

May 23, 2013

VIA EDGAR SUBMISSION

Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549

Attention: Jeffrey P. Riedler

Re: Epizyme, Inc.
Amendment No. 3 to Registration Statement on Form S-1
Filed May 21, 2013
File No. 333-187982

Ladies and Gentlemen:

On behalf of Epizyme, Inc. (the "Company"), this letter is being submitted in response to comments contained in the letter dated May 22, 2013 (the "Letter") from Jeffrey P. Riedler of the Staff (the "Staff") of the Securities and Exchange Commission (the "Commission") to Jason Rhodes, the Company's Executive Vice President and Chief Financial Officer. The responses contained herein are based on information provided to WilmerHale by the Company. The responses are keyed to the numbering of the comments in the Letter.

On behalf of the Company, we advise you as follows:

1. Please refer to your response to our comment six. In order for us to further evaluate your response please address the following:
 - You state "*For these reasons, the Company believes Celgene would not exercise an option to license an available target until the earlier of IND effectiveness or the end of the option period in order to mitigate, to the fullest extent possible in the circumstances, the risk associated with the available target.*" However this appears to contradict your disclosure in the first paragraph on page F-22 which indicates that during the option period, Celgene has the right to exercise its option to non-U.S. rights to available targets until the effectiveness of an investigational new drug application. Please advise.
 - In the third paragraph on page F-22 you state that for the available targets, you must conduct and fully fund research and development activities through the option. Please tell us what exactly your obligation is related to this statement and tell us why this is not a separate deliverable. In addition tell us how revenue is being recognized for these services.
 - Confirm to us that the revenue related to the \$81.4 million allocated to the available target licenses and related research services is not be recognized until an option is exercised.

Response:

In response to the question in the first bullet and as discussed on the telephone call between representatives of the Company and Joel Parker of the Staff occurring earlier today, the Company respectfully informs the Staff that it believes that the language in the Company's prior response letter does not contradict the disclosure set forth in the first paragraph on page F-22 of Amendment No. 3 to the Registration Statement. Specifically, the Company notes that the disclosure on page F-22 states that Celgene has the right to exercise the option during the option period until the effectiveness of the IND. In other words, the effectiveness of the IND ends the ability of Celgene to select a target during the option period (emphasis added): "During the option period, Celgene has the right to exercise its option to non-U.S. rights to available targets until the effectiveness of an investigational new drug application ("IND") for an HMT inhibitor directed to such available target." In the context of the remaining disclosures in this paragraph, this is the relevant disclosure.

Because the sentence in the Company's response letter was describing its assessment of the likelihood that Celgene would exercise the option at various points within the option period it was phrased differently, but it too conveys the point that the effectiveness of the IND ends the ability of Celgene to select a target during the option period.

In response to the questions in the second bullet, the Company describes its obligation to conduct and fully fund research and development activities during the option period in the last sentence of the referenced paragraph on page F-22 of Amendment No. 3, which reads as follows: "During the option period, the Company is required to use commercially reasonable efforts to conduct platform discovery activities necessary to characterize and identify available targets and HMT inhibitors directed to available targets and targets licensed by Celgene."

The Company considered whether or not the research activities performed during the option period represented a separate unit of accounting. To qualify as a separate unit of accounting, the research activities would need to have value to Celgene on a standalone basis. The Company determined that these research activities, which are guided solely by the Company, did not have standalone value from the licenses to the available targets, as described on pages F-22 through F-23 of Amendment No. 3 to the Registration Statement. Specifically, Celgene could not derive any value from the research activities performed during the option period as to the available targets without obtaining a license to an available target. As described on pages F-21 through F-22 of Amendment No. 3 to the Registration Statement, Celgene has the right to select targets for licensing from the Company's platform of available HMT targets. Although Celgene is not obligated to select any targets, the Company has determined that the substance and economics of the agreement indicate that the option to select targets is not substantive as the structure and economics of the agreement compel Celgene to select targets in order to derive value from the research activities performed during the option period and recover its upfront investment. In reaching the conclusion that the option to obtain licenses to available targets is not substantive, the Company considered the guidance in ASC 605-25, *Multiple-Element Arrangements*, which applies to arrangements with multiple deliverables

but does not provide guidance on determining if an arrangement includes multiple deliverables. In assessing whether Celgene's option to obtain licenses to available targets should be considered a deliverable at the inception of the agreement, the Company considered interpretive guidance published by Ernst & Young that provides factors to consider in determining whether options would represent deliverables at the inception of an agreement. Relevant excerpts from this interpretive guidance are included below (*emphasis added*):

"Frequently, agreements include options for the customer to receive additional products or services in the future at agreed-upon prices. Whether or not these options should be treated as deliverables in the original contract depends on the facts and circumstances surrounding the options for additional products and services. If such an option is substantive (i.e. the customer is not required to purchase additional products), then the vendor is not obligated under the option to deliver goods and services unless and until such time as the customer elects to exercise the option. In such cases, the products or services to be delivered by the vendor upon the exercise of the option should not be considered elements included in the current arrangement.

Determining whether an option to acquire additional products or services is substantive requires an assessment as to whether the vendor is truly at risk as to whether the customer will choose to exercise the option. For example, if an arrangement includes an option to acquire services from a vendor that are essential to the functionality of other elements of the arrangement, and such services are only available from the vendor (i.e. there is a lack of other qualified service providers that can be engaged to perform the services), we believe the products or services to be delivered by the vendor on exercise of the option should be accounted for as an element of the current arrangement." (Ernst & Young's comprehensive guide: *Revenue Recognition – Multiple Element Arrangements*)

Interpretive guidance issued by other public accounting firms, such as Deloitte & Touche, PricewaterhouseCoopers and KPMG, include similar concepts.

