



DIVISION OF  
CORPORATION FINANCE

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

March 10, 2014

Via E-mail

Dr. Mark J. Ahn, PhD  
President and Chief Executive Officer  
Galena Biopharma, Inc.  
4640 SW Macadam Avenue, Suite 270  
Portland, Oregon 97239

**Re: Galena Biopharma, Inc.  
Form 10-K for Fiscal Year Ended December 31, 2012  
Filed March 12, 2013  
Form 10-Q for the Quarterly Period Ended September 30, 2013  
Filed November 6, 2013 and amended on November 7, 2013  
File No. 001-33958**

Dear Dr. Ahn:

We have reviewed your January 29, 2014 response to our January 14, 2014 letter and have the following comment.

Please respond to this letter within 10 business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe the comment applies to your facts and circumstances, please tell us why in your response. Please furnish us a letter on EDGAR under the form type label CORRESP that keys your response to our comment.

After reviewing the information provided, we may raise additional comments and/or request that you amend your filings.

Form 10-Q for the Quarterly Period Ended September 30, 2013  
Management's Discussion and Analysis of Financial Condition and Results of Operations  
Developing Novel Cancer Immunotherapies, page 21

1. We note the following statement on page 22: "after establishing statistical significance in the prevention of recurrence in 24- and 36-month analyses, the 60-month median follow-up from the Phase 1/2 trial demonstrated a 5.6% recurrence rate with NeuVax versus 25.9% recurrence rate in the control arm, a reduction of 78.4%." We compare this statement to the following statement from an abstract entitled "Peptide Vaccine Strategies in the Treatment of Cancer," co-authored by

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a number of individuals, including your principal investigator on NeuVax, which abstract appeared in J Proteomics Bioinform 6: 081-084 (2013):

After a median follow-up of 60 months, there has been a persistent decrease in recurrences observed in the vaccinated patients compared to the control patients (10.6% vs 20.3%,  $p=0.098$ ).

While not entirely clear, there does appear to be some inconsistency between these two statements. Please provide us with a concise explanation that reconciles the two statements. In addition, please provide draft language for inclusion in future filings which explains in layman's terms what you mean by "recurrence," how the rate is determined, and how the recurrence rate impacts the determination of a vaccine's efficacy.

Please contact Frank Wyman, Staff Accountant, at (202) 551-3660 or Joel Parker, Accounting Branch Chief, at (202) 551-3651 if you have any questions regarding the comment. In this regard, do not hesitate to contact me at (202) 551-3679.

Sincerely,

/s/ Joel Parker for

Jim B. Rosenberg  
Senior Assistant Chief  
Accountant