

IN-STENT RESTENOSIS

Jeffrey Wang MD

Horizon Vascular Specialists

In-Stent Restenosis

- Vascular Intervention is Paliative not Curative
- If the patient lives long enough you will have to re-intervene
- If you use stents....you will get In-stent restenosis
- Instent Restenosis
 - Crossing
 - Intervention

Crossing

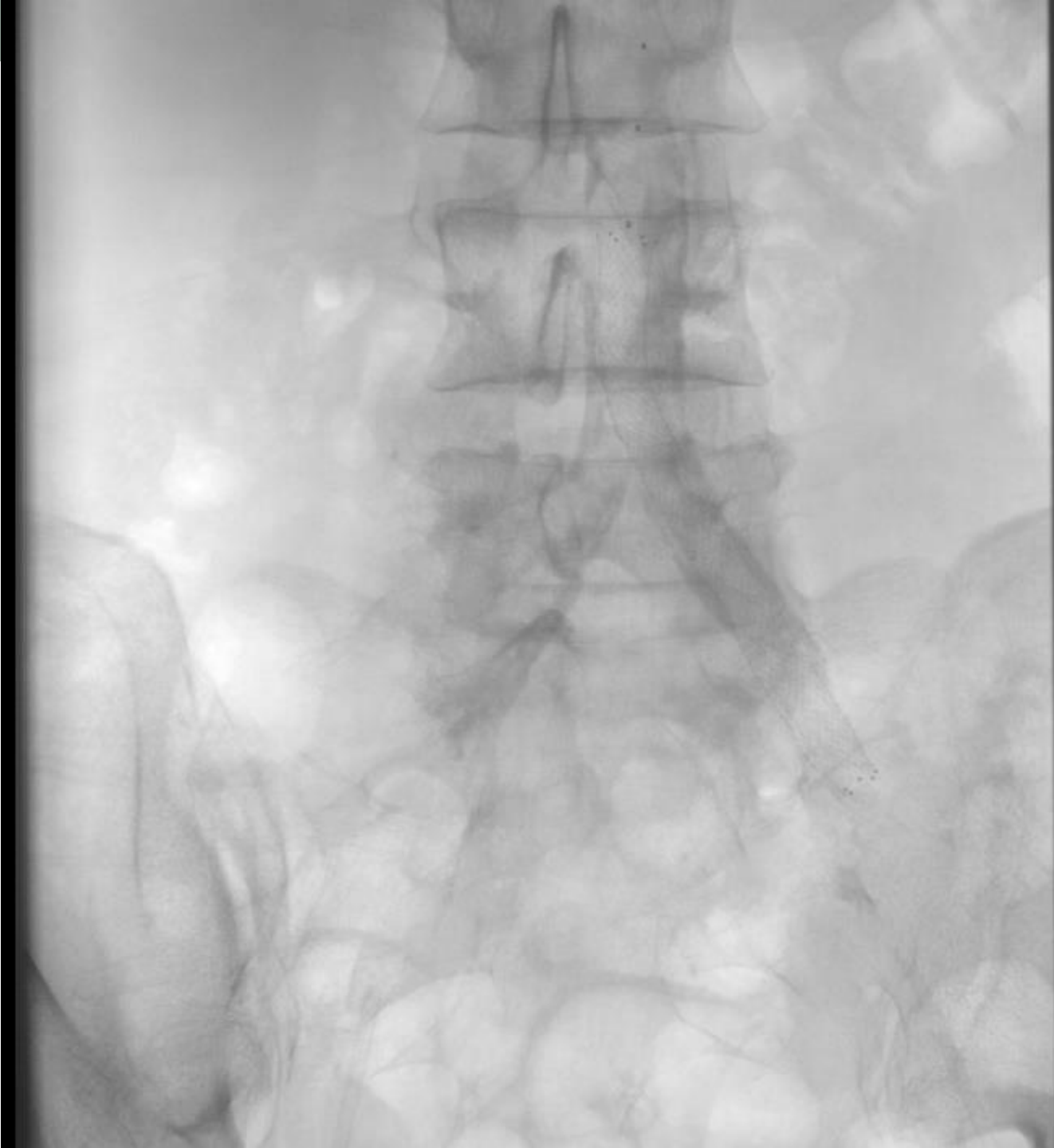
- Technically more challenging “ReDo”
- Stay within the previous stent
- Make a loop with the wire
- Crossing devices
- IVUS
- Balloon anchoring

Re-intervention

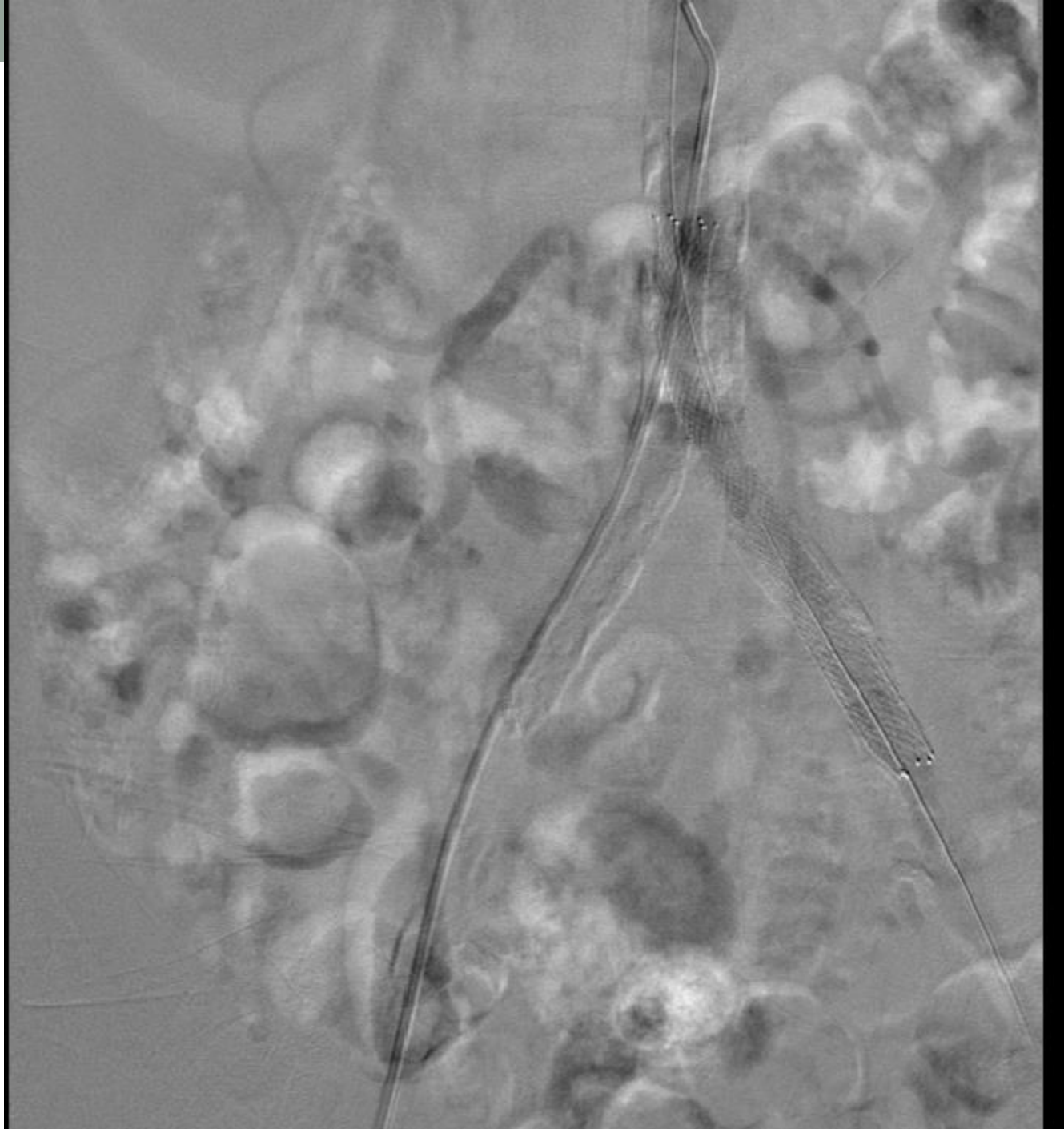
- What to do?.....
- Balloon?
- Bare Metal Stent?
- “Doing the same thing over and over again and expecting a different result”
- Atherectomy?
- Drugs?
- Covered Stent?

