Hill, Carol

From:

Ning, Yongli < Yongli.Ning@providence.org>

Sent:

Tuesday, April 12, 2016 12:57 PM

To:

Cook, Jackie Hill, Carol

Cc: Subject:

[External_Sender] License amendment for AU of 35.300 for parenteral administration of

Ra-223 Xofigo

Attachments:

160411 NRC license-Xofigo Halligan.pdf; Form 313A (AUT) Xofigo Halligan.pdf

Jackie,

Please see the attached for an amendment to our license 50-17838-01 to add Dr. Halligan as AU for parenteral administration of Ra-223 Xofigo.

If you need the hard copy I will do that upon your request.

Thank you.

Yongli Ning, MS Chief Medical Physicist - Radiation Oncology Radiation Safety Officer Providence Alaska Medical Center & Providence Imaging Center

Phone: 907 212-3186, 907 212-5691 Cell: 907-230-2072; Fax: 907 212-3665

Email: yning@provak.org

PUBLIC

☐ Immediate Release
☐ Normal Release

NON-PUBLIC

☐ A.3 Sensitive-Security Related

☐ A.7 Sensitive Internal

Other:

Reviewer: 1177

Date: 4/12

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April 11, 2016

Jacqueline D. Cook
Senior Health Physicist
Division of Nuclear Materials Safety
Nuclear Materials Safety Branch B
1600 E. Lamar Blvd., Arlington, TX 76011

Subject: Amendment to Radioactive Materials License 50-17838-01

Addition of Dr. John Halligan as Authorized User for 35.300 for parenteral administration of Ra-223 Xofigo for which a written directive is required

Dear Ms. Cook,

We wish to amend our Radioactive Materials License to add John Halligan, M.D. as Authorized User for 35.300 for parenteral administration of Ra-223 Xofigo for which a written directive is required. Please note that Dr. Halligan, as a radiation oncologist, is an authorized user for 35.300 for Oral administration of sodium iodine I-131 requiring a written directive, 35.400, 35.600 and 35.1000 currently listed in the NRC Materials License number 50-17838-01, Amendment No. 67.

Dr. John Halligan meets the training and experience requirements of 10 CFR 35.390 and 35.396. He has successfully completed training for Ra-223 Xofigo therapeutic dose treatment in ordering the materials, performing QC, calculating dose, administering dose by IV injection, and safety and protection procedures. Specifically, Dr. John Halligan has successfully completed supervised work experience in three cases for parenteral administration of Ra-223 Xofigo for which he is seeking AU status. The three cases were implemented in the Radiation Oncology of Providence Alaska Medical Center, Anchorage, Alaska in the following dates separately:

Date	MR#	Preceptor
4/30/2015	01200520	Dr. Blom
5/28/2015	01200520	Dr. Blom
4/7/2016	00334188	Dr Bertucio



The training and experience requirements were satisfactorily completed under the supervision of the preceptors, James G. Blom, M.D and Clare S. Bertucio, M.D., who is AU for Xofigo.

Please see the documents as attached:

NRC Form 313A (AUT), signed by Dr. James G. Blom, AU and Preceptor.

If you have any questions, please do not hesitate to call me at (907) 212-5691.

Sincerely,

Yongli Ning, M.S.

Chief Medical Physicist - Radiation Oncology

Radiation Safety Officer

Providence Alaska Medical Center

3200 Providence Drive

Anchorage, AK 99516-6604

Tel: (907)212-5691

Email: yning@provak.org

NRC FORM 313A (AUT) (05-2012)

U.S. NUCLEAR REGULATORY COMMISSION

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION

(for uses defined under 35.300)

APPROVED BY OMB: NO. 3150-0120 EXPIRES: (05/31/2015)

