September 5, 2006

Mr. Kevin C. O'Boyle Chief Financial Officer Nuvasive, Inc. 4545 Towne Centre Court San Diego, CA 92121

Re: Nuvasive, Inc.

Form 10-K for the fiscal year ended December 31, 2005

Form 10-Q for the quarter ended June 30, 2006

Form 8-K filed July 27, 2006

File No. 0-50744

Dear Mr. O'Boyle:

We have completed our review of your Form 10-K and related filings and have no further comments at this time.

Sincerely,

Martin F. James Senior Assistant Chief Accountant