Department of Health and Human Services

Food and Drug Administration

Northeast Region
New England District
One Montvale Ave., 4th Floor
Stoneham, MA 02180
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June 11, 2014

Dr. Ann Kiessling
Director
Bedford Research Foundation
260 Elm St Ste 106
Somerville, MA 02144-2951

Dear Dr. Kiessling:

The U.S. Food and Drug Administration (FDA) conducted an inspection at 260 Elm St Ste 106, Somerville, MA 02144-2951 ending on May 15, 2014. Effective April 1, 1997, when the Agency determines an inspection is closed under 21 C.F.R. 20.64 (d)(3), FDA releases a copy of the inspection report to the inspected firm.

You will find a copy of the FDA Establishment Inspection Report attached. FDA may have redacted some information in accordance with the Freedom of Information Act (FOIA) and Title 21, Code of Federal Regulations, Part 20. Firms may request a copy of their FDA inspections completed prior to April 1, 1997 through FOIA.

FDA is working to make its regulatory process and activities more transparent to the regulated industry. Part of this effort is releasing a copy of your inspection report or summary to you, or acknowledging that the state provided you a copy at the close of their inspection.

If there is any question about the released information, feel free to contact our FOI Specialist, Barbara Recupero, at the above address or at (781) 587-7482.

Sincerely,

Digitally signed by Lori A. Holmquist -S
DN: c=US, o=U.S. Government, ou=HHS, ou=FDA, ou=People, 0.9.2342.19200300.100.1.1=1300055627, cn=Lori A. Holmquist -S
Date: 2014.06.13 08:12:59 -04'00'

Lori A. Holmquist
Investigations Branch Director

Enclosure:
FEI: 3005001384
FMD: 878835

NRN

SUMMARY

A comprehensive inspection of Bedford Research Foundation was conducted in accordance with NWE-DO performance goal assignments for FY14 (FACTS #8710452) and accomplished under CP7341.002, Inspection of Human Cells, Tissues, and Cellular and Tissue-Based Products (HCT/Ps). Inspection was reported under PAC 41002B.

Previous inspection conducted on 10/7/2011, 10/13/2011, and 10/18/2011disclosed no objectionable conditions. Inspection was classified as NAI.

The current inspection primarily covered the firm's Special Program of Assisted Reproduction (SPAR). SPAR was originally developed as a support group to minimize the risk of contracting HIV/AIDS in both mother and baby. The firm's research indicates that an estimated two-thirds of semen produced from healthy, HIV-infected males has an undetectable viral burden; therefore, safer sperm and decreased risk of transmitting infection to mother and child. Since 6/2013, 178 healthy babies have been born. To date, none of the SPAR mothers and babies have tested positive for HIV and Hepatitis C.

The inspectional records reviewed include: SPAR standard operating procedures, specimen logbook, semen analysis worksheets, andrology report summaries, parameters of shipped semen records, HIV follow-up testing schedule reminders, quality control records, temperature monitoring records, and electrophoresis file run summary.

The inspection revealed that the facility is a privately funded, not for profit, biomedical research organization since 2004. The firm operates a Massachusetts-licensed and CLIA-certified clinical laboratory that provides parenting products and services to domestic and international heterosexual, homosexual, and sero-positive males. The reproductive tissue activities performed include: packaging, processing, storing, labeling, and releasing sexually intimate partner (SIP) and directed semen specimens. Refer to Exhibit #1. No SPAR operations were performed during the inspection. No issues or objectionable conditions were noted during the inspection.

ADMINISTRATIVE DATA

Inspected firm:	Bedford Research Foundation
Location:	260 Elm St Ste 106 Somerville, MA 02144-2951
Phone:	617-623-7447
FAX:	
Mailing address:	260 Elm St Ste 106 Somerville, MA 02144-2951

Dates of inspection:	5/15/2014
Days in the facility:	1
Participants:	Sherry M. Nisson, Investigator Diane M. Prince, Compliance Officer

On May 15, 2014, credentials were displayed and an FDA-482, Notice of Inspection, was issued to Ms. Maureen Kearnan, Laboratory Manager. Ms. Kearnan identified herself as the most responsible individual available at the onset of the inspection. Dr. Ann A. Kiessling, Director, joined the inspection at a later time. Ms. Diane M. Prince, Compliance Officer, accompanied me throughout the inspection for training purposes. The establishment inspectional report (EIR) was written in its entirety by CSO Nisson.

All official correspondence, including the FMD-145 copy of the report, should be addressed to: Dr. Ann A. Kiessling, Director, 260 Elm Street, Suite 106, Somerville, Massachusetts 02144.

INDIVIDUAL RESPONSIBILITY AND PERSONS INTERVIEWED

Dr. Ann A. Kiessling, Director, gave an overview of SPAR and commented on the research activities performed at Bedford Research Foundation. SPAR Overview and Program Guide is attached as Exhibit #2. SPAR and the clinical laboratory fall under the auspices of Dr. Kiessling. She initiated the Special Program of Assisted Reproduction in 1994 and established the Foundation in 1996. The staff directory is attached as Exhibit #3.

