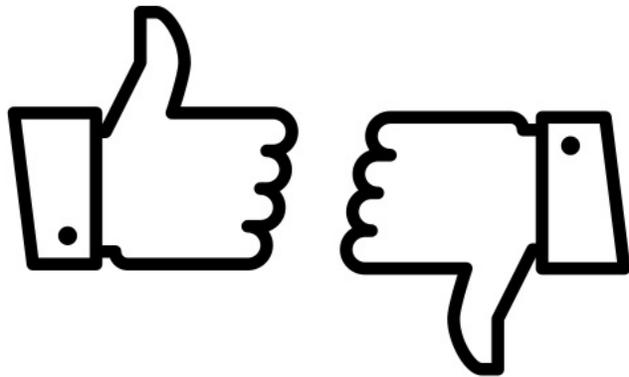


Vantaggi e limiti della robotica



da Vinci Si
(2009)

- Full HD Vision (1080)
- Ergonomicità superiore
- Increased surgeon control
- Architettura modellabile

2009



da Vinci Xi
(2014)

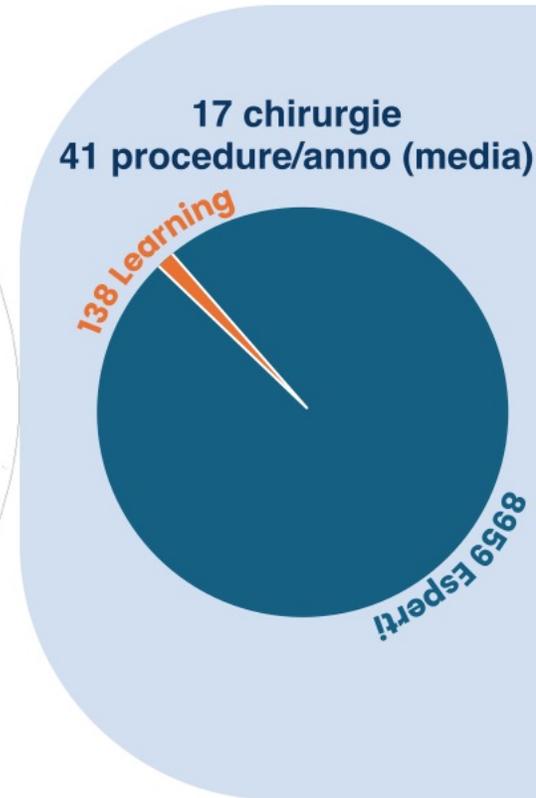
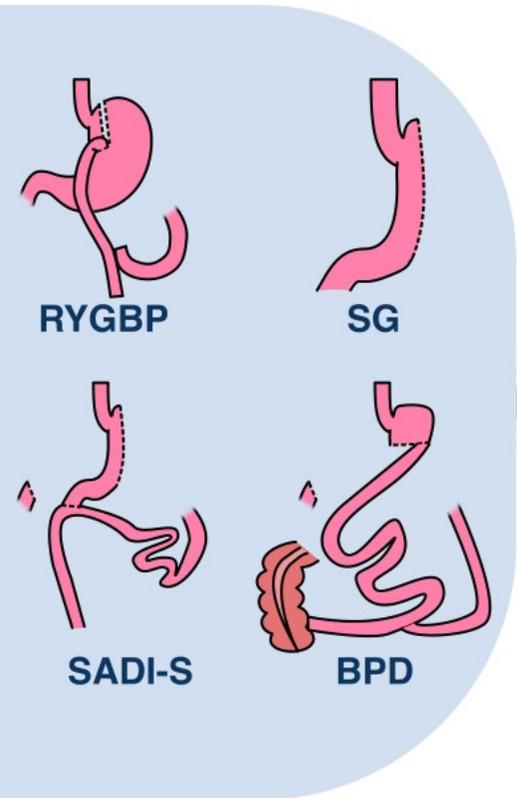
- Chirurgia collaborativa
- Visione crystal clear
- Chirurgia multi-quadrante
- Piattaforma nuove tecnologie

2014

Dario Bettini UOC Chirurgia Endocrina AUSL Romagna - Forlì

Chirurgia robotica bariatrica: poco diffusa

9097 procedure robotiche (2009-2022)



