U.S. NUCLEAR REGULATORY COMMISSION

Amendment No. 78

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 37, 39, 40, 70 and 71, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee	In accordance with letter dated November 12, 2019.	4. Expiration Date: March 31, 2026
1. Saint Francis Medical Center		5. Docket No.: 030-02269 Reference No.:
2. 211 Saint Francis Dr. Cape Girardeau, MO 63703	3. License number: 24-00158-03 is amended in its entirety to read as follows:	

6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license	9. Authorized use
A. Any byproduct material permitted by 10 CFR 35.100	A. Any	A. As Needed	A. For use in uptake, dilution and excretion studies permitted by 10 CFR 35.100.
B. Any byproduct material permitted by 10 CFR 35.200	B. Any	B. As Needed	B. For use in imaging and localization studies permitted by 10 CFR 35.200.
C. Any byproduct material permitted by 10 CFR 35.300	C. Any	C. 1 curie total	C. For any use permitted by 10 CFR 35.300.
D. Any byproduct material permitted by 10 CFR 35.500	D. Sealed Sources (DuPont Pharma , Model NES 8412; North American Scientific, Model 3601)	D. 600 millicuries total	D. For diagnostic medical use of sealed sources permitted by 10 CFR 35.500 in compatible devices registered in accordance with 10 CFR 30.32(g).
E. Any byproduct material permitted by 10 CFR 31.11	E. Prepackaged Kits	E. 2 millicuries total	E. For use in in-vitro studies.

MATERIALS LICENSE SUPPLEMENTARY SHEET	License Number 24-00158-03	Docket or Reference Number 030-02269
	Amendment No. 78	

6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license	9. Authorized use
F. Yttrium-90 permitted by 10 CFR 35.1000	F. Microspheres (Nordion (Canada), Inc., Model TheraSphere)	F. 540 millicuries per vial; 3 curies total	F. For use in permanent manual brachytherapy using Nordion (Canada), Inc. TheraSphere yttrium-90 microspheres delivery system as permitted by 10 CFR 35.1000.
G. Yttrium-90 permitted by 10 CFR 35.1000	G. Microspheres (Sirtex, Model SIR-Spheres delivery system)	G. 189 millicuries per vial; 1 curie total	G. For use in permanent manual brachytherapy using Sirtex Model SIR-Spheres yttrium-90 microspheres delivery system as permitted by 10 CFR 35.1000.

CONDITIONS

10. Licensed material may be used or stored at the licensee's facilities located at 211 Saint Francis Dr., Cape Girardeau, Missouri, 63703.

11. The Radiation Safety Officer (RSO) for this license is Mark L. Gates, M.D.

MATERIALS LICENSE SUPPLEMENTARY SHEET	License Number 24-00158-03	Docket or Reference Number 030-02269
	Amendment No. 78	

12. Licensed material shall only be used by, or under the supervision of:

A. Individuals permitted to work as authorized users in accordance with 10 CFR 35.13 and 10 CFR 35.14.

B. The following individuals are authorized users for the material and medical uses as indicated:

Authorized User(M.D.,D.O.,etc.)	Material and Use
Marc A. Apostol, M.D.	10 CFR 35.100,10 CFR 35.200,10 CFR 35.300 (limited to the oral administration of sodium iodide I-131)
Matthew Bokerman, M.D.	10 CFR 35.200,10 CFR 35.300 (limited to the oral administration of sodium iodide I-131)
James Borders, M.D.	10 CFR 35.100,10 CFR 35.200,10 CFR 35.500
Jeffrey W. Boss, M.D.	10 CFR 35.100,10 CFR 35.200,10 CFR 35.300 (limited to the oral administration of sodium iodide I-131)
Tom B. Brumitt, D.O.	10 CFR 35.100,10 CFR 35.200,10 CFR 35.300 (limited to the oral administration of sodium iodide I-131 in quantities less than or equal to 33 millicuries),10 CFR 35.1000 (limited to yttrium-90 as TheraSpheres)
Todd Michael Buersmeyer, M.D.	10 CFR 35.100,10 CFR 35.200,10 CFR 35.300 (limited to the oral administration of sodium iodide I-131), 10 CFR 35.1000 (limited to yttrium-90 as TheraSpheres and as SIR-Spheres)
Terrence Michael Chambers, M.D.	10 CFR 35.100,10 CFR 35.200,10 CFR 35.300 (limited to the oral administration of sodium iodide I-131 in quantities less than or equal to 33 millicuries)
Randall Clark, D.O.	10 CFR 35.100,10 CFR 35.200,10 CFR 35.300 (limited to the oral administration of sodium iodide I-131)
Derek L. Fimmen, M.D.	10 CFR 35.200
Mark L. Gates, M.D.	10 CFR 35.100,10 CFR 35.200,10 CFR 35.300,10 CFR 35.500
Benjamin D. Goodman, M.D.	10 CFR 35.300 (limited to the oral administration of sodium iodide I-131 and the parenteral administration of any beta emitter, or a photon-emitting radionuclide with a photon energy less than 150 keV)
Patrick M. Keating, M.D.	10 CFR 35.100,10 CFR 35.200,10 CFR 35.300 (limited to the oral administration of sodium iodide I-131),10 CFR 35.1000 (limited to yttrium-90 as TheraSpheres)

