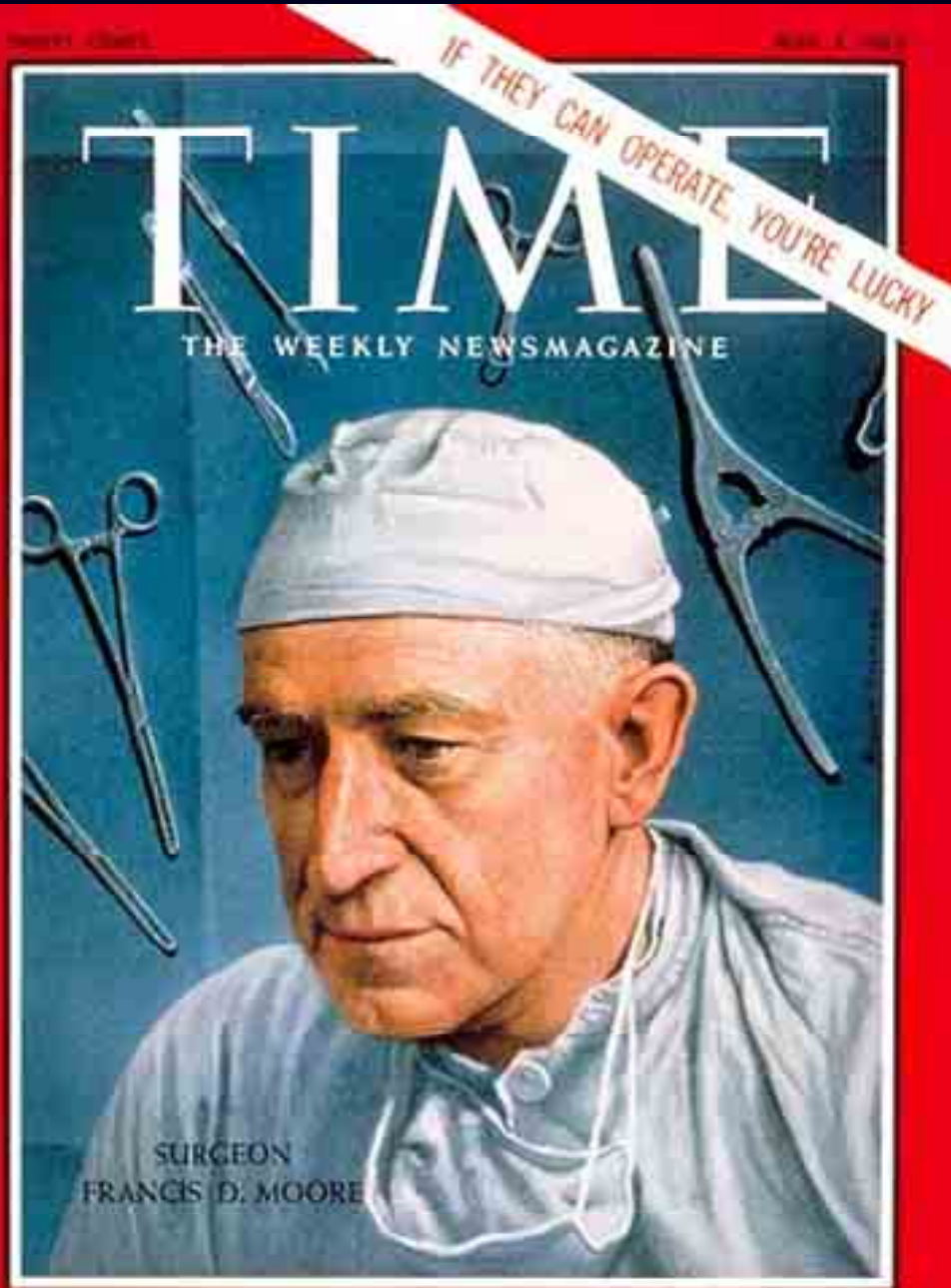


I problemi chirurgici nel trattamento dei GIST

P. Massucco

S.C. Chirurgia Generale
Indirizzo Oncologico





Era pre-imatinib

- ✓ Resecabile
OS 50% 5aa
- ✓ Non resecabile / metastatico
OS mediana 18mm

De Matteo – *Ann Surg* 2000

Era post-imatinib

- ✓ GIST localizzato
- ✓ GIST 'localmente avanzato'
- ✓ GIST recidivo / metastatico



shared decisions

Era post-imatinib

Chirurgia radicale

Chirurgia palliativa

CHT palliativa



Chirurgia radicale

Chirurgia palliativa

Target therapy

primaria
neoadiuvante
adiuvante

Chirurgia del residuo

Chirurgia adiuvante

Era post-imatinib

- ✓ GIST localizzato



Chirurgia +/-
terapia adiuvante

- ✓ GIST 'localmente avanzato'
- ✓ GIST recidivo / metastatico



shared decisions

GIST localizzato

✓ Laparoscopia ?