The Company believes this interpretive guidance, regarding the evaluation of whether an option has substance, is applicable in the absence of any specific guidance within ASC 605-25 relative to the determination of deliverables. Accordingly, the Company has utilized this interpretive guidance in determining the deliverables at the inception of the Celgene agreement. Specifically, the Company considered the following factors in determining whether Celgene's options to obtain licenses to available targets represented deliverables at the inception of the agreement:

- the overall objective of the agreement;
- the benefit that Celgene could derive from the research activities during the option period without receipt of the licenses to available targets;
- the overall economics of the agreement, including the estimated selling price of a license and the estimated selling price of the related research services.

The Company did not consider the options to license available targets to be substantive, and therefore considered the licenses to available targets to be deliverables at the inception of the arrangement, based on the following considerations:

- The overall objective of the agreement was for Celgene to obtain licenses to HMT inhibitors developed by the Company. Based on the status of research at the time of agreement, DOT1L, the subject of the Company's most advanced product candidate was a named target in the arrangement, however the arrangement contemplates Celgene continuing to select targets and obtain licenses to additional HMT inhibitors.
- Receipt of the undelivered licenses to available targets is essential to the usefulness of the research activities performed during the option period. Celgene would not obtain any benefit from the research activities performed during the option period as to the available targets without exercising its option(s) to obtain licenses to available targets. Celgene is not able to direct the research efforts of the Company during the option period and is not provided with access to any of the Company's proprietary knowledge or intellectual property related to the available targets without exercising its option(s). The licenses to the available targets provide Celgene with the path to market in order to derive benefit from the research activities performed during the option period.

- The upfront consideration provided by Celgene of \$68.0 million exceeded the estimated selling price of the DOT1L license by a significant amount. The Company does not believe that Celgene would have paid such a significant amount unless it intended to exercise its options to obtain licenses to available targets. As previously described, without the license to the available targets, there is no commercial benefit to Celgene from the Company's research activities performed during the option period.

Based on these factors the company concluded that the options to license available targets were not substantive as the Company was not at risk with regard to Celgene exercising its options.

These factors also indicate that the upfront payment made by Celgene contemplates that additional licenses will be selected via its option right at a future date. Although the exercise of an option requires the payment of an additional option exercise fee by Celgene, Celgene has already made a substantial upfront payment with respect to the available targets which would be lost if no options were exercised. Without exercising this option(s), Celgene would only derive benefit from the DOT1L component of the agreement, and the economics of the transaction indicate that paying \$68.0 million for the license to one target would not provide economic benefit to Celgene. After considering these factors, the Company concluded that the licenses to the available targets represented deliverables at the inception of the agreement, as described on page F-22 of Amendment No. 3 to the Registration Statement. As the options were not considered to be substantive, the option exercise fees would not be considered to be contingent consideration and have therefore been included in the Company's determination of allocable consideration for this arrangement.

As further described on pages F-22 through F-23, with respect to the licenses to the available targets, the Company concluded that prior to IND effectiveness, the licenses do not have standalone value apart from the related research services due to the limited economic benefit that Celgene would derive from the licenses if it did not obtain the pre-IND research services. In particular, the Company concluded that, prior to IND effectiveness; the license could not be used for its intended purpose without the highly specialized skills and know-how relating to HMT inhibitors that are only available from the Company. Similarly, Celgene would derive no value from the Company's research activities during the option period as to the available targets without exercising its option(s) and obtaining a license(s). Accordingly, the licenses to the available targets and the research services are considered a combined unit of accounting prior to IND effectiveness. Because the licenses to available targets have standalone value from one another, the licenses to available targets and research services have been combined into units of accounting on a license-by-license basis prior to IND effectiveness. As no available targets have yet been selected or licenses to such targets delivered, no revenue is currently being recognized related to these research activities.

In response to the questions in the third bullet, for the reasons stated in the previous paragraph, the Company confirms that the \$81.4 million allocated to the available target licenses and related research services will only begin to be recognized as options to available targets are exercised. This is described on page F-24 of Amendment No. 3 to the Registration Statement as follows: "[...] the Company expects to recognize, on a selected target-by-selected target basis, an equal amount of the allocated arrangement consideration, as a combined unit of accounting, over the period beginning when each available target is selected through the estimated date of IND effectiveness for each selected target."

Additionally, the Company proposes to amend its disclosure on pages F-22 through F-23 as follows:

"With respect to the licenses to the available targets, the Company concluded that, prior to IND effectiveness, the licenses do not have standalone value apart from the related research services due to the limited economic benefit that Celgene would derive if it did not obtain the research services. In particular, the Company concluded that prior to IND effectiveness, a license could not be used for its intended purpose without the highly specialized skills and know-how relating to HMT inhibitors that are only available from the Company."

* * *

Securities and Exchange Commission
Division of Corporation Finance
May 23, 2013
Page 4

If you have any further questions or comments, or if you require any additional information, please contact the undersigned by telephone at (617) 526-6633 or facsimile at (617) 526-5000. Thank you for your assistance.

Very truly yours,

/s/ ROSEMARY G. REILLY

Rosemary G. Reilly

cc: Dr. Robert Gould, Epizyme, Inc.
Mr. Jason Rhodes, Epizyme, Inc.