



# Certificate of Need Application

FOR

## ST. LUKE'S HOSPITAL – REPLACEMENT LINEAR ACCELERATOR

On Behalf Of

St. Luke's Episcopal Presbyterian Hospitals

Project No. 6095 HT

Replacement Linear Accelerator

Submitted to:

Missouri Health Facilities Review Committee

April 12, 2024

Submitted by:

Richard Hill

Attorney At Law

Lashly & Baer, P.C.

714 Locust Street

St. Louis, MO 63101



# Certificate of Need Program

## EQUIPMENT REPLACEMENT APPLICATION

- Expedited review if equipment to be replaced was CON-approved.
- Full review if equipment was not CON-approved.

Project Name: St. Luke's Hospital - Replacement Linear Accelerator

Project No: 6095 HT

Project Description: Replacement Linear Accelerator

Done Page N/A Description

**Divider I. Application Summary:**

- 3 1. Applicant Identification and Certification (Form MO 580-1861)
- 4 2. Representative Registration (From MO 580-1869)
- 5-7 3. Proposed Project Budget (Form MO 580-1863) and detail sheet with documentation of costs.

**Divider II. Proposal Description:**

- 9 1. Provide a complete detailed project description and include the type/brand of the existing equipment and the replacement equipment.
- 10-40 2. Provide a listing with itemized costs of the medical equipment to be acquired and bid quotes.
- 9 3. Provide a timeline of events for the project, from CON issuance through project completion.

**Divider III. Service Specific Criteria and Standards:**

- 42 1. Describe the financial rationale for the proposed replacement equipment.
- 42 2. Document if the existing equipment has exceeded its useful life.
- 42 3. Describe the effect the replacement unit would have on quality of care.
- 42 4. Document if the existing equipment is in constant need of repair.
- 5. Document if the lease on the current unit has expired.
- 42 6. Describe the technological advances provided by the new unit.
- 42 7. Describe how patient satisfaction would be improved.
- 42 8. Describe how patient outcomes would be improved.
- 43 9. Describe what impact the new unit would have on utilization.
- 43 10. Describe any new capabilities that the new unit would provide.
- 43 11. By what percent will this replacement increase patient charges.

*(If replacement equipment was not previously approved, also complete Divider IV below.)*

**Divider IV. Financial Feasibility Review Criteria and Standards:**

- 1. Document that sufficient financing is available by providing a letter from a financial institution or an auditor's statement indicating that sufficient funds are available.
- 2. Provide Service-Specific Revenues and Expenses (Form MO 580-1865) projected through three (3) **FULL** years beyond project completion.
- 3. Document how patient charges are derived.
- 4. Document responsiveness to the needs of the medically indigent.

**DIVIDER I**

**APPLICATION SUMMARY**

**DIVIDER I. APPLICATION SUMMARY**

**1. Applicant Identification and Certification (Form MO 580-1861)**

See attached.

**2. Representative Registration (Form 580-1869)**

See attached.

**3. Proposed Project Budget (Form MO 580-1863) and detail sheet with documentation of costs.**

See attached.



Certificate of Need Program

APPLICANT IDENTIFICATION AND CERTIFICATION

The information provided must match the Letter of Intent for this project, without exception.

1. Project Location (Attach additional pages as necessary to identify multiple project sites.)

Table with 2 columns: Project Information and County. Includes fields for Title of Proposed Project, Project Number, Project Address, and County.

2. Applicant Identification (Information must agree with previously submitted Letter of Intent.)

Table with 3 columns: List All Owner(s), Address, and Telephone Number. Includes a sub-section for List All Operator(s).

3. Ownership (Check applicable category.)

- Checkboxes for Nonprofit Corporation, Partnership, Individual, Corporation, City, County, District, and Other.

4. Certification

In submitting this project application, the applicant understands that: (A) The review will be made as to the community need for the proposed beds or equipment in this application; (B) In determining community need, the Missouri Health Facilities Review Committee (Committee) will consider all similar beds or equipment within the service area; (C) The issuance of a Certificate of Need (CON) by the Committee depends on conformance with its Rules and CON statute; (D) A CON shall be subject to forfeiture for failure to incur an expenditure on any approved project six (6) months after the date of issuance, unless obligated or extended by the Committee for an additional six (6) months; (E) Notification will be provided to the CON Program staff if and when the project is abandoned; and (F) A CON, if issued, may not be transferred, relocated, or modified except with the consent of the Committee.

We certify the information and date in this application as accurate to the best of our knowledge and belief by our representative's signature below:

5. Authorized Contact Person (Attach a Contact Person Correction Form if different from the Letter of Intent.)

Table with 3 columns: Name of Contact Person, Telephone Number, Signature of Contact Person, Title, Fax Number, E-mail Address, and Date of Signature.



Certificate of Need Program

REPRESENTATIVE REGISTRATION

(A registration form must be completed for each project presented.)

Project Name St. Luke's Hospital - Replacement Linear Accelerator	Number 6095 HT
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(Please type or print legibly.)

Name of Representative Richard Hill	Title Attorney
--	-------------------

Firm/Corporation/Association of Representative (may be different from below, e.g., law firm, consultant, other) Lashly & Baer, P.C.	Telephone Number 314-621-2939
--	----------------------------------

Address (Street/City/State/Zip Code)  
714 Locust Street, St. Louis, MO 63101

Who's interests are being represented?  
(If more than one, submit a separate Representative Registration Form for each.)

Name of Individual/Agency/Corporation/Organization being Represented St. Luke's Episcopal Presbyterian Hospitals	Telephone Number 314-434-1500
---	----------------------------------

Address (Street/City/State/Zip Code)  
232 South Woods Mill Road, Chesterfield, MO 63017

Check one. Do you:

- Support
- Oppose
- Neutral

Relationship to Project:

- None
- Employee
- Legal Counsel
- Consultant
- Lobbyist
- Other (explain):

Other Information:

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

I attest that to the best of my belief and knowledge the testimony and information presented by me is truthful, represents factual information, and is in compliance with §197.326.1 RSMo which says: *Any person who is paid either as part of his normal employment or as a lobbyist to support or oppose any project before the health facilities review committee shall register as a lobbyist pursuant to chapter 105 RSMo, and shall also register with the staff of the health facilities review committee for every project in which such person has an interest and indicate whether such person supports or opposes the named project. The registration shall also include the names and addresses of any person, firm, corporation or association that the person registering represents in relation to the named project. Any person violating the provisions of this subsection shall be subject to the penalties specified in § 105.478, RSMo.*

Original Signature 	Date 4/11/24
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Certificate of Need Program

**PROPOSED PROJECT BUDGET**

**Description**

**Dollars**

**COSTS:\***

*(Fill in every line, even if the amount is "\$0".)*

1. New Construction Costs ***	\$0
2. Renovation Costs ***	\$242,030
<b>3. Subtotal Construction Costs</b> (#1 plus #2)	<b>\$242,030</b>
4. Architectural/Engineering Fees	\$20,180
5. Other Equipment (not in construction contract)	\$0
6. Major Medical Equipment	\$2,348,948
7. Land Acquisition Costs ***	\$0
8. Consultants' Fees/Legal Fees ***	\$0
9. Interest During Construction (net of interest earned) ***	\$0
10. Other Costs ***	\$0
<b>11. Subtotal Non-Construction Costs</b> (sum of #4 through #10)	<b>\$2,369,128</b>
<b>12. Total Project Development Costs</b> (#3 plus #11)	<b>\$2,611,158 **</b>

**FINANCING:**

13. Unrestricted Funds	\$2,611,158
14. Bonds	\$0
15. Loans	\$0
16. Other Methods (specify)	\$0
<b>17. Total Project Financing</b> (sum of #13 through #16)	<b>\$2,611,158 **</b>

18. New Construction Total Square Footage	0
19. New Construction Costs Per Square Foot *****	\$0
20. Renovated Space Total Square Footage	1,500
21. Renovated Space Costs Per Square Foot *****	\$161

\* Attach additional page(s) detailing how each line item was determined, including all methods and assumptions used. Provide documentation of all major costs.

\*\* These amounts should be the same.

\*\*\* Capitalizable items to be recognized as capital expenditures after project completion.

\*\*\*\* Include as Other Costs the following: other costs of financing; the value of existing lands, buildings and equipment not previously used for health care services, such as a renovated house converted to residential care, determined by original cost, fair market value, or appraised value; or the fair market value of any leased equipment or building, or the cost of beds to be purchased.

\*\*\*\*\* Divide new construction costs by total new construction square footage.

\*\*\*\*\* Divide renovation costs by total renovation square footage.

St. Luke's  
Linac Replacement  
Budget Detail

Table 1 - MME Quote

	A	B	C	D	E
	Line Item	Cost	Location	Include in CON Budget?	CON Budget
1	Section 1 - Varian	\$2,231,380.00	Varian Quote	Yes	\$2,231,380.00
2	Section 2 - Varian	\$1,784,986.00	Varian Quote	No	\$0.00
3	Section 3 - Varian	\$0.00	Varian Quote	Yes	\$0.00
4	Section 4 - Varian	\$0.00	Varian Quote	Yes	\$0.00
5	Section 5 - Varian	(\$175,000.00)	Varian Quote	No	\$0.00
6	Section 6 - Varian	(\$175,000.00)	Varian Quote	No	\$0.00
7	Section 7 - Varian	\$50,000.00	Varian Quote	Yes	\$50,000.00
8	Section 8 - Varian	\$67,568.00	Varian Quote	Yes	\$67,568.00
9	Section 9 - Varian	\$27,040.00	Varian Quote	No	\$0.00
10	Section 10 - Varian	\$0.00	Varian Quote	No	\$0.00
11	Section 11 - Varian	\$0.00	Varian Quote	No	\$0.00
12	Section 12 - Varian	\$0.00	Varian Quote	No	\$0.00
13	<b>Total MME Quote</b>	<b>\$3,810,974.00</b>			<b>\$2,348,948.00</b>

Table 2 - Renovation Quote

	A	B	C	D	E
	Line Item	Cost	Location	Include in CON Budget?	CON Budget
1	Final Clean	\$860.00	PARIC	No	\$0.00
2	Selective Demolition	\$5,500.00	PARIC	No	\$0.00
3	Concrete	\$600.00	PARIC	No	\$0.00
4	X Ray Scanning	\$800.00	PARIC	No	\$0.00
5	Casework / Millwork	\$23,074.00	PARIC	No	\$0.00
6	Acoustical Ceilings	\$3,238.00	PARIC	No	\$0.00
7	Resilient Flooring	\$10,920.00	PARIC	No	\$0.00
8	Painting	\$2,540.00	PARIC	No	\$0.00
9	HVAC	\$186,700.00	PARIC	No	\$0.00
10	Fire Protection	\$9,793.00	PARIC	No	\$0.00
11	Electrical	\$183,140.00	PARIC	Yes	\$183,140.00
12	ICRA Temp Protection	\$26,314.00	PARIC	Yes	\$26,314.00
13	General Cleanup	\$8,395.00	PARIC	No	\$0.00
14	<b>Total Hard Costs</b>	<b>\$461,874.00</b>	<b>PARIC</b>		<b>\$209,454.00</b>
15	<b>CON Hard Costs as % of Total Hard Costs</b>				<b>45.35%</b>
16	General Requirements	\$29,885.00	PARIC	YES	\$29,885.00
17	Project Management	\$11,645.00	PARIC	YES	\$11,645.00
18	Permits	\$2,670.00	PARIC	YES	\$2,670.00
19	Subcontractor Insurance	\$5,773.00	PARIC	YES	\$5,773.00
20	Builders Risk	\$273.00	PARIC	YES	\$273.00
21	Risk Management	\$3,539.00	PARIC	YES	\$3,539.00
22	Fee	\$18,049.00	PARIC	YES	\$18,049.00
23	<b>Total Soft Costs</b>	<b>\$71,834.00</b>	<b>PARIC</b>	<b>YES</b>	<b>\$71,834.00</b>
24	<b>CON Hard Costs as % of Total Hard Costs</b>				<b>45.35%</b>
25	<b>Line 23 * Line 24</b>				<b>\$32,575.81</b>
26	<b>Total Renovation Quote</b>	<b>\$533,708.00</b>			<b>\$242,029.81</b>



