

# ANGIOFLOW<sup>®</sup> DIAGNOSTIC CATHETERS

Our **difference**  
is your **speciality**

# KIMAL COMMITMENT

## AWARD WINNING CUSTOMER SERVICE

The customer is our number one priority and we are committed to consistently delivering high standards of customer care globally. It is this philosophy which has led us to achieve the European Supply Chain Excellence Award for Customer Service in conjunction with an NHS Trust.



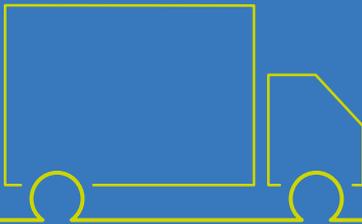
## NO UNEXPECTED SURPRISES

We will work with you to deliver a customised procedure pack to your requirements. You will receive what you ask for and if anything changes, we will notify you first.



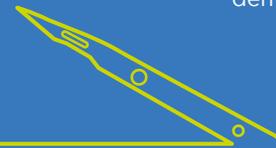
## DELIVER ON TIME

KIMAL recognise the importance of delivering on time, every time, in full. Through our 50 Years' experience we have developed core skills which have enabled us to work with our customers and actively manage the challenges of fluctuating demand through forecasted monthly usage.



## HIGH QUALITY PRODUCTS TO MEET YOUR NEEDS

We work with our manufacturers to deliver quality products which will withstand the demands of the procedure.



## SPECIALIST CLINICAL KNOWLEDGE

Our team of Clinical Specialists and a customer focussed sales team are dedicated to understanding the needs of clinicians and will support you in improving efficiencies in your department.



Our **commitment** to your **patient**

# PACK +

**Your speciality is our priority and we believe in giving you choice.**

**With over 50 years' experience of working in a specialism where expert knowledge, an eye for detail and high quality specialist products are critical, Kimal understand the individual requirements of a procedure.**

The Kimal Pack+ Service supplies the choice you need to perform a procedure at the highest standard.

Committed to supporting your individual needs, Kimal have a range of high quality Procedure Packs, Drapes and Gowns and Procedure products to suit your speciality.

If you are looking for something more specialised, Kimal can work with you to produce solutions with the whole procedure in mind, which will meet your exact requirements.

**PROCEDURE PACKS**

**1**

**SPECIALITY PROCEDURE PACKS**

**DRAPES + GOWNS**

**2**

**SPECIALITY DRAPES**

## **PROCEDURE PRODUCTS**

Kimal's comprehensive range of products, from swabs to instruments and specialist ranges of Angiographic Catheters, Guidewires, Introducer Sheaths and Biopsy needles, have been developed alongside clinicians with your procedural requirements in mind.

**3**

**SPECIALITY PRODUCTS**



- + Dedicated to supporting innovation and delivering speciality innovative products to niche areas
- + Key speciality devices developed and selected with the whole procedure in mind
- + Committed to supporting patient safety and increasing productivity.

Our **difference** is your **speciality**

## DIAGNOSTIC CATHETERS

### Precise tip placement with flexibility and control

Gain access comfortably with Kimal AngioFlow. Designed for smooth vessel engagement, AngioFlow diagnostic catheters are available in a range of sizes and tip shapes to support cannulation of the LCA and RCA.

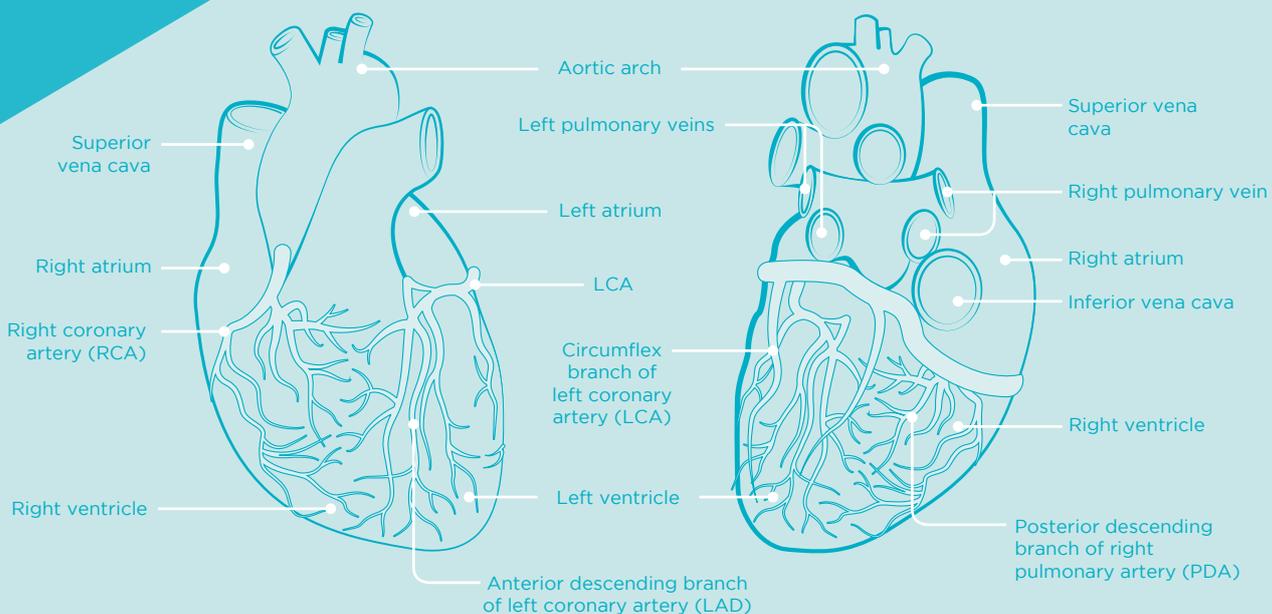
- ▶ Tip whip behaviour
- ▶ Tip radiopacity
- ▶ Ease of contrast injection
- ▶ Kink resistance
- ▶ Steerability
- ▶ Pushability
- ▶ Catheter and hub torque response

Engineered to support vessel engagement through some of the most tortuous anatomies, AngioFlow combines excellent torque control, kink resistance and pushability.

