DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration
Silver Spring, MD 20993

VIA UPS

April 28, 2014

Dr. Abhijit Barve, M.D., Ph.D.
Human Pharmacology Unit
Clinigene House, Tower I, Semicon Park
Electronic City, Phase- I I, Hosur Road
Bangalore, India

Dear Dr. Barve

We are enclosing a copy of the Establishment Inspection Report (EIR) for the inspection conducted at your premises, **Clinigene House, Tower I, Semicon Park, Electronic City, Phase- I I, Hosur Road, Bangalore, India,** by the United States Food and Drug Administration (FDA) from **February 13 – 17, 2012.**

The Agency has concluded that this inspection is closed under 21 CFR 20.64(d)(3). We are therefore releasing a copy of the EIR for the inspected establishment to you. The EIR being provided to you comprises the narrative portion of the report; it reflects redactions made by the Agency in accordance with the Freedom of Information Act (FOIA) and Title 21, Code of Federal Regulations, part 20. However, this does not preclude you from requesting, and possibly obtaining, any additional information provided under FOIA.

The documents provided to you under FDA's FMD-145 Program have not been reviewed for public disclosure, and may contain confidential commercial information (e.g., applicant protocol information) and/or patient information (e.g., patient initials) that you already know in your capacity. FDA would normally redact this type of information before allowing the EIR's public disclosure. **If you were to disclose this information to others, you would be responsible for ensuring that sensitive information is adequately protected.**

If you would like a copy of the EIR that has been reviewed by FDA and redacted for public disclosure, you will need to submit a FOIA request specifically asking for a publicly disclosable version.

ADMINISTRATIVE DATA

Inspected firm:	Human Pharmacology Unit
Location:	Clinigene House, Tower I, Semicon Park Electronic City, Phase- I I, Hosur Road Bangalore, India
Phone:	
FAX:	
Mailing address:	
Dates of inspection:	2/13/2012, 2/14/2012, 2/15/2012, 2/16/2012, 2/17/2012
Days in the facility:	5
Participants:	Scott B Laufenberg, Investigator

HISTORY

Chief Operating Officer, Dr. Abhijit Barve, M.D., Ph.D. provided a PowerPoint presentation during the opening discussion that covered the background of the firm. These materials (Exhibit #1) include information about the corporate and business structure, services, brief organizational chart, management team, and specifics on clinical, bioanalytical, laboratory, and quality services/systems.

Clinigene is a Biocon company that was established in 2000, received CAP accreditation for the Central Laboratory in 2002, NABL accreditation in 2003, established a Human Pharmacology Unit and Bioanalytical Research Lab in 2004, began offering CRO services to clients in 2005 and moved to their current 65,000 sq. ft. facility at the end of 2007/beginning of 2008. Clinigene is the clinical/analytical portion of the Biocon business structure, with Syngene performing pre-clinical discovery services and Biocon performing the commercialization of the products. Clinigene

conducts BA/BE studies, PK/PD studies and also performs Phase I – IV clinical trials, in-house and off site.

Clinigene International, Bangalore, India has several accreditations, including: NABL - National Accreditation Board for Testing and Calibration Laboratories from the Dept. of Science & Technology, India. Their Certificate number is M-0027. They are also accredited by CAP – College of American Pathologists, AU-ID: 1362359.

Dr. Barve provided a list of studies conducted on (potential) FDA regulated products since the previous FDA inspection (Exhibit #2).

INDIVIDUAL RESPONSIBILITY & PERSONS INTERVIEWED

Pre-announcement of the current inspection was accomplished by contacting COO - Dr. Abhijit Barve and Clinical Investigator Dr. Siddangouda Patil on Feb. 2, 2012. The firm was informed of intent to inspect, but was not notified of the application, drug name, or the studies to be audited.

On Feb. 13, 2012, I showed my credentials to Dr. Abhijit Barve as COO and most responsible individual at the inspected facility. Dr. Barve has overall decision making authority and is responsible for day to day operations at this firm. His current curriculum vitae (CV) is included as Exhibit #3. Correspondence with Dr. Barve should be addressed to him at the firm's physical and mailing address:

Clinigene International Ltd.
Clinigene House, Tower I, Semicon park
Electronic City, Phase II, Hosur Road
Bangalore 560 100 India

A condensed organization chart was included in the materials provided during the opening discussions. A more expanded version is included as Exhibit #4. This expanded chart shows all area heads reporting into Dr. Barve, including a separate and direct line for Quality Assurance (QA) reporting directly to Dr. Barve.

The following individuals were also present at the initiation of the inspection:

Dr. Anil K., MBBS, M.D.: Head, Human Pharmacology Unit, Principal Investigator
Dr. Siddangouda Patil: Deputy Manager, Human Pharmacology Unit, Clinical Investigator

Dr. Anand Eswaraiah: Head, Clinical Development, Clinical Data management and Biostatistics and Regulatory Affairs

Dr. Chetana Basavaraj, MD: Laboratory Director

Ms. Lakshmi Achuta: Head, Quality Assurance Unit

Dr. K. Sudheendra, Ph.D., DHRM, DIM: Manager Quality Assurance Unit

Due to their involvement in the audited trials CVs for Dr. Anil K. and Dr. S. Patil are also included in Exhibit #3. Other employees who were involved in the inspection or otherwise provided information or explanations included:

Ms. Jaya Patel, M.Pharm., Project Leader, Human Pharmacology Unit

Mr. Ravi Kulkarni, Pharmacist, Human Pharmacology Unit

Dr. M.N. Dixit M.V.Sc, M.S., Head Bioanalytical laboratory

During the course of the inspection, my primary contacts were Dr. Siddangouda Patil, Dr. K. Sudheendra and Ms. Jaya Patel; all of whom provided information and records for review, arranged interviews with staff and provided copies of records as requested, per the direction of firm management. Additionally, Dr. Anil K., Ms. Lakshmi Achuta and Dr. Abhijit Barve would regularly stop by the room to check in, exchange information and participate in daily debrief sessions.