Giudicelli G *BMJ* 2024

7963 procedure robotiche vs VL

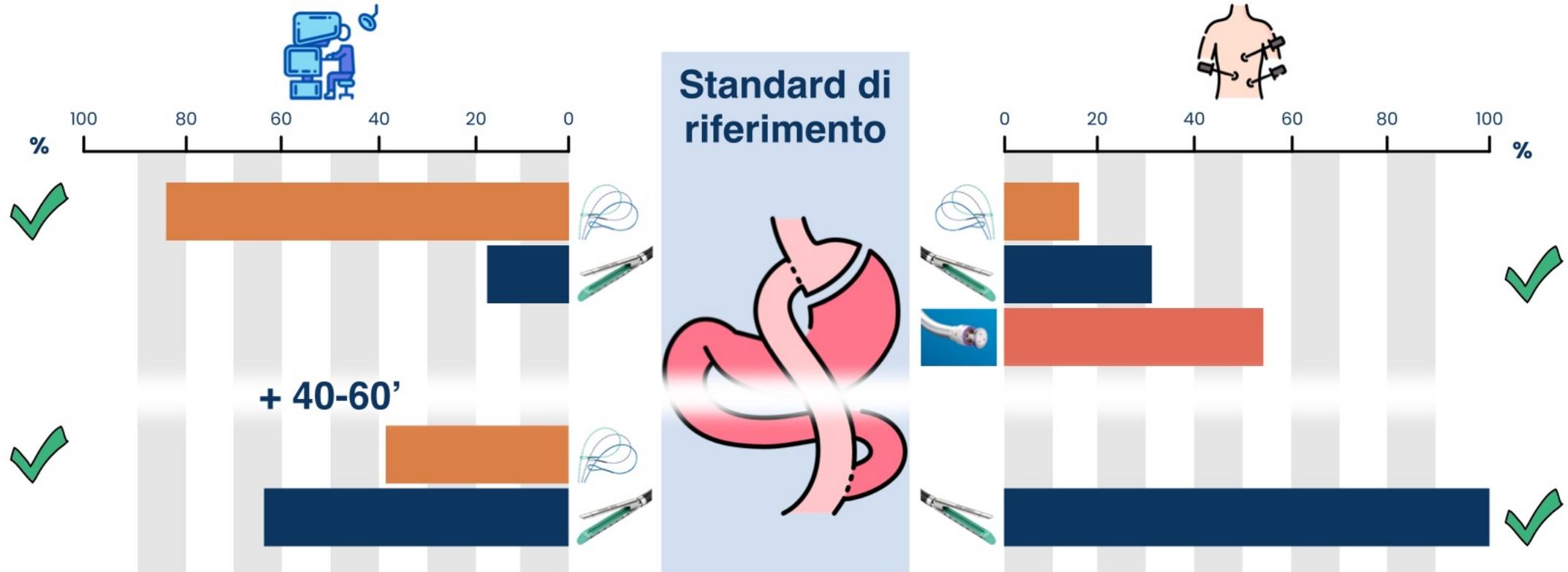


Tecnica anastomotica: GBP primario

859 robotici

vs

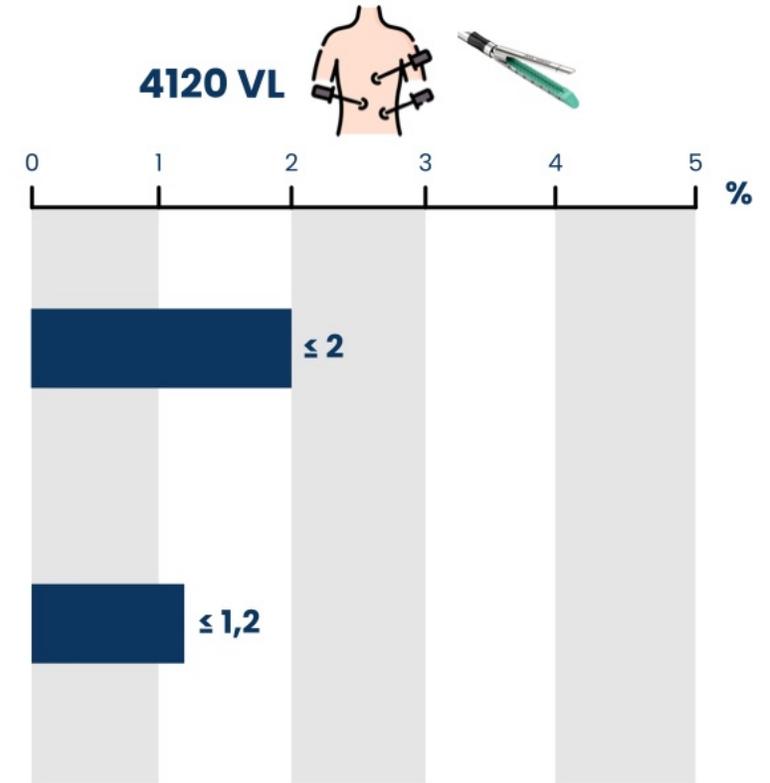
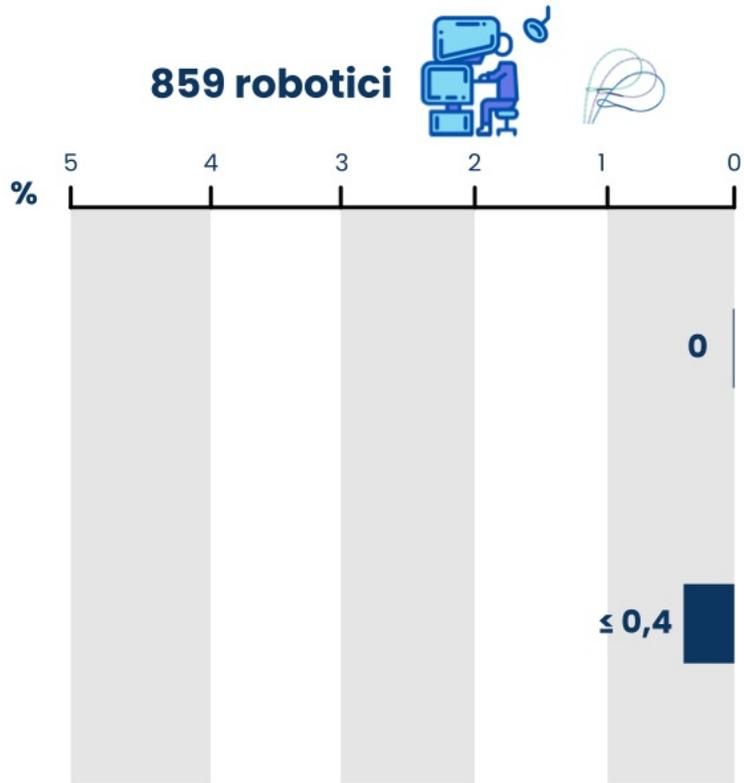
4120 VL



Giudicelli G *BMJ* 2024

