NRC FORM 591M PART 1 (07-2012) 10 CFR 2.201

U.S. NUCLEAR REGULATORY COMMISSION

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED:	2. NRC/REGIONAL OFFICE
The University of Kansas Cancer Center 8700 N. Green Hills Rd. Kansas City, MO REPORT NUMBER(S) 2016-001	NRC Region III 2443 Warrenville Rd. Lisle, IL 60532 Select a location (Use keyboard arrows to select). . .

3. DOCKET NUMBER(S)	4. LICENSE NUMBER(S)	5. DATE(S) OF INSPECTION
030-36583	24-32517-01	6/2/16

LICENSEE:

The inspection was an examination of the activities conducted under your license as they relate to radiation safety and to compliance with the Nuclear Regulatory Commission (NRC) rules and regulations and the conditions of your license. The inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector. The inspection findings are as follows:

☑ 1. Based on the inspection findings, no violations were identified.

☑ 2. Previous violation(s) closed.

☐ 3. The violations(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, and corrective action was or is being taken, and the remaining criteria in the NRC Enforcement Policy, to exercise discretion, were satisfied.

_____ Non-cited violation(s) were discussed involving the following requirement(s):

☐ 4. During this inspection, certain of your activities, as described below and/or attached, were in violation of NRC requirements and are being cited in accordance with NRC Enforcement Policy. This form is a NOTICE OF VIOLATION, which may be subject to posting in accordance with 10 CFR 19.11.
(Violations and Corrective Actions)

Statement of Corrective Actions

I hereby state that, within 30 days, the actions described by me to the Inspector will be taken to correct the violations identified. This statement of corrective actions is made in accordance with the requirements of 10 CFR 2.201 (corrective steps already taken, corrective steps which will be taken, date when full compliance will be achieved). I understand that no further written response to NRC will be required, unless specifically requested.

TITLE	PRINTED NAME	SIGNATURE	DATE
LICENSEE'S REPRESENTATIVE			
NRC INSPECTOR	Robert G. Gattone, Jr.	Robert G. Gattone, Jr.	6/2/16
BRANCH CHIEF	Andrew T. McCraw		6/8/16

NRC FORM 591M PART 3
(07-2012)
10 CFR 2.201

U.S. NUCLEAR REGULATORY COMMISSION

Docket File Information

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED:	2. NRC/REGIONAL OFFICE
The University of Kansas Cancer Center 8700 N. Green Gills Rd. Kansas City, MO REPORT NUMBER(S) 2016-001	Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352

3. DOCKET NUMBER(S)	4. LICENSE NUMBER(S)	5. DATE(S) OF INSPECTION
030-36583	24-32517-01	6/2/16

6. INSPECTION PROCEDURES USED	7. INSPECTION FOCUS AREAS
87130 & 87132	For Both Inspection Procedures Used: 02.01-02.07

SUPPLEMENTAL INSPECTION INFORMATION

1. PROGRAM CODE(S)	2. PRIORITY	3. LICENSEE CONTACT	4. TELEPHONE NUMBER
02230	2	Stephen Howard, M.S., RSO	(913) 967-9056

☑ Main Office Inspection Next Inspection Date: 06/02/2018

☐ Field Office Inspection _____

☐ Temporary Job Site Inspection _____

PROGRAM SCOPE

The licensee conducted high dose rate (HDR) afterloading treatments, radiopharmaceutical therapies, and radiopharmaceutical diagnostic studies as required. The Lee's Summit facility involved HDR, Xofigo, and diagnostic imaging including flourine-18. The Terrace facility involved radiopharmaceutical therapy with Xofigo, and diagnostic imaging. Ninety five percent of the HDR treatments were for the breast. The licensee received flourine-18 labeled fluorodeoxyglucose (FDG) from a local radiopharmacy and it was used for positron emission tomography (PET). The licensee's work hours were from 7:30am to 5:00pm Monday through Friday.

Performance Observations

The inspector: (1) observed that licensed material was secured as required; (2) observed the licensee conduct required HDR spot checks prior to an HDR treatment; (3) observed that HDR emergency equipment was near the patient during the HDR treatment; (4) observed that the HDR facility and features were as required; (5) observed that the HDR source and the HDR unit were as authorized; (6) noted that HDR written directives were as required; (7) observed the licensee conduct dual verification of the HDR treatment settings prior to treatment; (8) observed that an authorized medical physicist (AMP) and a physician authorized user were at the HDR console during the treatment; (9) observed the AMP conduct an ambient exposure rate survey of the patient and the HDR unit after the treatment; (10) observed that applicable staff conducted a post HDR treatment assessment to verify that the HDR treatment was as prescribed; (11) reviewed selected HDR, Xofigo, and Iodine treatment records and there were no concerns identified; (12) noted that Elekta serviced the HDR unit; (13) reviewed dosimeter records and noted that the doses were well below regulatory limits; (14) observed a nuclear medicine technologist (NMT) prepare and administer FDG to a patient, including use of dosimeter badges, gloves, lab coat, L-block, dual patient identify verification, syringe shield, and dose calibrator measurement of the dosage; (15) measured a maximum of 2 milliroentgen per hour (mR/hr) at selected surfaces of the hot lab and 0.1 mR/hr at external walls of the room where a FDG patient was in; (16) observed an NMT check in a received package of licensed material, including updating the inventory and surveying the package; (17) observed the licensee prepare and administer 50 millicuries of iodine-131 to a patient in accordance with a proper written directive; (18) observed that the iodine-131 patient received safety instructions; and (19) observed that the iodine-131 patient was released per 10 CFR 35.75.