St. Luke's  
 Linac Replacement  
 Budget Detail

Table 3 - A&E Quotes

	A	B	C	D	E
	Line Item	Cost	Location	Include in CON Budget?	CON Budget
1	Archimages Quote	\$15,000.00	3/7/24 Email	YES	\$15,000.00
2	Heideman Quote	\$29,500.00	2/26/24 Quote	YES	\$29,500.00
3	<b>Total A&amp;E</b>				<b>\$44,500.00</b>
4	<b>CON Hard Costs as % of Total Hard Costs</b>				<b>45.35%</b>
5	<b>Total A&amp;E Quote</b>				<b>\$20,180.19</b>

Table 4 - Total Budget

	A	B
	Cost Category	CON Budget
1	MME	\$2,348,948.00
2	Renovation	\$242,029.81
3	A&E Costs	\$20,180.19
4	<b>Total CON Budget</b>	<b>\$2,611,157.99</b>

**DIVIDER II**

**PROPOSAL DESCRIPTION**

## DIVIDER II. PROPOSAL DESCRIPTION

1. **Provide a complete detailed project description, CON project number of the existing equipment (if prev. CON approved), and include the type/brand of both the existing equipment and the replacement equipment.**

The Applicant proposes to replace a linear accelerator that was previously approved by the Committee in CON Project 4529 HT with a Varian TrueBeam Linear Accelerator.

2. **Provide a listing with itemized costs of the medical equipment to be acquired and bid quotes.**

See attached.

3. **Provide a timeline of events for the project, from CON issuance through project completion.**

- CON Approval – May 24, 2024
- Commencement of Construction Work – May 2024
- Commencement of Installation Work – July 2024
- Replacement Unit Operational – July 2024

## Custom System Proposal

Quotation Number - 2022-358676-5-A1

### SPECIAL AMENDED QUOTATION

#### REMOVE:

QTY 1, TVL001001005 - 15/16 MV, \$0

QTY 1, TVL001001004 - 10/10 MV, \$0

QTY 1, TVL001001005 - 15/16 MV, \$0

QTY 1, TVL001001004 - 10/10 MV, \$0

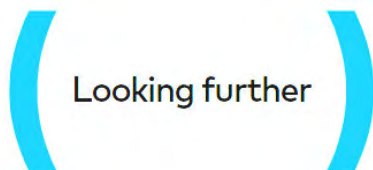
#### ADD:

QTY 1, TVL001001006 - 18/23 MV, \$0

QTY 1, TVL001001006 - 18/23 MV, \$0

No change in contact price.

PROVIDED TO REMEDY ERROR ON QUOTATION 2022-358676-5.



Looking further



**ST LUKES EPISCOPAL PRESBYTERIAN HOSPITAL**  
("Customer")

232 S WOODS MILL RD  
CHESTERFIELD Missouri 63017 United States

**VMS Inc, Oncology Systems**

Matt Wilson  
District Manager  
Work from home  
Atlanta , GA 30327 US  
Email : matt.wilson@varian.com

\*\*\* Confidential - Proposal is intended for Recipient and Recipient's Site Representatives Only \*\*\*

**Quote Information**

Quotation Number :	2022-358676-5-A1	Sales PO Required :	No
Quotation Valid Until :	December 16, 2022	Customer Procurement Contact Name :	Needed
Customer Requested Delivery Date :	September 29, 2023		

**Sales**

Incoterms : US1: FOB: Origin  
 Payment Terms : 30 days net  
 Shipment : 80.00%  
 Acceptance : 20.00%  
 For orders equal or less than \$100k, 100% upon shipment, net 30.

**Quotation Total**

Quotation Total : US \$3,810,974.00

The quotation is provided in order to remedy an error on Quotation 2022-358676-5. The products listed on this quotation are to be used exclusively and only by St. Lukes Episcopal Presbyterian Hospital.

Both parties may execute this amendment contract approval in counterparts, each of which is deemed an original and all of which constitute only one agreement.

**Terms and Conditions**

**Products and Services:** Customer's access to and use of the Products, Support Services and Services (except Software-as-a-Service or Subscription Services) as indicated in this Quotation are subject to and governed by: (a) the Varian Terms and Conditions of Sale (Form RAD 1652) at: [https://www.varian.com/1652V\\_OCT\\_2018](https://www.varian.com/1652V_OCT_2018) and (b) any Schedules, Exhibits and/or additional terms (including third party terms) contained, attached, referenced or otherwise indicated in this Quotation. All terms and conditions provided in the website link listed in item (a) above are incorporated by reference and form part of the contract between Varian and Customer.  
 If there is a separate written agreement (e.g. master agreement) in effect between the parties that expressly provides for and governs the purchase and sale of the specific Products, Support Services, Services, Software-as-a-Service and/or Subscription Service set forth in this Quotation, such written agreement shall govern. Hard copies of the referenced terms and conditions and any additional terms indicated will be provided to Customer upon request.

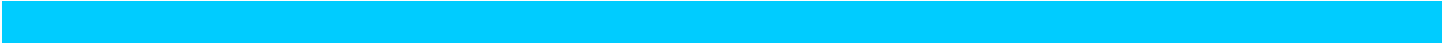
**For and on behalf of Customer**

\_\_\_\_\_  
 Authorized Representative :  
 \_\_\_\_\_  
 Title :  
 \_\_\_\_\_  
 Date :  
 \_\_\_\_\_

**For and on behalf of Varian Medical Systems**

\_\_\_\_\_  
 Authorized Representative :  
 \_\_\_\_\_  
 Title :  
 \_\_\_\_\_  
 Date :  
 \_\_\_\_\_

# Amendment Info



OMNI Quote Number:	N/A
Amended Delta:	\$0
Contract Total:	\$3,810,974
Old Contract Total:	\$3,810,974

Item	Description	Qty
<b>Section 1 Original Configuration - Scalable TrueBeam - Vault 1</b>		
1.1	<b>15/16 MV (BJR 11/17)</b>  40 cm x 40 cm maximum field size, dose rate range 0-600 MU/Min.	1
1.2	<b>10/10 MV (BJR 11/17)</b>  40 cm x 40 cm maximum field size, dose rate range 0-600 MU/Min.	1
1.3	<b>6/6 MV (BJR 11/17)</b>  40 cm x 40 cm maximum field size, dose rate range 0-600 MU/Min.	1
1.4	<b>16 MeV, 0-1000 MU/Min</b>  25 cm x 25 cm maximum field size, dose rate range 0-1000 MU/Min.	1
1.5	<b>12 MeV, 0-1000 MU/Min</b>  25 cm x 25 cm maximum field size, dose rate range 0-1000 MU/Min.	1
1.6	<b>9 MeV, 0-1000 MU/Min</b>  25 cm x 25 cm maximum field size, dose rate range 0-1000 MU/Min.	1
1.7	<b>6 MeV, 0-1000 MU/Min</b>  25 cm x 25 cm maximum field size, dose rate range 0-1000 MU/Min.	1
1.8	<b>IGRT Couch Top</b>  Image Guided RadioTherapy (IGRT) carbon fiber treatment couch top, free of metal or other radiation-opaque materials.  <b>Features:</b> <ul style="list-style-type: none"> <li>• Indexed Immobilization® for compatible accessories</li> <li>• Couch top interface for mounting patient immobilization and quality assurance devices at the head of the couch</li> <li>• Lock bar for indexed positioning of equipment or immobilization devices on the couch top</li> <li>• Handrail for couch positioning, with hooks for temporary pendant placement during patient set up</li> </ul>	1
1.9	<b>PerfectPitch 6DoF Couch</b>  The PerfectPitch™ 6-Degrees of Freedom couch system <b>Features:</b> <ul style="list-style-type: none"> <li>• Image-based 6DoF patient positioning</li> </ul> <b>Prerequisites:</b> <ul style="list-style-type: none"> <li>• TrueBeam® v2.5 MR2 or higher</li> <li>• ARIA® oncology information system v11.1 MR1 (11.0.55) and ARIA radiation therapy management v11 MR3 (11.0.47) or higher or compatible third-party oncology information system</li> </ul> <b>Customer Responsibilities:</b> <ul style="list-style-type: none"> <li>• Verify compatibility of third-party oncology information system</li> </ul>	1
1.10	<b>6X High Intensity Mode</b>  40 cm x 40 cm maximum field size, dose rate range 400-1400 MU/Min in 200 MU/min steps.	1
1.11	<b>Low-X Imaging Energy</b>  Low-X imaging energy configuration, providing high soft tissue contrast when imaging in-line with the treatment beam.	1

Item	Description	Qty
1.12	<p><b>RapidArc Treatment Delivery</b></p> <p>RapidArc® Treatment Delivery is a volumetric modulated arc treatment delivery technique.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Simultaneous modulation of MLC aperture shape, beam dose rate, and gantry angle and rotation speed during beam delivery</li> <li>• Supports dynamic jaw tracking and collimator rotation with supporting treatment planning system</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• 120 Multi Leaf Collimator or HD120™ Multi Leaf Collimator</li> <li>• Eclipse™ treatment planning system v11.0 or higher</li> <li>• RapidArc treatment planning license</li> <li>• Compatible server hardware and operating system. For detailed specifications, visit: <a href="http://www.varian.com/hardwarespecs">www.varian.com/hardwarespecs</a></li> </ul>	1
1.13	<p><b>Triggered Imaging</b></p> <p>Automated intrafraction 2D kV radiographic imaging, with images triggered by respiration phase or amplitude, gantry angle, time period, or MU. Automated image-based beam hold on fiducial markers, based on user-defined marker motion thresholds.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Respiration Triggered Imaging</li> <li>• MU Triggered Imaging</li> <li>• Gantry Triggered Imaging</li> <li>• Time Triggered Imaging</li> <li>• Autobeam Hold</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• Respiratory Motion Management System</li> </ul>	1
1.14	<p><b>Filtrine Water Chiller</b></p> <p>A closed loop water cooling system, providing clean water at a constant flow, pressure, and temperature for cooling a high energy medical linear accelerator. Ideal for sites where a dependable source of clean water for cooling is not available.</p>	1
1.15	<p><b>Additional MotionView CCTV Camera System</b></p> <p>Additional set of two Motion View CCTV cameras and displays. Camera placement is at customer discretion.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Two pan, tilt, zoom CCTV cameras</li> <li>• Two desktopLCD displays with built in camera controls</li> <li>• Adjustable viewing angle for patient privacy</li> <li>• Push button pan, tilt, zoom, and home position control</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• Motion View camera system, provided with linac system.</li> </ul>	1
1.16	<p><b>Main Circuit Breaker Panel</b></p> <p>Main circuit breaker panel, interfacing to a single power input feed from the facility Mains. Circuit breakers provide independent over-current protection for equipment at the console and in the treatment room. UL and IEC/CE certified.</p>	1
1.17	<p><b>NLS: English</b></p>	1
1.18	<p><b>Existing Baseframe 52" Fixed Floor</b></p> <p>Use of existing baseframe may require modification.</p>	1



