

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

June 12, 2025

Jennifer Holmgren, Ph.D.
Chief Executive Officer and Director
LanzaTech Global, Inc.
8045 Lamon Avenue
Suite 400
Skokie, Illinois 60077

Re: LanzaTech Global, Inc.
Amendment No. 1 to Preliminary Proxy Statement on Schedule 14A
Filed June 11, 2025
File No. 001-40282

Dear Jennifer Holmgren Ph.D.:

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 Industrial Applications and Services

cc: Marisa Stavenas, Esq.