Minori complicanze?

Anastomosi manuale



Prevenzione stenosi

Anastomosi Gastro-digiunale



Feed-back tattile

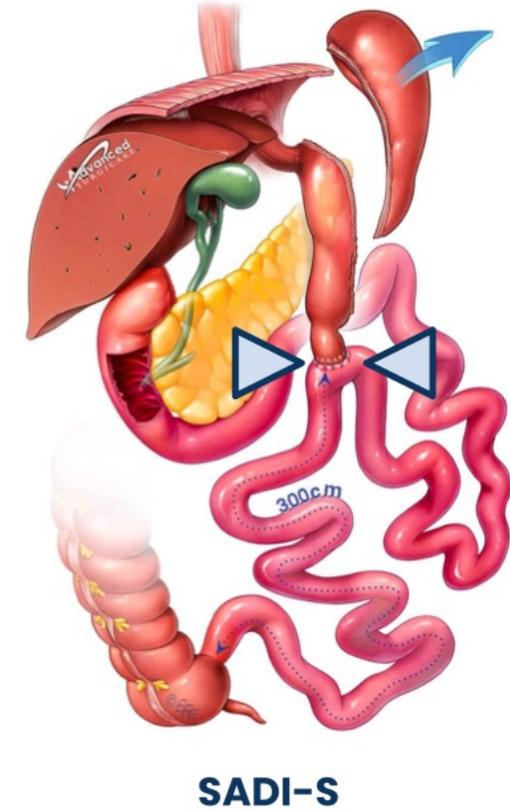
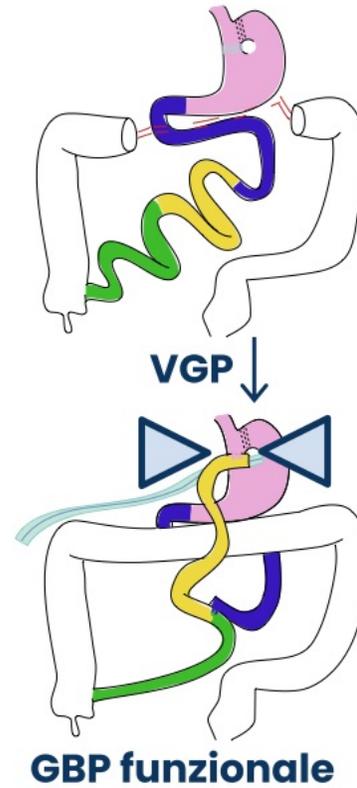
**Sonda calibratrice 40 Fr
trans-anastomotica**



Feed-back visivo

Casi complessi?