Item	Description	Qty
1.19	<p><b>Horizontal LAP Apollo Green Laser Kit</b></p> <p>LAP Apollo Green Room Laser Kit for patient alignment with Horizontal Remote-Controlled Sagittal Line Laser.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• 1 Apollo Green Remote-controlled Ceiling Crosshair Laser</li> <li>• 2 Apollo Green Remote-controlled Lateral Crosshair Lasers</li> <li>• 1 Apollo Green Horizontal Remote-Controlled Sagittal Line Laser</li> </ul>	1
1.20	<p><b>Power Cond., 3phase 50KVA</b></p> <p>Transtector 50KVA, 3-phase power conditioning unit, providing transient protection, line power regulation, and Input and Output circuit breakers for over-current protection. UL and IEC/CE certified.</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• Supports voltage configurations from 208 to 600 VAC and in 50 or 60 Hz for US and ROW applications.</li> </ul>	1
1.21	<p><b>TrueBeam Base System 120 MLC</b></p> <p>Treatment delivery system includes 120 leaf MLC with dual independent jaws, enhanced dynamic wedge, 6 MV X-ray treatment energy, 43 cm x 43 cm MV imager for radiographic, cine, and integrated imaging, Motion View CCTV camera system, treatment console with integrated audio and video systems, back pointer lasers, front pointer set, upper port film graticule to support basic quality assurance, and drum phantom for Machine Performance Check (MPC).</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Basic X-Ray treatment delivery technique package, including Static Photon, Photon Arc, and Dynamic Conformal Arc treatment delivery techniques</li> <li>• Intensity Modulated Radiotherapy (IMRT) treatment technique, including large field IMRT</li> <li>• Total Body Treatment technique package</li> <li>• 2D MV Radiographic and Cine Image Acquisition, 2D/2D Radiographic Image Review and match, Cine image review</li> <li>• Relative Portal Dosimetry Image and Integrated Image Acquisition</li> <li>• Matching of 2D radiographs to 3D reference images</li> <li>• Online addition of kV and MV imaging protocols to treatment fields, with automated generation of reference images</li> <li>• Online Physician Approval of Images at Treatment Console (compatible with ARIA only)</li> <li>• Automated Machine Performance Check Testing, Online Machine Performance Check Review</li> <li>• Offline Machine Performance Check Review</li> <li>• Image only sessions</li> <li>• Unplanned Treatment Mode up to 5 fractions</li> <li>• Fraction number displayed on in-room monitor</li> <li>• Match environment layout for 2D/2D and 2D/3D layouts default to the 2-panel</li> <li>• Custom DRR templates that are created in Eclipse will be available on the TrueBeam Platform</li> <li>• Online access to a marketing kit that contains a broad range of advertising, educational, promotional, and public relations materials targeted to referring physicians, patients, and the media</li> <li>• Electronic Dynamic Wedges (EDW)</li> <li>• Large field IMRT</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• ARIA oncology information system for radiation oncology v15.1 or higher, or compatible third-party oncology information system</li> <li>• Eclipse treatment planning system v15.1 or higher, or compatible third-party treatment planning system</li> <li>• If third-party OIS: <ul style="list-style-type: none"> <li>• Authentication Server for third-party OIS (Hardware and Software) or</li> <li>• Authentication Server for third-party OIS (Software only)</li> </ul> </li> </ul> <p><b>Customer Responsibilities:</b></p> <ul style="list-style-type: none"> <li>• Verify compatibility with third-party oncology information systems if applicable</li> <li>• Verify compatibility with third-party treatment planning systems if applicable</li> <li>• If using a scale other than IEC 60601 or IEC 61217 in the rest of the department, it may be necessary to change scales on all other machines. This may require additional purchases.</li> </ul> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• Multiple patient name in Japan market is applicable for Kanji, Kana and Romaji characters to identify the patient</li> </ul>	1
1.22	<p><b>TrueBeam v3.0</b></p>	1
1.23	<p><b>kV Imaging System</b></p> <p>kV Imaging system, providing 2D radiographic and fluoroscopic and 3D CBCT imaging capability.</p>	1

Item	Description	Qty
	<p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• kV CBCT image acquisition, review, and match to 3D reference image</li> <li>• Radiographic image acquisition, with 2D/2D and 2D/3D image matching to reference image</li> <li>• Fluoroscopic image acquisition, with structure overlay on fluoroscopic images.</li> <li>• kV CBCT image acquisition with a long field of view, provided by merging multiple indexed CBCT images online.</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• ARIA oncology information system for radiation oncology v15.1 or higher, or compatible third-party oncology information system</li> <li>• TrueBeam Platform v3.0 or higher</li> </ul> <p><b>Customer Responsibilities:</b></p> <ul style="list-style-type: none"> <li>• Verify compatibility with third-party oncology information systems if applicable</li> </ul>	
1.24	<p><b>Advanced Resp Motion Management System</b></p> <p>Advanced Respiratory Motion Management System is a stereoscopic optical system for managing patient respiration motion during treatment delivery and imaging.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Stereoscopic optical imager, including marker block for tracking patient respiration motion</li> <li>• Respiratory gated treatment delivery</li> <li>• Respiratory gated MV image acquisition and online review, respiration synchronized cine image acquisition and online review</li> <li>• Respiratory gated kV image acquisition and online review, respiration synchronized fluoroscopic image acquisition and online review</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• TrueBeam®, VitalBeam, or Edge v2.7 and higher</li> <li>• kV Imaging System</li> </ul>	1
1.25	<p><b>CatPhan Phantom</b></p> <p>Phantom for measuring CBCT image contrast, spatial resolution, and uniformity.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Modules for measuring CBCT image contrast, spatial resolution, and uniformity</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• kV Imaging system with CBCT</li> </ul>	1
1.26	<p><b>Supp. Phantom Kit</b></p> <p>Supplemental imaging phantom kit for measuring resolution and contrast of kV and MV imaging systems.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Leeds TOR 18FG phantom for measuring spatial resolution and contrast of kV imaging system</li> <li>• MV contrast phantom for measuring contrast performance of MV imaging system</li> <li>• Geometric phantom, mounted on IGRT couch top-compatible lock bar. Can be used for quality assurance of image guidance workflow.</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• MV imaging system</li> </ul>	1
1.27	<p><b>Authentication Svr, 3rd Party OIS SW</b></p> <p>Varian Service Portal (VSP) software to run on TrueBeam Platform v3.0 with a shared framework server.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• VSP software at v15 or higher</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• TrueBeam Platform v3.0</li> </ul> <p><b>Customer Responsibilities:</b></p>	1

Item	Description	Qty
1.28	<p><b>STD TRNG: TB Platform On-Site</b></p> <p>The on-site review of the TrueBeam/Edge/VitalBeam components includes imaging and use cases for support of patient treatment for therapists. This support is to ensure that personnel who attended the classroom training are able to operate the TrueBeam Platform machine in a safe and effective manner in the clinical environment.</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• Provide Windows Operating System software and licenses</li> <li>• Provide Microsoft SQL server software and licenses</li> <li>• Only Windows critical updates allowed. Please contact your Varian representative for the approved hotfixes.</li> <li>• For a detailed description of the hardware and software server specifications, see the Varian Provided Hardware specifications (<a href="https://www.varian.com/hardware-specs">https://www.varian.com/hardware-specs</a>).</li> </ul> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Includes support for TrueBeam/Edge/VitalBeam</li> <li>• Offer is valid for 18 months after installation of product</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• TrueBeam Platform classroom trainings</li> </ul> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• Training is non-refundable and non-transferable</li> </ul>	1
1.29	<p><b>STD TRNG: Two Day Follow Up</b></p> <p>Two Day Follow Up Training. This follow up training is conducted after the initial training has been completed to ensure safe and efficient use of the product.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Training plan details will be provided by the training management team as part of your product implementation process</li> <li>• Duration and Location: 2 days onsite</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• Initial product training completed</li> </ul> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• Offer is valid for up to 18 months after installation of product</li> <li>• Non-transferable to other products and services and non-refundable</li> </ul>	1
1.30	<p><b>INCL ED: TB201 TB Platform Physicists</b></p> <p>TrueBeam Physics and Administration: TrueBeam Physics and Administration course is designed for personnel (primarily Medical Physicists) responsible for the acceptance, commissioning, and QA program development of the TrueBeam in the clinical environment. It is recommended that the student attend the TrueBeam Physics and Administration course shortly before the installation of the TrueBeam. The course provides instruction of the basic delivery components, basic imaging components, and a general overview of the motion management system components. Machine commissioning, calibration, and QA of the machine are included. The course subject matter is presented from a clinical use perspective. Primary emphasis is on the overall commissioning, calibration, and QA of the TrueBeam and its components. Extensive hands-on laboratory exercises are included.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Includes support for TrueBeam/Edge/VitalBeam</li> <li>• Includes Tuition and Materials for ONE person</li> <li>• Length: 4.5 days</li> <li>• Offer is valid for 18 months after installation of product</li> </ul> <p><b>Customer Responsibilities:</b></p> <ul style="list-style-type: none"> <li>• Customer is responsible for all travel expenses (airfare, hotel, rental car, meals and travel incidentals)</li> </ul> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• Training is non-refundable and non-transferable</li> </ul>	1
1.31	<p><b>INCL ED: TB101 TB Platform Operations</b></p>	1