2004
Intramurali
2 cm



2011
gastric 5 cm
> 5 cm hand-assisted

'discouraged
in large
tumours'

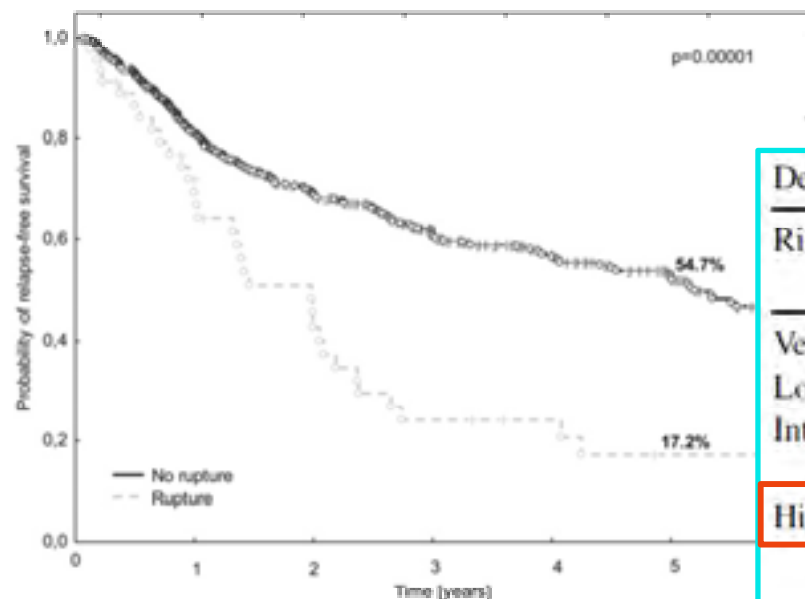
GIST localizzato

✓ Laparoscopia ?

	open	lap	
	40	40	
■ Diam	4.3 (2 – 9)	3.6 (0.7 – 7.8)	0.48
■ Durata	89'	96'	0.32
■ Perdite	100 ml	25 ml	0.006
■ Degenza	7 gg	4 gg	0.002
■ Conversione	-	25% (hand-assisted)	

GIST localizzato

✓ Laparoscopia, sì se...



Definition of the risk categories in the proposed Joensuu classification.

Risk category	Tumour size (cm)	Mitotic index (per 50 HPF ^a)	Primary tumour site
Very low risk	≤2.0	≤5	Any
Low risk	2.1–5.0	≤5	Any
Intermediate risk	≤5.0	6–10	Gastric
	5.1–10.0	≤5	Gastric
High risk	Any	Any	Tumour rupture
	>10.0	Any	Any
	Any	>10	Any
	>5.0	>5	Any
	≤5.0	>5	Non-gastric
	5.1–10.0	≤5	Non-gastric

Era post-imatinib

- ✓ GIST localizzato
- ✓ GIST 'localmente avanzato'
 - ➔ Terapia neoadiuvante
- ✓ GIST recidivo / metastatico



shared decisions

Tumore localmente avanzato

✓ Cos'è ?



coinvolgimento di:

1 organo >5cm
più organi

'if surgical morbidity
would be improved'

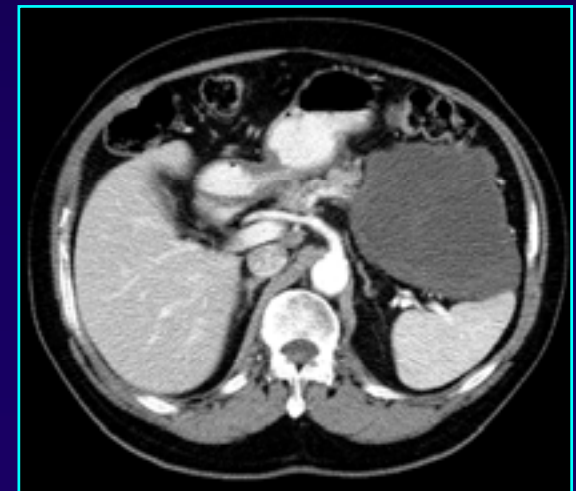
'if surgery would be less
mutilating or safer'

