

	<p>संजय गाँधी स्नातकोत्तर आयुर्विज्ञान संस्थान, रायबरेली रोड, लखनऊ।</p>
	<p><b>Sanjay Gandhi Post Graduate Institute Of Medical Sciences, Raebareli Road, Lucknow-226014</b></p>
	<p>E-mail : <a href="mailto:jdmml@sgpgi.ac.in">jdmml@sgpgi.ac.in</a>, <a href="mailto:chandola@sgpgi.ac.in">chandola@sgpgi.ac.in</a> Phone no. 0522-2668004-008,700,800,900 Fax No.0522-2668017,2668129,2668218</p>

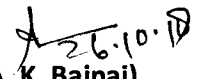
Ref: PGI/MM/SBI Loan/ Rob Surg/2018/631

Date: 26/10/2018

**Sub:** Inviting comments for Procurement of Dual Console Robotic Surgical System with Accessories on proprietary basis from M/s Intuitive Surgical Sarl., Switzerland.

The Institute is in process to purchase **Dual Console Robotic Surgical System with accessories** for the various surgical superspecialities of the Institute from **M/s Intuitive Surgical Sarl, Switzerland** (M/s Intuitive Surgical India Pvt. Ltd., Bangalore). The PAC Certifications by M/s Intuitive Surgical Sarl, Switzerland (M/s Intuitive Surgical India Pvt. Ltd., Bangalore) as well as user departments are attached.

The above documents with specifications are being upload for open information to submit online objections, comments, if any from any manufacturer regarding proprietary nature of **Dual Console Robotic Surgical System with accessories** on or before **10.11.2018 upto 17:00 hrs** giving Advt. reference No. **I/62/J.D.M.M./PGI/MM/SBI LOAN/ROB.SURG./2018-19**. The comments should be received online only in the name of the Director, SGPGIMS, Raebareli Road, Lucknow-226014 on or before **10.11.2018 upto 17:00 hrs**, failing which it will be presumed that any other vendor is having no comments, objections for above purchase on proprietary basis and case will be decided on merits.

  
 (A. K. Bajpai)  
 Joint Director (MM)

**Encl:** Related documents enclosed.

**Dainik Jagran, Lucknow**

**Date:-25.10.2018**

**Page No.-08**



**Sanjay Gandhi Post Graduate Institute of Medical Sciences**

Raebareli Road, Lucknow - 226014 (U P) India

Phones : 2668004-8, 2668700, 2668800, 2668900,

Fax.: 91-522-2668973, 2668218 (JDMM), Email: jdmm@sgpgi.ac.in

**NOTICE FOR INVITING COMMENTS/OBJECTIONS FOR  
PURCHASE OF DUAL CONSOLE ROBOTIC SURGICAL SYSTEM  
WITH ACCESSORIES ON PROPRIETARY BASIS**

The Materials Management department is in process of purchase of **Dual Console Robotic Surgical System with accessories** on proprietary basis submitted by the firm and user departments in favour of M/s Intuitive Surgical Sarl, Switzerland wherein it has been certified and confirmed that **Dual Console Robotic Surgical System with accessories** is proprietary product of M/s Intuitive Surgical Sarl, Switzerland. The above documents with specifications will be uploaded on e-tender portal i.e. [www.etender.up.nic.in](http://www.etender.up.nic.in) from **26.10.2018** for open information to submit online objections, comments, if any from any manufacturer regarding proprietary nature of **Dual Console Robotic Surgical System with accessories** within **10.11.2018**, failing which it will be presumed that any other vendor is having no comments, objections for above purchase on proprietary basis and case will be decided on merits.

The above details will also be available on our website [www.sgpgi.ac.in](http://www.sgpgi.ac.in) for reference only. The objections / comments will be accepted On-Line only through above e-tender portal within above stipulated period.

Advt. No.: V62/J.D.M.M/PGI/MM/SBI LOAN/ROB.SURG/2018-19

**DIRECTOR**

INTUITIVE  
SURGICAL

From: Intuitive Surgical India Pvt. Ltd.  
55, Yashas Building ( Opp. to RT Nagar Police station )  
Vishveshwariah Nagar, HMT Layout,  
Bangalore 560032

To: The Director,  
Sanjay Gandhi Post Graduate Institute of Medical Sciences,  
Raebareli Road,  
Lucknow-226014,  
Uttar Pradesh.

