Accepted Manuscript

Origin of Nanodroplet Formation upon Dissolution of an Amorphous Solid Dispersion: A Mechanistic Isotope Scrambling Study

Anura S. Indulkar, Jan E. Waters, Huaping Mo, Yi Gao, Shweta A. Raina, Geoff G.Z. Zhang, Lynne S. Taylor

PII: S0022-3549(17)30248-4

DOI: 10.1016/j.xphs.2017.04.015

Reference: XPHS 738

To appear in: *Journal of Pharmaceutical Sciences*

Received Date: 2 March 2017

Revised Date: 30 March 2017

Accepted Date: 10 April 2017

Please cite this article as: Indulkar AS, Waters JE, Mo H, Gao Y, Raina SA, Zhang GGZ, Taylor LS, Origin of Nanodroplet Formation upon Dissolution of an Amorphous Solid Dispersion: A Mechanistic Isotope Scrambling Study, *Journal of Pharmaceutical Sciences* (2017), doi: 10.1016/j.xphs.2017.04.015.

Origin of Nanodroplet Formation upon Dissolution of an Amorphous Solid Dispersion: A Mechanistic Isotope Scrambling Study

AUTHORS

Anura S. Indulkar[1], Jan E. Waters[2], Huaping Mo[3], Yi Gao[4], Shweta A. Raina[4], Geoff G. Z. Zhang[5*], Lynne S. Taylor[1*]

AFFILIATIONS

1. Department of Industrial and Physical Pharmacy, College of Pharmacy, Purdue University, West Lafayette, Indiana 47907, United States
2. Structural Chemistry, Research and Development, AbbVie Inc., North Chicago, Illinois 60064, United States
3. Purdue Interdepartmental NMR Facility, Department of Medicinal Chemistry and Molecular Pharmacology, and Department of Chemistry, Purdue University, West Lafayette, Indiana 47907, United States
4. Manufacturing Science & Technology (MS&T), Operations, AbbVie Inc., North Chicago, Illinois 60064, United States
5. Drug Product Development, Research and Development, AbbVie Inc., North Chicago, Illinois 60064, United States

CORRESPONDING AUTHORS

Lynne S. Taylor, Address: Department of Industrial and Physical Pharmacy, College of Pharmacy, Purdue University, 575 Stadium Mall Drive, West Lafayette, Indiana 47907, USA. Tel: +1-765-496-6614; fax: +1-765-494-6545; e-mail: lstaylor@purdue.edu.

Geoff G. Z. Zhang, Address: Drug Product Development, Research and Development, AbbVie Inc., 1 N Waukegan Road, North Chicago, Illinois 60064, USA. Tel: +1-847-937-4702; fax: +1-847-937-7756; e-mail: Geoff.GZ.Zhang@abbvie.com.