

July 23, 2015

VIA EDGAR

U.S. Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549

Attention: Larry Spigel, Assistant Director

Re: NantKwest, Inc.
Registration Statement on Form S-1
File No. 333-205124
Acceleration Request
Requested Date: July 27, 2015
Requested Time: 4:00 P.M. Eastern Time

Ladies and Gentlemen:

Pursuant to Rule 461 under the Securities Act of 1933, as amended, NantKwest, Inc. (the "**Company**") hereby requests that the above-referenced Registration Statement on Form S-1, as amended (File No. 333-205124) (the "**Registration Statement**") be declared effective at the "Requested Date" and "Requested Time" set forth above or as soon thereafter as practicable, or at such later time as the Company or its counsel may orally request via telephone call to the staff (the "**Staff**") of the Division of Corporation Finance of the Securities and Exchange Commission (the "**Commission**"). Once the Registration Statement has been declared effective, please orally confirm that event with our counsel, Wilson Sonsini Goodrich & Rosati, P.C., by calling Martin J. Waters at (858) 350-2308 or Daniel R. Koeppe at (858) 350-2393.

In connection with the acceleration request, the Company hereby acknowledges that:

- should the Commission or the Staff, acting pursuant to delegated authority, declare the Registration Statement effective, it does not foreclose the Commission from taking any action with respect to the Registration Statement;

- the action of the Commission or the Staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the Company from its full responsibility for the adequacy and accuracy of the disclosure in the Registration Statement; and
- the Company may not assert Staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

[Signature page follows]

* * * *

Sincerely,

NantKwest, Inc.

/s/ Barry J. Simon

Barry J. Simon
President and Chief Operating Officer

cc: Patrick Soon-Shiong, NantKwest, Inc.
Martin J. Waters, Wilson Sonsini Goodrich & Rosati, P.C.
Daniel R. Koeppen, Wilson Sonsini Goodrich & Rosati, P.C.
Sean M. Clayton, Cooley LLP
Charles S. Kim, Cooley LLP