

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

June 2, 2025

Scott Burrows Chief Financial Officer Spyre Therapeutics, Inc. 221 Crescent Street Building 23 Suite 105 Waltham, MA 02453

> Re: Spyre Therapeutics, Inc. Form 10-K for the fiscal year ended December 31, 2024 Filed February 27, 2025 File No. 001-37722

Dear Scott Burrows:

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