Tumore localmente avanzato

✓ Indicazioni terapia neoadiuvante

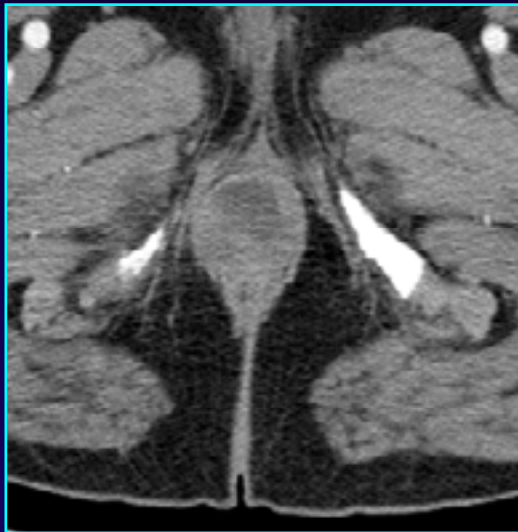
- Risparmio d'organo
- Riduzione resezioni multiviscerali
- Tumore borderline resectable

➔ > chance R0



Terapia neoadiuvante

✓ Risparmio d'organo



Imatinib
14 mesi

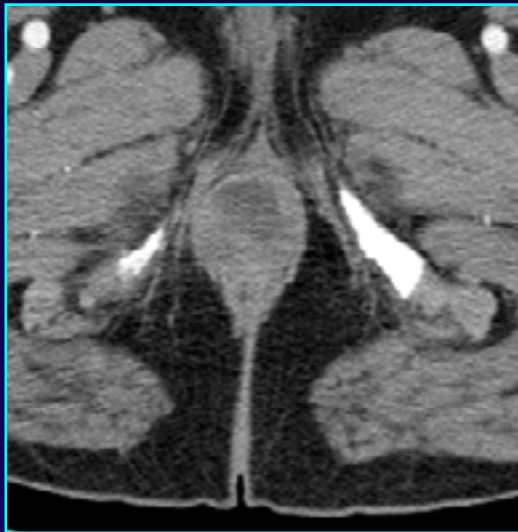
M 64aa

GIST retto

40mm

Terapia neoadiuvante

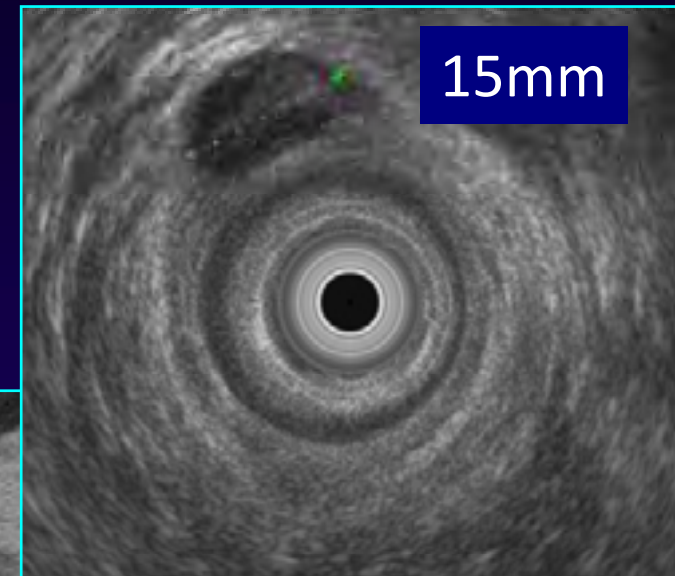
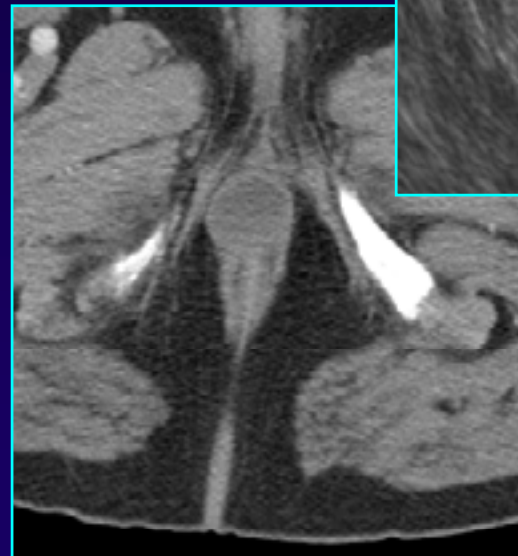
✓ Risparmio d'organo