For full procedural solutions, the Kimal Cardiology Procedure pack can compliment your Kimal AngioFlow diagnostic Catheter. Supporting you in your procedure from initial setup until completion.

TRANSRADIAL

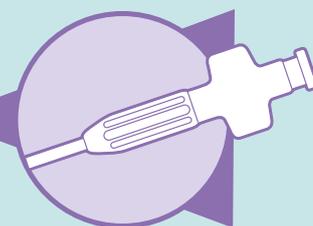
FEMORAL



# CONTENTS

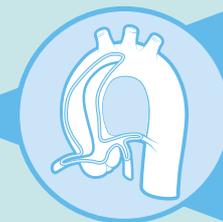
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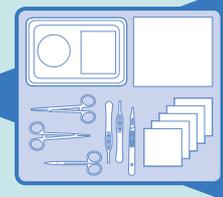
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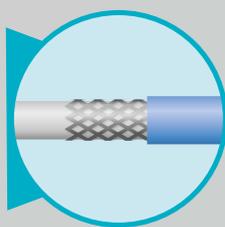
# ANGIOFLOW<sup>®</sup> DIAGNOSTIC CATHETERS

## *Optimal Control for Precise Placement*

AngioFlow catheters have been constructed to produce enhanced steering with pushability, large inner lumens for increased flow and an enhanced surface for superior smoothness and flexibility.

Available in a range of configurations and tip shapes, to support the individual needs of your patient.

**See page 18-22 for ordering information.**



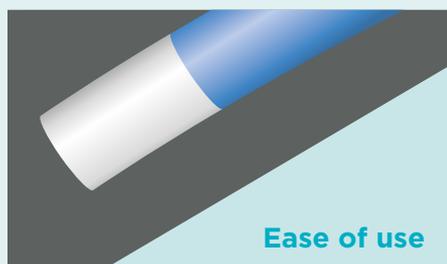
AngioFlow is a multilayer tube with a double wire stainless steel braiding for improved steerability. The tip is constructed out of soft atraumatic material to prevent vessel trauma. The hub has a grip section for optimal torque control.

**Basecoat:** Nylon and Pebax™. Nylon for strength and Pebax™ for flexibility

**Braiding:** Inner layer consists of a flat wire stainless steel braiding

**Topcoat:** Nylon and Pebax™. Pebax™ for superior surface smoothness and flexibility

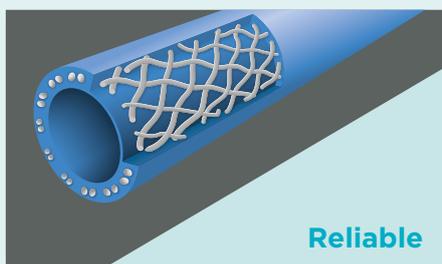
## FEATURES & BENEFITS



**Ease of use**

### **Ease of use**

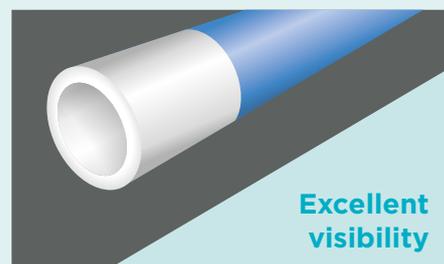
The soft atraumatic tip and superior surface smoothness of the AngioFlow catheter maintains an even insertion, leading to a reduced occurrence in vessel spasm, providing a quick and reliable vessel access.



**Reliable**

### **Reliable**

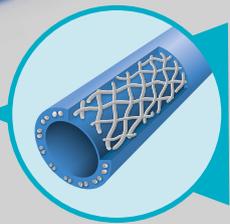
The double wire stainless steel braiding supports 1:1 torque response, which combined with the specially designed ergonomic hub, prevents “whip back” and enhances pushability.



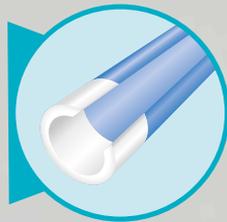
**Excellent visibility**

### **Excellent visibility**

The large inner lumen provides a consistent flow of contrast and superior flow rate which combined with the radiopaque tip, ensures consistent visibility throughout the diagnostic procedure.



**Double wire stainless steel braiding**  
 The braided construction allows 1:1 torque control and enhanced pushability whilst maintaining kink resistance



**Soft tip**  
 The distal tip of the catheter is left un-braided and constructed from a radiopaque soft material. This supports an atraumatic, smooth passage which minimises the risk of catheter induced complications



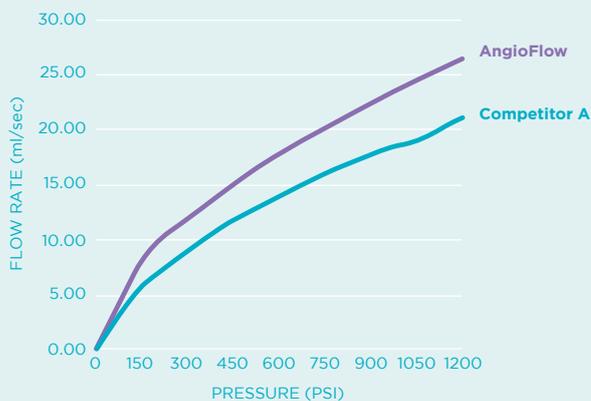
**Ergonomic hub**  
 incorporates a specially designed torque device which supports comfortable handling and optimal torque control