Item	Description	Qty
	<p>TrueBeam Operations is a course designed for personnel (primarily Radiation Therapists) responsible for the routine operation and clinical use of the TrueBeam. It is recommended that students attend the TrueBeam Operations course shortly before clinical use and the commencement of patient treatments. The course provides instruction of the basic delivery components, basic imaging components, and a general overview of the motion management system components. The course subject matter is presented from a clinical use perspective. Primary emphasis is on the overall understanding of the TrueBeam function and operation to include imaging and respiratory gating. Extensive hands-on laboratory exercises are included. The attendees of this class will be provided tools to allow them to instruct other clinical staff upon their return.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Includes support for TrueBeam/Edge/VitalBeam</li> <li>• Includes Tuition and Materials for ONE person</li> <li>• Length: 4 days</li> <li>• Offer is valid for 18 months after installation of product</li> </ul> <p><b>Customer Responsibilities:</b></p> <ul style="list-style-type: none"> <li>• Customer is responsible for all travel expenses (airfare, hotel, rental car, meals and travel incidentals)</li> </ul> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• Training is non-refundable and non-transferable</li> </ul>	
1.32	<p><b>INCL ED: CL222 Respiratory Gating</b></p> <p>The Respiratory Gating course provides training for physicists and therapists, to obtain knowledge of principles and practices of respiratory gating in radiation oncology for clinical implementation.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Includes support for TrueBeam Platform</li> <li>• Includes Tuition and Materials for ONE person</li> <li>• Length: 2 days</li> <li>• Offer is valid for 18 months after installation of product</li> </ul> <p><b>Customer Responsibilities:</b></p> <ul style="list-style-type: none"> <li>• Customer is responsible for all travel expenses (airfare, hotel, rental car, meals and travel incidentals)</li> </ul> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• Training is non-refundable and non-transferable</li> </ul>	1
Section Total :		Offer Price US\$ 2,231,380.00
<b>Section 2</b>	<b>Original Configuration - Scalable VitalBeam - Vault 2</b>	
2.1	<b>New Universal Baseframe 52" Fixed Floor</b>	1
2.2	<p><b>15/16 MV (BJR 11/17)</b></p> <p>40 cm x 40 cm maximum field size, dose rate range 0-600 MU/Min.</p>	1
2.3	<p><b>10/10 MV (BJR 11/17)</b></p> <p>40 cm x 40 cm maximum field size, dose rate range 0-600 MU/Min.</p>	1
2.4	<p><b>6/6 MV (BJR 11/17)</b></p> <p>40 cm x 40 cm maximum field size, dose rate range 0-600 MU/Min.</p>	1
2.5	<b>16 MeV, 0-1000 MU/Min</b>	1

Item	Description	Qty
2.6	25 cm x 25 cm maximum field size, dose rate range 0-1000 MU/Min. <b>12 MeV, 0-1000 MU/Min</b>	1
2.7	25 cm x 25 cm maximum field size, dose rate range 0-1000 MU/Min. <b>9 MeV, 0-1000 MU/Min</b>	1
2.8	25 cm x 25 cm maximum field size, dose rate range 0-1000 MU/Min. <b>6 MeV, 0-1000 MU/Min</b>	1
2.9	25 cm x 25 cm maximum field size, dose rate range 0-1000 MU/Min. <b>IGRT Couch Top</b>  Image Guided RadioTherapy (IGRT) carbon fiber treatment couch top, free of metal or other radiation-opaque materials.  <b>Features:</b> <ul style="list-style-type: none"> <li>Indexed Immobilization® for compatible accessories</li> <li>Couch top interface for mounting patient immobilization and quality assurance devices at the head of the couch</li> <li>Lock bar for indexed positioning of equipment or immobilization devices on the couch top</li> <li>Handrail for couch positioning, with hooks for temporary pendant placement during patient set up</li> </ul>	1
2.10	<b>PerfectPitch 6DoF Couch</b>  The PerfectPitch™ 6-Degrees of Freedom couch system <b>Features:</b> <ul style="list-style-type: none"> <li>Image-based 6DoF patient positioning</li> </ul> <b>Prerequisites:</b> <ul style="list-style-type: none"> <li>TrueBeam® v2.5 MR2 or higher</li> <li>ARIA® oncology information system v11.1 MR1 (11.0.55) and ARIA radiation therapy management v11 MR3 (11.0.47) or higher or compatible third-party oncology information system</li> </ul> <b>Customer Responsibilities:</b> <ul style="list-style-type: none"> <li>Verify compatibility of third-party oncology information system</li> </ul>	1
2.11	<b>6X High Intensity Mode</b>  40 cm x 40 cm maximum field size, dose rate range 400-1400 MU/Min in 200 MU/min steps.	1
2.12	<b>Low-X Imaging Energy</b>  Low-X imaging energy configuration, providing high soft tissue contrast when imaging in-line with the treatment beam.	1
2.13	<b>Varian Vol Mod Arc Treatment Delivery</b>  A volumetric modulated arc treatment delivery technique, providing the capability to simultaneously modulate aperture shape, dose rate, gantry angle, and speed during beam delivery. When used with Respiratory Motion Management System, provides the capability for Gated VVMAT.  <b>Features:</b> <ul style="list-style-type: none"> <li>Simultaneous modulation of MLC aperture shape, beam dose rate, and gantry angle and rotation speed during beam delivery</li> <li>Supports dynamic jaw tracking and collimator rotation with supporting treatment planning system</li> </ul> <b>Prerequisites:</b> <ul style="list-style-type: none"> <li>120 Leaf MLC</li> </ul>	1
2.14	<b>Filtrine Water Chiller</b>	1

Item	Description	Qty
	A closed loop water cooling system, providing clean water at a constant flow, pressure, and temperature for cooling a high energy medical linear accelerator. Ideal for sites where a dependable source of clean water for cooling is not available.	
2.15	<p><b>Additional MotionView CCTV Camera System</b></p> <p>Additional set of two Motion View CCTV cameras and displays. Camera placement is at customer discretion.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Two pan, tilt, zoom CCTV cameras</li> <li>• Two desktopLCD displays with built in camera controls</li> <li>• Adjustable viewing angle for patient privacy</li> <li>• Push button pan, tilt, zoom, and home position control</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• Motion View camera system, provided with linac system.</li> </ul>	1
2.16	<p><b>Main Circuit Breaker Panel</b></p> <p>Main circuit breaker panel, interfacing to a single power input feed from the facility Mains. Circuit breakers provide independent over-current protection for equipment at the console and in the treatment room. UL and IEC/CE certified.</p>	1
2.17	<p><b>Power Cond., 3phase 50KVA</b></p> <p>Transtector 50KVA, 3-phase power conditioning unit, providing transient protection, line power regulation, and Input and Output circuit breakers for over-current protection. UL and IEC/CE certified.</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• Supports voltage configurations from 208 to 600 VAC and in 50 or 60 Hz for US and ROW applications.</li> </ul>	1
2.18	<p><b>CatPhan Phantom</b></p> <p>Phantom for measuring CBCT image contrast, spatial resolution, and uniformity.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Modules for measuring CBCT image contrast, spatial resolution, and uniformity</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• kV Imaging system with CBCT</li> </ul>	1
2.19	<p><b>Supp. Phantom Kit</b></p> <p>Supplemental imaging phantom kit for measuring resolution and contrast of kV and MV imaging systems.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Leeds TOR 18FG phantom for measuring spatial resolution and contrast of kV imaging system</li> <li>• MV contrast phantom for measuring contrast performance of MV imaging system</li> <li>• Geometric phantom, mounted on IGRT couch top-compatible lock bar. Can be used for quality assurance of image guidance workflow.</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• MV imaging system</li> </ul>	1

<b>Item</b>	<b>Description</b>	<b>Qty</b>
2.20	<b>NLS: English</b>	1
2.21	<p><b>STD TRNG: TB Platform On-Site</b></p> <p>The on-site review of the TrueBeam/Edge/VitalBeam components includes imaging and use cases for support of patient treatment for therapists. This support is to ensure that personnel who attended the classroom training are able to operate the TrueBeam Platform machine in a safe and effective manner in the clinical environment.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Includes support for TrueBeam/Edge/VitalBeam</li> <li>• Offer is valid for 18 months after installation of product</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• TrueBeam Platform classroom trainings</li> </ul> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• Training is non-refundable and non-transferable</li> </ul>	1
2.22	<p><b>INCL ED: TB201 TB Platform Physicists</b></p> <p>TrueBeam Physics and Administration: TrueBeam Physics and Administration course is designed for personnel (primarily Medical Physicists) responsible for the acceptance, commissioning, and QA program development of the TrueBeam in the clinical environment. It is recommended that the student attend the TrueBeam Physics and Administration course shortly before the installation of the TrueBeam. The course provides instruction of the basic delivery components, basic imaging components, and a general overview of the motion management system components. Machine commissioning, calibration, and QA of the machine are included. The course subject matter is presented from a clinical use perspective. Primary emphasis is on the overall commissioning, calibration, and QA of the TrueBeam and its components. Extensive hands-on laboratory exercises are included.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Includes support for TrueBeam/Edge/VitalBeam</li> <li>• Includes Tuition and Materials for ONE person</li> <li>• Length: 4.5 days</li> <li>• Offer is valid for 18 months after installation of product</li> </ul> <p><b>Customer Responsibilities:</b></p> <ul style="list-style-type: none"> <li>• Customer is responsible for all travel expenses (airfare, hotel, rental car, meals and travel incidentals)</li> </ul> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• Training is non-refundable and non-transferable</li> </ul>	1
2.23	<p><b>INCL ED: TB101 TB Platform Operations</b></p> <p>TrueBeam Operations is a course designed for personnel (primarily Radiation Therapists) responsible for the routine operation and clinical use of the TrueBeam. It is recommended that students attend the TrueBeam Operations course shortly before clinical use and the commencement of patient treatments. The course provides instruction of the basic delivery components, basic imaging components, and a general overview of the motion management system components. The course subject matter is presented from a clinical use perspective. Primary emphasis is on the overall understanding of the TrueBeam function and operation to include imaging and respiratory gating. Extensive hands-on laboratory exercises are included. The attendees of this class will be provided tools to allow them to instruct other clinical staff upon their return.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Includes support for TrueBeam/Edge/VitalBeam</li> <li>• Includes Tuition and Materials for ONE person</li> <li>• Length: 4 days</li> <li>• Offer is valid for 18 months after installation of product</li> </ul> <p><b>Customer Responsibilities:</b></p>	1

Item	Description	Qty
	<ul style="list-style-type: none"> <li>Customer is responsible for all travel expenses (airfare, hotel, rental car, meals and travel incidentals)</li> </ul> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>Training is non-refundable and non-transferable</li> </ul>	
2.24	<p><b>INCL ED: CL222 Respiratory Gating</b></p> <p>The Respiratory Gating course provides training for physicists and therapists, to obtain knowledge of principles and practices of respiratory gating in radiation oncology for clinical implementation.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>Includes support for TrueBeam Platform</li> <li>Includes Tuition and Materials for ONE person</li> <li>Length: 2 days</li> <li>Offer is valid for 18 months after installation of product</li> </ul> <p><b>Customer Responsibilities:</b></p> <ul style="list-style-type: none"> <li>Customer is responsible for all travel expenses (airfare, hotel, rental car, meals and travel incidentals)</li> </ul> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>Training is non-refundable and non-transferable</li> </ul>	1
2.25	<p><b>Horizontal LAP Apollo Green Laser Kit</b></p> <p>LAP Apollo Green Room Laser Kit for patient alignment with Horizontal Remote-Controlled Sagittal Line Laser.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>1 Apollo Green Remote-controlled Ceiling Crosshair Laser</li> <li>2 Apollo Green Remote-controlled Lateral Crosshair Lasers</li> <li>1 Apollo Green Horizontal Remote-Controlled Sagittal Line Laser</li> </ul>	1
2.26	<p><b>VitalBeam Base System 120 MLC</b></p> <p>Treatment delivery system supports optional Electron treatment delivery. Includes 120 leaf MLC with dual independent jaws, enhanced dynamic wedge, 6 MV X-ray treatment energy, 43 cm x 43 cm MV imager for radiographic, cine, and integrated imaging, Motion View CCTV camera system, treatment console with integrated audio and video systems, back pointer lasers, front pointer set, upper port film graticule to support basic quality assurance, and drum phantom for Machine Performance Check (MPC).</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>Basic X-Ray treatment delivery technique package, including Static Photon, Photon Arc, and Dynamic Conformal Arc treatment delivery techniques</li> <li>Intensity Modulated Radiotherapy (IMRT) treatment technique, including large field IMRT</li> <li>Total Body Treatment technique package, including X-Ray Total Body Irradiation (TBI), Electron Total Body Irradiation (TBE), High Dose Total Body Electron (HDTSE) treatment techniques</li> <li>2D MV Radiographic and Cine Image Acquisition, 2D/2D Radiographic Image Review and match, Cine image review</li> <li>Relative Portal Dosimetry Image and Integrated Image Acquisition</li> <li>Matching of 2D radiographs to 3D reference images</li> <li>Online addition of kV and MV imaging protocols to treatment fields, with automated generation of reference images</li> <li>Online Physician Approval of Images at Treatment Console (compatible with ARIA® only)</li> <li>Automated Machine Performance Check Testing, Online Machine Performance Check Review</li> <li>Machine Performance Check Offline Review</li> <li>Image only sessions</li> <li>Unplanned Treatment Mode up to 5 fractions</li> <li>Fraction number displayed on in-room monitor</li> <li>Match environment layout for 2D/2D and 2D/3D layouts default to the 2-panel</li> <li>Custom DRR templates that are created in Eclipse will be available on the TrueBeam Platform</li> <li>Online access to a marketing kit that contains a broad range of advertising, educational, promotional, and public relations materials targeted to referring physicians, patients, and the media</li> <li>Electronic Dynamic Wedges (EDW)</li> <li>Large field IMRT</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>ARIA oncology information system for radiation oncology v15.1 or higher, or compatible third-party oncology information system</li> <li>Eclipse treatment planning system v15.1 or higher, or compatible third-party treatment planning system</li> <li>If third-party OIS:</li> </ul>	1



