

Via Facsimile and U.S. Mail
Mail Stop 4720

February 2, 2010

Peter S. Lawrence
President and Chief Operating Officer
ArQule, Inc.
19 Presidential Way
Woburn, MA 01801

Re: ArQule, Inc.
Definitive Proxy Statement filed April 10, 2009
File No. 000-21429

Dear Mr. Lawrence:

We have completed our review of the above-referenced filing and have no further comments at this time.

Sincerely,

Jeffrey Riedler
Assistant Director

cc: Richard E. Baltz
Arnold & Porter LLP
555 Twelfth Street, NW
Washington, DC 20004-1206