

1660 Lincoln Street Suite 1900 Denver, CO 80264 303-830-1776

Facsimile 303-894-9239 www.pattonboggs.com

December 7, 2006

Alan L. Talesnick 303-894-6378 atalesnick@pattonboggs.com

VIA EMAIL AND OVERNIGHT COURIER

Ms. Song Brandon
Division of Corporation Finance
U.S. Securities and Exchange Commission
450 Fifth Street, N.W.
Washington, D.C. 20549-0405

Re: Chembio Diagnostics, Inc.

Registration Statement on Form SB-2

Filed on October 27, 2006 File Number 333-138266

Dear Ms. Brandon:

On behalf of Chembio Diagnostics, Inc. ("Chembio") and following up on our phone discussion on December 6, 2006, please see enclosed a table providing further information regarding the shares covered by the Registration Statement on Form SB-2 filed with the Commission on October 27, 2006. All information in this response was provided to us by Chembio.

If you have any further questions, do not hesitate to contact me (303-894-6378), James Muchmore (303-894-6154) or Rich Larkin at (631-924-1135).

Very truly yours,

PATTON BOGGS LLP

Alan L. Talesnick

cc: Chembio Diagnostics, Inc.

c/o Rich Larkin, Chief Executive Officer

Chembio Diagnostics Inc.

Number of shares to be newly registered

SHAREHOLDER	on Form SB-2 filed on October 27, 2006 ¹	Previously registered shares	Date previously registered shares were acquired
Alpha Capital AG	746,875	1,232,000 ⁵	May 4, 2004
Big Bend XXXI Investments, LP	2,343,750		
Bio-Business Science & Development LTDA 2	252,923		
Bristol Investment Fund, Ltd.	160,000	-	
Bushido Capital Master Fund, LP	1,171,875		
C.E. Unterberg, Towbin Capital Partners I, L.P.	666,875	-	
Cranshire Capital, LP	390,625		
Crestview Capital Master, LLC 3	6,321,717	9,590,162 ⁶	January 28, 2005
Ferrari, Braden ⁴	1,875		
Frankenthal, Stuart J.	234,375		
Howard M. Rossman Revocable Trust	234,375		
lmas, Ariel ⁴	2,500		
Inverness Medical Innovations, Inc.	3,125,000	•	
Investor Relations Group ²	255,414		
Iroquois Master Fund, Ltd.	40,000	-	
Jordan, Bruce ⁴	35,092	67,931 ⁶	January 28, 2005
Kreger, Richard H. ⁴	165,160	453,435 ⁶	January 28, 2005
Longview Fund, LP	781,250		
Midtown Partners & Co., LLC 4	73,309	116,639 ⁶	January 28, 2005
Pierce Diversified Strategy Master Fund, LLC -	000.005		
Series BUS	390,625		
RHK Midtown Partners LLC 4	8,333	450 405 6	I
Rohan, J. Rory ⁴	95,901	453,435 ⁶	January 28, 2005
TOTALS	17,497,849	11,913,602	
Shares for possible anti-dilution and future			
dividends	8,526,368		
TOTAL SHARES BEING REGISTERED	26,024,217		

¹ Shares of common stock and/or shares underlying warrants received by investors in the Series C Offering, the Series B Follow-On or the June 2006 Bridge Financing, except as noted otherwise.

- 2 Common shares and/or shares underlying warrants received for services.
- 3 Includes 1,639,340 shares underlying series B preferred stock (and 1,557,377 shares underlying warrants in connection therewith) that were acquired in the Series B Follow-On on March 30, 2006.
- 4 Midtown Partners & Co., LLC, a registered broker-dealer, and its designees received these securities as selling commissions as follows: a) shares underlying warrants to purchase 62,500 shares of common stock of the Company acquired October 2006; and b) 163,933 shares underlying series B preferred stock (and 155,737 shares underlying warrants in connection therewith) that were acquired in the Series B Follow-On on March 30, 2006.
- 5 These shares were registered on November 8, 2004.
- 6 These shares were registered on May 23, 2006.