**Proprietary nylon material**  
 provides high levels of flexibility, superior surface smoothness and excellent torque control

## ANGIOFLOW® 5F DIAGNOSTIC CATHETER

### Large inner lumen

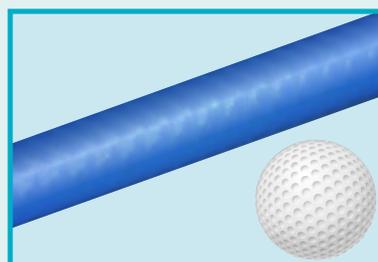
The larger inner lumen of the 5 Fr. guarantees easy and complete contrast filling for optimal vessel opacification, without losing body characteristics and providing superior flow rates.



### Ease of insertion

The AngioFlow 6F Diagnostic Catheters employ a unique hydrodynamic outer body surface.

- Ease introduction
- Flexible in tortuous anatomy
- Quick and reliable coronary vessel access
- Lower occurrence of vessel spasms



**Hydrodynamic outer body**

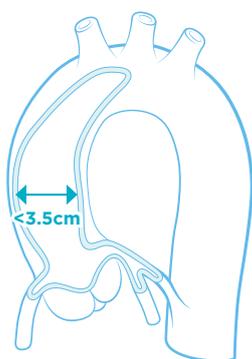
# ANATOMICAL CONSIDERATIONS

## AngioFlow® Tip Shapes

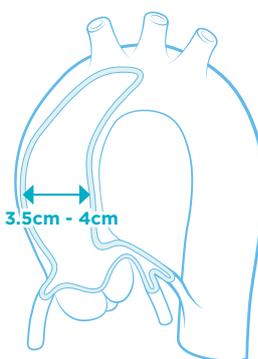
AngioFlow Diagnostic catheters are available in various configurations to support cannulation of the LCA and RCA, including Radial specific options.

The TIG24 and RAD curve are specially designed to cannulate both LCA and RCA, therefore AngioFlow Diagnostic Catheters do not need to be exchanged.

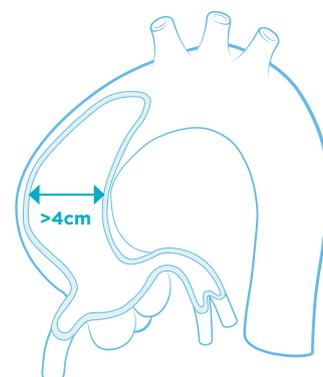
Reduced catheter exchanges leads to a reduction in radial artery spasm, radiation exposure and the length of the procedure.



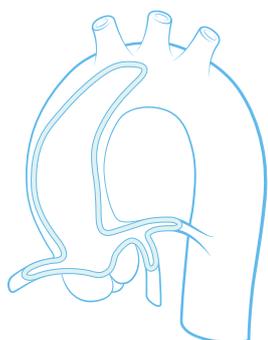
**Narrow Aorta**



**Normal Aorta**



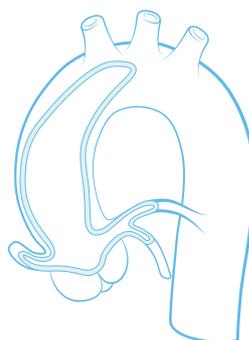
**Dilated Aorta**



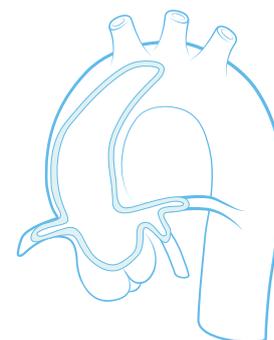
**Lateral**



**Inferior**



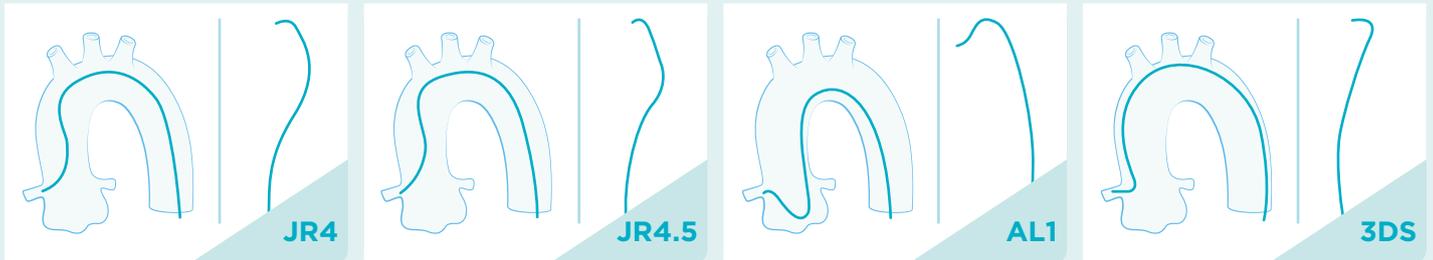
**Superior**



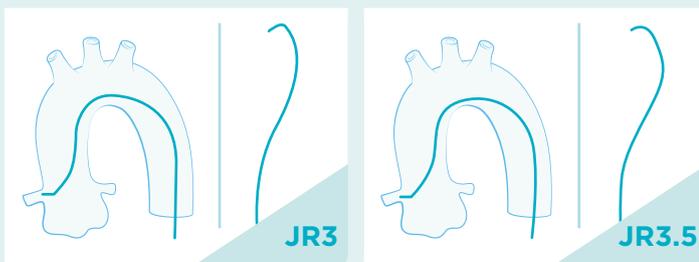
**High**

Incorporating the same key benefits, Kimal AngioFlow has been developed to cater for a range of anatomies.

