

IPR2021-00406
U.S. Patent No. 10,716,793 B2

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LIQUIDIA TECHNOLOGIES, Inc.,
Petitioner,

v.

UNITED THERAPEUTICS CORPORATION,
Patent Owner.

IPR2021-00406
U.S. Patent No. 10,716,793

DECLARATION OF AARON WAXMAN, M.D., PH.D

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I. INTRODUCTION

A. Scope of Analysis

1. I, Aaron Waxman, M.D., Ph.D., submit this declaration on behalf of United Therapeutics Corporation (“UTC” or “Patent Owner”) in connection with responding to the Petition for *Inter Partes* Review (“IPR” or “Petition”) of U.S. Patent No. 10,716,793 (“the ’793 patent”) filed by Liquidia Technologies, Inc. (“Liquidia” or “Petitioner”). I am over the age of eighteen and otherwise competent to make this declaration.

2. I am being compensated at my standard consulting rate for my time in connection with this matter. My compensation is not contingent on the substance of my opinions or the outcome of the proceedings.

3. I understand that Petitioner has asserted six grounds of unpatentability in this IPR challenging claims 1 to 8 of the ’793 patent by relying upon allegations that the claims are anticipated and/or obvious. I further understand that the scope of issues to be considered in an IPR are limited to those grounds disclosed in the Petition, and so I limit my opinions to those grounds.

B. Qualifications

4. I am a pulmonary critical physician in Boston, Massachusetts. I have been practicing as a pulmonary and critical care doctor for over 20 years. As a practicing physician, one of the areas in which I specialize includes all aspects of

pulmonary vascular disease including pulmonary hypertension, and more specifically pulmonary arterial hypertension. I have treated thousands of patients with pulmonary hypertension using intravenous, subcutaneous, oral and inhaled forms of medications. Importantly, dosing between all the various forms of administration has shown great variability, ranging from nanograms to milligrams.

5. I am Executive Director of the Center for Pulmonary and Heart Disease in the Heart and Vascular and Lung Centers, and Director of the Pulmonary Vascular Disease Program at Brigham and Women's Hospital in Boston, Massachusetts. I am board certified in Internal Medicine, Pulmonary Disease and Critical Care Medicine. I am also a member of the American College of Chest Physicians, The American Thoracic Society, the Pulmonary Hypertension Association, and the Pulmonary Vascular Research Institute.

6. I am an Associate Professor of Medicine at Harvard Medical School and have dual appointments in the Pulmonary Critical Care and Cardiovascular Medicine divisions at Brigham and Women's Hospital. I have previously served as an assistant professor in Medicine at the Yale University School of Medicine and Tufts University School of Medicine.

7. I received my Bachelor's degree from George Washington University. I received a Ph.D. in Anatomy and Neuroscience at the Albany Medical College, and an M.D. from Yale University School of Medicine. I completed my internship

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