		רַן	0 CFR 35.390,	35.392, 35.39	4, and 35.396]		When the substitute of a state of
Name of Proposed Authorized User					State or Territory W	here License	ed
John Halligan, M.D.					ALASKA		
Requested Authorization(s) (check all that apply):							
	√ 35.300 Use of unsealed byproduct material for which			ch a written directiv	ve is require	ed (Ra-223 Xofigo)	
	OR						
	35.300		ministration of sociabecquerels (33)		equiring a written o	directive in	quantities less than or equal to
	35.300		ministration of soc querels (33 millic		requiring a written o	directive in o	quantities greater than 1.22
	35.300		ral administration 0 keV for which a			ng radionud	clide with a photon energy less
	∡ 35.300	Parente	ral administration	of any other radio	nuclide for which a	written din	ective is required
	date of app training and experience 1. Board C a. Provide b. For 35.3 be used to c. For 35.3	elication of experie related to copy of the copy of th	or the individual mance was complete to the uses checked in the board certificated documentation this experience de documentation ical case experier	(Select one of the part certification, roust have related cod. Provide dates ad above. eation. In on supervised climation on classroom and con classroom classroom and con classroom	ontinuing education, duration, and des	tained within and exper cription of connece. The tag, supervise	n the 7 years preceding the rience since the required continuing education and able in section 3.c. may sed work experience, ay be used to
			rience. Plete Part II Prece	otor Attestation.			
1	2. Current	35.300.	35.400, or 35.600	Authorized Use	r Seeking Additio	nal Author	ization
			on Materials Licer ement State requi	V	Amendment No. 67 that apply):	under	the requirements below or
	₹ 35.3	390	√ 35.392	35.394	√ 35.490	√ 35.690)
	required su	pervised		The table in sect	der 35.300, provide ion 3.c. may be use ttestation.		
	documenta case exper	tion on c ience. T	lassroom and labo	oratory training, su ons 3.a., 3.b., and	questing authoriza ipervised work exp 3.c. may be used t	erience, an	d supervised clinical

Training and Experience for Classroom and Laboratory Training		ed Aut 35.3			35.392		35.3	94		35.396
Description of Training		I	Location	of Trai	ining			Clock Hours		Dates of Training*
Radiation physics and instrumentation										
Radiation protection										
Mathematics pertaining to the use and measurement of radioactivity										
Chemistry of byproduct material for medical use										
Radiation biology										
	Total Ho	ours of	Trainin	g: [v 2			10	6.00441MMQ+
b. Supervised Work Experience	a ı	35.3	190	1.13	35.392	1 .1	35.3	94		35.396
If more than one supervising of this page. Supervised Wo	individual	is nec		-		ervised	train		ide m	
If more than one supervising of this page.	ndividual	is nec	essary to	o docui	Total Ho	ervised urs of E	train			
If more than one supervising of this page. Supervised Wood Description of Experience Must Include: Ordering, receiving, and unpacking radioactive materials safely and performing the related radiation surveys	ndividual	is nec	essary to	o docui	Total Ho	ervised urs of E	train	lence;		ultiple copies Dates of
If more than one supervising of this page. Supervised Wood Description of Experience Must Include: Ordering, receiving, and unpacking radioactive materials safely and performing the related radiation surveys Performing quality control procedures on instruments used to determine the activity of dosages and performing checks for proper operation of	ndividual	is nec	essary to	o docui	Total Ho	ervised urs of E	train	Confirm		ultiple copies Dates of
Supervised Wood Description of Experience Must Include: Ordering, receiving, and unpacking radioactive materials safely and performing the related radiation surveys Performing quality control procedures on instruments used to determine the activity of dosages and performing checks for proper operation of survey meters Calculating, measuring, and safely preparing patient or human research subject	ndividual	is nec	essary to	o docui	Total Ho	ervised urs of E	train	Confirm Yes No		ultiple copies Dates of
If more than one supervising of this page. Supervised Wo	ndividual	is nec	essary to	o docui	Total Ho	ervised urs of E	train	Confirm Yes No Yes No Yes		ultiple copies Dates of

