FOIA CONFIDENTIAL TREATMENT REQUEST

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The entity requesting confidential treatment is:
Tokai Pharmaceuticals, Inc.
One Broadway, 14th floor
Cambridge, MA 02142
Attn: Jodie P. Morrison
President and Chief Executive Officer
(617) 225-4305

August 25, 2014

VIA EDGAR SUBMISSION

Securities and Exchange Commission
Division of Corporation Finance
100 F Street, NE
Washington, DC 20549
Attention: Johnny Gharib

Re: Tokai Pharmaceuticals, Inc.
Registration Statement on Form S-1
File No. 333-198052

Ladies and Gentlemen:

In connection with the filing by Tokai Pharmaceuticals, Inc. (the "Company") on August 11, 2014 of the above-referenced Registration Statement on Form S-1 (File No. 333-198052) (the "Registration Statement"), on behalf of the Company, we are providing the staff (the "Staff") of the Securities and Exchange Commission with further information for the Staff's consideration regarding the anticipated price range for the Company's initial public offering.

The responses set forth below are based upon information provided to Wilmer Cutler Pickering Hale and Dorr LLP by the Company.

Rule 83 Confidential Treatment Request by Tokai Pharmaceuticals, Inc. Request #1

The Company supplementally advises the Staff that the Company currently anticipates that the price range for this offering will be within the range of $[**] to $[**] per share (before giving effect to a reverse stock split that the Company plans to implement prior to effectiveness of the Registration Statement). This anticipated price range is based on a number of factors, including the Company's future prospects and those of the Company's industry in general, the Company's financial and operating information in recent periods, the market prices of securities of

companies engaged in activities similar to the Company's, existing conditions in the public capital markets and preliminary discussions with the underwriters regarding potential valuations of the Company. The actual price range to be included in a subsequent amendment to the Registration Statement (which will comply with the Staff's interpretation regarding the parameters of a bona fide price range) has not yet been determined and remains subject to adjustment based on factors outside of the Company's control. However, the Company believes that the foregoing indicative price range will not be subject to significant change.

The anticipated price range for the offering was determined with reference to several quantitative and qualitative factors, each of which contributed to the difference between the Company's most recent valuation of its common stock on April 8, 2014 of $0.62 per share and the midpoint of the anticipated offering price range of $[**] per share. Specifically, the Company believes that the difference between the fair value of its common stock as of April 8, 2014 and the midpoint of the anticipated price range for this offering is primarily the result of the following factors:

Tokai Pharmaceuticals, Inc. respectfully requests that the information contained in the response be treated as confidential information and that the Commission provide timely notice to Jodie P. Morrison, President and Chief Executive Officer, Tokai Pharmaceuticals, Inc., One Broadway, 14th floor, Cambridge, MA 02142, (617) 225-4305, before it permits any disclosure of the bracketed information in Request #1.

- The anticipated price range for this offering is based only upon a scenario in which the Company completes this offering and is not probability weighted, in contrast to the Company's prior valuations of common stock, which had to consider multiple potential outcomes, some of which would have resulted in a lower value of its common stock than an initial public offering ("IPO").
- The anticipated price range for this offering necessarily assumes that the IPO has occurred and that a public market for the Company's common stock has been created and, therefore, excludes any discount for lack of marketability of its common stock, which was appropriately taken into account in the Company's determination of fair value of its common stock on April 8, 2014.
- The Company's preferred stock currently has substantial economic rights, preferences and privileges over its common stock. Upon the closing of this offering, all outstanding shares of the Company's preferred stock will convert into common stock, thus eliminating the superior rights, preferences and privileges of the Company's preferred stock as compared to its common stock.
- In May 2014, the Company announced interim data from its ongoing Phase 2 clinical trial of galeterone (the "ARMOR2 trial") at The American Society of Clinical

Oncology 2014 Annual Meeting ("ASCO"). Specifically, the Company reported positive interim safety and efficacy results, including that (i) in 51 evaluable castration resistant prostate cancer ("CRPC") treatment-naïve patients in the ARMOR2 trial, galeterone showed clinically meaningful reductions in levels of prostate specific antigen ("PSA"), a biochemical marker used to evaluate prostate cancer patients for signs of response to therapy and (ii) all four patients in the ARMOR2 trial who were identified as having truncated androgen receptors with C-terminal loss had maximal reductions in PSA levels of at least 50%.

- Data presented at ASCO by researchers at MD Anderson Cancer Center ("MD Anderson") and Johns Hopkins University ("Johns Hopkins") showed that the presence in patients of truncated androgen receptors with C-terminal loss and AR-V7 was associated with poor responsiveness to treatment with Zytiga and Xtandi, two of the highest selling therapies for CRPC. The Company believes that these studies indicate that there is a need for effective treatments for CRPC patients with truncated androgen receptors. As a result, following ASCO, the Company determined that it would focus its initial development of galeterone on the treatment of patients with CRPC whose prostate tumor cells expressed an altered androgen receptor. This decision was based on the MD Anderson and Johns Hopkins data, as well as positive clinical data observed in the ARMOR2 trial in patients with C-terminal loss and preclinical data summarized in the Registration Statement. In particular, the Company plans to initiate a pivotal clinical trial in patients with C-terminal loss generally or AR-V7 specifically (as described in the Registration Statement).
- The proceeds of a successful IPO would substantially strengthen the Company's balance sheet by increasing its cash resources. In addition, the closing of this offering would provide the Company with readier access to the public company debt and equity markets. These projected improvements in the Company's financial position influenced the increased common stock valuation indicated by the midpoint of the anticipated price range.

The Company respectfully requests confidential treatment under 17 C.F.R. § 200.83 for the contents of this letter and has submitted a separate request for confidential treatment in accordance therewith to the Commission's Office of Freedom of Information and Privacy Act Operations.

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If you have any further questions or comments, or if you require any additional information, please contact the undersigned by telephone at (617) 526-6663. Thank you for your assistance.

Very truly yours,

/s/ Stuart M. Falber
Stuart M. Falber

cc: Jodie P. Morrison

Daniel Greenspan, Securities and Exchange Commission
Jim Peklenk, Securities and Exchange Commission
Office of Freedom of Information and Privacy Act Operations
Securities and Exchange Commission
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