June 5, 2018

To whom it may concern:

The **da Vinci<sup>®</sup> Xi<sup>™</sup> Surgical System\*** can provide a surgeon with intuitive control, range of motion, fine tissue manipulation capability, and visualization characteristics of open surgery, while simultaneously allowing the surgeon to work through small ports and perform minimally invasive surgery.

Purchasers of the equipment use it to facilitate the pursuit of minimally invasive, cardiac, thoracic, pediatric, urologic, gynecologic and general surgery. The **da Vinci<sup>®</sup> Xi<sup>™</sup> Surgical System** is both CE marked and FDA cleared, and Intuitive Surgical, Inc. and its subsidiaries solely own all property rights in and to the System.

To the best of our knowledge, Intuitive Surgical is currently the only manufacturer of commercially available robotic surgical systems offering a suite of fully wristed 8mm instrumentation, wristed advanced energy, wristed stapling, fluorescence imaging, integrated table motion, skills simulation and robotic 4-arm multi-port and single port access, all on a single platform, capable of performing minimally invasive surgical procedures with up to two surgeons simultaneously using a dual console system.

The **da Vinci<sup>®</sup> Xi<sup>™</sup> Surgical System** is intended to assist in the accurate control of Intuitive Surgical Endoscopic Instruments during urologic surgical procedures, general laparoscopic surgical procedures, gynecologic laparoscopic surgical procedures, general thoracoscopic surgical procedures, thoracoscopically-assisted cardiotomy procedures, and trans-oral otolaryngology

\*Intuitive Surgical Endoscopic Instrument Control System (da Vinci Surgical System Model IS4000)

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Dr. S. K. Agarwal  
Professor  
Deptt. of Cardiovascular &  
Thoracic Surgery  
Sanjay Gandhi Postgraduate  
Institute of Medical Sciences

Prof. Amit Agarwal  
Chief Medical Superintendent  
S. G. P. I. M. S.

Dr. Anand K. Srivastava  
Professor & Head  
Urology & Renal Transplantation  
Sanjay Gandhi Postgraduate  
Institute of Medical Sciences, Lucknow-226014

surgical procedures restricted to benign tumors and malignant tumors classified as T1 and T2, and for benign base of tongue resection procedures.


The system can also be employed with adjunctive mediastinotomy to perform coronary anastomosis during cardiac revascularization.

The system is indicated for adult and pediatric use (except for trans-oral otolaryngology surgical procedures).

The **da Vinci® Xi™ Surgical System** is comprised of the components listed below.

- **Surgeon Console including high definition stereoscopic (3D) vision technology**
- **Single Patient Side Cart with Single Port, 4-arm multi-port and multi-quadrant surgical access**
- **Vision Cart including High Definition Stereo Endoscope 0°/30° with FireFly™ Fluorescence imaging capability and integrated ERBE electro-surgical generator**

Sincerely,  
Intuitive Surgical Sàrl



Jean-Yves Raimon  
Vice President International Finance & Operations

\*Intuitive Surgical Endoscopic Instrument Control System (da Vinci Surgical System Model IS4000)

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Prof. Amit Agarwal  
Chief Medical Superintendent  
S.G.P.G.I.M.S.  
Lucknow - 226014

Dr. S. K. Agarwal  
Professor  
Dept. of Surgery  
Thoracic Surgery

# Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow-226014

## PROPRIETARY ARTICLE CERTIFICATE

It is certified that the **Robotic Surgical System with accessories** should be purchased from **M/s Intuitive Surgical Sarl, Switzerland** through Indian Subsidiary **M/s Intuitive Surgical India Pvt. Ltd.**, who are the sole manufacturer / agent of the above equipment.

