



Materials Inspection Report

1. Licensee/Location Inspected:

Missouri Cancer Associates
1705 E Broadway
Columbia, MO 65201

Report Number(s) 2024-001

2. NRC/Regional Office

Region III
U. S. Nuclear Regulatory Commission
2056 Westings Avenue, Suite 400
Naperville, IL 60563-2657

3. Docket Number(s)

030-37082

4. License Number(s)

24-32604-01

5. Date(s) of Inspection

11/7/2024

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. During this inspection, certain of your activities, as described below and/or attached, were in violation of NRC requirements, and were assessed at Severity Level IV, in accordance with the NRC Enforcement Policy.

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

(Non-cited violation(s) was/were discussed involving the following requirement(s))

B. The following violation(s) is/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 AND DATE
LICENSEE'S REPRESENTATIVE		
NRC INSPECTOR	Zahid Sulaiman, Daniel Fiedorek	ZAHID SULAIMAN <small>Digitally signed by ZAHID SULAIMAN Date: 2024.11.14 12:13:20 -06'00'</small>
BRANCH CHIEF	Deborah A. Piskura for Rhex Edwards	Deborah A. Piskura <small>Digitally signed by Deborah A. Piskura Date: 2024.11.14 13:39:47 -06'00'</small>



Materials Inspection Record

1. Licensee Name: Missouri Cancer Associates		2. Docket Number(s): 030-37082		3. License Number(s) 24-32604-01	
4. Report Number(s): 2024-001			5. Date(s) of Inspection: 11/7/2024		
6. Inspector(s): Zahid Sulaiman, Daniel Fiedorek		7. Program Code(s): 02230		8. Priority: 2	9. Inspection Guidance Used: 87130, 87132
10. Licensee Contact Name(s): Iris Ouyang		11. Licensee E-mail Address: iris.ouyang@usoncology.com		12. Licensee Telephone Number(s): 573-441-3711	
13. Inspection Type: <input checked="" type="checkbox"/> Routine <input type="checkbox"/> Announced <input type="checkbox"/> Non-Routine <input checked="" type="checkbox"/> Unannounced		14. Locations Inspected: <input type="checkbox"/> Hybrid <input checked="" type="checkbox"/> Main Office <input type="checkbox"/> Temporary Job Site <input type="checkbox"/> Field Office <input type="checkbox"/> Remote		15. Next Inspection Date (MM/DD/YYYY): 11/7/2026 <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Extended <input type="checkbox"/> Reduced <input type="checkbox"/> No change	
16. Location(s) Inspected List: 1705 E Broadway, Columbia, MO 65201					
17. Scope and Observations: <p>This was an unannounced routine inspection of a cancer clinic in Columbia, Missouri. The licensee was authorized for possession and use of byproduct material pursuant to 10 CFR 35.200, 35.300, 35.400 limited to a strontium-90 eye applicator, and 35.600 limited to an HDR unit. The licensee conducts approximately four to six PET administrations daily, approximately two therapeutic radiopharmaceutical (radium-223 Xofigo) patients per year, and approximately 40 HDR patients per year, primarily gynecological treatments with occasional breast, esophageal, and endobronchial treatments. At the time of the inspection the licensee was undergoing construction and had temporarily paused their 35.200 and 35.300 program with an expectation to resume them as soon as construction had completed. The strontium-90 eye applicator had not been used since the previous inspection but remained stored in the licensee's hot lab. The licensee had a contract oncologist group to provide authorized users with three main oncologists and the rest of the oncologists to fill in as needed. The licensee was staffed with one nuclear medicine technologist, six therapists, three dosimetrists, and six authorized medical physicists (four as contract physicists). The licensee retained a consultant physicist to conduct quarterly program audits. The inspection included a tour of the licensee facility, records review, and observation of an endobronchial HDR treatment.</p> <p>The tour of the licensee's facility included the hot lab, radiopharmaceutical injection rooms, and the HDR suite. The HDR unit remained in a locked cabinet inside the treatment room when not in use. The licensee recently removed an x-ray machine from the HDR treatment room and at the time of the inspection the room was only used for HDR. Independent surveys were taken throughout the licensee facility (RadEye G survey meter, SN 30713, last calibration date 4/5/2024) and no elevated radiation levels were found. The inspectors also verified the location of the licensee's sealed sources on the most recent inventory. No issues were identified during the tour of the licensee facility.</p> <p>The record review consisted of a review of radium-223 Xofigo written directives, HDR written directives and treatment plans for each type of treatment the licensee conducted, HDR full calibration records, dosimetry, radiation safety committee minutes, quarterly consultant audits, sealed source inventory and leak tests, dose calibrator and well counter quarterly maintenance, and licensee training records. No issues were identified during the records</p>					

Materials Inspection Record (Continued)

review.

The inspectors observed an endobronchial HDR treatment. Prior to the treatment, the inspectors observed the licensee perform daily spot checks on the HDR unit, authorized user sign the written directive, and observed the licensee plan the patient treatment. The inspectors also observed the authorized user sign the updated written directive based on the patient treatment plan changing the initial parameters of the written directive. The inspectors observed the licensee perform the HDR treatment with two authorized medical physicists and the authorized user present. No issues were identified from observing the HDR treatment.

No violations of NRC requirements were identified from this inspection.

Signature and Date - Branch Chief

Deborah A. Piskura



Digitally signed by Deborah A. Piskura
Date: 2024.11.14 13:52:46 -06'00'

From: [Daniel Fiedorek](#)
To: iris.ouyang@usoncology.com
Cc: [Zahid Sulaiman](#)
Subject: NRC Inspection of Missouri Cancer Associates
Date: Monday, November 18, 2024 10:48:00 AM
Attachments: Missouri Cancer Associates 591 - ZS with DAP sign for RAE.pdf

Hi Iris,

Please see the attached NRC Form 591M Inspection Report from Zahid and I's inspection on 11/7. Please keep a copy of the report with your NRC files. No response is required on your part, but if you can please send an email confirming that you have received the report and are able to open it that would be appreciated.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response, if you choose to provide one, will be made available electronically for public inspection in the NRC's Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC's website at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made publicly available without redaction.

Thanks!

Daniel

Daniel Fiedorek
U.S. NRC | Region III
Division of Radiological Safety and Security (DRSS)
Materials Inspection Branch (MIB)
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