Your Total Resource



Bard® BrachySource® Seed Implants - 10% Assay Certificate

Customer: INSTITUUT VERBEETEN

Address: HOOFDRECEPTIE INSTITUUT VERBEETEN KFM J VAN WERSHOVEN/M VAN WIEREN TILBURG 5042 SE

Bard Tracking Number: 777322SL

Independent Assay Date: 5/16/2022

Leak Test Date: 4/29/2022 Certificate Number: 777322SL

Source Model: STM1251

Independent Quality Assurance Ion Chamber ID: 1760011

Customer PO Number: 5597091/BVI579SCH

Patient ID: BVI579SCH

Physician Name:

Implant Date: 5/25/2022

Ion Chamber NIST-traceable Calibration: Feb-2022

		Bard's St	ated Activity on Im	Bard's Stated	Bard's Stated		
Source Lot Number	Source Quantity	Min	Midpoint	Max	Total Activity on Implant Date	Total Air Kerma Strength on Implant Date	
BBGR0083	86			34.830mCi	44.234 U		
·		0.386mCi	0.405mCi	0.424mCi			

Decay Factors (59.6 day half life)

Day	0	1	2	3	4	5	6	7	8	9	10
Decay Factor	1.000	0.988	0.977	0.966	0.955	0.944	0.933	0.922	0.911	0.901	0.890

Test Data

Assay Number	Assayed Activity (mCi) on 5/16/2022	Assayed Activity Corrected to Implant Date (mCl)	Bard's Stated Midpoint Activity on Implant Date (mCl)	Calculated Air Kerma (U) on implant Date
1	0.457	0.411	0.405	0.521
2	0.460	0.414	0.405	0.525
3	0.446	0.401	0.405	0.509
4	0.437	0.393	0.405	0.499
5	0.437	0.393	0.405	0.499
6	0.440	0.396	0.405	0.502
7	0.462	0.416	0.405	0.528
8	0.438	0.394	0.405	0.500
9	0.456	0.410	0.405	0.520
10	0.433	0.389	0.405	0.494
	₩	Avg. = 0.402mCl Avg. = /14,863MBql	A Company of the Company	Avg, = 0.510 U
	red activity error to mean is -0.	on 5/25/2022	Transmit and	Life of the Control of the Control

Bard Brachytherapy Quality Assurance

5/16/11 Date



Your Total Resource



BRACHYSOURCE® Seed Implants

Manufactured For:

BD Switzerland Sàrl

Terre Bonne Park - A4

Route de Crassier 17

1262 Eysins, Switzerland

Model Number: STM1251

Manufactured by:

Bard Brachytherapy, Inc.

295 E. Lies Road

Carol Stream, IL 60188 USA

800-977-6733

www.bardmedical.com

Customer:

INSTITUUT VERBEETEN

Address:

HOOFDRECEPTIE INSTITUUT VERBEETEN TILBURG 5042 SB NL

Certificate Number:

777322SL

Bard Tracking Number:

777322SL

Physician Name:

Customer PO Number:

5597091/BVI579SCH

Patient ID:

BVI579SCH

Reference Date:

2022/05/21

Implant Date:

2022/05/25

Lot Numi	oer	BBGR0083						Total	Range Midpoint
Quantit	у	ŧ	36			86	on Implant Date		
	Min:	0.405 mCi	14.99 MBq						
Apparent Activity Range (mCi) on	Midpt:	0.425 mCi	15.73 MBq						0.406mCi
	Мах:	0.445 mCi	16.47 MBq						(15.01MBq)
2022/05/21	Total:	36.550 mCi	1,352.35 MBq			·		36.550mCi	on 2022/05/25
								1,352.35 MBq	
	Min:	0.514 μ	uGym²/h						
Air Kerma Strength	Midpt:	0.540 բ	₄Gym²/h						0.515 μGym²/h
Range (µGym²/h) on 2022/05/21	Max:	0.565 μGym²/h							
2022,00/21	Total:	46.440	µGym²/h				·· · · · · · · · · · · · · · · · · · ·	46.440 µGym²/h	on 2022/05/25
Leak Test I	Date	2022	/04/29						

The enclosed sources consist of a radioisotope-coated cylindrical core pellet hermetically sealed within a titanium capsule. Each brachytherapy source is calibrated by measurement in a re-entrant ionization chamber with the measurement traceable to the National Institute of Standards and Technology (NIST) per the 1999 primary calibration standard. The uncertainty in the assay of the sources is ±5%. Bard Brachytherapy, Inc. certifies that the listed sources passed a leakage and contamination test meeting the requirements of ISO 9978:1992 (E), 5.1.1., Immersion Test (hot liquid), showing less than 0.005 microcuries (0.19kBg) of removable lodine-125 activity.