FACILITIES AND PROCEDURES

During the inspection, I was provided a tour of the facility lead by Dr. Anil K. in the Human Pharmacology Unit (HPU) and then turned over to the Head or Director of each subsequent area. The facility has a total of 86 beds and 8 ICU beds with a 24 hour ambulance on-site and a contract with a local hospital for emergency services. The in-house Bioanalytical Research Laboratory is experienced in small molecule and large molecule processes, including method development, validation and bioanalysis of drug/metabolite in biological specimens to support PK, BA/BE and TDM studies. There is an on-site Central Laboratory that supports clinical testing services for Phase I-IV clinical trials and BA/BE studies. The facility; which is over 65,000 square feet, is a four-level building with separate clinical and bioanalytical areas. The facility floor plan is included as Exhibit #5.

Access to the entire facility is restricted by the use of card keys that require employees to tag in and out of each area. Each employee is granted/allowed access to only the areas they utilize to perform their job functions. The environmental conditions at the facility are monitored via a system that covers heating, cooling and humidity and monitored via sensors and alarms by the firm's maintenance/security department. The refrigerators and freezers are also monitored by this Oceasoft alarm system with a Sensaphone back-up.

Study BA/BE113/10 (fasting) "A Randomized balanced, open-label, two treatment, two period, two sequence, single dose, crossover bioequivalence study of manufactured by and tablets manufactured for Abbott laboratories, USA, in healthy, adult human subjects, under fasting conditions".

Period I Check-in: March 10, 2010
Period I Dosing: March 11, 2010

Period II Check-in: March 17, 2010
Period II Dosing: March 18, 2010

Study 114/10 (fed) "A Randomized balanced, open-label, two treatment, two period, two sequence, single dose, crossover bioequivalence study of tablets manufactured by , and tablets manufactured for Abbott laboratories, USA, in healthy, adult human subjects, under fed conditions".

Period I Check-in: March 19, 2010
Period I Dosing: March 20, 2010

Period II Check-in: March 26, 2010
Period II Dosing: March 27, 2010

COMPLAINTS

There were no complaints to follow up on during the current inspection.

REFUSALS

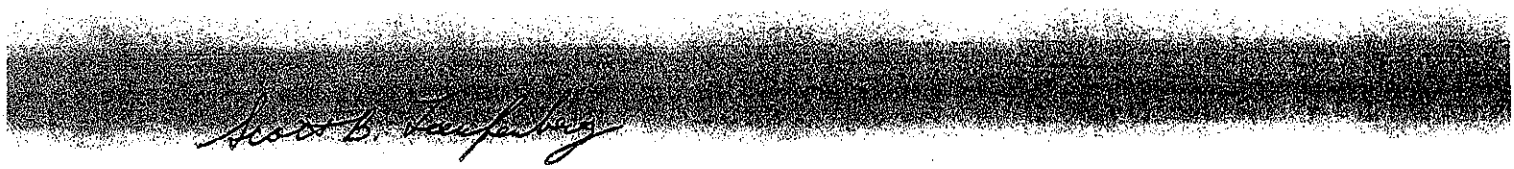
No significant refusals were encountered during the current inspection.

ATTACHMENTS

CDER Assignment memo dated Dec. 20, 2010.

EXHIBITS

1. Clinigene Corporate Overview PowerPoint (11 pp).
2. List of studies since previous EI (1 p).
3. CVs for COO Dr. Barve; PI Dr. Nail K.; CI Dr. Patil (10 pp).
4. Organization Chart (1 p).
5. Facility Floor Plan (1 p).
6. List of Instruments/Equipment (4 pp).
7. Index for SOP -HPU & QA (3 pp).
8. SOP: HPU-SOP-001 (11 pp).
9. SOP: HPU-SOP-048 (10 pp).
10. SOP: HPU-SOP-050 (6 pp).
11. SOP: HPU-SOP-051 (4 pp).
12. SOP: HPU-SOP-052 (5 pp).
13. SOP: CDMB-SOP-BSS-002 (4 pp).
14. Vendor Audit List/Forecast 2010-12 (4 pp).
15. SOP: QA-SOP-008 (11 pp).
16. Contract and Master Service Agreement, study 113/10 (10 pp).
17. Clinical Study Synopsis (4 pp).
18. Task Allocation form (1 p).
19. Form 1572 signed on Jan. 22, 2010 for both studies (4 pp).
20. List of Computerized System (1 p).
21. Adverse Event Summary Form, both studies (3 pp).
22. Sample Shipment Log; Study 113/10 (1 p).
23. Sample Shipment Log; Study 114/10 (1 p).
24. PK Concentration data, Study 113/10 (9 pp).
25. PK Concentration data, Study 114/10 (9 pp).
26. IEC membership Roster (1 p).



Scott B Laufenberg, Investigator