



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