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

. Training and Experience for P	roposed Authorized	d User (continued)	,		
b. Supervised Work Experience		, , , , , , , , , , , , , , , , , , , ,			
Supervising Individual		License/Permit Number listing supervising incauthorized user	lividual as an		
James G. Blom, M.D.		NRC Material license #50-17838-01, Amend	lment No. 67		
Supervising individual meets the apply)**:	e requirements below	, or equivalent Agreement State requirement	s (check all that		
35,390 : With experience administering dosages of:					
35.392 Oral Nal-131 requiring a written directive in quantities less than or equal to 1.22 gigabecquerels (33 millicuries)					
☑ 35 396 ☐ Oral Nal-131		than 1.22 gigabecquerels (33 millicuries)			
- Parenteral ad		emitter, or photon-emitting radionuclide with a g a written directive is required	photon		
1144		ther radionuclide requiring a written directive			
c. Supervised Clinical Case Explif more than one supervising multiple copies of this page.		ary to document supervised work experience,	provide		
Description of Experience	Number of Cases Involving Personal Participation	Location of Experience/License or Permit Number of Facility	Dates of Experience*		
Oral administration of sodium iodide I-131 requiring a written directive in quantities less than or equal to 1.22 gigabecquerels (33 millicuries)					
Oral administration of sodium iodide I-131 requiring a written directive in quantities greater than 1.22 gigabecquerels (33 millicuries)					
Parenteral administration of any beta-emitter, or photon-emitting radionuclide with a photon energy less than 150 keV for which a written directive is required					
other radionuclide for which a	Three clinical cases with personal participation	Providence Alaska Medical Center NRC Material license #50-17838-01,	6/24/2015		
Ra-223 Xofigo	L mark associa	Amendment No. 65	7/22/2015		
(List radionuclides)					

NRC FORM 313A (AUT)		U.S. NUCLEAR REGULATORY COMMISSION			
(05-2012) AUTHORIZE	ED USER TRAINING AND EXPERIEN	ICE AND PRECEPTOR ATTESTATION (continued)			
3. <u>Training and Ex</u>	perience for Proposed Authorized	User (continued)			
c. Supervised C	linical Case Experience (continued)				
Supervising Individ	fual	License/Permit Number listing supervising individual as an authorized user			
James G. Blom, M	ſ,D.	NRC Material license #50-17838-01, Amendment No. 67			
Supervising indivapply)**:	ridual meets the requirements below,	or equivalent Agreement State requirements (check all that			
☐ 35.390 W	35,390 With experience administering dosages of:				
	Oral Nal-131 requiring a written directive in quantities less than or equal to 1.22 gigabecquerels (33 millicuries)				
35.394	Oral Nal-131 in quantities greater the	an 1.22 gigabecquerels (33 millicuries)			
₹ 35.396 Rq.223	Parenteral administration of beta-em energy less than 150 keV requiring a	aitter, or photon-emitting radionuclide with a photon a written directive is required			
X04:90 V	Parenteral administration of any other	er radionuclide requiring a written directive			
** Supervising Author	** Supervising Authorized User must have experience in administering dosages in the same dosage category or categories as the individual requesting authorized user status.				
d. Provide comp	eleted Part II Preceptor Attestation.				
	PART II - PRECEP	TOR ATTESTATION			
individual as l	ong as the preceptor provides, directs	ceptor. The preceptor does not have to be the supervising , or verifies training and experience required. If more than a separate preceptor statement from each.			
	ne boxes below, the preceptor is attest ought and not attesting to the individua	ing that the individual has knowledge to fulfill the duties of l's "general clinical competency."			
First Section Check one of the foll	lowing for each requested authoriza	ation:			
For 35.390:					
Board Certific	cation				
✓ I attest that	at John Halligan, M.D. Name of Proposed Authorized User	has satisfactorily completed the training and experience			
requiremen	nts in 35.390(a)(1).				
	C	PR .			
Training and	······································	has a still feats the assessment of the 700 to see a feat to			
l attest tha	Name of Proposed Authorized User	has satisfactorily completed the 700 hours of training			
	ence, including a minimum of 200 hou 5.390 (b)(1).	ers of classroom and laboratory training, as required by			

