

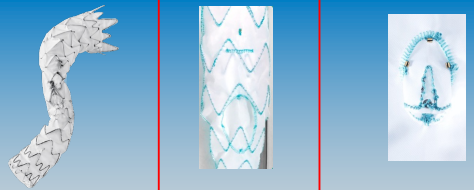


Twinbranch – A New Approach: Evolution Of The Colt Manifold Device For TAAA Repairs To An Inner Branched Technology

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My disclosures:

- Consultant of Artivion
- Consultant of Endologix
- Consultant of TerumoAortic



E-side
Off the shelf

Twin branch
CMD

Semi branch
CMD



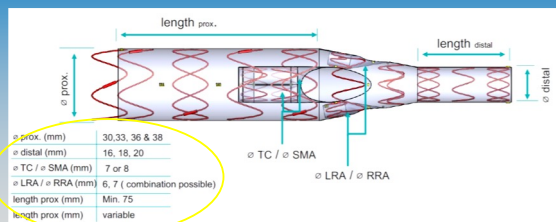
COLT 2.0

COLT

Colt 2.0 – now CMD Twinbranch



Twinbranch



∅ prox. (mm)	30, 33, 36 & 38
∅ distal (mm)	16, 18, 20
∅ TC / ∅ SMA (mm)	7 or 8
∅ LRA / ∅ RRA (mm)	6, 7 (combination possible)
length prox (mm)	Min. 75
length prox (mm)	variable

∅ TC / ∅ SMA

∅ LRA / ∅ RRA

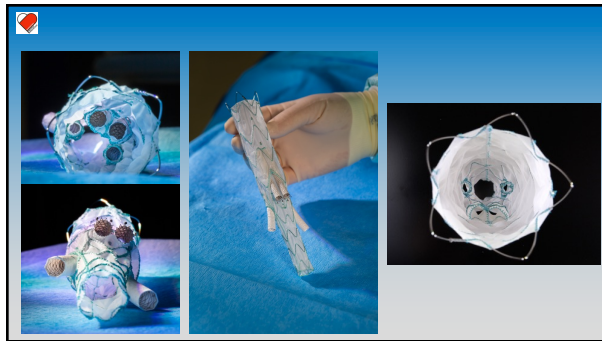
length prox.

length distal

∅ prox.

∅ distal

24F

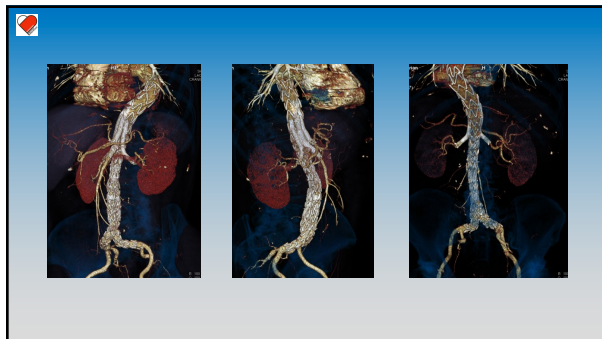
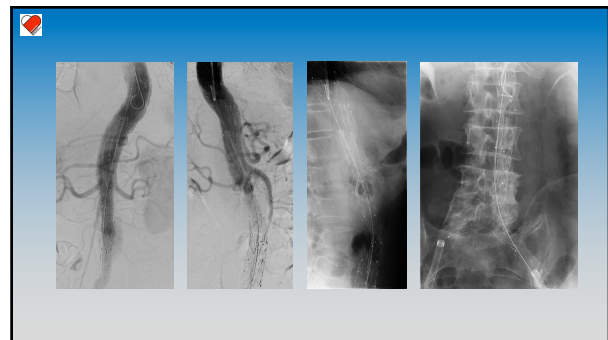


Twinbranch Case 1

- 67 yo male
- Type II TAAA, max. Diam. 57mm
- h/o: hypertension, CAD

Colt 2.0 Twinbranch + bifurcated stent-graft (Artivion)