Similar items manufactured by other firm(s) shall not be suitable for our purpose for the following reasons:-

1. There is no other manufacturer of Robotic Surgical System with accessories.
2. Robotic Surgical System with accessories is a proprietary article of M/s Intuitive Surgical Sarl, Switzerland.
3. As per internet, no other alternative sources for supply of other substitute are available.
4. AIIMS, New Delhi and AIIMS, Rishikesh procured the above equipment on proprietary basis from M/s Intuitive Surgical.
5. As per minutes of meeting dated 07.07.2018 and dated 12.07.2018 is proprietary of M/s Intuitive Surgical.
6. Proprietary Article Certificate of M/s Intuitive Surgical is enclosed.
7. It is certified that the equipment mentioned above is required to be procured on proprietary basis as the source of supply is definitely known and the specified brand proposed is advantageous in meeting our functional requirements and any other mode of purchase would serve no useful purpose in this particular case.

Signature of respective Indenter / HOD / Users

Dr. S. K. Agarwal  
Professor  
Deptt. of Cardiovascular &  
Thoracic Surgery  
Sanjay Gandhi Postgraduate  
Institute of Medical Sciences  
LUCKNOW, U.P.-226 014 (INDIA)

Dr. Anesh Srivastava  
Professor & Head  
Urology & Renal Transplantation  
S.G.P.G.I.M.S., Lucknow-22601.

Requisition No.:

Department: Robotic Surgery Centre

Dated: 12.07.2018

Designation & Signature

Nodal Officer, Robotic Surgery Centre

Prof. Amit Agarwal  
Chief Medical Superintendent  
S.G.P.G.I.M.S.  
Lucknow - 226014

**NB: The indenter before recording the above certificates should satisfy himself that the article is genuinely of proprietary nature manufactured under patent laws.**

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Name of the Item:Purchase of Robotic Surgical System with Accessories .

Specification:-

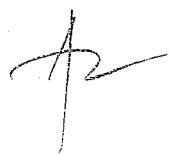
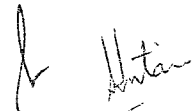

TECHNICAL SPECIFICATIONS FOR ROBOTIC SURGICAL SYSTEM WITH ACCESSORIES	
	<b>DESCRIPTION</b>  The following specification is for a system capable of working in the Master slave mode with the surgeon as the Master and his hand movements are translated in to minimally invasive instruments capable of navigating inside the human body and performing manoeuvres as desired by the surgeon as per the capabilities of the instruments for performing dissection and suturing in what is come to be called as a robot assisted surgery.
	<b>CAPABILITIES SPECIFICATION</b>
1.	The equipment must be capable of performing minimally invasive robot assisted operative procedures in General Surgery,GI, Urology, Gynaecology, Thoracic, Colorectal for benign and cancer surgeries. The provided system must be the latest generation/ later model at the time of procurement.
2.	The Main Equipment should comprise of the following fully integrated subsystems.  1. Dual Surgeon's consoles – with Master controls and an integrated true High Definition 3D display stereo viewer with ability to switch surgeon console from one console to the other during surgery.  2. Surgical Cart with camera arm and three instrument arms.  3. Vision cart containing camera, image processing units and integrated true high definition display monitor for interaction.  4. Should have skill simulator compatible with related model of robotic system to practice & enhance surgical skills of new & existing robotic surgeons.
3.	1. High quality Three Dimensional View of the field of operation is to be

*Dr. Ananda Kumar*  
*[Signature]*

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	<p>provided by the Vision system through its stereo endoscope.</p> <p>2. LED light source with spare bulb to be provided for illumination of the surgical field with a standby lamp.</p> <p>3. The surgeon should be able to magnify the images with his own controls.</p>
4.	The Stereo endoscopes should be capable to view at 0 degree and 30 degree. Capability for Real-time near-infrared guidance through visualization of injectable fluorescence dye with suitable endoscope, illuminator and camera should be available.
5.	Camera should provide high resolution images of the operative field along with perception of depth of field.
6.	<p>Instruments to be used with the system should be able to provide surgeons with natural dexterity and a range of motion equal to the human hand.</p> <p>Such instruments should be able to offer a wide range of tips suitable for performing procedures for benign and onco surgeries across multiple disciplines. These Instruments shall offer Seven degrees of motion mimicking the dexterity of human Hand.</p>
7.	The masters at the surgeon's console should be capable of translating the natural hand and wrist movements in to corresponding precise and scaled movements to the instruments and camera attached to the surgical cart arms minimising fatigue. Such movements of the instrument tips shall replicate the experience of open surgery.
8.	There should be facility for scaling of surgeon hand movements to corresponding smaller instrument tip movements. The surgeons hand movements shall be replicated at the instrument tip after filtering tremors if any in real time.
9.	There should be facility for learning hand – eye coordination movements by a Simulator subsystem.
10.	The system should perform self-checks to provide safety during usage.
11.	The system should have built in energy source for monopolar and bipolar cautery as well have ability to use external energy source of at least one compatible model for emergency use.

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12.	Ability to change instruments during surgery safely with proper guidance should be in built.
13.	Should provide the flexibility to place scope in any one of the surgical arms during the procedure.
14.	Features to provide ability for the assistants in the OR to see and communicate with the surgeon through monitor and telestration.
15.	Ability to adjust the surgeons view ports and console to suit individual comfort and ergonomics should be available.
16.	Ability to enable the surgeon to view two additional video sources from other medical systems with compatible video sources.
17.	While the robotic arms shall be operated by sterile persons the vision system and surgeons console shall be non-sterile are in the Operating room.
18.	Adequate safety features to prevent inadvertent movements of the surgeon affecting the instruments shall be available.
19.	The sub systems shall be easily movable within the OR. If wheels are used there should be features to lock the wheel to prevent movements.
20.	The system shall provide video output suitable for connecting to external devices such as recorders and additional video monitors.
21.	The system shall have all software required to support all disciplines of surgery which is possible by the system under the control of the surgeon.
22.	System shall have features for emergency release of the robotic instruments from the surgery.
	<b>OTHER REQUIREMENTS</b>
A	<b>TRAINING</b>

*[Handwritten signatures]* Rkumar

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A1	<b>Surgeon Training</b>
	Six surgeons nominated in a phased manner by the Director shall be trained and certified by the vendor for using the system to perform robot assisted surgeries. The duration of the training and the training method shall be as per international norms at an authorised centre abroad.
A2	<b>OT staff training</b>
	A set of OT Staff such as Nurses and OT technicians and Biomedical staff shall be trained by the vendor for handling the system covering powering on, moving and positioning the system and observing the system for right function and errors if any etc. The training method and duration shall be outlined by the vendor. There may be multiple batches of OT staff required to be trained over a period of time.
B	<b>INSTRUMENTS, CONSUMABLES &amp; ACCESSORIES</b>
	The vendor should provide a list of Instruments, consumables and accessories available for the use of the system for benign and cancer surgeries suitable for the capabilities of the system. Instruments name & quantity is enclosed as (ANNEXURE-1). The system should be supplied with the Starter kit of Instruments, Accessories & Reusable for approx. 250 Procedures (Urology- 100 procedures, Endocrine Surgery- 50 procedures, GI Surgery- 50 procedures & CVTS- 50 procedures). Institute may increase the Quantity of Instruments, Accessories & Reusable at the time of Purchase ordering.
C	<b>SPECIAL ADDITIONAL EQUIPMENTS</b>
	Vendor to specify any special additional equipment that may be required for the use of the robotic surgery system such as special cleaning and sterilisation equipment and UPS with adequate back up capacity.
D	<b>ENVIRONMENT AND POWER</b>

*(Signature)* *(Signature)* *(Signature)* Arundhanee Kumar <sup>9</sup>

	<p>All equipment shall be capable of working on 230 V AC, +/- 5%, 50 Hz Power supply.</p> <p>The system shall be capable of working between 22 to 30Deg C air-conditioned environment.</p>
E	<b>SPARES and ACCESSORIES</b>
	A minimum set of Emergency spares that may be required for immediate replacement during procedures. A set of Reusable accessories required for common procedures shall also be proposed.
	The vendor must ensure that all equipment necessary for full functioning of the device and its unhindered use for surgery are quoted and provided.

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<b>Accessories that have to be provided with the Robotic Surgical System</b>	
1	Continuous Smoke evacuating, Gas Insufflation System with all disposables, Instruments & Accessories required for the conduct of 250 Surgical procedures must be Quoted. The device must be capable of providing High flow Insufflation (Upto 30L/min), LCD Display for set & current pressure, Flow Rate, Gas Consumption, Constant measurement of Intra-Abdominal Gas pressure, Internal Venting system for safety.
2	High Definition Recorder
3	OT Table enabled with Table motion feature with the Robotic Surgical System- Mobile operating table with electrically motorized adjustment of height, Trendelenburg/ anti-Trendelenburg, tilt, longitudinal shift, back and leg section; two-part table top consists of seat and back section with joints at head and foot end with coupling points and side rails on leg section joints; with Velcro; column and table top can be operated with cable remote control and foot control; running gear includes four electrically conductive double swivel wheels with an electrically powered and self-levelling brake, directional travel and freewheeling; table top frame, column cladding and running gear made of stainless steel; with IsoCenter Motion (combined Trendelenburg adjustment and longitudinal shift) for robotic surgery; software for Table Motion included and shall be supplied with other required accessories.

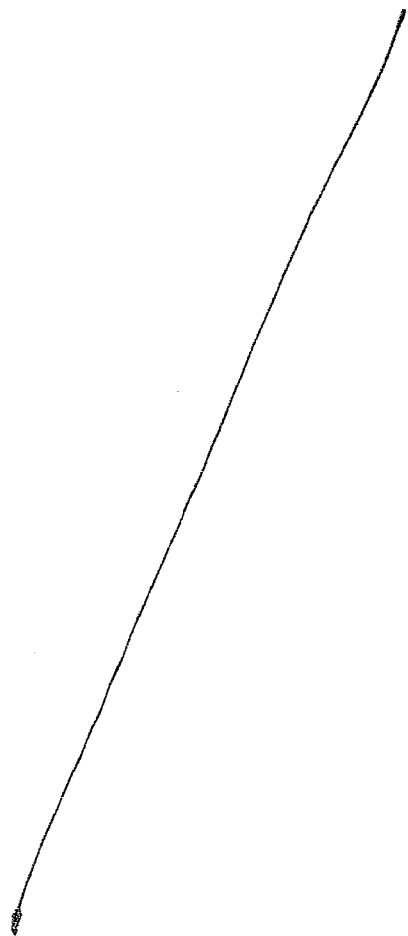
*[Handwritten signatures]* Rajman (10)

4	<p>Ultrasonic Cleaner</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Ultrasonic frequency: 38 kHz or greater</li> <li><input type="checkbox"/> Power density: 13W/Liter or greater (ultrasonic power output/internal tank volume)</li> <li><input type="checkbox"/> Tank size should be large enough to fully submerge instruments with at least 1 in. (25 mm) clearance around all instrument surfaces. To accommodate the longest <i>Intuitive Surgical</i> instrument, the tank length should be a minimum of 28 in. (712 mm).</li> </ul>
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**Optional Item**

	Recommended External accessories that have to be provided with da Vinci Xi
1	<p>Low temperature H<sub>2</sub>O<sub>2</sub> gas sterilizer          Should be compatible with da Vinci Xi endoscopes          The Consumables for 250 Cycles will be provided in batches on requirement basis to avoid the expiry and wastage.          STERIS V-PRO 1; STERIS V-PRO 1 Plus; STERIS V-PRO Max; STERRAD 100 S;          STERRAD 100 NX</p>



*[Handwritten signature]*

*Atti Akanda*

*R Kumar*

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## ANNEXURE-1

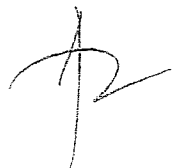


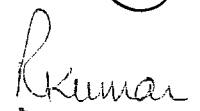
LIMITED USE INSTRUMENTS					
Sl#	# of Uses/ Instrument	Pieces/ Box	Xi Part No.	Xi Description	Qty
1	10	1	470006	Large Needle Driver	26
2	10	1	470049	Cadiere Froceps	6
3	10	1	470093	Prograsp Forceps	18
4	10	1	470172	Maryland Bipolar Forceps	8
5	10	1	470179	Hot shears (Monopolar curved scissors)	20
6	10	1	420183	Permanent Cautery Hook	2
7	10	1	470205	Fenestrated bipolar forceps	14
8	100	1	470230	Large Clip Applier	3
9	100	1	470327	Medium Large Clip Applier	2
10	10	1	470347	Tip-Up Fenestrated Grasper	1
11	1	6	480275	Harmonic Ace Curved Shears	2
12	1	6	480322	Vessel Sealer	2
13	10	1	470007	Round Tip Scissors	5
14	10	1	470181	Resano Forceps	5
15	10	1	470246	Atrial Retractor Short Right	5
16	10	1	470036	DeBakey Forceps	5
17	10	1	470184	Permanent Cautery Spatula	5
18	10	1	470171	Microbipolar forceps	5
19	15	1	470033	Black Diamond Forceps	3