PAGE 4

NRC FORM \$13A (AUT) (05-2012)

NRC FORM 313A (AUT) (05-2012)		U.S. NUCLEAR REGULATORY COMMISSION
P. S. San	JSER TRAINING AND EXPERIENC	CE AND PRECEPTOR ATTESTATION (continued)
Preceptor Attestation (c	continued)	
First Section (continu	ued)	
For 35.392 (Identical	Attestation Statement Regardles	ss of Training and Experience Pathway):
I attest that	Name of Proposed Authorized User	has satisfactorily completed the 80 hours of classroom
	training, as required by 10 CFR 35.3 uired in 35.392(c)(2).	392(c)(1), and the supervised work and clinical case
For 35.394 (Identical	Attestation Statement Regardles	ss of Training and Experience Pathway):
I attest that	Name of Proposed Authorized User	has satisfactorily completed the 80 hours of classroom
	training, as required by 10 CFR 35.3 uired in 35.394(c)(2).	394 (c)(1), and the supervised work and clinical case
Second Section	*************	************
✓ I attest that Jo	ohn Halligan, M.D. Name of Proposed Authorized User	has satisfactorily completed the required clinical case
experîence requ	uired in 35.390(b)(1)(ii)G listed below	w:
	1 requiring a written directive in quar rels (33 millicuries)	ntities less than or equal to 1.22
Oral Nal-131	1 in quantities greater than 1.22 giga	abecquerels (33 millicuries)
energy less t	dministration of beta-emitter, or phothan 150 keV requiring a written dire	oton-emitting radionuclide with a photon ective is required
Ra223 Parenteral ad	dministration of any other radionucli	ide requiring a written directive
Third Section		*********************
	hn Halligan, M.D. Name of Proposed Authorized User	has satisfactorily achieved a level of competency to
function indepen	ndently as an authorized user for:	
	1 requiring a written directive in quan rels (33 millicuries)	ntities less than or equal to 1.22
Oral Nai-131	in quantities greater than 1.22 giga	abecquerels (33 millicuries)
	dministration of beta-emitter, or phot than 150 keV requiring a written dire	ton-emitting radionuclide with a photon ective is required
	dministration of any other radionuclic	de requiring a written directive
•		

NRC FORM 313A (AUT)	×			U.S. NUCLEAR REGUL	ATORY COMMISSION
(05-7012) AUTHORIZ	ED USER TRAIN	ING AND EXPER	IENCE AND PRECEI	TOR ATTESTATION (C	ontinued)
Fourth Section					
For 35.396:					
Current 35.49	0 or 35,690 auth	orized user:			
I attest that		oposed Authorized User	is an authorized	user under 10 CFR 35.4	190 or 35.690
laboratory sexperience	nt Agreement Sta training, as requir	ate requirements, hed by 10 CFR 35.396(d)(2), and has	396 (d)(1), and the su	pleted the 80 hours of cla pervised work and clinica mpetency sufficient to ful	al case
		of any beta-emitte written directive is		radionuclide with a photo	on energy less
Parente	ral administration	of any other radio	onuclide for which a w	ritten directive is required	i
			OR		
Board Certific	ation:				
attest that	1		has satisfactoril	y completed the board co	ertification
35.396(d)(2 authorized Parente than 15	l), and has achieve user for: ral administration I keV for which a	of any beta-emitte written directive is	petency sufficient to fuer, or photon-emitting required	cal case experience requirection independently as radionuclide with a photo ritten directive is required	an on energy less
Farente	rai auministration	of any other radio	nuclide for which a wi	illen directive is required	
Fifth Section Complete the follow				ents, as an authorized u	ser for:
✓ 35.390	☑ 35.392	₹ 35.394	₹ 35.396		
I have experient requesting auti		dosages in the fol	lowing categories for	which the proposed Auth	orized User is
Oral Nal-13 millicuries)	1 requiring a writ	ten directive in qua	antities less than or ec	ual to 1.22 gigabecquere	als (33
✓ Oral Nat-13	1 in quantities gr	eater than 1.22 gig	abecquerels (33 millio	curies)	
Parenteral a 150 keV rec	administration of l juiring a written d	peta-emitter, or phi irective is required	oton-emitting radionud	clide with a photon energ	y less than
✓ Parenteral a	administration of a	any other radionuc	lide requiring a writter	n directive	
lame of Preceptor		Signature 7	2	Telephone Number	Date
lames G. Blom, M.D.		1 (16	**************************************	(907) 212-3186	4/11/2016
icense/Permit Number/					
NRC Material license #	50-17838-01, Ame	ndment No. 67, Prov	vidence Alaska Medical	Center	

