

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

WEST-WARD PHARMACEUTICALS INTERNATIONAL LIMITED,
Petitioner

v.

NOVARTIS PHARMACEUTICALS
CORPORATION,
Patent Owner

Case IPR2018-_____

U.S. Patent No. 8,410,131

**DECLARATION OF DANIEL CHANG CHO, M.D., IN SUPPORT OF THE
PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 8,410,131**

West Ward Exhibit 1112

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I, Daniel Chang Cho, M.D., hereby declare as follows:

I. INTRODUCTION AND QUALIFICATIONS

1. I have been retained by counsel for West-Ward Pharmaceuticals International Limited (“West-Ward”) to provide my opinion concerning the validity of U.S. Patent No. 8,140,131 (Ex. 1001, “the ’131 Patent”) in support of West-Ward’s Petition for *Inter Partes* Review of the ’131 patent.

2. I have been a licensed medical doctor since 2000 and am Board certified in Medical Oncology. I currently serve as Assistant Professor of Medicine at NYU School of Medicine and hold the position of Attending Oncologist of Hematology and Oncology at NYU Cancer Center.

3. For the last 15 years, I have specialized in the diagnosis and treatment of kidney cancer, during which time I have treated thousands of patients with kidney cancer.

4. I graduated from Yale University, New Haven, CT in 1996, after which I attended the medical school at Washington University, St. Louis, MO, receiving my M.D. in 2000. I completed an Internship and Residency in Internal Medicine in 2003, followed by a Fellowship in Hematology and Oncology at Beth Israel Deaconess Medical Center which was completed in 2006. I received a Master of Medical Science at Harvard University in 2007. I was a Clinical Teaching Fellow of Medicine at Harvard Medical School from 2000 to 2006

before becoming an Instructor and then Assistant Professor of Medicine from 2011-2013. I am currently an Assistant Professor of Medicine at NYU School of Medicine.

5. I have held several hospital appointments over my career to date. From 2000-2006, I was a Teaching Fellow of Medicine at Beth Israel Deaconess Medical Center before beginning an Attending Oncologist position in Hematology and Oncology at Beth Israel Deaconess Medical Center.

6. I have held several other professional positions and major administrative leadership positions. I have been a member of the Advisory Board for Wyeth Pharmaceuticals and Genentech Pharmaceuticals and I am a member of the Kidney Cancer Think Tank as part of the Kidney Cancer Association. I was the Course Director on the Hematology and Oncology Grand Rounds at Beth Israel Deaconess Medical Center from 2007-2013, and was Director of the Experimental Therapeutics Program at both Beth Israel Deaconess Medical Center and NYU Cancer Center. I am also currently the Director of the Translational Research Laboratory at NYU Cancer Center.

7. I have conducted pre-clinical and translational research directed towards exploiting the PI3-Kinase/Akt/mTOR pathway for the treatment of patients with advanced renal cell cancer. In that regard, my research focused on identifying predictive biomarkers of response to treatment with mTOR inhibitors,

and also on developing pre-clinical rationale for novel therapeutic strategies targeting that pathway.

8. I am actively involved in the clinical trials program at NYU Cancer Center, where I serve as the Co-Chair of the Phase I/II Committee and have previously been a member on various clinical trial committees at Dana-Farber/Harvard Cancer Center and Beth Israel Deaconess Medical Center. I have also led at least twenty, and participated in over a hundred, clinical trials directed towards treatment of kidney cancer.

9. I have authored more than 50 journal articles, abstracts, and other publications relating primarily to the diagnosis and treatment of kidney cancers and other advanced solid tumors.

10. A copy of my *curriculum vitae* is attached as Exhibit 1113, providing a list of my publications, and describing my education, training and experience in greater detail.

II. OPINIONS

11. I have reviewed and agree with the opinions and conclusions set forth at Exhibit 1010 of this IPR (which is the declaration of Dr. Pantuck filed in Breckenridge IPR2017-0592). For convenience and expediency, I will not reiterate all of those opinions again but instead have appended Dr. Pantuck's

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