Item	Description	Qty
	<ul style="list-style-type: none"> <li>• Authentication Server for third-party OIS (Hardware and Software) or</li> <li>• Authentication Server for third-party OIS (Software only)</li> </ul> <p><b>Customer Responsibilities:</b></p> <ul style="list-style-type: none"> <li>• Verify compatibility with third-party oncology information systems if applicable</li> <li>• Verify compatibility with third-party treatment planning systems if applicable</li> <li>• VitalBeam supports IEC 60601 or IEC 61217 scales only</li> </ul> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• Multiple patient name in Japan market is applicable for Kanji, Kana and Romaji characters to identify the patient.</li> </ul>	
2.27	<b>VitalBeam v3.0</b>	1
2.28	<p><b>kV Imaging System</b></p> <p>kV Imaging system, providing 2D radiographic and fluoroscopic and 3D CBCT imaging capability.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• kV CBCT image acquisition, review, and match to 3D reference image</li> <li>• Radiographic image acquisition, with 2D/2D and 2D/3D image matching to reference image</li> <li>• Fluoroscopic image acquisition, with structure overlay on fluoroscopic images.</li> <li>• kV CBCT image acquisition with a long field of view, provided by merging multiple indexed CBCT images online.</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• ARIA oncology information system for radiation oncology v15.1 or higher, or compatible third-party oncology information system</li> <li>• TrueBeam Platform v3.0 or higher</li> </ul> <p><b>Customer Responsibilities:</b></p> <ul style="list-style-type: none"> <li>• Verify compatibility with third-party oncology information systems if applicable</li> </ul>	1
2.29	<p><b>Advanced Resp Motion Management System</b></p> <p>Advanced Respiratory Motion Management System is a stereoscopic optical system for managing patient respiration motion during treatment delivery and imaging.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Stereoscopic optical imager, including marker block for tracking patient respiration motion</li> <li>• Respiratory gated treatment delivery</li> <li>• Respiratory gated MV image acquisition and online review, respiration synchronized cine image acquisition and online review</li> <li>• Respiratory gated kV image acquisition and online review, respiration synchronized fluoroscopic image acquisition and online review</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• TrueBeam®, VitalBeam, or Edge v2.7 and higher</li> <li>• kV Imaging System</li> </ul>	1
2.30	<p><b>Authentication Svr, 3rd Party OIS HW/SW</b></p> <p>Computer server hardware to support a single installation of the Varian System Database and shared framework Varian Service Portal (VSP) software.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• 1 Rack Server to support up to 10 TrueBeam Platform machines and 25 users.</li> <li>• Windows Operating System and client access licenses</li> <li>• Microsoft SQL server software and licenses</li> <li>• VSP software at v15 or higher</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• TrueBeam Platform v3.0 or higher</li> </ul> <p><b>Customer Responsibilities:</b></p> <ul style="list-style-type: none"> <li>• Space, cooling, power, and any external network devices/ports to connect the system to the customer's network.</li> <li>• Perform any required maintenance including contacting server provider.</li> </ul> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• Customers may purchase an extended warranty directly from server provider.</li> <li>• Only Windows critical updates allowed. Please contact your Varian representative for the approved hotfixes.</li> <li>• For a detailed description of the hardware and software provided with this server, see the Varian Provided Hardware specifications (<a href="https://www.varian.com/hardware-specs">https://www.varian.com/hardware-specs</a>).</li> </ul>	1

Offer Price

Section Total :

US\$ 1,784,986.00

Item	Description	Qty
<b>Section 3 Original Configuration - C-Series Upgrade H295112</b>		
3.1	<p><b>OBI Software Upgrade</b></p> <p>On-Board Imager® kV Imaging system (OBI) Software version upgrade to v1.6.20 or higher</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• OBI software v1.6.20</li> <li>• Windows Embedded 7 (WES7) compatible</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• HE Clinac® v9.5 or v9.1 where v9.5 is not cleared</li> <li>• 4D Integrated Treatment Console (4DITC™) v13.0.400 or higher</li> <li>• ARIA® RO v15.1 or higher, or compatible third-party oncology information systems</li> <li>• 4DITC or OBI workstation computer (IGMA 8110D or 8113B)</li> <li>• If Millennium™ or HD 120™ Multileaf Collimator (MLC), MLC v8.5 or v8.1 where v8.5 is not cleared</li> </ul> <p><b>Customer Responsibilities:</b></p> <ul style="list-style-type: none"> <li>• Verify compatibility with third-party oncology information systems if applicable</li> </ul>	1
3.2	<p><b>4DITC Software Upg for C-Series v9.5</b></p> <p>4D Integrated Treatment Console (4DITC) software v13 MR4 (13.0.400) for C-Series console v9.5 only</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Supports 4-slot accessories (Custom Coding) for complex treatment techniques</li> <li>• Photos, activity and patient note display on Treatment queue</li> <li>• Enhanced cybersecurity features that include: <ul style="list-style-type: none"> <li>• Updates of the Microsoft Knowledge Base (KB) Security Patches with June 9, 2020 cut off.</li> <li>• AppLocker application (also known as "whitelisting") which only allows applications validated by Varian to run on the workstation.</li> <li>• USB hardening disables the access to USB mass storage on the 4DITC workstation.</li> </ul> </li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• 4DITC v13 MR3 (13.0.107) running on Windows 7</li> <li>• 4DITC Treatment Workstation (IGMA 8110D workstation computer)</li> <li>• Clinac console SW version <ul style="list-style-type: none"> <li>• HE Clinac SW v 9.5 OR</li> <li>• Unique Clinac SW v9.5</li> </ul> </li> <li>• ARIA Oncology Information System (ARIA OIS) v15.1 U2 or higher</li> <li>• Mission Critical Application Protection (MICAP)</li> <li>• If Varian Verification System (VVS) is installed, VVS (Patient and/or Cones Verification) v1.1 or higher</li> <li>• If Millennium or HD 120 MLC installed, MLC SW v8.5 MR1</li> <li>• If On-Board Imager (OBI) is installed, Combo workstation with OBI SW v1.6 MR11 (1.6.20) or higher</li> <li>• If MV imager is installed, PortalVision® Advanced Imaging (PVAI) v1.6.1MR11 (1.6.20) or higher</li> </ul> <p><b>Customer Responsibilities:</b></p> <ul style="list-style-type: none"> <li>• No third-party software may be installed on the 4DITC workstation</li> <li>• For patient safety and security reasons, the AppLocker application only allows validated/tested and Varian approved applications to run as identified in the product intended use. For additional details, please see the Software Guidelines in Treatment Delivery Instructions for Use.</li> </ul> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• 4DITC v13 MR4 is not compatible with Elekta MOSAIQ</li> <li>• Upgrade does NOT include a Monitor</li> </ul>	1
3.3	<p><b>4DITC SW UPG</b></p> <p>Windows Embedded 7 (WES7) version of 4D Integrated Treatment Console (4DITC™) software</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Supports 4-slot accessories for complex treatment techniques</li> <li>• Photos, activity, and patient note display on Treatment queue</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• One of the below: <ul style="list-style-type: none"> <li>• HE Clinac® v6.3 and v9.5 (9.1 where v9.5 is not cleared)</li> <li>• UNIQUE® v9.5 (9.1 where v9.5 is not cleared)</li> <li>• LE Clinac v6.3</li> </ul> </li> <li>• ARIA® RO v15.1 or higher, or compatible third-party oncology information systems</li> <li>• 4DITC or On-Board Imager® (OBI) workstation computer (IGMA 8110D, or 8113B)</li> <li>• Mission Critical Application Protection (MICAP) firewall SRX300 or higher</li> <li>• If using conical collimator ("cones") and/or patient accessories verification, then the latest version of Varian Verification System (VVS)</li> </ul>	1