Anastomosi manuale



Vanetta C J Clin Med 2022

Carrello paziente: evoluzione



da Vinci SI
(2009)

- Full HD Vision (1080)
- Ergonomicità superiore
- Increased surgeon control
- Architettura modellabile

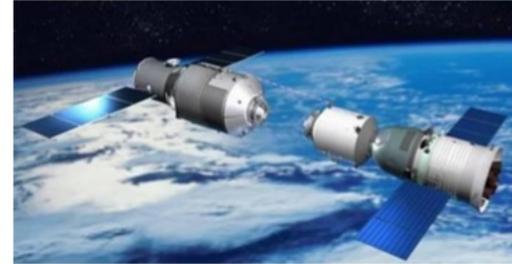
2009



da Vinci XI
(2014)

- Chirurgia collaborativa
- Visione crystal clear
- Chirurgia multi-quadrante
- Piattaforma nuove tecnologie

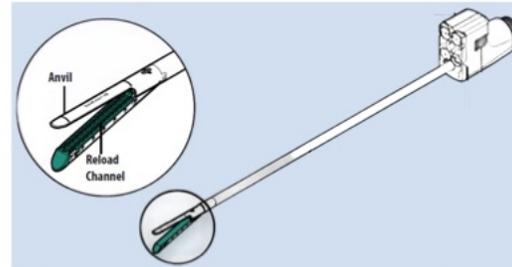
2014



Docking facilitato