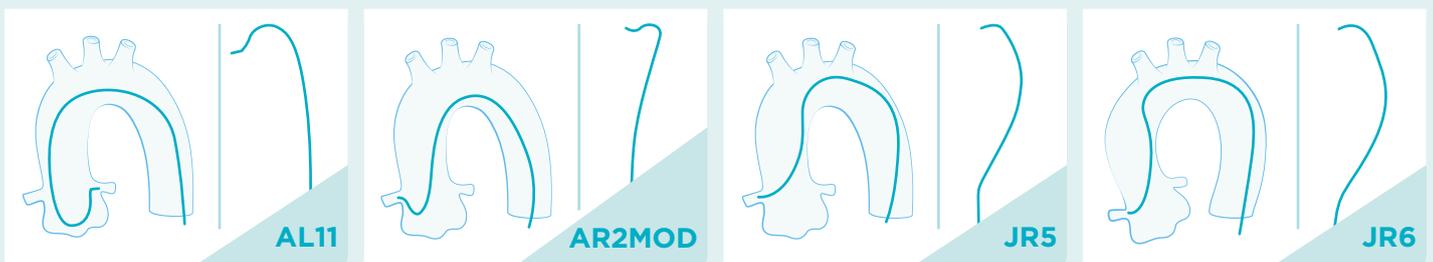
## RIGHT CORONARY ARTERY (RCA)



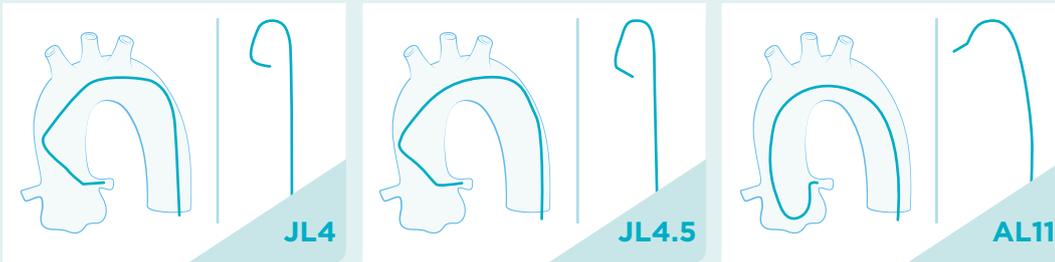
## SMALL AORTIC ROOT (RCA)



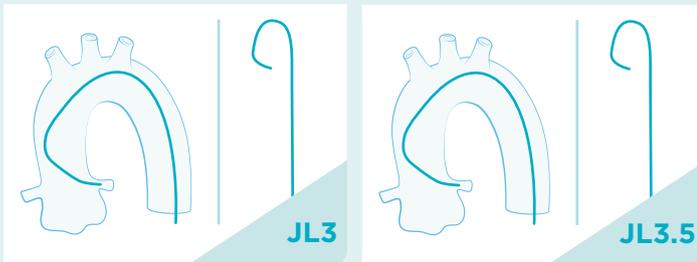
## LARGE AORTIC ROOT (RCA)



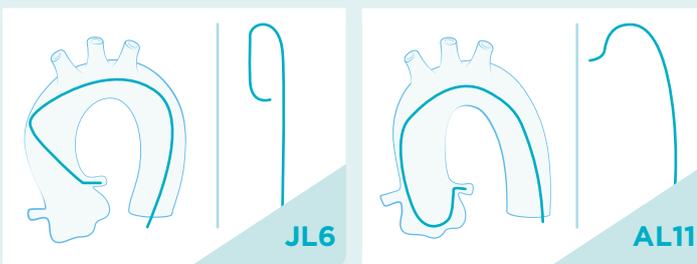
## LEFT CORONARY ARTERY (RCA)



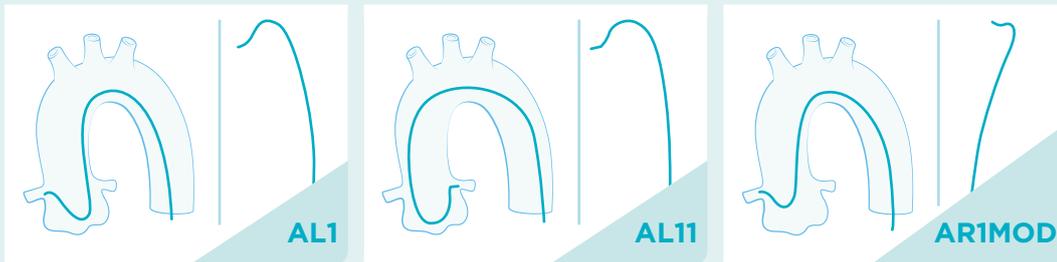
## SMALL AORTIC ROOT (RCA)



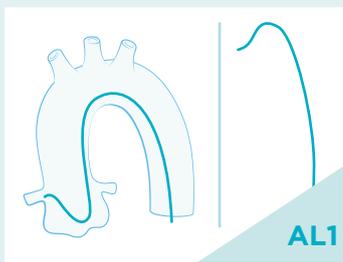
## LARGE AORTIC ROOT (RCA)



