

August 13, 2020

Troy E. Wilson, Ph.D., J.D.  
President and Chief Executive Officer  
Kura Oncology, Inc.  
12730 High Bluff Drive, Suite 400  
San Diego, CA 92130

Re: Kura Oncology, Inc.  
Registration

Statement on Form S-3

Filed August 6,

2020

File No. 333-241663

Dear Dr. Wilson:

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 Jeffrey

Gabor at 202-551-2544 with any questions.

Sincerely,

Division of Corporation Finance

Office of Life Sciences

cc:

Charles Bair, Esq.