CT: Fluency plus 8x100mm, Zilver Flex 8x100mm
 SMA: Fluency 10x100mm, Zilver Flex 10x100mm
 RRA: Viabahn 7x79mm, Zilver Flex 7x100mm, Zilver Flex 8x100mm
 LRA: Viabahn 7x79mm, Zilver Flex 8x100mm



Twinbranch Case 2

- F 69 yo
- TAAA type II, max. diam. 62mm
- h/o:
 - implantation of Zenith Thoracic stent-graft for TAAA (2011)
 - implantation of Bolton Relay stent-graft with scallop for LSA (2014)

E-Vita Thoracic + Twinbranch + 2x tube Artivion stent-grafts

CT: occluded - Amplatzer 10x7mm
 SMA: Triency 10x80mm, Advanta 10x127mm
 RRA: Viabahn 7x100mm, Zilver Flex 7x100mm
 LRA: Viabahn 7x100mm

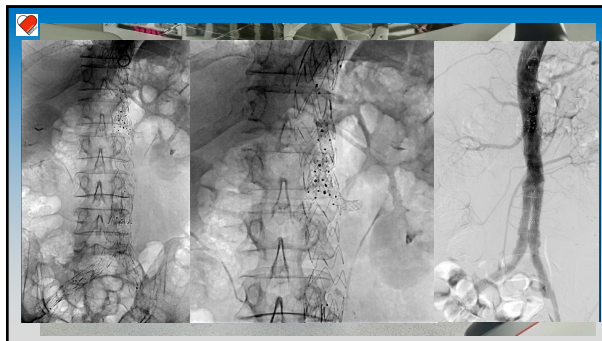
Semi branch

- Could be compared to fenestrations, with longer connection between bridging stent and semi branch.
- Very short aorta coverage
- Good option to treat type Ia endoleak after EVAR, juxta-, pararenal aneurysms and dissections.
- Useful for small distances between target vessels.
- Easy cannulation and stent positioning even coming from below.

Twin and semibranch dimensions

	Twin branch	Semi branch
Diameter D [mm]	2 x Ø6 2 x Ø7 2 x Ø8	Ø6 Ø7 Ø8
Length L [mm]	29 (Ø6) 29 (Ø7) 29 (Ø8)	11 (Ø6) 11.5 (Ø7) 12 (Ø8)
Orientation	antergrade / retrograde	antergrade / retrograde

05.2024 – first Semibranch

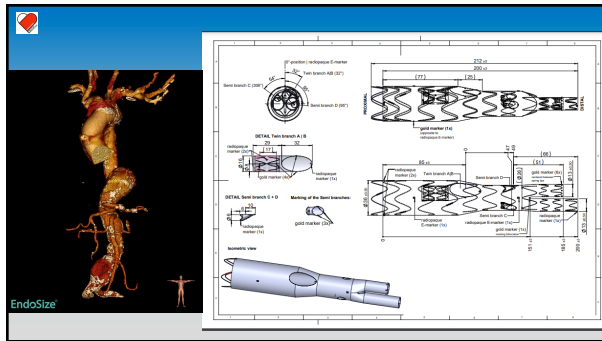


Comparison of minimal possible aorta coverage

E-nside: 93

Twinbranch: 62

Semibranch: 18



Summary

E-side (Off-the-shelf)	Twin branch (CMD)	Semi branch (CMD)
<ul style="list-style-type: none"> Off-the-shelf solution. Reduce operating time. Less radiation exposure. Facilitate target vessel cannulation and stenting. Dedicated to urgent cases. 	<ul style="list-style-type: none"> Same cannulation area for both tubes of twinbranch. Could shorten procedure time. Good tolerance thanks to wide branch exit which helps during positioning of a stentgraft and cannulation of target vessels. In combination with inner or semi branches can secure anatomy with vessels which are close to each other. 	<ul style="list-style-type: none"> Can be used in narrow aorta. Very short aorta coverage of aorta. Option to treat juxta-, pararenal aneurysms and dissections. Possible lower density of packaging into introduction system.