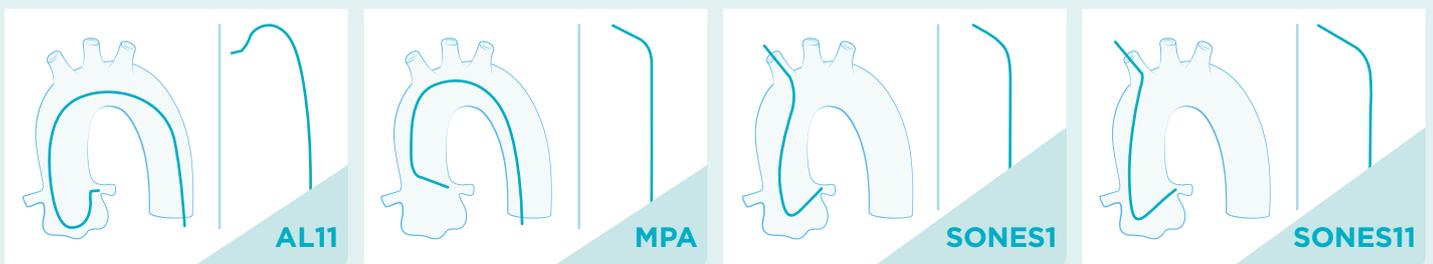
## SUPERIOR/UPFACING RIGHT CORONARY ARTERY (RCA)



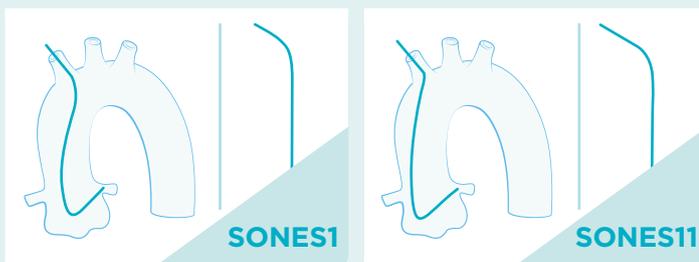
## SUPERIOR/UPFACING LEFT ANTERIOR DESCENDING (LAD)



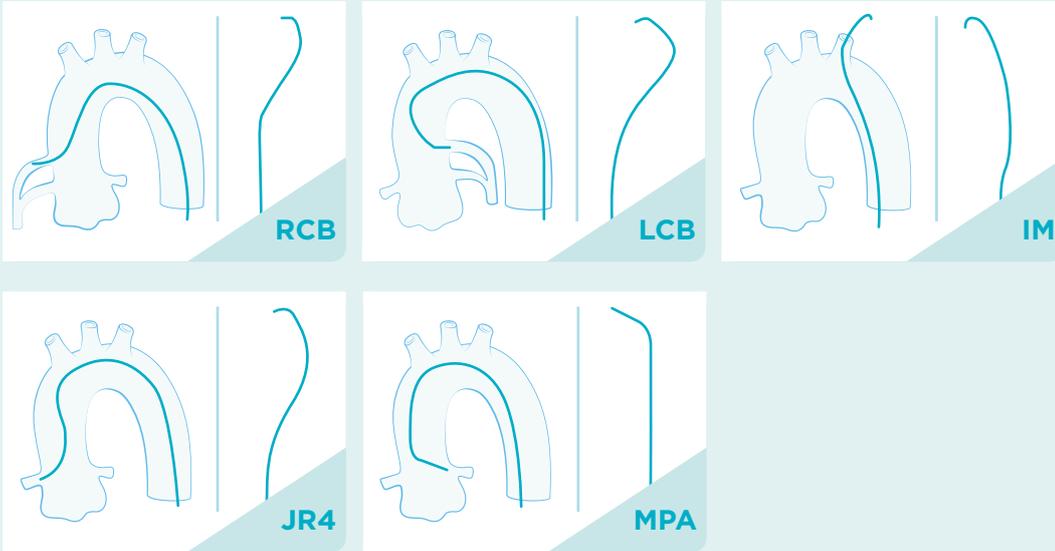
## INFERIOR/DOWNWARD FACING RIGHT CORONARY ARTERY (RCA)



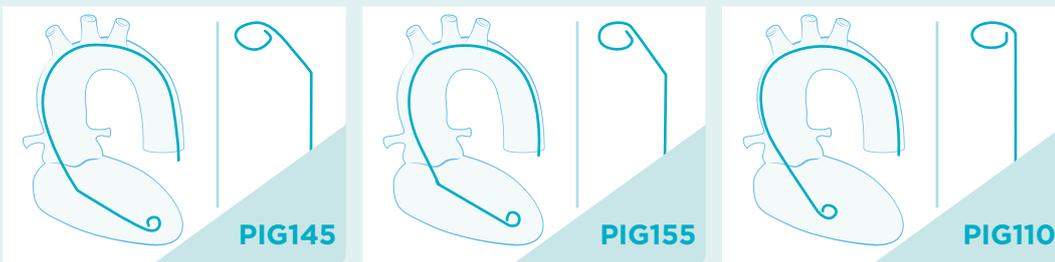
## INFERIOR/DOWNWARD FACING LEFT ANTERIOR DESCENDING (LAD)



