



DIVISION OF  
CORPORATION FINANCE

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

August 27, 2010

Greg S. Lea  
Senior Vice President and Chief Financial Officer  
EnteroMedics Inc.  
2800 Patton Road  
St. Paul, Minnesota 55113

**Re: EnteroMedics Inc.  
Form 10-K for the fiscal year ended December 31, 2009  
Filed March 29, 2010  
File No. 001-33818**

Dear Mr. Lea:

We have completed our review of your filings and do not have any further comments at this time.

Sincerely,

Russell Mancuso  
Branch Chief

cc (via facsimile): Kenneth L. Cutler, Esq. — Dorsey & Whitney LLP