Item	Description	Qty
	<ul style="list-style-type: none"> <li>• If Millennium™ or HD 120™ Multileaf Collimator (MLC), MLC v8.5, or v8.1 where v8.5 is not cleared</li> <li>• If OBI, OBI v1.6.20 or higher</li> <li>• If PortalVision™ without OBI:               <ul style="list-style-type: none"> <li>• PortalVision aS500-II or aS1000 with Exact® arm (E-Arm), v1.6.20 or higher</li> <li>• PortalVision Advanced Imaging (PVAI)</li> </ul> </li> </ul> <p><b>Customer Responsibilities:</b></p> <ul style="list-style-type: none"> <li>• Verify compatibility with third-party oncology information systems if applicable</li> </ul> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• This product supports Custom Coding</li> </ul>	
3.4	<p><b>4DITC+OBI Combo WS</b></p> <p>This upgrade delivers a new 8113B workstation computer that contains 4D Integrated Treatment Console (4DITC™) and On-board Imager® (OBI) workstation computer components in a single chassis.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Windows Embedded Standard 7 (WES7) Operating System with Solid State Drive (SSD)</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• HE Clinac® v6.3 and v9.5 or v9.1 where v9.5 is not cleared</li> <li>• 4DITC v13.0.400 or higher</li> <li>• ARIA® RO v15.1 or higher, or compatible third-party oncology information systems</li> <li>• Mission Critical Application Protection (MICAP) firewall SRX300 or higher</li> <li>• If using conical collimator ("cones") and/or patient accessories verification, then the latest version of Varian Verification System (VVS)</li> <li>• Millennium™ or HD 120™ Multileaf Collimator (MLC), MLC v8.5, or v8.1 where v8.5 is not cleared</li> <li>• OBI v1.6.20 or higher</li> <li>• If PortalVision™ without OBI:               <ul style="list-style-type: none"> <li>• PortalVision aS500-II or aS1000 with Exact® arm (E-Arm), v1.6.20 or higher</li> <li>• PortalVision Advanced Imaging (PVAI)</li> </ul> </li> </ul> <p><b>Customer Responsibilities:</b></p> <ul style="list-style-type: none"> <li>• Verify compatibility with third-party oncology information systems if applicable</li> </ul>	1
3.5	<p><b>HE Clinac Console UPG from v9.1 to v9.5</b></p> <p>This upgrade includes the High Energy Clinac® console software upgrade from v9.1 to v9.5 and a consolidated Clinac console and Multi leaf collimator (MLC) Controller (CCMC)</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• CCMC combines the Clinac console computer and the MLC controller</li> <li>• Clinac console software v9.5</li> <li>• MLC software v8.5</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• High Energy Clinac console software v9.1</li> <li>• 4D Integrated Treatment Console (4DITC™) v13 MR4 (13.0.400) for sites with ARIA® RO v15 or higher</li> <li>• 4DITC v13 MR3 (13.0.107) for sites with ARIA RO v13.7</li> <li>• Millennium™ MLC or HD 120™ MLC</li> <li>• If On-Board Imager® kV Imaging system (OBI) is installed, OBI software v1.6.20 or higher</li> <li>• If PortalVision™ is installed, PortalVision Advanced Imaging (PVAI) v1.6.20</li> </ul> <p><b>Customer Responsibilities:</b></p> <ul style="list-style-type: none"> <li>• Verify compatibility with third-party oncology information systems if applicable</li> </ul>	1
3.6	<p><b>MICAP Firewall HW</b></p> <p>Mission Critical Application Protection (MICAP) firewall hardware for 4D Integrated Treatment Console (4DITC™), Real-time Position Management (RPM™), and Acuity.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Firewall hardware Juniper SRX300 or higher</li> <li>• Enhanced protection between internal and external networks connected to Varian products</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• One of the following:               <ul style="list-style-type: none"> <li>• 4DITC v13.0.400 or higher</li> <li>• RPM v1.7 or higher</li> <li>• Acuity Client v13.6 or higher</li> </ul> </li> </ul>	1

Offer Price

Item	Description	Qty
Section Total :		US\$ 0.00
Section 4	Original Configuration - C-Series Upgrade H293406	
4.1	<p><b>Upg. VVS v1.2 Conical Collimator</b></p> <p>Upgrade to Varian Verification System (VVS) for conical collimator provides the capability to verify conical collimators through the use of a barcode scanning system.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• One barcode scanner</li> <li>• Conical collimator labels</li> <li>• Conical collimator verification license</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• ARIA® Oncology Information System for Radiation Oncology v15 or higher</li> <li>• 4DITC v13 MR3 or higher</li> </ul> <p><b>Customer Responsibilities:</b></p> <ul style="list-style-type: none"> <li>• Verify compatibility with third-party oncology information systems if applicable</li> </ul>	1
4.2	<p><b>4DITC Software Upg for C-Series v9.5</b></p> <p>4D Integrated Treatment Console (4DITC) software v13 MR4 (13.0.400) for C-Series console v9.5 only</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Supports 4-slot accessories (Custom Coding) for complex treatment techniques</li> <li>• Photos, activity and patient note display on Treatment queue</li> <li>• Enhanced cybersecurity features that include: <ul style="list-style-type: none"> <li>• Updates of the Microsoft Knowledge Base (KB) Security Patches with June 9, 2020 cut off.</li> <li>• AppLocker application (also known as "whitelisting") which only allows applications validated by Varian to run on the workstation.</li> <li>• USB hardening disables the access to USB mass storage on the 4DITC workstation.</li> </ul> </li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• 4DITC v13 MR3 (13.0.107) running on Windows 7</li> <li>• 4DITC Treatment Workstation (IGMA 8110D workstation computer)</li> <li>• Clinac console SW version <ul style="list-style-type: none"> <li>• HE Clinac SW v 9.5 OR</li> <li>• Unique Clinac SW v9.5</li> </ul> </li> <li>• ARIA Oncology Information System (ARIA OIS) v15.1 U2 or higher</li> <li>• Mission Critical Application Protection (MICAP)</li> <li>• If Varian Verification System (VVS) is installed, VVS (Patient and/or Cones Verification) v1.1 or higher</li> <li>• If Millennium or HD 120 MLC installed, MLC SW v8.5 MR1</li> <li>• If On-Board Imager (OBI) is installed, Combo workstation with OBI SW v1.6 MR11 (1.6.20) or higher</li> <li>• If MV imager is installed, PortalVision® Advanced Imaging (PVAI) v1.6.1MR11 (1.6.20) or higher</li> </ul> <p><b>Customer Responsibilities:</b></p> <ul style="list-style-type: none"> <li>• No third-party software may be installed on the 4DITC workstation</li> <li>• For patient safety and security reasons, the AppLocker application only allows validated/tested and Varian approved applications to run as identified in the product intended use. For additional details, please see the Software Guidelines in Treatment Delivery Instructions for Use.</li> </ul> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• 4DITC v13 MR4 is not compatible with Elekta MOSAIQ</li> <li>• Upgrade does NOT include a Monitor</li> </ul>	1
4.3	<p><b>HE Clinac Console UPG from v9.1 to v9.5</b></p> <p>This upgrade includes the High Energy Clinac® console software upgrade from v9.1 to v9.5 and a consolidated Clinac console and Multi leaf collimator (MLC) Controller (CCMC)</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• CCMC combines the Clinac console computer and the MLC controller</li> <li>• Clinac console software v9.5</li> <li>• MLC software v8.5</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• High Energy Clinac console software v9.1</li> <li>• 4D Integrated Treatment Console (4DITC™) v13 MR4 (13.0.400) for sites with ARIA® RO v15 or higher</li> <li>• 4DITC v13 MR3 (13.0.107) for sites with ARIA RO v13.7</li> <li>• Millennium™ MLC or HD 120™ MLC</li> <li>• If On-Board Imager® kV Imaging system (OBI) is installed, OBI software v1.6.20 or higher</li> <li>• If PortalVision™ is installed, PortalVision Advanced Imaging (PVAI) v1.6.20</li> </ul> <p><b>Customer Responsibilities:</b></p>	1

Item	Description	Qty
4.4	<ul style="list-style-type: none"> <li>• Verify compatibility with third-party oncology information systems if applicable</li> </ul> <p><b>Config for C-Series Clinac</b></p>	1
4.5	<p><b>RPM Gating Workstation Replacement</b></p> <p>This upgrade applies to the Real-time Position Management™ (RPM) System workstation.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Windows Embedded Standard 7 (WES7) compatible workstation computer</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• Existing RPM system</li> <li>• RPM software v1.7 MR2 or higher</li> </ul> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• If RPM database is shared with other RPM systems, then the RPM software version must be at v1.7 MR1 or higher</li> </ul>	1
4.6	<p><b>RPM Gating System SW Upg from v1.6</b></p> <p>This provides a software upgrade from v1.6 to v1.8 Windows 7 compatible RPM System software version. Supports all standard breathing protocols, including free-breathing.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• RPM software version running on Windows Embedded Standard 7 (WES7) Operating System</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• RPM Gating workstation WES7 compatible (IGMA 8913, IGMA8113)</li> <li>• Mission Critical Application Protection (MICAP) firewall</li> <li>• If using the TrueBeam/RGSC marker block, then the 3D for Advanced RPM Gating is required</li> </ul> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• If RPM database is shared with other RPM systems, then the RPM software version must be at v1.7 MR1 or higher</li> </ul>	1
4.7	<p><b>OBI Software Upgrade</b></p> <p>On-Board Imager® kV Imaging system (OBI) Software version upgrade to v1.6.20 or higher</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• OBI software v1.6.20</li> <li>• Windows Embedded 7 (WES7) compatible</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• HE Clinac® v9.5 or v9.1 where v9.5 is not cleared</li> <li>• 4D Integrated Treatment Console (4DITC™) v13.0.400 or higher</li> <li>• ARIA® RO v15.1 or higher, or compatible third-party oncology information systems</li> <li>• 4DITC or OBI workstation computer (IGMA 8110D or 8113B)</li> <li>• If Millennium™ or HD 120™ Multileaf Collimator (MLC), MLC v8.5 or v8.1 where v8.5 is not cleared</li> </ul> <p><b>Customer Responsibilities:</b></p> <ul style="list-style-type: none"> <li>• Verify compatibility with third-party oncology information systems if applicable</li> </ul>	1
4.8	<p><b>4DITC SW UPG</b></p> <p>Windows Embedded 7 (WES7) version of 4D Integrated Treatment Console (4DITC™) software</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Supports 4-slot accessories for complex treatment techniques</li> <li>• Photos, activity, and patient note display on Treatment queue</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>• One of the below: <ul style="list-style-type: none"> <li>• HE Clinac® v6.3 and v9.5 (9.1 where v9.5 is not cleared)</li> <li>• UNIQUE® v9.5 (9.1 where v9.5 is not cleared)</li> <li>• LE Clinac v6.3</li> </ul> </li> <li>• ARIA® RO v15.1 or higher, or compatible third-party oncology information systems</li> <li>• 4DITC or On-Board Imager® (OBI) workstation computer (IGMA 8110D, or 8113B)</li> <li>• Mission Critical Application Protection (MICAP) firewall SRX300 or higher</li> <li>• If using conical collimator ("cones") and/or patient accessories verification, then the latest version of Varian Verification System (VVS)</li> <li>• If Millennium™ or HD 120™ Multileaf Collimator (MLC), MLC v8.5, or v8.1 where v8.5 is not cleared</li> <li>• If OBI, OBI v1.6.20 or higher</li> <li>• If PortalVision™ without OBI: <ul style="list-style-type: none"> <li>• PortalVision aS500-II or aS1000 with Exact® arm (E-Arm), v1.6.20 or higher</li> </ul> </li> </ul>	1