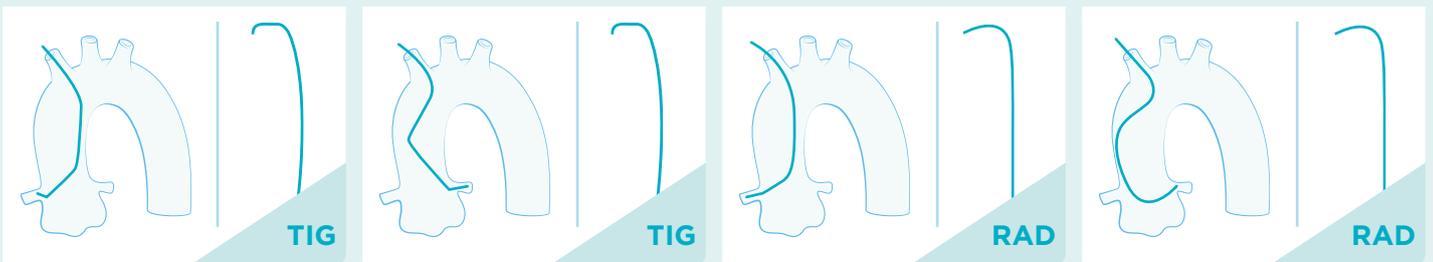
## BYPASSES



## LEFT VENTRICLE



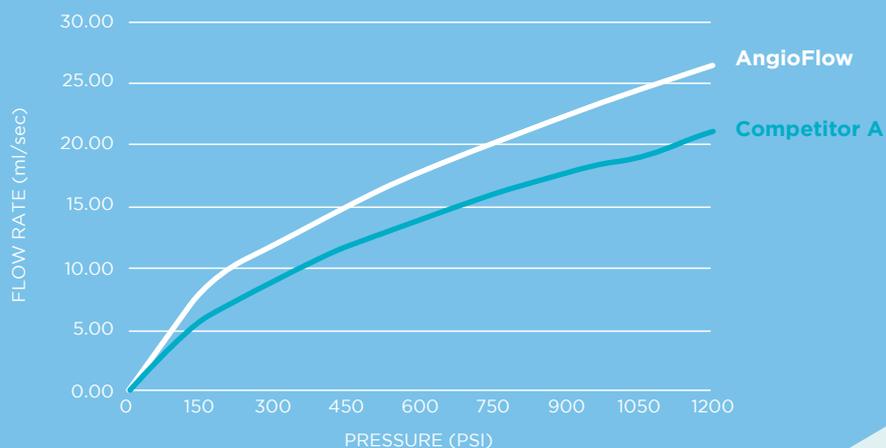
## RADIAL ACCESS



# COMPETITOR INFO

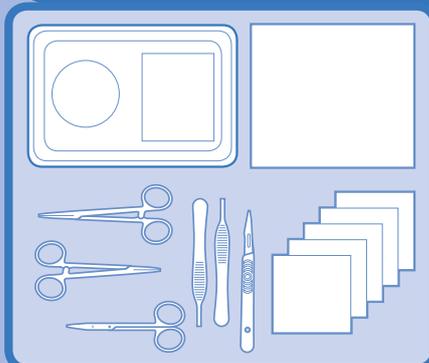
## Large inner lumen

The larger inner lumen of the 5 Fr. guarantees easy and complete contrast filling for optimal vessel opacification, without losing body characteristics and providing superior flow rates.



	INNER DIAMETER		
	4F	5F	6F
Kimal Angioflow®	0.042"	0.050"	0.057"
Competitor A		0.045" 0.045" 0.045"	0.056" 0.052" 0.056"
Competitor B	0.042"	0.047" 0.044"	0.057" 0.051"
Competitor C	0.042"	0.045" 0.045"	0.050" 0.055"
Competitor D		0.044"	0.050"
Competitor E	0.041" 0.041"	0.047"	0.051"
Competitor F	0.042"	0.044" 0.046"	0.051" 0.054"

# PROCEDURE PACKS



**For full procedural solutions, the Kimal Procedure Pack can compliment your AngioFlow<sup>®</sup> Diagnostic Catheter. Supporting you in your procedure from initial setup until completion.**

Kimal offer an extensive selection of products to support Cardiology procedures, manufactured to the highest standard and customised to your requirements.

Kimal specialise in creating bespoke procedure pack solutions and our team of dedicated clinical specialists and customer focussed sales teams will work with your department to deliver a solution tailored to your individual needs.

The components and packs listed represent universal options. Please contact Kimal to discuss your exact requirements.

**For further information on our range of speciality products and customisation please speak to your local Kimal representative.**

# CARDIOLOGY ANGIOGRAPHY PROCEDURE PACKS (K211/4001/10)



## QTY CONTENTS

- 1 Namic® 2 port manifold
- 2 Gallipot 120ml
- 1 Guidewire bowl
- 4 Syringe, PE 10ml L/S
- 1 Syringe, PE 5ml L/L
- 1 Label set
- 1 Needle 18G x 7cm (70mm) introducer needle
- 1 Needle 21G x 3.8cm hypo green
- 1 Needle 23G x 3cm hypo blue

## QTY CONTENTS

- 1 Scalpel no.11
- 2 Sponge stick medium 15cm
- 1 Swab gauze 10 x 10cm, 12ply 10 pack
- 1 Medium fluoro cover
- 1 Sharps needle containment device
- 1 Angio drape, 2 fenestrations, 3ply laminate, no windows, 300cm
- 1 Equipment cover, PE, 100 x 100cm
- 1 Bowl 250ml
- 1 Sponge bowl 500ml

## RADIOLOGY MULTI PURPOSE PROCEDURE PACKS (K209/4001/10)



### QTY CONTENTS

1	Syringe 5ml, L/S
1	Syringe 10ml, L/S
1	Needle 21G x 3.8cm, hypo green
1	Needle 23G x 3cm, hypo blue
1	Swab NW 10 x 10cm 4ply 10 pack
1	Sponge stick medium 15cm
1	Scalpel no.11
1	Gallipot 120ml
1	Tray half shallow 24.5 x 3.5cm
1	Absorbent dressing, 9 x 10cm
1	Fenestrated drape, 2ply laminate with adhesive