NRC FORM 313A (AUT) (05-2012)

PAGE 6

entified until

(1-2012)



DATE 04/12/2016

NAME AND ADDRESS OF APPLICANT AND/OR LICENSEE

Mr. Yongli Ning, M.S., Radiation Safety Officer Providence Alaska Medical Center 3200 Providence Drive P.O. Box 196604 Anchorage, Alaska 99519-6604

LICENSE NUMBER
50-17838-01
MAIL CONTROL NUMBER
590622
LICENSING AND/OR TECHNICAL REVIEWER
CH

This is to acknowledge the receipt of your:

Please fill out NRC Form 531, located at the following link:

✓ LETTER and/or APPLICATION	DATED:	04/11/2016
The initial processing, which included an administrative rev	iew, has been	performed.
✓ AMENDMENT TERMINATION NEW	LICENSE	RENEWAL
There were no administrative omissions identified during	our initial revie	ew.
This is to acknowledge receipt of your application for rene above. Your application is deemed timely filed, and accor- final action has been taken by this office.		

http://www.nrc.gov/reading-rm/doc-collections/forms/nrc531.pdf

Send the completed NRC Form 531, by facsimile, to the following number: (301) 415-5387

Your application for a new NRC license did not include your taxpayer identification number.

A copy of your action has been emailed to our License Fee and Accounts Receivable Branch, in our Headquarters office in Rockville, MD. You will be contacted separately if there is a fee issue involved.

Your application has been assigned the above listed MAIL CONTROL NUMBER. When calling to inquire about this action, please refer to this control number. Your application has been forwarded to a technical reviewer. Please note that the technical review, which is normally completed within 180 days for a renewal application (90 days for all other requests), may identify additional omissions or require additional information. If you have any questions concerning the processing of your application, our contact information is listed below:

Region IV U. S. Nuclear Regulatory Commission DNMS/NMSB - B 1600 E. Lamar Boulevard Arlington, TX 76011-4511 (817) 200-1140

NRC FORM 532 (1-2012)

BETWEEN: Accounts Receivable/Payable and Regional Licensing Branches	[FOR ARPB USE] INFORMATION FROM WBL Program Code: 02230 Status Code: Pending Amendment Fee Category:7C Exp. Date: Fee Comments: Decom Fin Assur Reqd: N
License Fee Worksheet - L	icense Fee Transmittal
A. REGION	
1. APPLICATION ATTACHED Applicant/Licensee: Providence Alaska M Received Date: 04/12/2016 Docket Number: 3013426 Mail Control Number: 590622 License Number: 50-17838-01 Action Type: Amendment	Medical Center
2. FEE ATTACHED	
Amount:	
Check No.:	
OTIGER NO	
3. COMMENTS	
Signed:	and Latie
Date:	9/12/13
B. LICENSE FEE MANAGEMENT BRANCH	d (Check when milestone 03 is entered / /)
Fee Category and Amount:	
Correct Fee Paid. Application may be proc	pessed for:
Amendment:	
Renewal:	
License:	
3. OTHER	
Signed:	

Date: