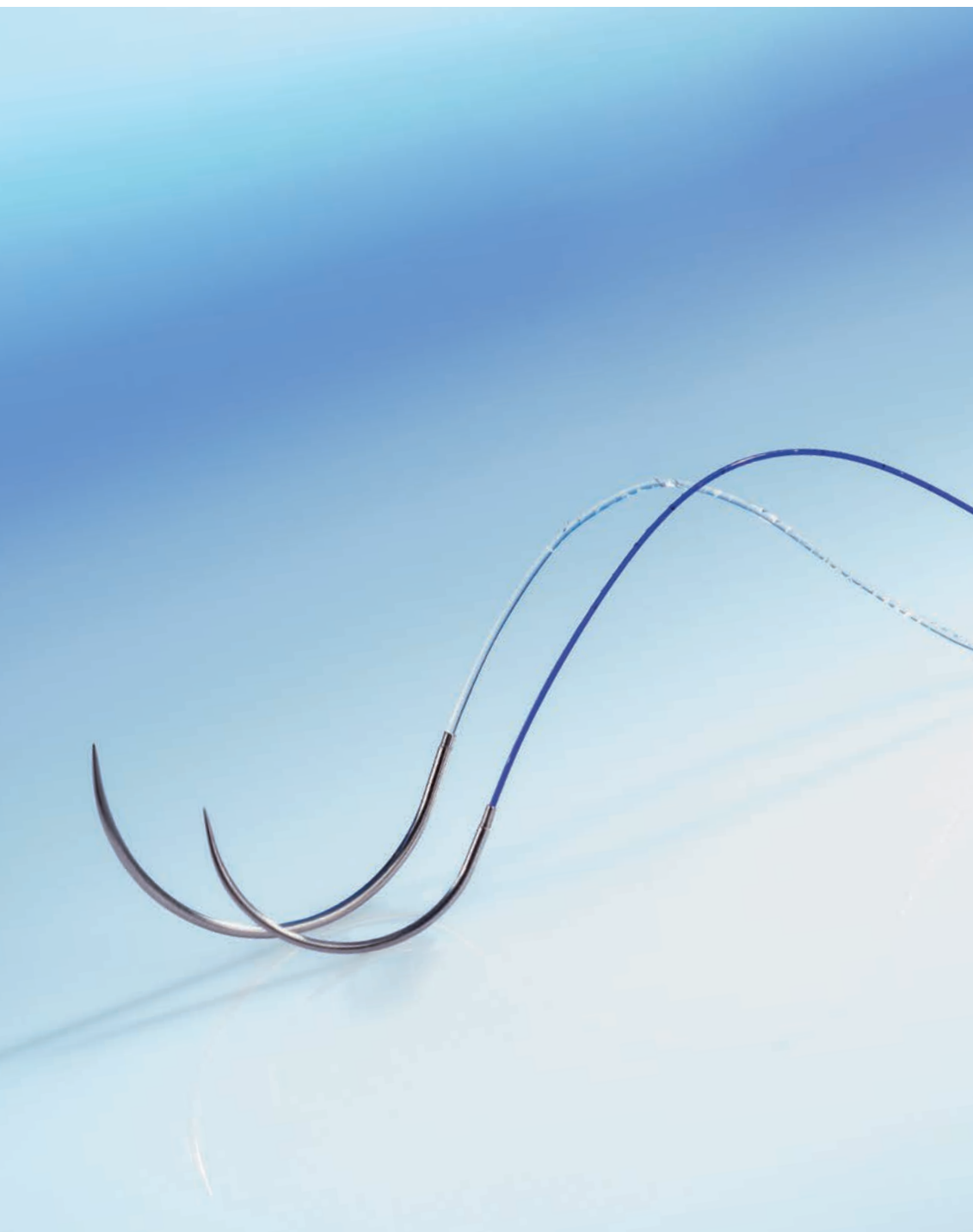




GENERAL OPEN SURGERY

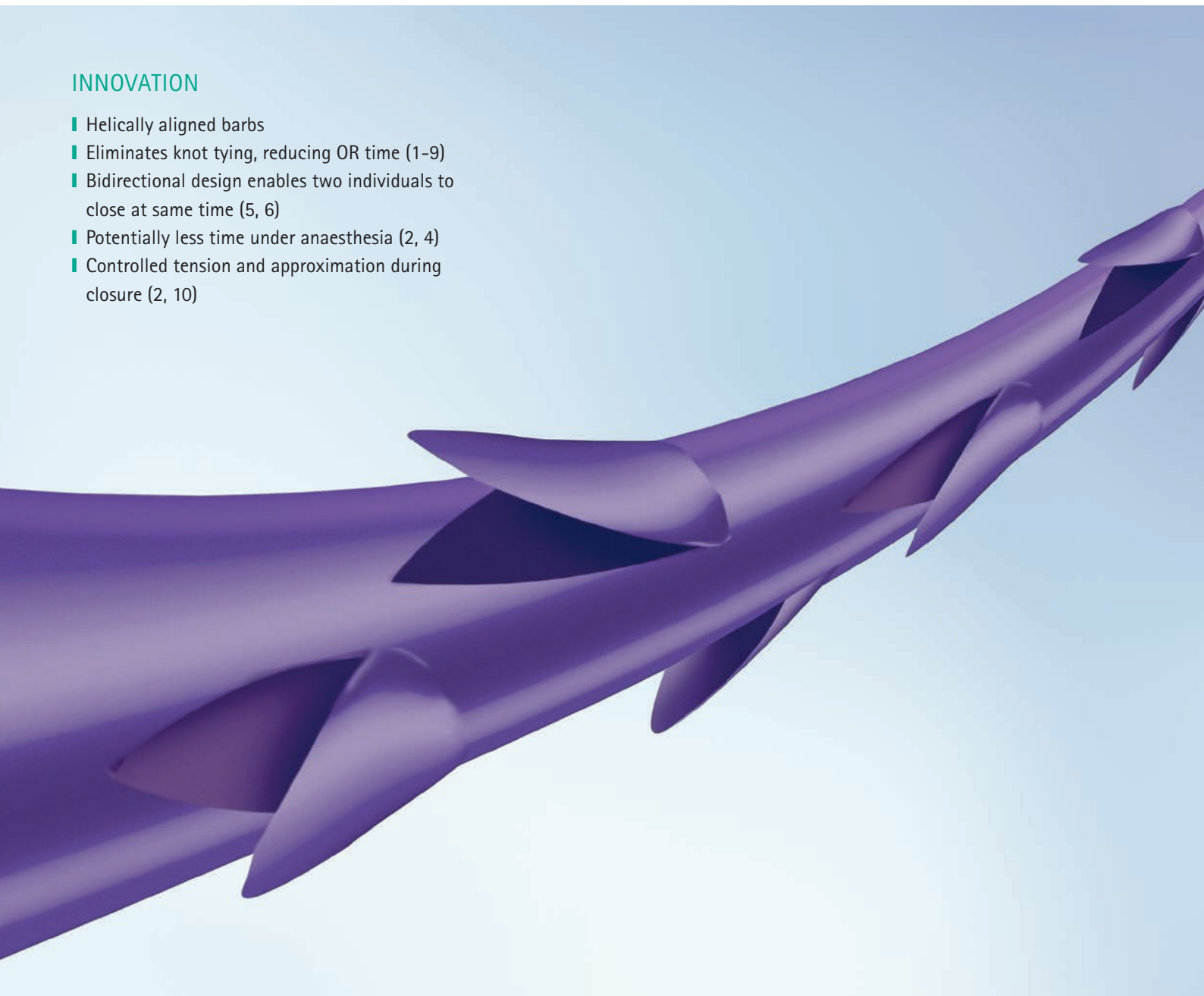
QUILL™
KNOTLESS TISSUE-CLOSURE DEVICE

QUILL™

KNOTLESS TISSUE-CLOSURE DEVICE

INNOVATION

- Helically aligned barbs
- Eliminates knot tying, reducing OR time (1-9)
- Bidirectional design enables two individuals to close at same time (5, 6)
- Potentially less time under anaesthesia (2, 4)
- Controlled tension and approximation during closure (2, 10)



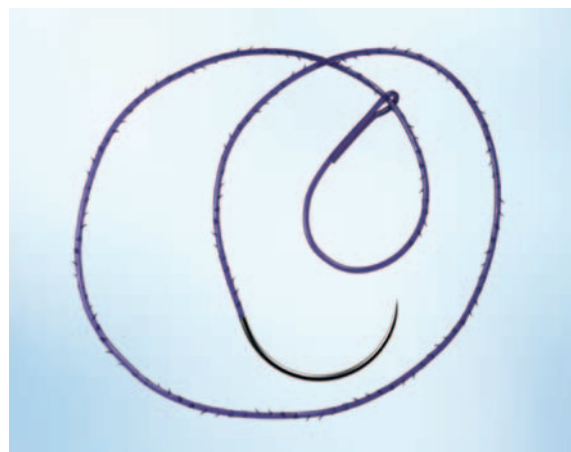


VERSATILE KNOTLESS TISSUE-CLOSURE DEVICE

- The original barbed suture launched in 2007
- Used in more than 25 million surgical cases
- Studied in more than 80 clinical papers
- Complete range of absorbable and non-absorbable materials and configurations including Monoderm™, PDO and Polypropylene
- More than 200 SKUs available in sizes 5-0 to 2 (11)



QUILL™ Knotless Tissue-Closure Device
Bidirectional Design



QUILL™ Variable Loop Device
Unidirectional Design



QUILL™

KNOTLESS TISSUE-CLOSURE DEVICE



MATERIALS GUIDE (11)

Material Absorbable	Material Description	BSR Profile	Mass Absorption
Monoderm™ (PGA - PCL) 	Monofilament ■ Undyed (clear) ■ Violet	In vivo strength retention: 42% to 76% at 7 days 36% to 52% at 14 days	Essentially complete between 90 and 120 days
PDO (polydioxanone) 	Monofilament ■ Violet	In vivo strength retention: QUILL™ device size: Gauge 3/0 & larger Gauge 4/0 80% at 2 weeks 67% at 2 weeks 60% at 4 weeks 50% at 4 weeks 40% at 6 weeks 37% at 6 weeks	Minimal until approximately 120 days Essentially complete by 180 days
Polypropylene 	Monofilament ■ Undyed (clear)		Polypropylene is not absorbed, nor is any significant change in tensile strength retention known to occur in vivo



BARIATRIC & UPPER GI SURGERY

NEEDLE-THREAD COMBINATIONS

NISSEN FUNDOPLICATION

Gastric Fundus Plication								
Material	Needle	Color	Length (cm)	3/0	2/0	USP		
						0	1	2
PDO	22 mm, 1/2 Circle Taper Point 	Violet	14 x 14				RA-1088Q	
PDO	26 mm, 1/2 Circle Taper Point 	Violet	10 x 10 14 x 14			RA-1078Q RA-1079Q		
PDO	36 mm, 1/2 Circle Taper Point 	Violet	7 x 7 14 x 14			RX-1068Q RX-1069Q	RA-1003Q	
PDO	36 mm, 1/2 Circle Taper Point 	Violet	15 20 30			VLP-1001 VLP-1002		VLP-2030 VLP-2032

HIATAL & PARAESOPHAGEAL HERNIA

Crura								
Material	Needle	Color	Length (cm)	3/0	2/0	USP		
						0	1	2
Polypropylene	36 mm, 1/2 Circle Taper Point 	Undyed	24 x 24					JA-1007Q

GASTRECTOMY

Oversew Staple Line (Stomach)								
Material	Needle	Color	Length (cm)	USP				
				3/0	2/0	0	1	2
PDO	22 mm, 1/2 Circle Taper Point 	Violet	14 x 14				RA-1088Q	
PDO	36 mm, 1/2 Circle Taper Point 	Violet	14 x 14				RA-1003Q	
PDO	36 mm, 1/2 Circle Taper Point 	Violet	45					VLP-2025

Omentalpexy								
Material	Needle	Color	Length (cm)	USP				
				3/0	2/0	0	1	2
PDO	26 mm, 1/2 Circle Taper Point 	Violet	15 30		VLP-2021	VLP-2009		

CARDIOVASCULAR SURGERY

NEEDLE-THREAD COMBINATIONS

CABG

Sternal Closure								
Material	Needle		Color	Length (cm)	3/0	2/0	USP	
							0	1
								2
Monoderm™	19 mm, 3/8 Circle Reverse Cutting		Undyed	60		VLM-2002		
Monoderm™	24 mm, 3/8 Circle Reverse Cutting		Undyed	45		VLM-2012		

THORACIC

Thoracotomy Closure								
Material	Needle		Color	Length (cm)	3/0	2/0	USP	
							0	1
								2
Monoderm™	19 mm, 3/8 Circle Reverse Cutting		Undyed	60		VLM-2002		
Monoderm™	24 mm, 3/8 Circle Reverse Cutting		Undyed	45		VLM-2012		

VATS Lobectomy – Extraction Site Closure								
Material	Needle		Color	Length (cm)	4/0	3/0	USP	
							2/0	0
								1
Monoderm™	19 mm, 3/8 Circle Reverse Cutting		Undyed	60			VLM-2002	
Monoderm™	19 mm, 3/8 Circle Fine Reverse Cutting		Undyed	30 45		VLM-3008 VLM-2018		

EP CATH LAB PACEMAKER

Pacemaker Pocket								
Material	Needle		Color	Length (cm)	3/0	2/0	USP	
					0	1	2	
Monoderm™	19 mm, 3/8 Circle Fine Reverse Cutting		Undyed	30	VLM-3008			
Monoderm™	26 mm, 1/2 Circle Taper Point		Undyed	20		VLM-1006		
PDO	36 mm, 1/2 Circle Taper Point		Violet	20			VLP-1001	
PDO	48 mm, 1/2 Circle Taper Point		Violet	70				VLP-2010

COLORECTAL SURGERY

NEEDLE-THREAD COMBINATIONS

LOWER ANTERIOR RESECTION

Subcutaneous									
Material	Needle		Color	Length (cm)	3/0	2/0	USP		
							0	1	2
Monoderm™	18 mm, 3/8 Circle Reverse Cutting		Undyed	14 x 14 30 x 30	YA-1016Q-0 YA-1021Q-0	YA-1012Q YA-1022Q-0			
Monoderm™	24 mm, 3/8 Circle Reverse Cutting		Undyed	30 x 30	YA-2023Q	YA-2024Q			
Monoderm™	26 mm, 3/8 Circle Reverse Cutting		Undyed	14 x 14 30 x 30	YA-1023Q-0	YA-1015Q-0 YA-1024Q-0			
Monoderm™	36 mm, 1/2 Circle Taper Point		Undyed	14 x 14 36 x 36			YA-1003Q YA-1029Q		
Monoderm™	19 mm, 3/8 Circle Reverse Cutting		Undyed	30 60	VLM-2004	VLM-2001 VLM-2002			
Monoderm™	24 mm, 3/8 Circle Reverse Cutting		Undyed	45 60		VLM-2012 VLM-1001			
Monoderm™	19 mm, 3/8 Circle Fine Reverse Cutting		Undyed	30 45	VLM-3008 VLM-2018	VLM-3010			
Monoderm™	26 mm, 1/2 Circle Taper Point		Undyed	20 45		VLM-1006	VLM-1020		
Monoderm™	36 mm, 1/2 Circle Taper Point		Undyed	30 60			VLM-1014 VLM-1003		
PDO	36 mm, 1/2 Circle Taper Point		Violet	14 x 14 24 x 24 30 x 30 36 x 36			RX-1069Q RA-1029Q RA-1067Q	RA-1003Q RA-1031Q RA-1059Q	
PDO	26 mm, 1/2 Circle Taper Point		Violet	30			VLP-2009		
PDO	36 mm, 1/2 Circle Taper Point		Violet	30 45 70			VLP-1004 VLP-2012		VLP-2032 VLP-2024

Oversew Staple Line								
Material	Needle		Color	Length (cm)	3/0	2/0	USP	
							0	1
								2
PDO	22 mm, 1/2 Circle Taper Point		Violet	14 x 14				RA-1088Q
PDO	26 mm, 1/2 Circle Taper Point		Violet	10 x 10 14 x 14			RA-1078Q RA-1079Q	
PDO	36 mm, 1/2 Circle Taper Point		Violet	7 x 7 14 x 14			RX-1068Q RX-1069Q	RA-1003Q
PDO	36 mm, 1/2 Circle Taper Point		Violet	30 45				VLP-2032 VLP-2025

COLORECTAL SURGERY

NEEDLE-THREAD COMBINATIONS

SIGMOIDECTOMY / PARTIAL SIGMOIDECTOMY

Subcutaneous								
Material	Needle		Color	Length (cm)	3/0	2/0	USP	
							0	1
								2
Monoderm™	18 mm, 3/8 Circle Reverse Cutting		Undyed	14 x 14 30 x 30	YA-1016Q-0 YA-1021Q-0	YA-1012Q YA-1022Q-0		
Monoderm™	24 mm, 3/8 Circle Reverse Cutting		Undyed	30 x 30	YA-2023Q	YA-2024Q		
Monoderm™	26 mm, 3/8 Circle Reverse Cutting		Undyed	14 x 14 30 x 30	YA-1023Q-0	YA-1015Q-0 YA-1024Q-0		
Monoderm™	36 mm, 1/2 Circle Taper Point		Undyed	14 x 14 36 x 36			YA-1003Q YA-1029Q	
Monoderm™	19 mm, 3/8 Circle Reverse Cutting		Undyed	30 60	VLM-2004	VLM-2001 VLM-2002		
Monoderm™	24 mm, 3/8 Circle Reverse Cutting		Undyed	45 60		VLM-2012 VLM-1001		
Monoderm™	19 mm, 3/8 Circle Fine Reverse Cutting		Undyed	30 45	VLM-3008 VLM-2018	VLM-3010		
Monoderm™	17 mm, 1/2 Circle Taper Point		Undyed Violet	15 30		VLM-2014 VLM-1021		
Monoderm™	26 mm, 1/2 Circle Taper Point		Undyed	20 45		VLM-1006	VLM-1020	
Monoderm™	36 mm, 1/2 Circle Taper Point		Undyed	30 60			VLM-1014 VLM-1003	
PDO	36 mm, 1/2 Circle Taper Point		Violet	14 x 14 24 x 24 30 x 30 36 x 36			RX-1069Q RA-1029Q RA-1067Q	RA-1003Q RA-1031Q RA-1059Q
PDO	26 mm, 1/2 Circle Taper Point		Violet	30			VLP-2009	
PDO	36 mm, 1/2 Circle Taper Point		Violet	30 45 70			VLP-1004 VLP-2012	VLP-2032 VLP-2024

Oversew Staple Line								
Material	Needle		Color	Length (cm)	3/0	2/0	USP	
					0	1	2	
PDO	22 mm, 1/2 Circle Taper Point		Violet	14 x 14			RA-1088Q	
PDO	26 mm, 1/2 Circle Taper Point		Violet	10 x 10 14 x 14			RA-1078Q RA-1079Q	
PDO	36 mm, 1/2 Circle Taper Point		Violet	14 x 14 7 x 7			RX-1069Q RX-1068Q	RA-1003Q
PDO	36 mm, 1/2 Circle Taper Point		Violet	15 20 30 45			VLP-1001 VLP-1002	VLP-2015 VLP-2030 VLP-2032 VLP-2025

GENERAL SURGERY

NEEDLE-THREAD COMBINATIONS

LAPAROTOMY CLOSURE

Subcutaneous									
Material	Needle		Color	Length (cm)	3/0	2/0	USP		
							0	1	2
Monoderm™	18 mm, 3/8 Circle Reverse Cutting		Undyed	14 x 14 30 x 30	YA-1016Q-0 YA-1021Q-0	YA-1012Q YA-1022Q-0	YA-1004Q		
Monoderm™	26 mm, 3/8 Circle Reverse Cutting		Undyed	7 x 7 14 x 14 30 x 30		YA-1015Q-0 YA-1024Q-0	YA-1010Q		
Monoderm™	24 mm, 3/8 Circle Reverse Cutting		Undyed	30 x 30	YA-2023Q	YA-2024Q			
Monoderm™	26 mm, 1/2 Circle Reverse Cutting		Undyed	14 x 14			YA-1014Q		
Monoderm™	36 mm, 1/2 Circle Reverse Cutting		Undyed	36 x 36 45 x 45			YA-2036Q YA-2035Q		
Monoderm™	36 mm, 1/2 Circle Taper Point		Undyed	14 x 14 36 x 36			YA-1003Q YA-1029Q		
Monoderm™	19 mm, 3/8 Circle Reverse Cutting		Undyed	30 60	VLM-2004	VLM-2001 VLM-2002			
Monoderm™	24 mm, 3/8 Circle Reverse Cutting		Undyed	45 60		VLM-2012 VLM-1001			
Monoderm™	19 mm, 3/8 Circle Fine Reverse Cutting		Undyed	30 45	VLM-3008 VLM-2018	VLM-3010			
Monoderm™	17 mm, 1/2 Circle Taper Point		Undyed Violet	15 30		VLM-2014 VLM-1021			
Monoderm™	26 mm, 1/2 Circle Taper Point		Undyed	20 45		VLM-1006	VLM-1020		
Monoderm™	36 mm, 1/2 Circle Taper Point		Undyed	30 60			VLM-1014 VLM-1003		

Subcutaneous									
Material	Needle		Color	Length (cm)	3/0	2/0	USP		
							0	1	2
PDO	36 mm, 1/2 Circle Taper Point		Violet	14 x 14 24 x 24 30 x 30 36 x 36			RX-1069Q RA-1029Q RA-1067Q	RA-1003Q RA-1031Q RA-1059Q	
PDO	19 mm, 3/8 Circle Reverse Cutting		Violet	45	VLP-2029	VLP-2001			
PDO	26 mm, 3/8 Circle Reverse Cutting		Violet	45 60		VLP-2026 VLP-2027			
PDO	13 mm, 3/8 Circle Fine Reverse Cutting		Violet	20 30	VLP-3021 VLP-3022				
PDO	19 mm, 3/8 Circle Fine Reverse Cutting		Violet	20 30	VLP-3026	VLP-3027 VLP-3028			
PDO	24 mm, 3/8 Circle Fine Reverse Cutting		Violet	30		VLP-3029			
PDO	26 mm, 1/2 Circle Taper Point		Violet	30			VLP-2009		
PDO	36 mm, 1/2 Circle Taper Point		Violet	45 70			VLP-1004 VLP-2012		VLP-2024

HIATAL & PARAESOPHAGEAL HERNIA

Crura									
Material	Needle		Color	Length (cm)	3/0	2/0	USP		
							0	1	2
Polypropylene	22 mm, 1/2 Circle Taper Point		Undyed	14 x 14				JA-1050Q	
Polypropylene	36 mm, 1/2 Circle Taper Point		Undyed	24 x 24					JA-1007Q

GENERAL SURGERY

NEEDLE-THREAD COMBINATIONS

VENTRAL HERNIA

Subcutaneous									
Material	Needle		Color	Length (cm)	3/0	2/0	USP		
							0	1	2
Monoderm™	18 mm, 3/8 Circle Reverse Cutting		Undyed	14 x 14 30 x 30	YA-1016Q-0 YA-1021Q-0	YA-1012Q YA-1022Q-0	YA-1004Q		
Monoderm™	26 mm, 3/8 Circle Reverse Cutting		Undyed	7 x 7 14 x 14 30 x 30		YA-1015Q-0 YA-1024Q-0	YA-1010Q		
Monoderm™	24 mm, 3/8 Circle Reverse Cutting		Undyed	30 x 30	YA-2023Q	YA-2024Q			
Monoderm™	26 mm, 1/2 Circle Reverse Cutting		Undyed	14 x 14			YA-1014Q		
Monoderm™	36 mm, 1/2 Circle Reverse Cutting		Undyed	36 x 36 45 x 45			YA-2036Q YA-2035Q		
Monoderm™	36 mm, 1/2 Circle Taper Point		Undyed	14 x 14 36 x 36			YA-1003Q YA-1029Q		
Monoderm™	19 mm, 3/8 Circle Reverse Cutting		Undyed	30 60	VLM-2004	VLM-2001 VLM-2002			
Monoderm™	24 mm, 3/8 Circle Reverse Cutting		Undyed	45 60		VLM-2012 VLM-1001			
Monoderm™	19 mm, 3/8 Circle Fine Reverse Cutting		Undyed	30 45	VLM-3008 VLM-2018	VLM-3010			
Monoderm™	17 mm, 1/2 Circle Taper Point		Undyed	15		VLM-2014			
Monoderm™	17 mm, 1/2 Circle Taper Point		Violet	30		VLM-1021			
Monoderm™	26 mm, 1/2 Circle Taper Point		Undyed	20 45		VLM-1006	VLM-1020		
Monoderm™	36 mm, 1/2 Circle Taper Point		Undyed	30 60			VLM-1014 VLM-1003		

Subcutaneous									
Material	Needle		Color	Length (cm)	3/0	2/0	USP		
							0	1	2
PDO	36 mm, 1/2 Circle Taper Point		Violet	14 x 14 24 x 24 30 x 30 36 x 36			RX-1069Q RA-1029Q RA-1067Q	RA-1003Q RA-1031Q RA-1059Q	
PDO	19 mm, 3/8 Circle Reverse Cutting		Violet	45	VLP-2029	VLP-2001			
PDO	26 mm, 3/8 Circle Reverse Cutting		Violet	45 60		VLP-2026 VLP-2027			
PDO	13 mm, 3/8 Circle Fine Reverse Cutting		Violet	20 30	VLP-3021 VLP-3022				
PDO	19 mm, 3/8 Circle Fine Reverse Cutting		Violet	20 30	VLP-3026	VLP-3027 VLP-3028			
PDO	24 mm, 3/8 Circle Fine Reverse Cutting		Violet	30		VLP-3029			
PDO	26 mm, 1/2 Circle Taper Point		Violet	30			VLP-2009		
PDO	36 mm, 1/2 Circle Taper Point		Violet	45 70			VLP-1004 VLP-2012		VLP-2024

GENERAL SURGERY

NEEDLE-THREAD COMBINATIONS

INGUINAL HERNIORRHAPHY (TAPP – LAPAROSCOPIC OR ROBOTIC)

Peritoneum									
Material	Needle		Color	Length (cm)	USP				
					3/0	2/0	0	1	2
Monoderm™	26 mm, 1/2 Circle Taper Point		Undyed	20		VLM-1006			
Monoderm™	26 mm, 1/2 Circle Taper Point		Violet	15			VLM-2013		
Monoderm™	36 mm, 1/2 Circle Taper Point		Undyed	20			VLM-1024		
PDO	26 mm, 3/8 Circle Reverse Cutting		Violet	24 x 24	RA-1052Q-0				
PDO	26 mm, 1/2 Circle Taper Point		Violet	15		VLP-2021			
PDO	36 mm, 1/2 Circle Taper Point		Violet	15 20 30			VLP-1001	VLP-2015	VLP-2030

VENTRAL HERNIA (LAPAROSCOPIC OR ROBOTIC)

Fascia								
Material	Needle		Color	Length (cm)	3/0	2/0	USP	
							0	1
								2
Polypropylene	22 mm, 1/2 Circle Taper Point		Undyed	14 x 14				JA-1050Q
Polypropylene	36 mm, 1/2 Circle Taper Point		Undyed	24 x 24				JA-1007Q

Mesh Fixation								
Material	Needle		Color	Length (cm)	3/0	2/0	USP	
							0	1
								2
PDO	22 mm, 1/2 Circle Taper Point		Violet	20 30		VLP-2002	VLP-1008	
PDO	26 mm, 1/2 Circle Taper Point		Violet	20		VLP-2006		
Polypropylene	22 mm, 1/2 Circle Taper Point		Undyed	14 x 14				JA-1050Q
Polypropylene	36 mm, 1/2 Circle Taper Point		Undyed	24 x 24				JA-1007Q
Polypropylene	22 mm, 1/2 Circle Taper Point		Undyed	30			VLO-1001	

HEPATOBIILIARY SURGERY

NEEDLE-THREAD COMBINATIONS

HPB (OPEN)

Subcutaneous								
Material	Needle		Color	Length (cm)	3/0	2/0	USP	
							0	1
								2
Monoderm™	36 mm, 1/2 Circle Taper Point		Undyed	14 x 14 36 x 36			YA-1003Q YA-1029Q	
Monoderm™	26 mm, 1/2 Circle Taper Point		Undyed	20 45		VLM-1006	VLM-1020	
Monoderm™	36 mm, 1/2 Circle Taper Point		Undyed	30 60			VLM-1014 VLM-1003	
PDO	36 mm, 1/2 Circle Taper Point		Violet	14 x 14 24 x 24 30 x30 36 x 36			RA-1029Q RA-1067Q	RA-1003Q RA-1031Q RA-1059Q
PDO	26 mm, 1/2 Circle Taper Point		Violet	30			VLP-2009	
PDO	36 mm, 1/2 Circle Taper Point		Violet	45 70			VLP-1004 VLP-2012	

Subcuticular								
Material	Needle		Color	Length (cm)	3/0	2/0	USP	
							0	1
								2
Monoderm™	18 mm, 3/8 Circle Reverse Cutting		Undyed	14 x 14 30 x 30	YA-1016Q-0 YA-1021Q-0	YA-1012Q YA-1022Q-0		
Monoderm™	24 mm, 3/8 Circle Reverse Cutting		Undyed	30 x 30	YA-2023Q	YA-2024Q		
Monoderm™	26 mm, 3/8 Circle Reverse Cutting		Undyed	14 x 14 30 x 30	YA-1023Q-0	YA-1015Q-0 YA-1024Q-0		
Monoderm™	19 mm, 3/8 Circle Reverse Cutting		Undyed	30 60	VLM-2004	VLM-2001 VLM-2002		
Monoderm™	24 mm, 3/8 Circle Reverse Cutting		Undyed	45 60		VLM-2012 VLM-1001		
Monoderm™	19 mm, 3/8 Circle Fine Reverse Cutting		Undyed	30 45	VLM-3008 VLM-2018	VLM-3010		

OBSTETRICS / GYNAECOLOGY

NEEDLE-THREAD COMBINATIONS

C-SECTION

Uterus								
Material	Needle		Color	Length (cm)	3/0	2/0	USP	
							0	1
								2
Monoderm™	36 mm, 1/2 Circle Taper Point		Undyed	30 60			VLM-1014 VLM-1003	
PDO	36 mm, 1/2 Circle Taper Point		Violet	14 x 14 24 x 24 30 x 30				RA-1003Q RA-1031Q RA-1059Q
PDO	36 mm, 1/2 Circle Taper Point		Violet	20 30 45			VLP-1001 VLP-1002 VLP-1004	

Peritoneum								
Material	Needle		Color	Length (cm)	3/0	2/0	USP	
							0	1
								2
Monoderm™	36 mm, 1/2 Circle Taper Point		Undyed	14 x 14 36 x 36			YA-1003Q YA-1029Q	
Monoderm™	26 mm, 1/2 Circle Taper Point		Undyed	30		VLM-1006		
Monoderm™	26 mm, 1/2 Circle Taper Point		Violet	15			VLM-2013	
Monoderm™	36 mm, 1/2 Circle Taper Point		Undyed	60			VLM-1003	

Subcutaneous									
Material	Needle		Color	Length (cm)	3/0	2/0	USP		
							0	1	2
Monoderm™	18 mm, 3/8 Circle Reverse Cutting		Undyed	14 x 14 30 x 30	YA-1016Q-0 YA-1021Q-0	YA-1012Q YA-1022Q-0	YA-1004Q		
Monoderm™	24 mm, 3/8 Circle Reverse Cutting		Undyed	30 x 30	YA-2023Q	YA-2024Q			
Monoderm™	26 mm, 3/8 Circle Reverse Cutting		Undyed	7 x 7 14 x 14 30 x 30		YA-1015Q-0 YA-1024Q-0	YA-1010Q		
Monoderm™	26 mm, 1/2 Circle Reverse Cutting		Undyed	14 x 14			YA-1014Q		
Monoderm™	36 mm, 1/2 Circle Taper Point		Undyed	14 x 14 36 x 36			YA-1003Q YA-1029Q		
Monoderm™	70 mm, Straight Reverse Cutting		Undyed	30 x 30			YA-1051Q		
Monoderm™	19 mm, 3/8 Circle Reverse Cutting		Undyed	30 60	VLM-2004	VLM-2001 VLM-2002			
Monoderm™	24 mm, 3/8 Circle Reverse Cutting		Undyed	45 60		VLM-2012 VLM-1001			
Monoderm™	19 mm, 3/8 Circle Fine Reverse Cutting		Undyed	30 45	VLM-3008 VLM-2018	VLM-3010			
Monoderm™	17 mm, 1/2 Circle Taper Point		Undyed Violet	15 30		VLM-2014 VLM-1021			
Monoderm™	26 mm, 1/2 Circle Taper Point		Undyed	20		VLM-1006			
Monoderm™	36 mm, 1/2 Circle Taper Point		Undyed	60			VLM-1003		

OBSTETRICS / GYNAECOLOGY

NEEDLE-THREAD COMBINATIONS

C-SECTION

Subcutaneous								
Material	Needle		Color	Length (cm)	3/0	2/0	USP	
							0	1
								2
PDO	36 mm, 1/2 Circle Taper Point		Violet	7 x 7 14 x 14 24 x 24 30 x 30 36 x 36			RX-1068Q RX-1069Q RA-1029Q RA-1067Q	RA-1003Q RA-1031Q RA-1059Q
PDO	19 mm, 3/8 Circle Reverse Cutting		Violet	45	VLP-2029	VLP-2001		
PDO	26 mm, 3/8 Circle Reverse Cutting		Violet	45 60		VLP-2026 VLP-2027		
PDO	36 mm, 1/2 Circle Reverse Cutting		Violet	20 30			VLP-1005 VLP-1006	
PDO	13 mm, 3/8 Circle Fine Reverse Cutting		Violet	20 30	VLP-3021 VLP-3022			
PDO	19 mm, 3/8 Circle Fine Reverse Cutting		Violet	20 30	VLP-3026	VLP-3027 VLP-3028		
PDO	24 mm, 3/8 Circle Fine Reverse Cutting		Violet	30		VLP-3029		
PDO	36 mm, 1/2 Circle Taper Point		Violet	20 30 45 70			VLP-1001 VLP-1002 VLP-1004 VLP-2012	

ORTHOPAEDICS

NEEDLE-THREAD COMBINATIONS

HIP REPLACEMENT

Capsule/Fascia									
Material	Needle		Color	Length (cm)	3/0	2/0	USP		
							0	1	2
PDO	26 mm, 1/2 Circle Reverse Cutting		Violet	14 x 14 24 x 24				RA-1004Q RA-1032Q	RA-1006Q RA-1034Q
PDO	40 mm, 1/2 Circle Reverse Cutting		Violet	36 x 36 45 x 45					RX-1066Q RX-2066Q
PDO	36 mm, 1/2 Circle Taper Point		Violet	14 x 14 24 x 24 30 x 30			RA-1029Q	RA-1003Q RA-1031Q RA-1059Q	RA-1005Q RA-1033Q RA-1058Q
PDO	48 mm, 1/2 Circle Taper Point		Violet	36 x 36 45 x 45					RA-1065Q RA-2065Q
PDO	36 mm, 1/2 Circle Taper Point		Violet	24 x 24 30 x 30 36 x 36				RX-1031Q RX-1059Q	RX-1033Q RX-1058Q RX-1062Q
PDO	40 mm, 1/2 Circle Reverse Cutting		Violet	20 70					VLP-2019 VLP-2011
PDO	36 mm, 1/2 Circle Taper Point		Violet	45 70					VLP-2025 VLP-2024
PDO	48 mm, 1/2 Circle Taper Point		Violet	70			VLP-2010		
Polypropylene	26 mm, 1/2 Circle Reverse Cutting		Undyed	14 x 14				JA-1005Q	JA-1001Q
Polypropylene	36 mm, 1/2 Circle Taper Point		Undyed	24 x 24					JA-1007Q

ORTHOPAEDICS

NEEDLE-THREAD COMBINATIONS

HIP REPLACEMENT

Subcutaneous									
Material	Needle		Color	Length (cm)	3/0	2/0	USP		
							0	1	2
Monoderm™	18 mm, 3/8 Circle Reverse Cutting		Undyed	14 x 14				YA-1004Q	
Monoderm™	36 mm, 1/2 Circle Reverse Cutting		Undyed	36 x 36 45 x 45			YA-2036Q YA-2035Q		
Monoderm™	36 mm, 1/2 Circle Taper Point		Undyed	14 x 14 36 x 36			YA-1003Q YA-1029Q		
Monoderm™	19 mm, 3/8 Circle Reverse Cutting		Undyed	30 60		VLM-2001 VLM-2002			
Monoderm™	24 mm, 3/8 Circle Reverse Cutting		Undyed	45 60		VLM-2012 VLM-1001			
Monoderm™	26 mm, 3/8 Circle Reverse Cutting		Undyed	20			VLM-1022		
Monoderm™	26 mm, 3/8 Circle Reverse Cutting		Violet	20			VLM-1023		
Monoderm™	19 mm, 3/8 Circle Fine Reverse Cutting		Undyed	30		VLM-3010			
Monoderm™	26 mm, 1/2 Circle Taper Point		Undyed	20 30 45		VLM-1006 VLM-1013	VLM-1020		
Monoderm™	36 mm, 1/2 Circle Taper Point		Undyed	30 60			VLM-1014 VLM-1003		
Monoderm™	36 mm, 1/2 Circle Taper Point		Violet	30			VLM-1015		
Monoderm™	40 mm, 1/2 Circle Taper Point		Violet	70			VLM-1017		

Subcutaneous									
Material	Needle		Color	Length (cm)	3/0	2/0	USP		
							0	1	2
PDO	26 mm, 3/8 Circle Reverse Cutting		Violet	7 x 7			RA-1015Q		
PDO	36 mm, 1/2 Circle Reverse Cutting		Violet	36 x 36 45 x 45			RX-2069Q RX-2068Q		
PDO	36 mm, 1/2 Circle Taper Point		Violet	7 x 7 14 x 14 24 x 24 30 x 30 36 x 36 45 x 45			RX-1068Q RX-1069Q RA-1029Q RA-1067Q RA-2067Q	RA-1003Q RA-1031Q RA-1059Q	
PDO	48 mm, 1/2 Circle Taper Point		Violet	30 x 30			RA-1060Q		
PDO	36 mm, 1/2 Circle Taper Point		Violet	24 x 24			RX-1029Q		
PDO	13 mm, 3/8 Circle Reverse Cutting		Violet	20 30		VLP-3021 VLP-3022			
PDO	19 mm, 3/8 Circle Reverse Cutting		Violet	30 45		VLP-2029	VLP-3028 VLP-2001		
PDO	24 mm, 3/8 Circle Reverse Cutting		Violet	30			VLP-3029		
PDO	26 mm, 3/8 Circle Reverse Cutting		Violet	45 60		VLP-2026 VLP-2027			
PDO	36 mm, 1/2 Circle Reverse Cutting		Violet	30			VLP-1006		
PDO	36 mm, 1/2 Circle Taper Point		Violet	15 20 30 45 70			VLP-1001 VLP-1002 VLP-1004 VLP-2012	VLP-2015	VLP-2030 VLP-2032 VLP-2025 VLP-2024

ORTHOPAEDICS

NEEDLE-THREAD COMBINATIONS

HIP REPLACEMENT

Subcuticular									
Material	Needle		Color	Length (cm)	3/0	2/0	USP		
							0	1	2
Monoderm™	18 mm, 3/8 Circle Reverse Cutting		Undyed	14 x 14 30 x 30	YA-1016Q-0 YA-1021Q-0	YA-1012Q YA-1022Q-0			
Monoderm™	19 mm, 3/8 Circle Reverse Cutting		Undyed	14 x 14 30 x 30 40 x 40	YA-2016Q YA-2021Q YA-2031Q	YA-2022Q YA-2032Q			
Monoderm™	24 mm, 3/8 Circle Reverse Cutting		Undyed	30 x 30 40 x 40	YA-2023Q YA-2033Q	YA-2024Q YA-2034Q			
Monoderm™	26 mm, 3/8 Circle Reverse Cutting		Undyed	14 x 14 30 x 30	YA-1015Q-0 YA-1023Q-0	YA-1024Q-0			
Monoderm™	70 mm, Straight Reverse Cutting		Undyed	30 x 30			YA-1051Q		
Monoderm™	19 mm, 3/8 Circle Reverse Cutting		Undyed	20 45 60	VLM-1010 VLM-2004	VLM-2016 VLM-2002			
Monoderm™	24 mm, 3/8 Circle Reverse Cutting		Undyed	20 30 45 60	VLM-1011	VLM-1002 VLM-2012 VLM-1001			
Monoderm™	24 mm, 3/8 Circle Reverse Cutting		Undyed	30	VLM-1012				
Monoderm™	19 mm, 3/8 Circle Fine Reverse Cutting		Undyed	30 45	VLM-3008 VLM-2018	VLM-3010			
PDO	26 mm, 3/8 Circle Reverse Cutting		Violet	14 x 14	RA-1021Q				

KNEE REPLACEMENT

Capsule/Fascia									
Material	Needle		Color	Length (cm)	3/0	2/0	USP		
							0	1	2
PDO	26 mm, 1/2 Circle Reverse Cutting		Violet	14 x 14 24 x 24				RA-1004Q RA-1032Q	RA-1006Q RA-1034Q
PDO	40 mm, 1/2 Circle Reverse Cutting		Violet	36 x 36 45 x 45					RX-1066Q RX-2066Q
PDO	36 mm, 1/2 Circle Taper Point		Violet	14 x 14 24 x 24 30 x 30			RA-1029Q	RA-1003Q RA-1031Q RA-1059Q	RA-1005Q RA-1033Q RA-1058Q
PDO	48 mm, 1/2 Circle Taper Point		Violet	36 x 36 45 x 45					RA-1065Q RA-2065Q
PDO	36 mm, 1/2 Circle Taper Point Reinforced		Violet	24 x 24 30 x 30 36 x 36				RX-1031Q RX-1059Q	RX-1033Q RX-1058Q RX-1062Q
PDO	40 mm, 1/2 Circle Reverse Cutting		Violet	20 70					VLP-2019 VLP-2011
PDO	36 mm, 1/2 Circle Taper Point		Violet	45 70					VLP-2025 VLP-2024
PDO	48 mm, 1/2 Circle Taper Point		Violet	70			VLP-2010		
Polypropylene	26 mm, 1/2 Circle Reverse Cutting		Undyed	14 x 14				JA-1005Q	JA-1001Q
Polypropylene	36 mm, 1/2 Circle Taper Point		Undyed	24 x 24					JA-1007Q

ORTHOPAEDICS

NEEDLE-THREAD COMBINATIONS

KNEE REPLACEMENT

Subcutaneous									
Material	Needle		Color	Length (cm)	3/0	2/0	USP		
							0	1	2
Monoderm™	18 mm, 3/8 Circle Reverse Cutting		Undyed	14 x 14				YA-1004Q	
Monoderm™	36 mm, 1/2 Circle Reverse Cutting		Undyed	36 x 36 45 x 45				YA-2036Q YA-2035Q	
Monoderm™	36 mm, 1/2 Circle Taper Point		Undyed	14 x 14 36 x 36			YA-1003Q YA-1029Q		
Monoderm™	19 mm, 3/8 Circle Reverse Cutting		Undyed	30 60		VLM-2001 VLM-2002			
Monoderm™	24 mm, 3/8 Circle Reverse Cutting		Undyed	45 60		VLM-2012 VLM-1001			
Monoderm™	26 mm, 3/8 Circle Reverse Cutting		Undyed	20			VLM-1022		
Monoderm™	26 mm, 3/8 Circle Reverse Cutting		Violet	20			VLM-1023		
Monoderm™	19 mm, 3/8 Circle Fine Reverse Cutting		Undyed	30		VLM-3010			
Monoderm™	26 mm, 1/2 Circle Taper Point		Undyed	20 30 45		VLM-1006 VLM-1013	VLM-1020		
Monoderm™	36 mm, 1/2 Circle Taper Point		Undyed	30 60			VLM-1014 VLM-1003		
Monoderm™	36 mm, 1/2 Circle Taper Point		Violet	30			VLM-1015		
Monoderm™	40 mm, 1/2 Circle Taper Point		Violet	70			VLM-1017		

Subcutaneous									
Material	Needle		Color	Length (cm)	3/0	2/0	USP		
							0	1	2
PDO	26 mm, 3/8 Circle Reverse Cutting		Violet	7 x 7			RA-1015Q		
PDO	36 mm, 1/2 Circle Reverse Cutting		Violet	36 x 36 45 x 45			RX-2069Q RX-2068Q		
PDO	36 mm, 1/2 Circle Taper Point		Violet	7 x 7 14 x 14 24 x 24 30 x 30 36 x 36 45 x 45			RX-1068Q RX-1069Q RA-1029Q RA-1067Q RA-2067Q	RA-1003Q RA-1031Q RA-1059Q	
PDO	48 mm, 1/2 Circle Taper Point		Violet	30 x 30			RA-1060Q		
PDO	36 mm, 1/2 Circle Taper Point Reinforced		Violet	24 x 24			RX-1029Q		
PDO	13 mm, 3/8 Circle Reverse Cutting		Violet	20 30		VLP-3021 VLP-3022			
PDO	19 mm, 3/8 Circle Reverse Cutting		Violet	30 45		VLP-2029	VLP-3028 VLP-2001		
PDO	24 mm, 3/8 Circle Reverse Cutting		Violet	30			VLP-3029		
PDO	26 mm, 3/8 Circle Reverse Cutting		Violet	45 60		VLP-2026 VLP-2027			
PDO	36 mm, 1/2 Circle Reverse Cutting		Violet	30			VLP-1006		
PDO	36 mm, 1/2 Circle Taper Point		Violet	15 20 30 45 70			VLP-1001 VLP-1002 VLP-1004 VLP-2012	VLP-2015	VLP-2030 VLP-2032 VLP-2025 VLP-2024

PLASTIC & RECONSTRUCTIVE SURGERY

NEEDLE-THREAD COMBINATIONS

ABDOMINOPLASTY

Plication									
Material	Needle		Color	Length (cm)	USP				
					3/0	2/0	0	1	2
PDO	40 mm, 1/2 Circle Reverse Cutting		Violet	36 x 36 45 x 45					RX-1066Q RX-2066Q
PDO	36 mm, 1/2 Circle Taper Point		Violet	30 x 30 36 x 36					RA-1058Q RX-1062Q
PDO	48 mm, 1/2 Circle Taper Point		Violet	36 x 36 45 x 45					RA-1065Q RA-2065Q
PDO	36 mm, 1/2 Circle Taper Point		Violet	30 45 70					VLP-2032 VLP-2025 VLP-2024
PDO	48 mm, 1/2 Circle Taper Point		Violet	70			VLP-2010		
PDO	65 mm, 1/2 Circle Taper Point		Violet	60					VLP-2031
Polypropylene	26 mm, 1/2 Circle Reverse Cutting		Undyed	14 x 14				JA-1005Q	JA-1001Q
Polypropylene	36 mm, 1/2 Circle Taper Point		Undyed	24 x 24					JA-1007Q
Polypropylene	36 mm, 1/2 Circle Taper Point		Undyed	45				VLO-1002	VLO-1003

ABDOMINOPLASTY / BREAST RECONSTRUCTION

Superficial Fascial System (SFS)									
Material	Needle		Color	Length (cm)	3/0	2/0	USP		
							0	1	2
PDO	36 mm, 1/2 Circle Taper Point		Violet	24 x 24 30 x 30 36 x 36			RA-1029Q RA-1067Q	RA-1031Q RA-1059Q	

Subcutaneous									
Material	Needle		Color	Length (cm)	3/0	2/0	USP		
							0	1	2
PDO	26 mm, 3/8 Circle Reverse Cutting		Violet	24 x 24		RA-1028Q-0			
PDO	36 mm, 1/2 Circle Taper Point		Violet	24 x 24 30 x 30 36 x 36			RA-1029Q RA-1067Q	RA-1031Q RA-1059Q	
Monoderm™	18 mm, 3/8 Circle Reverse Cutting		Undyed	30 x 30	YA-1021Q-0	YA-1022Q-0			
Monoderm™	24 mm, 3/8 Circle Reverse Cutting		Undyed	30 x 30	YA-2023Q	YA-2024Q			
Monoderm™	26 mm, 3/8 Circle Reverse Cutting		Undyed	30 x 30	YA-1023Q-0	YA-1024Q-0			
Monoderm™	36 mm, 1/2 Circle Taper Point		Undyed	36 x 36			YA-1029Q		
Monoderm™	19 mm, 3/8 Circle Reverse Cutting		Undyed	45 60	VLM-2004	VLM-2016 VLM-2002			
Monoderm™	19 mm, 3/8 Circle Fine Reverse Cutting		Undyed	30 45	VLM-3008 VLM-2018	VLM-3010			

PLASTIC & RECONSTRUCTIVE SURGERY

NEEDLE-THREAD COMBINATIONS

ABDOMINOPLASTY / BREAST RECONSTRUCTION

Subcuticular									
Material	Needle		Color	Length (cm)	3/0	2/0	USP		
							0	1	2
Monoderm™	18 mm, 3/8 Circle Reverse Cutting		Undyed	14 x 14 30 x 30	YA-1016Q-0 YA-1021Q-0				
Monoderm™	24 mm, 3/8 Circle Reverse Cutting		Undyed	30 x 30	YA-2023Q				
Monoderm™	19 mm, 3/8 Circle Reverse Cutting		Undyed	60	VLM-2004				
Monoderm™	19 mm, 3/8 Circle Fine Reverse Cutting		Undyed	30	VLM-3008				