## PREMIER RADIOLOGY PROCEDURE PACKS (K209/4002)



### QTY CONTENTS

1	Tray blue 42 x 30 x 6
1	Drape general utility, 75 x 75cm 2ply laminate
1	Needle 21G x 3.8cm hypo green
1	Needle 23G x 3cm hypo blue
1	Needle drawing up
1	Syringe 10ml, L/S
2	Syringe 20ml, L/S
1	Forceps artery mosquito straight
1	Scissors sharp/blunt 13cm
1	Scalpel no.11
1	Needle safety device
1	Cover, fluoro, large, green
1	Syringe 10ml, L/L
2	Sponge stick medium 15cm
1	Bag waste yellow, 35.5 x 60cm
1	Cover trolley 140 x 140cm
1	Syringe 5ml L/L
1	Swab gauze 10 x 10cm 12ply 10 pack
2	Absorbent dressings, 6 x 7cm
1	Gallipot 120ml
1	Fenestrated drape, 2ply laminate, adhesive
2	Bowl denture cup 250ml
1	Bowl kidney emesis 700ml

## PERMANENT PACING PROCEDURE PACKS (K212/4001/10)



QTY	CONTENTS	QTY	CONTENTS
1	Trolley cover 140 x 140cm	1	Scissors sharp/blunt 13cm
1	Guidewire bowl	1	Fluoro cover medium
1	Deep tray	2	Sponge stick 20cm yellow
1	Pacing drape set, single fenestration 12 x 20cm, SMS	1	Label set
4	Swab gauze 10 x 10cm XR 12ply 10 pack	1	Kimal® sharps needle containment device
1	Needle 21G x 3.8cm hypo green	1	Aneurysm needle
1	Needle 23G x 3cm hypo blue	1	Dissecting forceps toothed 14cm
1	Syringe, PE, 5ml, L/S	1	Dissecting forceps plain 14cm
3	Syringe, PE, 10ml, L/S	1	Needle holder 12.5cm
1	Syringe 20ml L/S	2	Langenbeck retractor
1	Scalpel no.10	1	Metzenbaum scissors 13.5cm
2	Mosquito artery forceps straight	1	Iris delicate scissors 11cm
3	Mosquito artery forceps curved	4	Towel clamps
		2	Bowl 250ml
		1	Kidney bowl 700ml
		1	Yellow waste bag

## TEMPORARY PACING PROCEDURE PACKS (K212/4002)



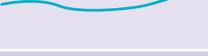
QTY	CONTENTS
1	Scalpel no.11
2	Syringe P.E 10ml L/S
1	Needle 25G x 5/8" hypo orange
1	Needle 21G x 3.8cm hypo green
2	Sponge stick medium 15cm
1	Gallipot 120ml
1	Opsite dressing 10 x 14cm
1	Swab gauze 10 x 10cm 12ply 10 pack
1	Mersilk® suture 2/0 W791
1	Gown SMS large
2	Hand towels
1	Fenestrated drape, 2ply laminate, 110cm x 110cm PE clear panel
1	Deep tray 28 x 25cm
1	Trolley cover 140 x 140cm
4	Foam cubes
1	Bi-polar pacing catheter 5Fr or bi-polar pacing catheter 6Fr
1	Needle 5Fr x 6.35cm peelaway or needle 6Fr x 6.35cm peelaway

# DIAGNOSTIC CATHETERS

TIP	SHAPE	CODE	FR SIZE	LENGTH	BOX QTY
	JL3	K5J100/JL3	5FR	100cm	5
	JL3	K6J100/JL3	6FR	100cm	5
	JL3.5	K4J100/JL3.5	4FR	100cm	5
	JL3.5	K5J100/JL3.5	5FR	100cm	5
	JL3.5	K6J100/JL3.5	6FR	100cm	5
	JL4	K4J100/JL4	4FR	100cm	5
	JL4	K5J100/JL4	5FR	100cm	5
	JL4	K6J100/JL4	6FR	100cm	5
	JL4.5	K5J100/JL4.5	5FR	100cm	5
	JL4.5	K6J100/JL4.5	6FR	100cm	5
	JL5	K4J100/JL5	4FR	100cm	5
	JL5	K5J100/JL5	5FR	100cm	5
	JL5	K6J100/JL5	6FR	100cm	5
	JL6	K4J100/JL6	4FR	100cm	5
	JL6	K5J100/JL6	5FR	100cm	5
	JL6	K6J100/JL6	6FR	100cm	5
	JR3.5	K4J100/JR3.5	4FR	100cm	5
	JR3.5	K5J100/JR3.5	5FR	100cm	5
	JR3.5	K6J100/JR3.5	6FR	100cm	5
	JR4	K4J100/JR4	4FR	100cm	5
	JR4	K5J100/JR4	5FR	100cm	5
	JR4	K6J100/JR4	6FR	100cm	5
	JR4.5	K5J100/JR4.5	5FR	100cm	5
	JR4.5	K6J100/JR4.5	6FR	100cm	5
	JR5	K4J100/JR5	4FR	100cm	5
	JR5	K5J100/JR5	5FR	100cm	5
	JR5	K6J100/JR5	6FR	100cm	5
	3DS	K4J100/3DS	4FR	100cm	5
	3DS	K5J100/3DS	5FR	100cm	5
	3DS	K6J100/3DS	6FR	100cm	5
	MPA	K4J100/MPA	4FR	100cm	5
	MPA	K5J100/MPA	5FR	100cm	5
	MPA	K6J100/MPA	6FR	100cm	5

For single use only.  
Please speak to your local Kimal Representative about your specific requirements.

