January 30, 2024 Oren Gilad, Ph.D. President and Chief Executive Officer Aprea Therapeutics, Inc. 3805 Old Easton Road Doylestown, PA 18902 Re: Aprea Therapeutics, Inc. Registration Statement on Form S-3 Filed January 26, 2024 File No. 333-276702 Dear Oren Gilad: This is to advise you that we have not reviewed and will not review your registration statement. Please refer to Rules 460 and 461 regarding requests for acceleration. 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. Please contact Chris Edwards at 202-551-6761 with any questions. Sincerely,

Division of Corporation Finance Office of Life Sciences cc: Fahd M.T. Riaz, Esq.