Item	Description	Qty	Offer Price
	<ul style="list-style-type: none"> <li>PortalVision Advanced Imaging (PVAI)</li> </ul> <p><b>Customer Responsibilities:</b></p> <ul style="list-style-type: none"> <li>Verify compatibility with third-party oncology information systems if applicable</li> </ul> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>This product supports Custom Coding</li> </ul>		
4.9	<p><b>4DITC+OBI Combo WS</b></p> <p>This upgrade delivers a new 8113B workstation computer that contains 4D Integrated Treatment Console (4DITC™) and On-board Imager® (OBI) workstation computer components in a single chassis.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>Windows Embedded Standard 7 (WES7) Operating System with Solid State Drive (SSD)</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>HE Clinac® v6.3 and v9.5 or v9.1 where v9.5 is not cleared</li> <li>4DITC v13.0.400 or higher</li> <li>ARIA® RO v15.1 or higher, or compatible third-party oncology information systems</li> <li>Mission Critical Application Protection (MICAP) firewall SRX300 or higher</li> <li>If using conical collimator ("cones") and/or patient accessories verification, then the latest version of Varian Verification System (VVS)</li> <li>Millennium™ or HD 120™ Multileaf Collimator (MLC), MLC v8.5, or v8.1 where v8.5 is not cleared</li> <li>OBI v1.6.20 or higher</li> <li>If PortalVision™ without OBI: <ul style="list-style-type: none"> <li>PortalVision aS500-II or aS1000 with Exact® arm (E-Arm), v1.6.20 or higher</li> <li>PortalVision Advanced Imaging (PVAI)</li> </ul> </li> </ul> <p><b>Customer Responsibilities:</b></p> <ul style="list-style-type: none"> <li>Verify compatibility with third-party oncology information systems if applicable</li> </ul>	1	
4.10	<p><b>MICAP Firewall HW</b></p> <p>Mission Critical Application Protection (MICAP) firewall hardware for 4D Integrated Treatment Console (4DITC™), Real-time Position Management (RPM™), and Acuity.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>Firewall hardware Juniper SRX300 or higher</li> <li>Enhanced protection between internal and external networks connected to Varian products</li> </ul> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>One of the following: <ul style="list-style-type: none"> <li>4DITC v13.0.400 or higher</li> <li>RPM v1.7 or higher</li> <li>Acuity Client v13.6 or higher</li> </ul> </li> </ul>	1	
		Section Total :	US\$ 0.00
<b>Section 5 Original Configuration - IX 5112 Trade In Credit for TrueBeam Project</b>			
5.1	<p><b>Trade-In Discount</b></p> <p>IX Trade In for TrueBeam Project</p>	1	
		Section Total :	US -\$175,000.00
<b>Section 6 Original Configuration - IX 4306 Trade In Credit for VitalBeam Project</b>			
6.1	<p><b>Trade-In Discount</b></p> <p>IX Trade In for TrueBeam Project</p>	1	
		Section Total :	US -\$175,000.00

Item	Description	Qty	Offer Price
<b>Section 7 Original Configuration - Removal of Existing (2)</b>			
7.1	<b>Remove/Dispose Existing Equipment</b> Removal of IX - Vault 1	1	
7.2	<b>Remove/Dispose Existing Equipment</b> Removal of IX - Vault 2	1	
Section Total :			US\$ 50,000.00
<b>Section 8 Original Configuration - RGSC</b>			
8.1	<b>RGSC, wall/ceiling mount</b>  Respiratory Gating for Scanners (RGSC) is for respiration synchronized image acquisition on CT and PET-CT scanners. The RGSC system correlates tumor motion with the patient's breathing cycle.  <b>Features:</b> <ul style="list-style-type: none"> <li>Monitors patient position during image acquisition in 3 motion axes</li> <li>Provides session recording</li> <li>The predictive filter monitors and predicts the patient's breathing</li> <li>Coaching of patient during breathing using audio and optional visual support</li> <li>Includes five (5) marker blocks</li> <li>Wall or ceiling mount camera configuration</li> </ul> <b>Prerequisites:</b> <ul style="list-style-type: none"> <li>ARIA® v13 or higher, only if storing RGSC data in the ARIA database Validated CT/PET-scanners</li> <li>RGSC option for validated CT/PET scanner</li> </ul> <b>Customer Responsibilities:</b> None	1	
8.2	<b>Connect with GE</b>  Respiratory Gating for Scanners (RGSC) is for respiration synchronized image acquisition on CT and PET-CT scanners. The RGSC system correlates tumor motion with the patient's breathing cycle.  <b>Features:</b> <ul style="list-style-type: none"> <li>Monitors patient position during image acquisition in 3 motion axes</li> <li>Provides session recording</li> <li>The predictive filter monitors and predicts the patient's breathing pattern</li> <li>Coaching of patient during breathing using audio and optional visual support</li> <li>Includes five (5) marker blocks</li> <li>Couch mount camera configuration with quick-lock mechanism, or wall/ceiling mount options</li> </ul> <b>Prerequisites:</b> <ul style="list-style-type: none"> <li>ARIA® v13 or higher, only if storing RGSC data in the ARIA database</li> <li>Validated GE CT/PET-scanners</li> </ul>	1	
8.3	<b>STD TRNG: RGSC</b>  This onsite training is included with the purchase of Respiratory Gating for Scanners (RGSC). This training covers RGSC Overview, System Components, User Rights, Start up and Shut down, Reference Session Procedure, Visual Coaching Device (if applicable), Quality Assurance, and References.  Training plan details will be provided by the training management team as part of your product implementation process.  <b>Features:</b> <ul style="list-style-type: none"> <li>On-site training for using the RGSC system on a CT Scanner</li> <li>Length: 1 day</li> <li>Offer is valid for 18 months after installation of product</li> </ul>	1	

Item	Description	Qty	Offer Price
	<p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>RGSC system</li> </ul> <p><b>Customer Responsibilities:</b></p> <ul style="list-style-type: none"> <li>Customer must ensure all trainees are available for the entire duration of scheduled training.</li> </ul> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>Training is non-refundable and non-transferable</li> </ul>		
Section Total :			US\$ 67,568.00

**Section 9 Original Configuration - Additional TrueBeam 101 Education (2)**

9.1 **Advantage Contract Credits**

Advantage Credits can be utilized for Varian's Professional Services, such as on-site applications training, education, consulting (in applicable regions), and third-party services including clinical schools that are purchased through Varian. For further details, please reference the attached Terms and Conditions.

**Notes:**

- Offer is valid for 24 months after purchase

9.2 **ED: TB101 TrueBeam Platform Operations** 32.0

(Qty : 2, Credit per Qty : 16.0)  
Includes Tuition and Materials for ONE Person

This course provides training for Radiation Therapists responsible for the operation of the TrueBeam, providing an overview of the TrueBeam system, hands-on training to include: system components, shutdown procedure, startup with basic morning QA procedures, startup after an emergency shutdown and power failure, basic administrative information and treatment and imaging scenarios to include: basic 2D and 2D-2D imaging, treatment with automation, LaserGuard II and Machine Protection, imaging and treatment with custom blocks, Cone-Beam CT , gated imaging and treatment with intra-fraction motion review, auto-beam hold and emergency treatment.

Designed for Radiation Therapists who will treat patients on a daily basis and will be able to teach TrueBeam others users in the department

Pre-Requisites: Clinical training in Radiation Therapy. Clinical experience if treating patients on Varian machines. Clinical experience of IGRT, OBI and Cone-Beam CT.

Application has been made for MPCEC credits

**Duration and Location:**

4.0 days

Varian Education Center

Las Vegas, Nevada, USA

Advantage Credits Eligible

Customer is responsible for all travel expenses (airfare, hotel, rental car, meals and travel incidentals), unless otherwise stated.

**Total Advantage Credits for this Section: 32.0**



Item	Description	Qty	Offer Price
		Section Total :	US\$ 27,040.00
<b>Section 10 Original Configuration - Physics</b>			
10.1	<b>CTS Custom SOW</b>	2	
	CTSI will design a custom scope of work and pricing for a service		
		Section Total :	US\$ 0.00
<b>Section 11 Extended Warranty for TrueBeam (1 Year)</b>			
11.1	<b>TrueBeam</b>	1	
	KV Imager MLC 120 MV Imager Triggered Imaging Rapid Arc/VVMAT PerfectPitch Couch		
		Section Total :	US\$ 0.00
<b>Section 12 Extended Warranty for VitalBeam Radiotherapy (1 Year)</b>			
12.1	<b>VitalBeam Radiotherapy</b>	1	
	KV Imager MLC 120 MV Imager Rapid Arc/VVMAT PerfectPitch Couch		
		Section Total :	US\$ 0.00
<b>Section 13 Amendment - TrueBeam</b>			
13.1	<b>15/16 MV (BJR 11/17)</b>	[Remove]-1	
	40 cm x 40 cm maximum field size, dose rate range 0-600 MU/Min.		
13.2	<b>10/10 MV (BJR 11/17)</b>	[Remove]-1	
	40 cm x 40 cm maximum field size, dose rate range 0-600 MU/Min.		
13.3	<b>18/23 MV (BJR 11/17)</b>	[Add]1	
	40 cm x 40 cm maximum field size, dose rate range 0-600 MU/Min.		
		Section Total :	US\$ 0.00
<b>Section 14 Amendment - VitalBeam</b>			
14.1	<b>15/16 MV (BJR 11/17)</b>	[Remove]-1	
	40 cm x 40 cm maximum field size, dose rate range 0-600 MU/Min.		

Item	Description	Qty	Offer Price
14.2	<b>10/10 MV (BJR 11/17)</b> 40 cm x 40 cm maximum field size, dose rate range 0-600 MU/Min.	[Remove]-1	
14.3	<b>18/23 MV (BJR 11/17)</b> 40 cm x 40 cm maximum field size, dose rate range 0-600 MU/Min.	[Add]1	
Section Total :			US\$ 0.00

[Summary of Advantage Contract Credits Quoted Above](#)

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Section 9

Year 1 Total	32.0
Total Credits	32.0

Sales Price Table

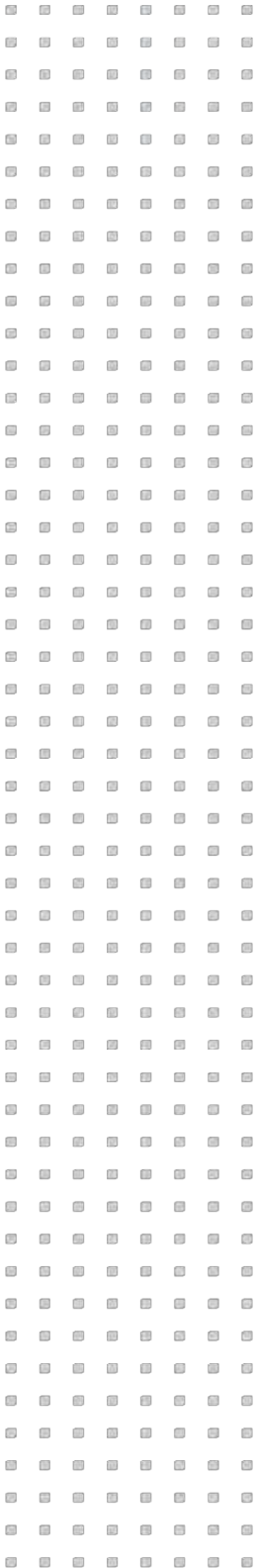
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TradeIn-Cancellations	US \$-350,000.00
Sales Total	US \$3,810,974.00
Quotation Total	US \$3,810,974.00

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March 6, 2024



Jason Willis  
St. Luke's Hospital  
232 South Woods Mill Road  
Chesterfield, MO 63017

Re: Linear Accelerator  
PARIC Estimate No. 24619

Dear Jason:

Paric Corporation proposes the following labor, materials and supervision to complete the above mentioned project per the Archimages drawings dated 02/14/24 for the lump sum amount of **Five Hundred Thirty-Three Thousand Seven Hundred Nine and 00/100 dollars (\$533,709.00)**.

We have enclosed Attachment "A" Qualifications/Clarifications for your review.

Thank you for the opportunity to submit our proposal. We look forward to working with you through the successful completion of this project. Should you have any questions or comments, please contact our office.

