### UNITED STATES PATENT AND TRADEMARK OFFICE

### BEFORE THE PATENT TRIAL AND APPEAL BOARD

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TARO PHARMACEUTICALS U.S.A., INC., Petitioner,

v.

APOTEX TECHNOLOGIES, INC., Patent Owner.

Case IPR2017-01446 U.S. Patent No. 7,049,328 B2

Title: USE FOR DEFERIPRONE

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SECOND DECLARATION OF THOMAS D. COATES, M.D., IN SUPPORT OF PATENT OWNER'S RESPONSE



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VIII.	THE PRIMARY REFERENCES FAIL TO DISCLOSE EACH ELEMENT OF CLAIMS 1, 2, 4-10, AND DEPENDENT CLAIMS THEREFROM7			
	A.	Hoffbrand 1998 does not explicitly or inherently disclose or teach or suggest each and every claim limitation		
		1. Hoffbrand 1998 does not disclose or teach or suggest treating a blood transfusion dependent patient having a condition on the spectrum of cardiac disease due to iron overload		
		2. Hoffbrand 1998 does not disclose or teach or suggest administering a therapeutically effective amount of deferiprone such that the methods of treatment required by claims 1, 2, and 4-10 were successfully practiced		
	B.	Olivieri Abstract 1995 does not explicitly or inherently disclose or teach or suggest each and every claim limitation		



	1.	Olivieri Abstract 1995 does not disclose treating a blood transfusion dependent patient having a condition on the spectrum of cardiac disease due to iron overload	12			
	2.	Olivieri Abstract 1995 does not disclose administering a therapeutically effective amount of deferiprone such that the methods of treatment required by claims 1, 2, and 4-10 are practiced	13			
C.		Olivieri 1995 does not explicitly or inherently disclose or teach or suggest each and every claim limitation				
	1.	Olivieri 1995 does not disclose or suggest treating a blood transfusion dependent patient having a condition on the spectrum of cardiac disease due to iron overload	14			
	2.	Olivieri 1995 does not disclose or suggest administering a therapeutically effective amount of deferiprone such that the methods of treatment required by claims 1, 2, and 4-10 are practiced	16			



I, Thomas D. Coates, M.D., declare as follows:

### I. INTRODUCTION

- 1. I previously provided a declaration (Ex. 2001) dated September 8, 2017 in these proceedings in support of Patent Owner's Preliminary Response ("First Coates Decl."). In it, I expressed my opinion that the subject matter claimed in U.S. Patent 7,049,328 ("the '328 patent") is novel and non-obvious, as those concepts have been explained to me, over the prior art references cited by Taro Pharmaceuticals USA, Inc. ("Taro" or "Petitioner").
- 2. My background and qualifications, set forth in paragraphs 1-7 of the First Coates Decl. (Ex. 2001), remain unchanged. Further, my *curriculum vitae* ("CV"), previously submitted as Ex. 2002, remains unchanged.
- 3. The opinions I expressed in the First Coates Decl. (Ex. 2001) also remain unchanged. Thus, the opinions I express in this Second Declaration are in addition to those expressed in the First Coates Decl. (Ex. 2001.)

### II. INSTITUTED GROUNDS

4. The following table summarizes the claims of the '328 patent challenged by Taro and the bases and references providing grounds for institution of this *Inter Partes* Review ("IPR"):



Reference(s)	Basis	Claims Challenged
Hoffbrand 1998	§ 102(b)	1, 2, 4-11, 13-17, 19
Olivieri Abstract 1995	§ 102(b)	1, 2, 4-11, 13-17, 19
Olivieri 1995	§ 102(b)	1, 2, 4-11, 13-17, 19
Hoffbrand 1998	§ 103(a)	1, 2, 4-17, 19
Olivieri Abstract 1995	§ 103(a)	1, 2, 4-17, 19
Olivieri 1995	§ 103(a)	1, 2, 4-17, 19

(Institution Decision at 41.)

- 5. It has been explained to me that "\s 102(b)" stands for the section of the patent statute pertaining to anticipation. My understanding of the legal standards for anticipation are the same as set forth in the First Coates Decl. (Ex. 2001 at \q 9-11.)
- 6. It has been explained to me that "§ 103(a)" stands for the section of the patent statute pertaining to obviousness. My understanding of the legal standards for obviousness are the same as set forth in the First Coates Decl. (Ex. 2001 at ¶¶ 12-15.)

### III. BACKGROUND OF THE TECHNOLOGY

7. The background of the technology, set forth in paragraphs 16-24 of the First Coates Decl. (Ex. 2001), remains unchanged. I further supplement the background of the technology as follows.

### A. Methods to Assess Cardiac Function

8. As a hematologist, in order to evaluate cardiac function in blood transfusion dependent patients, I rely on and work in concert with cardiologists,



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