UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

FLATWING PHARMACEUTICALS, LLC, Petitioner,

v.

ANACOR PHAMACEUTICALS, INC., Patent Owner

> Case No. IPR2018-00170 Patent No. 9,566,290

DECLARATION OF MAJELLA E. LANE, PH.D. IN SUPPORT OF PATENT OWNER'S RESPONSE

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I, Majella E. Lane, Ph.D., hereby state and declare as follows:

I. INTRODUCTION

1. I have been asked by Patent Owner Anacor Pharmaceuticals, Inc. ("Anacor") to offer my expert opinions regarding the petition for *inter partes* review of U.S. Patent No. 9,566,290 ("the '290 patent") filed by Petitioner FlatWing Pharmaceuticals, LLC ("FlatWing"). This declaration contains my opinions related to the validity of claims 2, 5, 6, 8, 11, and 12 of the '290 patent.

2. I am being compensated at my customary hourly rate, and my compensation is not dependent upon the outcome of, or the content of my testimony in, the present *inter partes* review proceeding or any litigation proceedings.

3. I have reviewed FlatWing's petition for *inter partes* review ("Pet.") of the '290 patent, including the declarations filed in support of the petition submitted by Dr. Stephen B. Kahl (Ex. 1003) and Dr. S. Narasimha Murthy (Ex. 1005). I have further reviewed the exhibits and articles cited in these documents, as well as the articles and documents cited in this declaration.

4. I have additionally reviewed the declaration of Dr. Paul J. Reider ("Reider Decl.," Ex. 2013) filed in support of Anacor's response to FlatWing's petition. I am also aware of knowledge generally available to and relied upon by persons of ordinary skill in the art ("POSA") at the time of the invention. 5. This declaration is based on information currently available to me. I reserve the right to continue my investigation and analysis, which may include a review of documents and information not yet provided. I further reserve the right to expand or otherwise modify my opinions and conclusions as my investigation and study continues, and to supplement my opinions and conclusions in response to any additional information that becomes available to me.

II. ACADEMIC AND PROFESSIONAL QUALIFICATIONS

6. I received a Ph.D. in 1997 from Trinity College, Dublin, where my research focused on drug transport across biological membranes (in particular skin and mucosa), topical and transdermal formulations, mathematical modeling of topical and transdermal drug delivery, and prediction of percutaneous drug penetration. I received a B.S. in pharmacy from Trinity College in 1992.

7. I am currently the Director of the Skin Research Group and a Senior Lecturer in Pharmaceutics at the School of Pharmacy at the University College of London ("UCL"). I have held those positions since 2010 and 2008, respectively. From 2005 to 2008, I was a Lecturer in Pharmaceutics at UCL. Prior to that, I was the director of the Master's program in Pharmaceutical Technology at Trinity College, Dublin from 1998 to 2005, after having first worked there as a Lecturer in Pharmaceutical Chemistry starting in 1995, and a Lecturer in Pharmaceutics starting in 1997. A copy of my curriculum vitae is attached as Exhibit 2045.

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