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LATHAM & WATKINS LLP

August 20, 2021

VIA EDGAR

Mr. Dillon Hagius
Office of Life Sciences
Division of Corporation Finance
U.S. Securities and Exchange Commission
100 F Street N.E.
Washington, D.C. 20549

Re: Tyra Biosciences, Inc.
Amendment No. 1 to Draft Registration Statement on Form S-1
Submitted July 2, 2021
CIK No. 0001863127

Dear Mr. Hagius:

We are in receipt of the Staff's letter dated July 13, 2021 with respect to the above-referenced confidential draft amended Registration Statement (the "***Amended Draft Registration Statement***"). We are responding to the Staff's comments on behalf of Tyra Biosciences, Inc. ("***Tyra***" or the "***Company***") as set forth below. Simultaneously with the submission of this letter, the Company is publicly filing via EDGAR the Registration Statement on Form S-1 (the "***Registration Statement***") responding to the Staff's comments and updating the Amended Draft Registration Statement.

The Company's responses set forth in this letter are numbered to correspond to the numbered comments in the Staff's letter. All terms used but not defined herein have the meanings assigned to such terms in the Registration Statement. For ease of reference, we have set forth the Staff's comments and the Company's response for each item below.

Amendment No. 1 to Draft Registration Statement on Form S-1

Risk Factors
Changes in methods of product candidate manufacturing or formulation may result in additional costs or delay,, page 29

1. *We note your amended disclosure that you "intend to change the delivery vehicle we use in our formulation for TYRA-300 from polyethylene glycol 400 to a cyclodextrin based vehicle" and that "[t]his change in formulation may result in effects and results that are different from those observed in our completed preclinical studies to date." Please provide more information about this change in a relevant portion of your business section and explain whether you believe your comparisons to erdafitinib and pemigatinib, which you previously addressed in response to comment number 7, are still appropriate.*

Tyra's Response: The Company respectfully advises the Staff that the Company recently completed the above-referenced formulation change and has conducted an additional preclinical study of animals in a bladder cancer xenograft model with the new formulation. The Company has revised the disclosure on pages 113 and 114 of the Registration Statement to include the results from this preclinical study and a description of the formulation change, in response to the Staff's comment. The Company continues to believe that the comparisons to erdafitinib and pemigatinib are appropriate based on both the new data as well as the prior preclinical data included in the Registration Statement beginning on page 115 and previously referenced in the Company's response to Comment 7, which shows results where the potency of TYRA-300 and the other referenced drugs were evaluated in the same model and/or experiment, where such experiments are not conducted in animals but cell lines and therefore delivery vehicle is not relevant to such data nor the Company's conclusions thereon.

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Any comments or questions regarding the foregoing should be directed to the undersigned at 858-523-3962. Thank you in advance for your cooperation in connection with this matter.

Very truly yours,

/s/ Matthew T. Bush
Matthew T. Bush
of LATHAM & WATKINS LLP

cc: Kristin Lochhead, *Securities and Exchange Commission*
Terence O'Brien, *Securities and Exchange Commission*
Chris Edwards, *Securities and Exchange Commission*
Todd Harris, Ph.D., *Tyra Biosciences, Inc.*
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