The total Air Kerma Strength or Apparent Activity is calculated by multiplying the midpoint by the number of sources. The midpoint is the middle of the range, not an average of the strength of the sources. The apparent activity and air kerma strength are measures of radiation output, not the contained activity. To calculate the contained activity, multiply the apparent activity by 1.7. The sources must be re-leak tested six months after the Leak Test Date before use or return to Bard Brachytherapy, Inc. if the source activity is greater than 100 microcuries (3.7MBq). lodine-125 has a half-life of 59.6 days and the principal photon emissions are 27.4 keV and 31 keV X-rays and a 35.5 keV gamma.1

Quality Assurance

Reference: 1. NCRP Report No. 58 ISO Classification: ISO/99/C64221

Bard Brachytherapy Inc., Carol Stream, IL 60188 USA

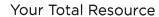
P: 800-977-6733

F: 888-383-3839

(21)777322SL

Authorized Representative: BD Switzerland Sàrl, Terre Bonne Park - A4, Route de Crassier 17, 1262 Eysins, Switzerland

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Bard Tracking Number: 777321SL

Independent Assay Date: 5/16/2022

Leak Test Date: 4/29/2022 Certificate Number: 777321SL Source Model: STM1251

Independent Quality Assurance Ion Chamber ID: 1760011

Customer PO Number: 5597091/BVI578ASS

Patient ID: BVI578ASS

Physician Name:

Implant Date: 5/25/2022

Ion Chamber NIST-traceable Calibration: Feb-2022

		Bard's Sta	ated Activity on Im	Bard's Stated	Bard's Stated		
Source Lot Number	Source Quantity	Min	Midpoint	Max	Total Activity on Implant Date	Total Air Kerma Strength on Implant Date	
BBGR0083	86				34.830mCi	44.234 U	
		0.386mCi	0.405mCi	0.424mCi			

Decay Factors (59.6 day half life)

Day	0	1	2	3	4	5	6	7	8	9	10
Decay Factor	1.000	0.988	0.977	0.966	0.955	0.944	0.933	0.922	0.911	0.901	0.890

Test Data

Assay Number	Assayed Activity (mCl) on 5/16/2022	Assayed Activity Corrected to Implant Date (mCl)	Bard's Stated Midpoint Activity on Implant Date (mCi)	Calculated Air Kerma (U) on Implant Date
1	0.450	0.405	0.405	0.514
2	0.448	0.403	0.405	0.511
3	0.441	0.397	0.405	0.504
4	0.434	0.390	0.405	0.495
5	0.463	0.416	0.405	0.528
6	0.455	0.409	0.405	0.519
7	0.466	0.419	0.405	0.532
8	0.450	0.405	0.405	0.514
9	0.437	0.393	0.405	0.499
10	0.432	0.389	0.405	0.494
he average assay	13 of 18 of	Avg. = 0,403mG/ Avg. = 14,896MBg. On 6/26/202274		Ayp = 0.5(j U)

Bard Brachytherapy Quality Assurance

5/16/11 Date



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Bard Tracking Number:

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Physician Name:

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Patient ID:

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Reference Date:

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Implant Date:

2022/05/25

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	Max:	0.445 mCi	16.47 MBq					(15.01MBq)
	Total:	36.550 mCi	1,352.35 MBq				36.550mCi	on 2022/05/25
							1,352.35 MBq	-
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Range (µGym²/h) on 2022/05/21	Max:	0.565 μGym²/h						
202200/21	Total:	46.440	µGym²/h				46.440 μGym²/h	on 2022/05/25
Leak Test (Date	2022	/04/29					

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