

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

January 23, 2015

Via E-mail

Gregory E. Lichtwardt Executive Vice President and Chief Financial Officer Accuray Incorporated 1310 Chesapeake Terrace Sunnyvale, California 94089

Re: Accuray Incorporated

Form 10-K for the Fiscal Year Ended June 30, 2014

Filed August 29, 2014

Form 10-Q for the Fiscal Quarter Ended September 30, 2014

Filed November 7, 2014 File No. 001-33301

Dear Mr. Lichtwardt:

We have reviewed your filings and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended June 30, 2014

Consolidated Financial Statements

Note 2. Summary of Significant Accounting Policies, Segment Information, page 92

1. Describe to us your consideration of whether the CyberKnife System and the TomoTherapy System are separate product lines for purposes of disclosure under FASB ASC 280-10-50-40.

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Form 10-Q for the Fiscal Quarter Ended September 30, 2014

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 17

2. We note your CEO's statement in your October 29, 2014 conference call that you expect the negative impact of the year-over-year foreign currency exchange rate movement to be more significant in the coming quarters of this fiscal year. Please provide us your analysis of how your disclosure in this Form 10-Q includes all disclosure regarding trends and uncertainties required by Regulation S-K Item 303(a)(3)(ii).

Backlog, page 18

- 3. We note your disclosure that you expect age outs beginning in the fourth fiscal quarter to return to levels comparable to the quarterly average for fiscal 2014. Please provide us your analysis of how investors can determine the quarterly average for fiscal year 2014.
- 4. Please tell us, and clarify in future filings where appropriate, both (1) the portion of your backlog that is subject to being aged out in the next fiscal quarter and this fiscal year, and (2) the portion of the disclosed backlog not reasonably expected to be filled within the current fiscal year.
- 5. Please tell us how and when the "order process" that you mention was changed and how that will affect age outs. Also, please (1) clarify this issue in future filings where you mention the order process change, (2) tell us about any other changes to the method that you used to determine the dollar amount of reported backlog during the last three fiscal years, the extent to which the change affected backlog, and where you describe those changes in your filings.

Net Revenue, page 20

- 6. We note your disclosure that product mix positively affected revenue. We also note your disclosure in your most recent Form 10-K that product mix negatively affected revenue. Please tell us, and clarify in future filings, how the mix has changed and how that change affected revenue and margins. In this regard, we note that your most recent Form 10-K indicates that increased sales reduced fixed costs per unit, while this Form 10-Q refers to unchanged product margin on increased sales. Include in your response the relative contributions of your CyberKnife and TomoTherapy systems during the periods presented in this filing and in your latest Form 10-K.
- 7. Please tell us, and clarify in future filings as appropriate, the reasons for the decreased sales that you mention in the third bullet point on page 22.

Gregory E. Lichtwardt Accuray Incorporated January 23, 2015 Page 3

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may Kristin Lochhead at (202) 551-3664 or Gary Todd, Senior Accountant, at (202) 551-3605 if you have questions regarding comments on the financial statements and related matters. Please contact Kate Maher at (202) 551-3184 or Russell Mancuso, Legal Branch Chief, at (202) 551-3617 with any other questions.

Sincerely,

/s/ Gary Todd for

Brian Cascio Accounting Branch Chief