



DIVISION OF  
CORPORATION FINANCE

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

Mail Stop 3030

June 19, 2009

Timothy W. Baker  
Executive Vice President, Chief Financial Officer and Treasurer  
Cynosure, Inc.  
5 Carlisle Road  
Westford, Massachusetts 01886

**Re: Cynosure, Inc.**  
**Form 10-K for the fiscal year ended December 31, 2008**  
**Filed March 13, 2009**  
**Form 10-Q for the quarterly period ended March 31, 2009**  
**File No. 000-51623**

Dear Mr. Baker:

We have completed our review of your Form 10-K and related filings and do not, at this time, have any further comments.

Sincerely,

Brian R. Cascio  
Accounting Branch Chief