Sincerely,

PARIC CORPORATION

Greta Vetter  
Project Manager



# PARIC PROJECT SUMMARY

PROJECT: St. Luke's - Linear Accelerator #2

BUILDING GROSS AREA (SF): 1,500

LOCATION: 232 South Woods Mill Rd., Chesterfield, MO 63141

JOB DURATION (MO): 2

ESTIMATE NO.: 24619

ADDENDA: 0

	DESCRIPTION	TOTAL	\$ / SF
1	Final Clean	\$ 860	\$ 0.57
2	Selective Demolition	\$ 5,500	\$ 3.67
3	Concrete	\$ 600	\$ 0.40
4	X-Ray Scanning	\$ 800	\$ 0.53
5	Rough Carpentry (With Scopes)	\$ -	\$ -
6	Finish Carpentry (With Scopes)	\$ -	\$ -
7	Casework-Millwork	\$ 23,074	\$ 15.38
8	Steel (Excluded)	\$ -	\$ -
9	Roofing (Excluded)	\$ -	\$ -
10	Drywall-Framing (With Painting)	\$ -	\$ -
11	Acoustical Ceilings	\$ 3,238	\$ 2.16
12	Resilient Flooring	\$ 10,920	\$ 7.28
13	Painting	\$ 2,540	\$ 1.69
14	Plumbing (N/A)	\$ -	\$ -
15	HVAC	\$ 186,700	\$ 124.47
16	Controls (w/ HVAC)	\$ -	\$ -
17	Fire Protection	\$ 9,793	\$ 6.53
18	Electrical	\$ 183,140	\$ 122.09
19	Low Voltage (w/ Electrical)	\$ -	\$ -
20	ICRA-Temp Protection	\$ 26,314	\$ 17.54
21	General Clean Up	\$ 8,395	\$ 5.60
22		\$ -	\$ -
77		\$ -	\$ -
24	GENERAL REQUIREMENTS	\$ 29,885	\$ 19.92
25	ON-SITE SUPERVISION/CONSTRUCTION FACILITIES	\$ -	\$ -
26	PROJECT MANAGEMENT	\$ 11,645	\$ 7.76
27	PRECONSTRUCTION	\$ -	\$ -
28	PERMITS	\$ 2,670	\$ 1.78
29	SUBCONTRACTOR DEFAULT INSURANCE	\$ 5,773	\$ 3.85
30	BUILDERS RISK	\$ 273	\$ 0.18
31	RISK MANAGEMENT	\$ 3,539	\$ 2.36
32	ESCALATION	\$ -	\$ -
33	CONTINGENCY	\$ -	\$ -
34	PERFORMANCE & PAYMENT BOND	\$ -	\$ -
	<b>SUBTOTAL CONSTRUCTION COST</b>	<b>\$ 515,660</b>	<b>\$ 344</b>
	FEE	\$ 18,049	\$ 12.03
	STL CITY EARNINGS TAX	\$ -	\$ -
	<b>TOTAL PROJECT COST</b>	<b>\$ 533,709</b>	<b>\$ 356</b>



**ATTACHMENT "A"**  
**PROJECT SPECIFIC QUALIFICATIONS/CLARIFICATIONS**  
**PROJECT NAME**  
**PARIC ESTIMATE #24619**  
**March 6, 2024**

1. PARIC Corporation will provide Builders Risk Insurance (all risk insurance) for the project.
2. Cost for performance and/or payment bonds is not included in the cost of this proposal.
3. The cost for the work for the project is based on performing all work during normal working hours of 7:00 a.m. to 3:30 p.m. Monday thru Friday.
4. Paric's Project Schedule is subject to revisions necessitated by weather, trade union strikes, scope revisions by Owner or Prime Contractor, uncontrollable material or equipment deliveries, or other circumstances beyond its control.
5. No costs have been included for fees assessed by Government or Municipal Agencies for impact or escrow fees or other fees associated with the development of the property.
6. This proposal shall remain valid for thirty (30) days.
7. Cost for building permit is included. While we have made every attempt to provide a scope of work that is complete, Paric has not included any contingency costs for additional work or different material which may be required by local authorities.
8. The Owner must warrant that there are no toxic or hazardous materials on site and hold Paric harmless from any actions and liabilities for same. We exclude any handling, removal or disposal of such materials.
9. Claims that may arise out of on-going operations or completed operations related to Exterior Insulated Finish Systems (EIFS) are expressly excluded by Paric Corporation.
10. The following scope notes have been included:
  - During crane pick for chiller, all areas directly underneath chiller and crane path will need to be evacuated during pick. This work to be coordinated with the Hospital and completed on a Saturday shift.
  - All mechanical and ICRA scope outside the Linear Accelerator room is priced as shift and/or overtime work.
11. The following Items are excluded:
  - Any scope of work regarding lead shielding
  - Structural Steel
  - Roofing
  - Tax on materials
  - Utility usage costs
  - Portable restrooms
  - Moisture testing and mitigation
  - Major floor prep, patching, sanding, and leveling floors
  - Removal and/or install of hospital furniture and/or equipment, unless otherwise noted.

- Plaster work; all patch and or new work to be metal stud, drywall, and taping.
- Commissioning of new equipment.
- Fire Watch
- Replacement of sprinkler heads outside of ICRA containment
- Plumbing work
- Price Escalation
- Additional on-site storage
- Repairs of existing fire protection / plumbing / HVAC / electrical equipment, systems, and/or controls
- Extra filter changes or cleaning of air handling units and/or ductwork
- Expansion joints, seismic clips, seismic upgrades



**Miller, Don L**

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**From:** Huber, Jim <jhuber@archimages-stl.com>  
**Sent:** Thursday, March 7, 2024 9:55 AM  
**To:** Miller, Don L  
**Subject:** [EXTERNAL] St. Luke's Lin Acc.

**CAUTION! This is an EXTERNAL sender: Please do not click links or open attachments unless you are expecting this email. Never give out user IDs/passwords or any sensitive information. If you would like to report or have questions regarding an email's validity, please forward it to .SLH Suspicious E-Mail. External sender address: jhuber@archimages-stl.com**

Don, I forgot to send this to you yesterday. Fees for the Lin Acc. Would be:

Architectural           \$ 15,000  
No structural

**Jim Huber**

*Principal*

**Archimages, Inc.**

*Architecture + Interiors*

143 West Clinton Place  
St. Louis, MO 63122  
314-965-7445 office  
[jhuber@archimages-stl.com](mailto:jhuber@archimages-stl.com)

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**HEIDEMAN ASSOCIATES, INC.**

*A Zak Company*

12250 Weber Hill Road | Suite 200 | St. Louis, Missouri 63127 | p 636.492.3200 | f 636.492.3202

**REQUEST FOR CHANGE ORDER**

This authorization for Professional Services shall be considered an Addendum to the original Contract and Agreement between Heideman Assoc., Inc. (HAI) and St. Luke's Hospital dated April 24, 2023.

Client: Jason Willis  
Director of Plant Engineering  
St. Luke's Hospital  
232 South Woods Mill Road  
Chesterfield, Missouri 63017

Consultant: Heideman Associates, Inc.  
12250 Weber Hill Road, Suite 200  
St. Louis, Missouri 63127

Project Name: St. Luke's Linear Accelerator Replacement  
224 South Woods Mill Road  
Chesterfield, Missouri 63017

HAI Project Number: HAI-231010      HAI Proposal Number: HAI-STL-04097-1

Date: February 26, 2024

**Description of Basic Services Required:**

1. Additional MEPFP services for design and re-issue of 100% Construction Documents for the replacement of a Linear Accelerator on the first floor at St. Luke's Chesterfield.

A 100% Construction Documents submission was issued on 7/28/2023. Original construction documents showed MEPFP work associated with the replacement of an existing Varian linear accelerator in vault 1380- Trilogy Linear Accelerator (as labeled on the architectural background).

Per email received from the Owner on 12/21/2023, the Owner direction moved to instead replace an existing Varian linear accelerator in vault 1385 – Linear Accelerator (as labeled on the architectural background). The new location is two vaults to the east of the original.

**Breakdown of Additional Services**

Prepared 100% Construction Document drawings based on Linear Accelerator replacement revision as noted above:	\$29,500.00
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<b>Total of Change Order</b>	<b>\$29,500.00</b>
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The General Condition terms from the original contract also apply to these Additional Services. If this Agreement is acceptable to you, please sign below and return a copy to our office.

Heideman Associates, Inc.

Amir Kukic, C.E.M.  
Project Manager | Mechanical

Accepted By

Signature

Title

Date

2/29/24

**DIVIDER III**

**COMMUNITY NEED CRITERIA AND STANDARDS**

### **DIVIDER III. COMMUNITY NEED CRITERIA AND STANDARDS**

**1. Describe the financial rationale for the proposed replacement equipment.**

The primary rationale for the proposed replacement linear accelerator is not financially-driven, but rather, age and safety driven. The existing linear accelerator was installed in 2011. The usual useful life of a linear accelerator is approximately 10-12 years. As such, the Applicant secured bids from several vendors and chose to proceed with Varian.

**2. Document if the existing equipment has exceeded its useful life.**

The existing linear accelerator was installed in 2011 and is therefore at least 13 years old. It has been in use beyond its 10-12 year depreciable life.

**3. Describe the effect the replacement unit would have on quality of care.**

The new linear accelerator is more accurate, which will help to spare healthy tissue around tumors being treated by the linear accelerator.

**3. Document if the existing equipment is in constant need of repair.**

Since 2020, the existing linear accelerator has had 49 repair events totaling over 5,400 unscheduled hours of downtime.

**5. Document if the lease on the current unit has expired.**

Not applicable.

**6. Describe the technological advances provided by the new unit.**

The Varian True Beam equipment has advanced imaging capability and high precision dosage control. This allows a more accurate beam to be targeted at the tumor, thereby preserving healthy tissue and reducing total radiation dosage. These improvements increase the speed and accuracy of treatment sessions, and decreases patient time on the table by up to 75%.

**7. Describe how patient satisfaction would be improved.**

Patient satisfaction will be improved through faster, more accurate, and safer treatment sessions.

**8. Describe how patient outcomes would be improved.**

See Divider II, Item 6.

**9. Describe what impact the new unit would have on utilization.**

The new linear accelerator will increase utilization through shorter treatment sessions, as otherwise set forth in Divider II, Item 6.

**10. Describe any new capabilities that the new unit would provide.**

The new linear accelerator does not provide any new capabilities. The True Beam unit is simply the next generation linear accelerator that performs more accurate and safer treatments.

**11. By what percent will this replacement increase patient charges?**

Patient charges will not be increased as a result of this replacement project.

**DIVIDER IV**

**FINANCIAL FEASIBILITY REVIEW CRITERIA AND STANDARDS**

**DIVIDER IV. FINANCIAL FEASIBILITY REVIEW CRITERIA AND STANDARDS**

- 1. Document that sufficient financing is available by providing a letter from a financial institution or an auditor's statement indicating that sufficient funds are available.**

Not applicable. The equipment was previously approved.

- 2. Provide Service-Specific Revenues and Expenses (Form MO 580-1865) projected through three (3) full years beyond project completion.**

Not applicable. The equipment was previously approved.

- 3. Document how patient charges are derived.**

Not applicable. The equipment was previously approved.

- 4. Document responsiveness to the needs of the medically indigent.**

Not applicable. The equipment was previously approved.