# DIAGNOSTIC CATHETERS

TIP	SHAPE	CODE	FR SIZE	LENGTH	BOX QTY
	MPA 2 side holes	K4J100/MPA2	4FR	100cm	5
	MPA 2 side holes	K5J100/MPA2	5FR	100cm	5
	MPA 2 side holes	K6J100/MPA2	6FR	100cm	5
	RCB	K4J100/RCB	4FR	100cm	5
	RCB	K5J100/RCB	5FR	100cm	5
	RCB	K6J100/RCB	6FR	100cm	5
	LCB	K4J100/LCB	4FR	100cm	5
	LCB	K5J100/LCB	5FR	100cm	5
	LCB	K6J100/LCB	6FR	100cm	5
	TIG24	K4J100/TIG24	4FR	100cm	5
	TIG24	K5J100/TIG24	5FR	100cm	5
	TIG24	K6J100/TIG24	6FR	100cm	5
	RAD	K5J100/RAD	5FR	100cm	5
	RAD	K6J100/RAD	6FR	100cm	5
	IM	K4J100/IM	4FR	100cm	5
	IM	K5J100/IM	5FR	100cm	5
	IM	K6J100/IM	6FR	100cm	5
	SONES12	K4J100/SONES12	4FR	100cm	5
	SONES12	K5J100/SONES12	5FR	100cm	5
	SONES12	K6J100/SONES12	6FR	100cm	5
	SONES22	K4J100/SONES22	4FR	100cm	5
	AL1	K4J100/AL1	4FR	100cm	5
	AL1	K5J100/AL1	5FR	100cm	5
	AL1	K6J100/AL1	6FR	100cm	5
	AL2	K4J100/AL2	4FR	100cm	5
	AL2	K5J100/AL2	5FR	100cm	5
	AL2	K6J100/AL2	6FR	100cm	5
	AL3	K5J100/AL3	5FR	100cm	5
	AL3	K6J100/AL3	6FR	100cm	5
	ARMOD	K4J100/ARMOD	4FR	100cm	5
	ARMOD	K6J100/ARMOD	6FR	100cm	5

**For single use only.**  
Please speak to your local Kimal Representative about your specific requirements.

# DIAGNOSTIC CATHETERS

TIP	SHAPE	CODE	FR SIZE	LENGTH	BOX QTY
	AR1MOD	K4J100	4FR	100cm	5
	AR1MOD	K5J100	5FR	100cm	5
	AR1MOD	K6J100	6FR	100cm	5
	AR2MOD	K4J100	4FR	100cm	5
	AR2MOD	K5J100	5FR	100cm	5
	AR2MOD	K6J100	6FR	100cm	5
	PIG1458 145 degrees, 8 side holes	K4J110/PIG1458	4FR	100cm	5
	PIG1458 145 degrees, 8 side holes	K5J110/PIG1458	5FR	100cm	5
	PIG1458 145 degrees, 8 side holes	K6JLRP4/1458	6FR	100cm	5
	PIG1458 145 degrees, 8 side holes	K6J130/PIG1458	6FR	100cm	5
	PIG1458 145 degrees, 8 side holes	K6J110/PIG1458	6FR	110cm	5
	PIG1558 145 degrees, 8 side holes	K5J130/PIG1558	5FR	100cm	5
	PIG1558 145 degrees, 8 side holes	K4J110/PIG1558	4FR	110cm	5
	PIG1558 145 degrees, 8 side holes	K5J110/PIG1558	5FR	110cm	5
	PIG1558 145 degrees, 8 side holes	K6J110/PIG1558	6FR	110cm	5
	PIG	K5J100/JR6	5FR	100cm	5
	PIG	K5J130/PIG8	5FR	100cm	5
	PIG	K6J130/PIG8	6FR	100cm	5
	PIG	K4J110/PIG8	4FR	110cm	5
	PIG	K5J110/PIG8	5FR	110cm	5
	PIG	K6J110/PIG8	6FR	110cm	5

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## DUO PACKS

TIP	SHAPE	CODE	FR SIZE	LENGTH (MM)	BOX QTY	
		JL3.5/3DS	K4JL3.53DS	4FR	100cm	5
		JL4/3DS	K4JL43DS	4FR	100cm	5
		JL4/JR4	K4JLR4	4FR	100cm	5
		JL3.5/JR4	K4JL3.5R4	4FR	100cm	5
		JL4/JR4	K5JLR4	5FR	100cm	5
		JL4/JR4	K6JLR4	6FR	100cm	5
		JL4/3DS	K6JL43DS	6FR	100cm	5

## TRI PACKS

TIP	SHAPE	CODE	FR SIZE	LENGTH (MM)	BOX QTY	
		JL4/JR4/PIG	K4JLRP4/8	4FR	100cm	5
		JL4/JR4/PIG145	K4JLRP4/1458	4FR	100cm	5
		JL4/JR4/PIG145	K5JLRP4/1458	5FR	100cm	5
		JL4/JR4/PIG145	K6JLRP4/1458	6FR	110cm	5
		JL4/JR4/PIG	K5JLRP4/8	5FR	100cm	5
		JL4/JR4/PIG	K6JLRP4/8	6FR	110cm	5

**For single use only.**  
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<b>PRODUCT CODE</b>	<b>DESCRIPTION</b>
K211/4001/10	Cardiology Angiography
K209/4001/10	Radiology Multi Purpose
K209/4002	Premier Radiology
K212/4001/10	Permanent Pacing
K212/4002	Temporary Pacing

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# ABOUT KIMAL

**Formed by George and Diana Press in 1964 Kimal® are an innovative and trusted developer, manufacturer and supplier of customised procedure packs and vascular access devices for use across a range of clinical departments.**

As a proudly independent company, our responsiveness and agility, combined with strong partnership and collaboration ethos, make us a supplier of choice to health organisations the world over.

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