

Via Facsimile and U.S. Mail  
Mail Stop 4720

January 4, 2010

Richard Love  
Chairman of the Board  
ImaRx Therapeutics, Inc.  
12277 134<sup>th</sup> Court NE, Suite 202  
Redmond, WA 98052

**Re: ImaRx Therapeutics, Inc.**  
**Form 10-K for the Fiscal Year Ended December 31, 2008**  
**Form 10-Q for the Quarterly Period Ended March 31, 2009**  
**Form 10-Q for the Quarterly Period Ended June 30, 2009**  
**Form 10-Q for the Quarterly Period Ended September 30, 2009**  
**File Number: 001-33043**

Dear Mr. Love:

We have completed our review of your above Forms 10-K and 10-Qs and have no further comments at this time.

Sincerely,

Joel Parker  
Accounting Branch Chief