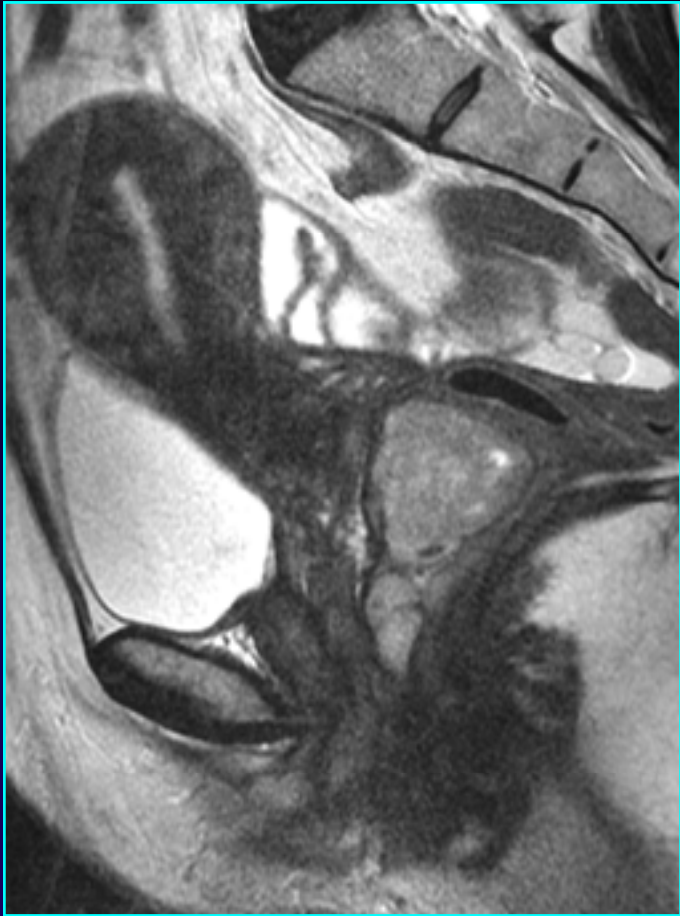
M 64aa
GIST retto
40mm



Imatinib
14 mesi

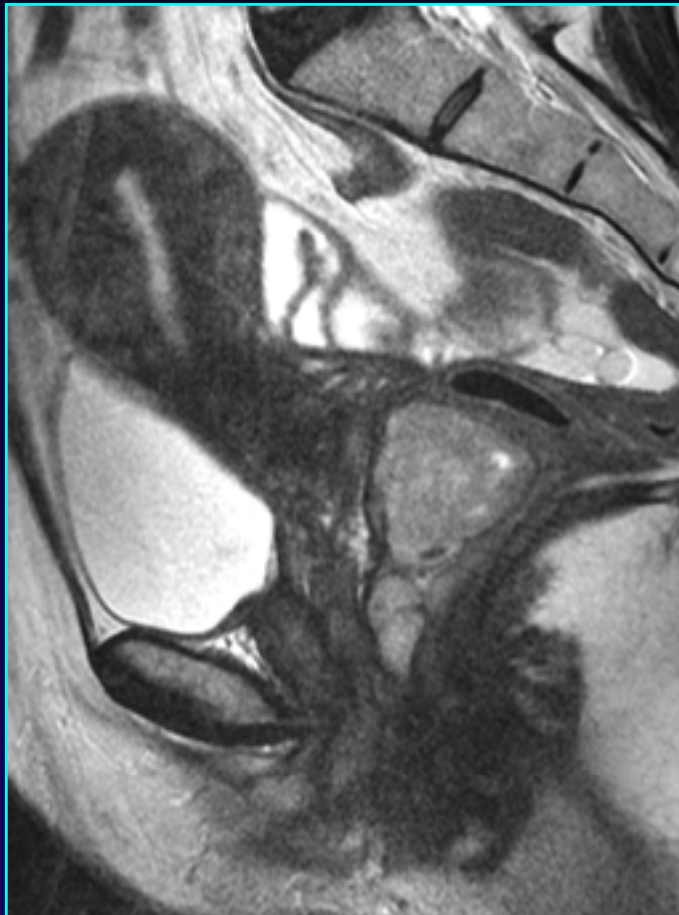


Exeresi locale
DF 50 mesi



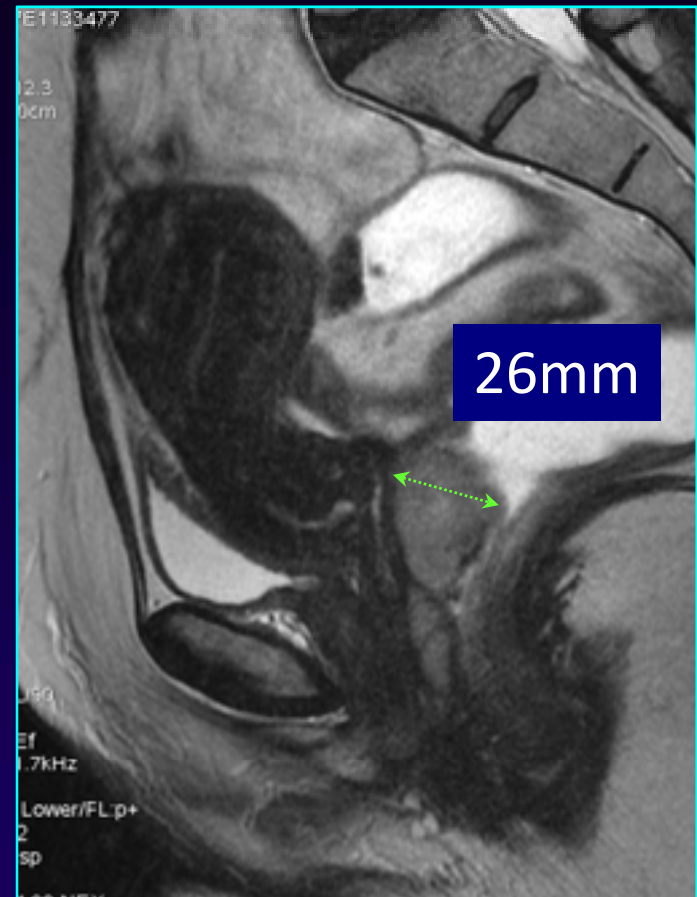
→ Imatinib
4 mesi

F 50aa
GIST retto
