



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

DIVISION OF
CORPORATION FINANCE

October 6, 2010

John Gandolfo
Chief Financial Officer
Bacterin International Holdings, Inc.
600 Cruiser Lane
Belgrade, MT 59714

Re: Bacterin International Holdings, Inc.
Item 4.01 Form 8-K
Filed September 24, 2010
File No. 333-158426

Dear Mr. Gandolfo:

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

Sincerely,

James A. Allegretto
Sr. Assistant Chief Accountant