Iliac Occlusion

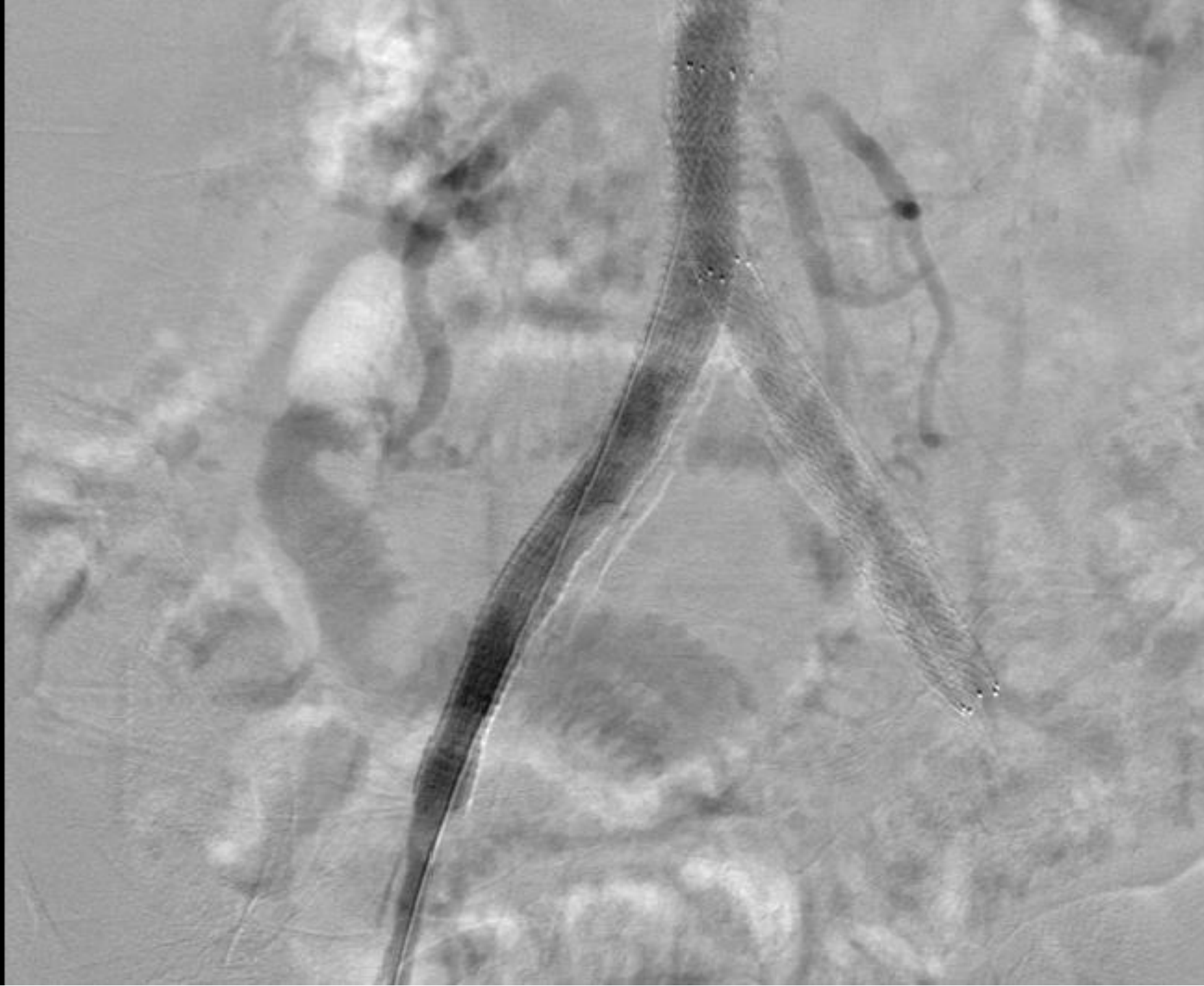
- 58 yo male right leg rest pain
- Fairly Healthy
- 84 pack year smoking history
- Prior appendectomy as a child