Ottica intercambiabile

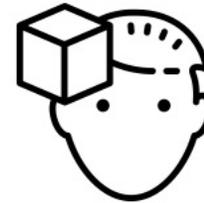


Suturatrice robotica

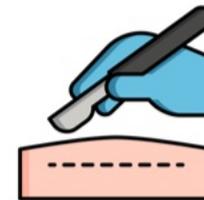
Console chirurgica e carrello visione



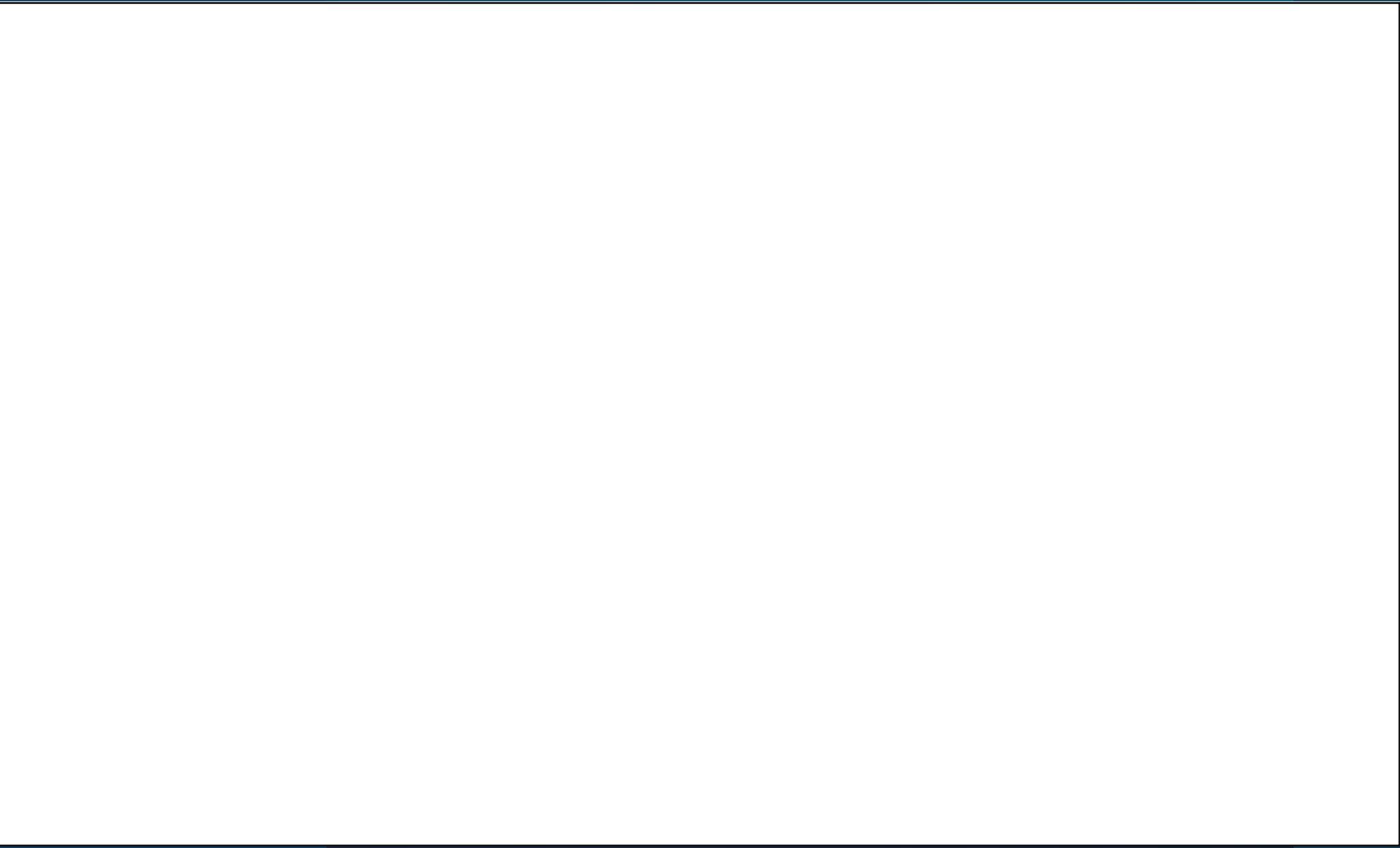
Personal trainer



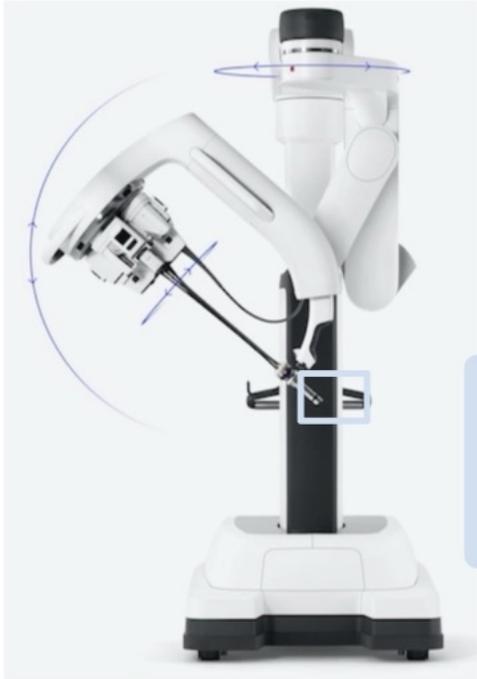
**Image inversion
30° lateral**



< Conversione a open?



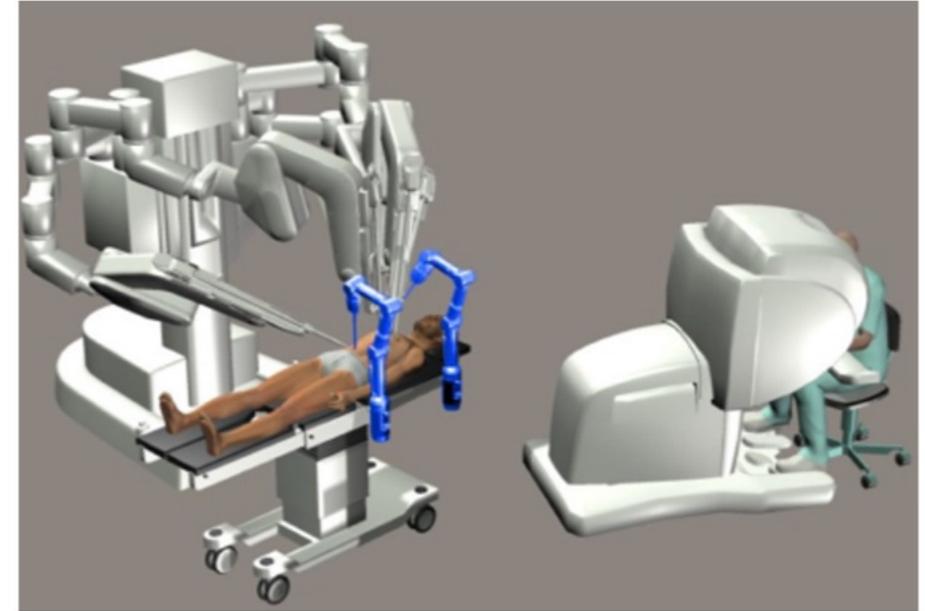
Futuro



Single-Port (No suturatrici)



**Mini-routine
(anastomosi manuali)**



Solo surgery