## Consumables

Sl#	# of Uses/ Instrument	Pieces/ Box	Xi Part No.	Xi Description	Qty
1	1	10	400180	Tip Cover Assembly	20
2	1	10	470361	5mm-8mm Universal Seal	80
3	1	20	470015	Instrument Arm Drape	50
4	1	6	470359	8 mm Bladeless Obturator (Optical)	20
5	1	6	470360	8 mm Bladeless Obturator, Long (Optical)	4
6	1	20	470341	Column Drape	13

## Reusable Instruments

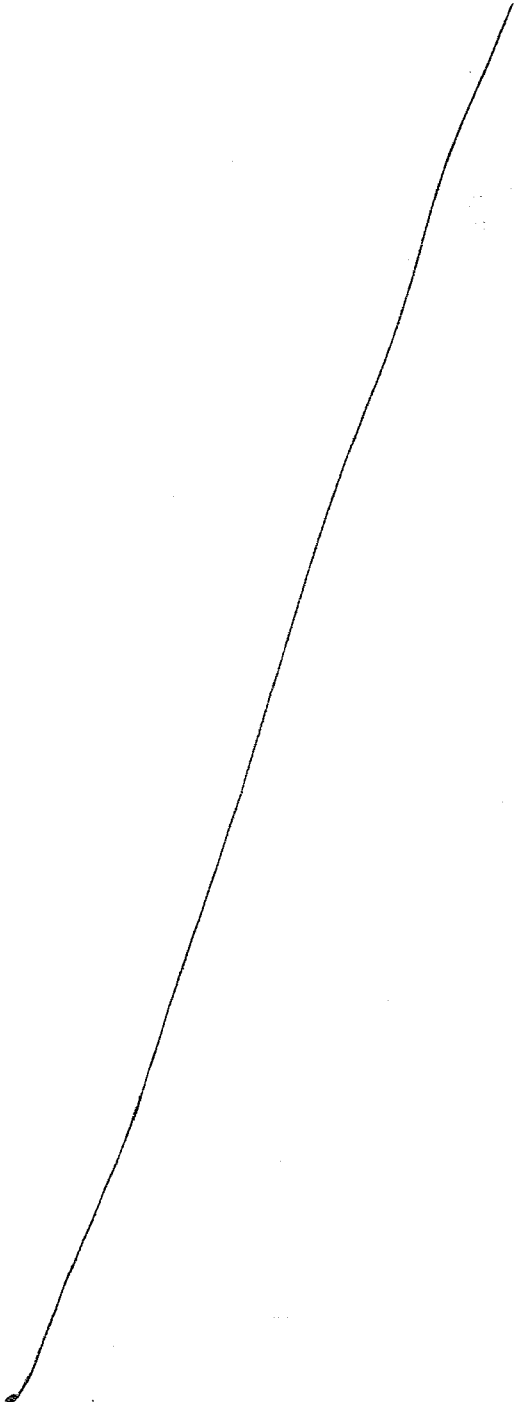
Sl#	# of Uses/ Instrument	Pieces/ Box	Xi Part No.	Description	Qty
1	NA	1	470002	8mm Instrument Cannula	8
2	NA	1	470004	8mm Instrument Cannula Long	4
3	NA	1	470008	8mm Blunt Obturator	5
4	NA	1	470009	8mm Blunt Obturator Long	3
6	NA	1	381216	Instrument release kit	5
7	NA	1	NA	Endoscope and Instrument Sterilisation Tray	2 Each

Emergency Spares

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Sl#	# of Uses/ Instrument	Pieces/ Box	Xi Part No.	Description	Qty
1		1	380989	Blue Fibre Kit	1
2		1	470383	Monopolar energy cord	10
3		1	470384	Bipolar Energy Cord	10
4		1	342562	Instrument Introducer	4
5		1	371870	Energy Activation Cable Gen 11	2



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Ramini