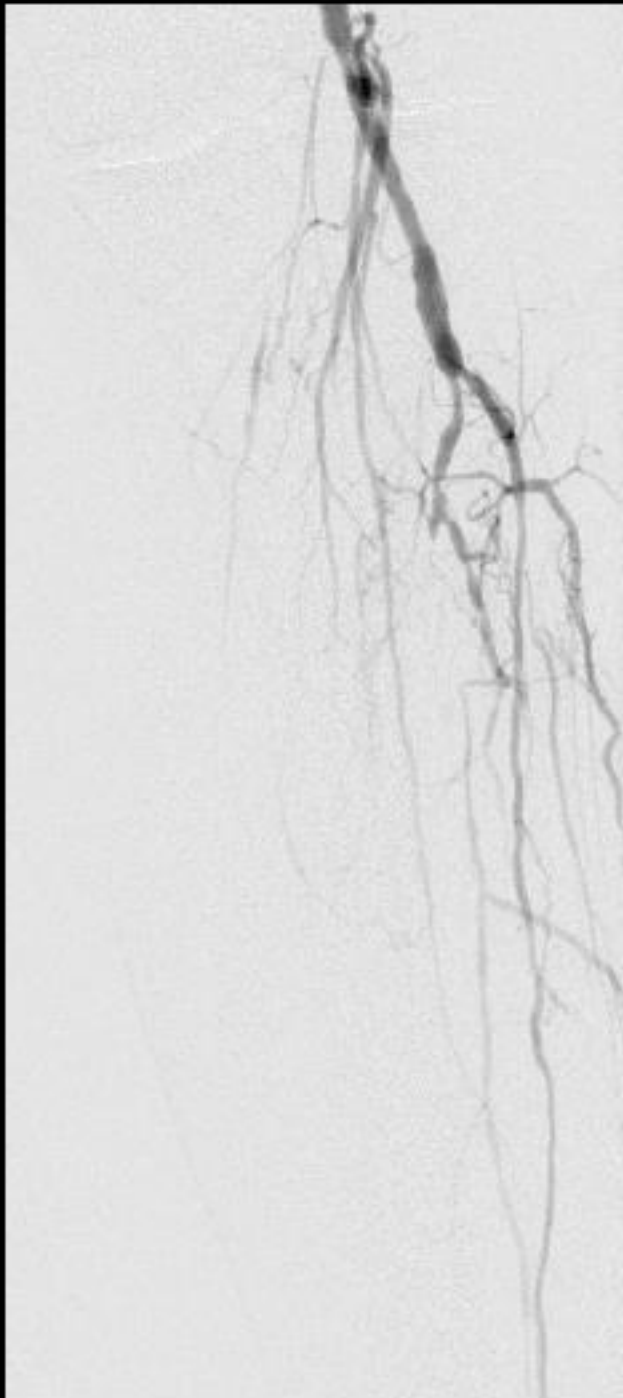




HPI

- 55 yo male with diabetes had ulcer which has healed
- Now with recurrent rest pain
- Prior SFA intervention with bare metal stents placed











Randomized, Multi-Center, Prospective Clinical Trials for Treatment of ISR

- RELINE Clinical Trial (GORE®
VIABAHN® Endoprosthesis/PTA vs PTA)
- EXCITE ISR Trial (Excimer Laser
Atherectomy/PTA vs PTA)
- FAIR Trial (IN.PACT DCB vs PTA)

Comparing Multi-Center, Randomized ISR Trials: *Lesion Characteristics*

	FAIR Trial		EXCITE ISR Trial		RELINE Trial	
	IN.PACT DCB	PTA	Excimer Laser Atherecto my	PTA	GORE® VIABAHN® Endoprothesi s	PTA
Mean Lesion Length (mm)	82	82	196	193	173	190
% CTOs	24%	33%	31%	37%	23%	25%
Moderate- Severe Calcification	10%*	9%*	27%	9%	33%	25%

*RELINE Trial and EXCITE ISR Trial report Moderate-
Severe Calcification,, while FAIR Trial reports only “Heavy
Calcium”.

Comparing Multi-Center, Randomized ISR Trials: *12-month Outcomes*

	FAIR Trial		EXCITE ISR		RELINE Trial	
	IN.PACT DCB	PTA	Excimer Laser Atherectomy	PTA	GORE® VIABAHN® Endoprosthesis	PTA
Primary Patency at 12-months	70.5%	37.5%	~40%	~20%	75%	28%
Freedom from TLR at 12-months	91%	53%	~47%	~28%	80%	40%

* RELINE Trial and EXCITE ISR Trial report Moderate-Severe Calcification,, while FAIR Trial reports only "Heavy Calcium".

Dippel, EJ: TCT 2014; Krankenberg H; LINC 2015; Bosiers M: JEVT 2015

Conclusion

- No head to head direct comparison
- When looking at lesion length and patency duration
- Trend to favor Viabahn for complex ISR

IN-STENT RESTENOSIS

Jeffrey Wang MD

Horizon Vascular Specialists