Ms. Maureen Kearnan, Laboratory Manager, reports to Dr. Ann A. Kiessling, Director. Ms. Kearnan accompanied us throughout the inspection; gave an overview of the procedures, operations, and PCR testing; answered technical and general questions; provided statistics and records; as well as testing, storage, and shipping information.

Ms. Alexis Agnew, SPAR Coordinator/Technician, also reports to Dr. Ann A. Kiessling, Director. Ms. Agnew has been in her position for one year. She explained sperm labeling, storing, and releasing procedures; answered questions relative to inventory maintenance; provided records; and explained the PCR testing.

OPERATIONS

Bedford Research Foundation continues to develop safer techniques and products to achieve pregnancies in childless couples living with HIV. SPAR offers an opportunity to produce healthy babies without viral transmission to the mother or child. To accomplish this goal, the facility only

uses sperm from semen specimens containing an undetectable viral burden. SPAR overview and program guide appears as Exhibit #3.

Dr. Ann A. Kiessling, Director, evaluates, interviews, and counsels male and female partners during a one-time meeting. Dr. Kiessling provides an informational packet; explains the program, process, and costs; performs health assessments; discusses client circumstances, risks, and treatment options; and locates collaborating infertility clinics. The client collects two or three semen specimens at the facility or at home. Semen specimens are delivered to the testing laboratory via two types of kits. Walk-in Collection Kits used to collect live sperm at home must be taken to the laboratory within 90 minutes. The Live Semen Transport Kits contain special, refrigerated medium to stabilize the specimens. These specifically designed SPAR kits must be shipped via FEDEX Priority Overnight to the laboratory within eighteen hours after collection. Every specimen must be accompanied by a signed consent form for HIV testing. Approximately, 0.5 mls of semen is removed and tested for HIV. The remainder of the specimens is labeled, washed, cryopreserved, and stored at -200 degrees Centigrade in liquid nitrogen cryotanks.

Polymerase Chain Reaction (PCR) amplification procedures are used to identify DNA/RNA virus particles, infected cells, and pathogens present in semen specimens. Approximately, 30% of the specimens test positive for viral burden and 70% indicate undetectable levels of virus. Positive HIV semen is discarded. Semen analysis, including sperm counts, motility, and morphology, is performed to evaluate sperm fertility and development. An immunostain is performed on semen specimens to distinguish between white blood cells, germ cells, and underdeveloped sperm cells. PCR testing is performed in batches of eight or nine specimens. The test takes approximately four to six weeks due to the expense and amount of time to collect the specimens. Test results are mailed to the clients.

All semen specimens are electronically and manually recorded upon receipt. Specimens are assigned a five, consecutive digit-log number and labeled with the client's name, description, test requisition, test date, referring physician, and technician's name. Frozen specimens are stored in cryovials, placed in aluminum canes, and submerged in liquid nitrogen filled cryotanks. The vials are identified with computer-generated labels, containing a unique log number, client's name, specimen date, and client's birth date. Black indelible markers are used to print log numbers on the frozen canes. The facility currently has 300 semen samples stored in cryopreservation tanks.

The level of liquid nitrogen in the storage tanks range between seven and ten inches. Every Monday, Wednesday, and Friday the levels are measured and recorded. The laboratory maintains two -80 degree Centigrade freezers. Both freezers are alarmed and have digital read-outs. Daily temperatures are recorded. During the inspection, we randomly selected five lot numbers of sperm and verified that each of the specimens were located in their assigned cryotanks and canisters as documented in the logbook. No deviations were noted.

Clients can request the laboratory to store their specimens indefinitely; or ship them to any infertility clinic or some other storage facility. Specimens are shipped in dry shippers containing liquid

nitrogen vapor. Clients pay monthly storage fees and must sign sperm renewal forms every two years. Stored specimens are discarded two years from the freezing date if the client fails to contact the facility and does not sign a consent form.

The facility maintains current standard operating procedures for SPAR. Specimen records showing receipt, testing, storage, and distribution are maintained in client files. Review of the specimen logbook and random semen analysis worksheets, andrology report summaries, parameters of shipped semen records, HIV follow-up testing schedule reminders, and electrophoresis file run summary revealed no recordkeeping issues. Random quality control records and temperature monitoring records indicated that the quality control and freezer temperatures were within acceptable ranges.

GENERAL DISCUSSION WITH MANAGEMENT

A brief closing discussion was held at the conclusion of the inspection with Dr. Ann Kiessling, Director; Ms. Maureen Kearnan, Laboratory Manager; and Ms. Alexis Agnew, SPAR Coordinator/Technician. Management is unaware of any procedural deviations, adverse events, and/or transmission of infectious diseases associated with SPAR. No issues were discussed. Management did not comment. The inspection concluded at this time.

EXHIBITS

1. Establishment Registration and Listing for Human Cells, Tissues, and Cellular and Tissue-Based Products (HCT/Ps) dated 11/26/2013, 1 page
2. SPAR Overview and Program Guide, 4 pages
3. Staff directory dated 2/25/14, 1 page

ATTACHMENTS

1. FDA-482, Notice of Inspection, dated 5/15/2014

Sherry M. Nisson, Investigator

Diane M. Prince, Compliance Officer