MATERIALS LICENSE SUPPLEMENTARY SHEET	License Number 24-00158-03	Docket or Reference Number 030-02269
	Amendment No. 78	

Authorized User(M.D.,D.O.,etc.)	Material and Use
Michael C. Muzinich, M.D.	10 CFR 35.100,10 CFR 35.200,10 CFR 35.300 (limited to the oral administration of sodium iodide I-131)
Shanaree M. Muzinich, M.D.	10 CFR 35.200
Huan Nguyen, M.D.	10 CFR 35.100,10 CFR 35.200,10 CFR 35.500
Richard Lyle Ogles, M.D.	10 CFR 35.100,10 CFR 35.200
Sagar Patel, M.D.	10 CFR 35.300
Mark Lewis Pfautsch, D.O.	10 CFR 35.100,10 CFR 35.200,10 CFR 35.300 (limited to the oral administration of sodium iodide I-131 in quantities less than or equal to 33 millicuries),10 CFR 35.500
George A. Pjura, M.D.	10 CFR 35.100,10 CFR 35.200,10 CFR 35.300,10 CFR 35.500
Tappan Roy, M.D.	10 CFR 35.300
Christopher Russell, M.D.	10 CFR 35.100,10 CFR 35.200,10 CFR 35.500
Ryan Siebert, M.D.	10 CFR 35.100,10 CFR 35.200,10 CFR 35.300 (limited to the oral administration of sodium iodide I-131)
Cedric Strange, M.D.	10 CFR 35.100,10 CFR 35.200,10 CFR 35.500
Theodore R. Swartz, M.D.	10 CFR 35.100,10 CFR 35.200,10 CFR 35.500
Michael Thomas, M.D.	10 CFR 35.100,10 CFR 35.200,10 CFR 35.300 (limited to the oral administration of sodium iodide I-131)
Andrew E. West, M.D.	10 CFR 35.100,10 CFR 35.200,10 CFR 35.500
Jeffrey Wichman, M.D.	10 CFR 35.200

13. The licensee shall conduct a physical inventory every 6 months, or at other intervals approved by the U.S. Nuclear Regulatory Commission, to account for all glass microspheres received and possessed under the license. Records of inventories shall be maintained for 3 years from the date of each inventory, and shall include the radionuclides, quantities, manufacturer's name and model numbers, and the date of the inventory.

14. In accordance with letter dated March 7, 2017 (ML17068A355), the licensee may make changes to its radiation safety program, as it relates to the use of yttrium-90 microspheres as permitted by 10 CFR 35.1000.

MATERIALS LICENSE SUPPLEMENTARY SHEET	License Number 24-00158-03	Docket or Reference Number 030-02269
	Amendment No. 78	

15. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. This license condition applies only to those procedures that are required to be submitted in accordance with the regulations. Additionally, this license condition does not limit the licensee's ability to make changes to the radiation protection program as provided for in 10 CFR 35.26. The U.S. Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.

A. Application dated September 8, 2015 (ML15253A911)
B. Letter dated March 1, 2016 (ML16061A327)
C. Letter dated March 7, 2017 (ML17068A355)
D. Letter dated July 27, 2017 (ML17214A831)

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date: JAN 2 7 2020

By: Magdalena R. Gryglak

Magdalena R. Gryglak
Region 3