HOLDINGS CORP.**  
**Preliminary Proxy Statement on Schedule 14A**  
**Filed July 8, 2022**  
**File No. 001-37350**

Dear Dr. Toselli:

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.