BREAST RECONSTRUCTION

Areola									
Material	Needle		Color	Length (cm)	3/0	2/0	USP		
							0	1	2
Monoderm™	18 mm, 3/8 Circle Reverse Cutting		Undyed	14 x 14	YA-1016Q-0	YA-1012Q			
Monoderm™	19 mm, 3/8 Circle Reverse Cutting		Undyed	14 x 14	YA-2016Q				
Monoderm™	26 mm, 3/8 Circle Reverse Cutting		Undyed	14 x 14		YA-1015Q-0			
Monoderm™	19 mm, 3/8 Circle Reverse Cutting		Undyed	20 30		VLM-1004 VLM-2001			
Monoderm™	24 mm, 3/8 Circle Reverse Cutting		Undyed	30		VLM-1002			
Monoderm™	19 mm, 3/8 Circle Fine Reverse Cutting		Undyed	20 30		VLM-3009 VLM-3010			
Monoderm™	26 mm, 1/2 Circle Taper Point		Undyed	20		VLM-1006			

UROLOGY

NEEDLE-THREAD COMBINATIONS

PROSTATECTOMY

Peritoneum								
Material	Needle		Color	Length (cm)	3/0	2/0	USP	
							0	1
								2
Monoderm™	36 mm, 1/2 Circle Taper Point		Undyed	14 x 14 36 x 36			YA-1003Q YA-1029Q	
Monoderm™	26 mm, 1/2 Circle Taper Point		Undyed	20		VLM-1006		
Monoderm™	26 mm, 1/2 Circle Taper Point		Violet	15			VLM-2013	
Monoderm™	36 mm, 1/2 Circle Taper Point		Undyed	60			VLM-1003	

UROLOGY

NEEDLE-THREAD COMBINATIONS

PROSTATECTOMY

Subcutaneous									
Material	Needle		Color	Length (cm)	3/0	2/0	USP		
							0	1	2
Monoderm™	18 mm, 3/8 Circle Reverse Cutting		Undyed	14 x 14 30 x 30	YA-1016Q-0 YA-1021Q-0	YA-1012Q			
Monoderm™	24 mm, 3/8 Circle Reverse Cutting		Undyed	30 x 30	YA-2023Q	YA-2024Q			
Monoderm™	26 mm, 3/8 Circle Reverse Cutting		Undyed	14 x 14 30 x 30	YA-1023Q-0	YA-1015Q-0 YA-1024Q-0			
Monoderm™	36 mm, 1/2 Circle Taper Point		Undyed	14 x 14 36 x 36			YA-1003Q YA-1029Q		
Monoderm™	19 mm, 3/8 Circle Reverse Cutting		Undyed	30 60	VLM-2004	VLM-2001 VLM-2002			
Monoderm™	24 mm, 3/8 Circle Reverse Cutting		Undyed	45 60		VLM-2012 VLM-1001			
Monoderm™	19 mm, 3/8 Circle Fine Reverse Cutting		Undyed	30 45	VLM-3008 VLM-2018	VLM-3010			
Monoderm™	17 mm, 1/2 Circle Taper Point		Undyed Violet	15 30		VLM-2014 VLM-1021			
Monoderm™	26 mm, 1/2 Circle Taper Point		Undyed	20 45		VLM-1006	VLM-1020		
Monoderm™	36 mm, 1/2 Circle Taper Point		Undyed	30 60			VLM-1014 VLM-1003		
PDO	36 mm, 1/2 Circle Taper Point		Violet	14 x 14 24 x 24 30 x 30 36 x 36			RX-1069Q RA-1029Q RA-1067Q	RA-1003Q RA-1031Q RA-1059Q	
PDO	26 mm, 1/2 Circle Taper Point		Violet	30			VLP-2009		
PDO	36 mm, 1/2 Circle Taper Point		Violet	45 70			VLP-1004 VLP-2012		

Urethrovesical Anastomosis (Bladder-Urethra Anastomosis)

Material	Needle		Color	Length (cm)	USP				
					3/0	2/0	0	1	2
Monoderm™	17 mm, 1/2 Circle Taper Point		Undyed Violet	16 x 16 16 x 16		VP-1000Q VP-2000Q			
Monoderm™	18 mm, 1/2 Circle Taper Point		Undyed	16 x 16	RS-1001Q	RS-1000Q			
Monoderm™	26 mm, 1/2 Circle Taper Point		Undyed	16 x 16		RS-1005Q			
Monoderm™	17 mm, 1/2 Circle Taper Point		Undyed	15 20		VLM-2014 VLM-1005			
Monoderm™	17 mm, 1/2 Circle Taper Point		Violet	15 20		VLM-2015 VLM-2005			
Monoderm™	18 mm, 1/2 Circle Taper Point		Violet	20 30	VLM-1008 VLM-1009				
Monoderm™	26 mm, 1/2 Circle Taper Point		Undyed	20		VLM-1006			
Monoderm™	26 mm, 1/2 Circle Taper Point		Violet	15 20		VLM-2017 VLM-2006			
Monoderm™	26 mm, 5/8 Circle Taper Point		Violet	15 20		VLM-1018 VLM-2019			
PDO	22 mm, 1/2 Circle Taper Point		Violet	14 x 14				RA-1088Q	
PDO	26 mm, 1/2 Circle Taper Point		Violet	10 x 10 14 x 14			RA-1078Q RA-1079Q		
PDO	36 mm, 1/2 Circle Taper Point		Violet	7 x 7 14 x 14			RX-1068Q RX-1069Q	RA-1003Q	
PDO	17 mm, 1/2 Circle Taper Point		Violet	15		VLP-2022			

UROLOGY

NEEDLE-THREAD COMBINATIONS

PROSTATECTOMY

Urethrovessical Anastomosis (Bladder-Urethra Anastomosis)								
Material	Needle		Color	Length (cm)	3/0	2/0	USP	
							0	1
								2
PDO	26 mm, 1/2 Circle Taper Point		Violet	15		VLP-2021		
PDO	36 mm, 1/2 Circle Taper Point		Violet	15 20 30			VLP-1001 VLP-1002	VLP-2015
								VLP-2030

NEPHRECTOMY/PARTIAL NEPHRECTOMY

Organ/Renorrhaphy (Kidney Closure on Partial Nephrectomy)								
Material	Needle		Color	Length (cm)	3/0	2/0	USP	
							0	1
								2
Monoderm™	26 mm, 1/2 Circle Taper Point		Undyed	20		VLM-1006		
Monoderm™	36 mm, 1/2 Circle Taper Point		Undyed	30			VLM-1014	
PDO	22 mm, 1/2 Circle Taper Point		Violet	14 x 14				RA-1088Q
PDO	26 mm, 1/2 Circle Taper Point		Violet	10 x 10 14 x 14			RA-1078Q RA-1079Q	
PDO	36 mm, 1/2 Circle Taper Point		Violet	7 x 7 14 x 14			RX-1068Q RX-1069Q	RA-1003Q
								RA-1005Q
PDO	26 mm, 1/2 Circle Taper Point		Violet	30			VLP-2009	
PDO	36 mm, 1/2 Circle Taper Point		Violet	20 30			VLP-1001 VLP-1002	VLP-2015

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- (11) Quill™ device Instructions for Use.

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