35mm



F 50aa
GIST retto
35mm

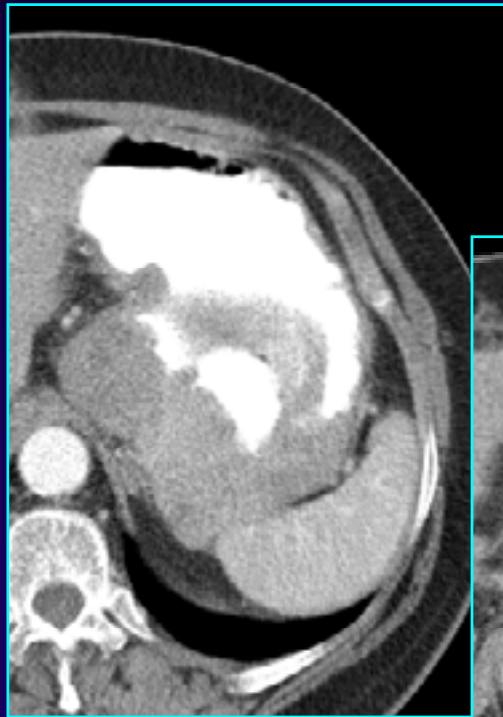
→ Imatinib
4 mesi →



Resezione
anteriore
DF 3 mesi

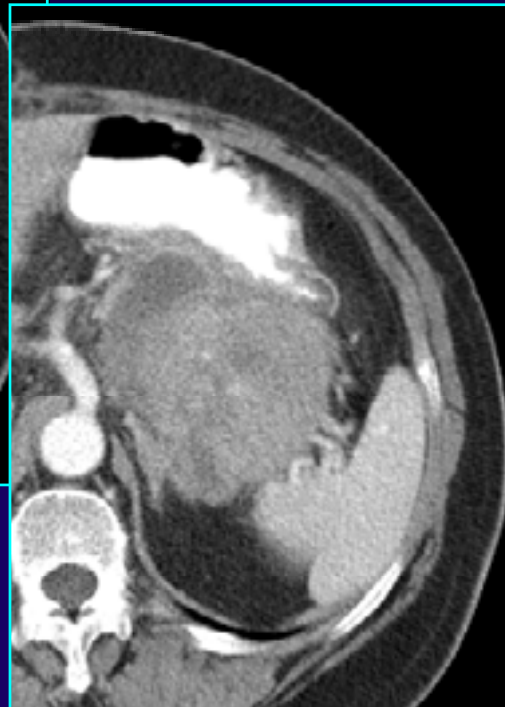
Terapia neoadiuvante

- ✓ Riduzione resezioni multiviscerali



F 61aa

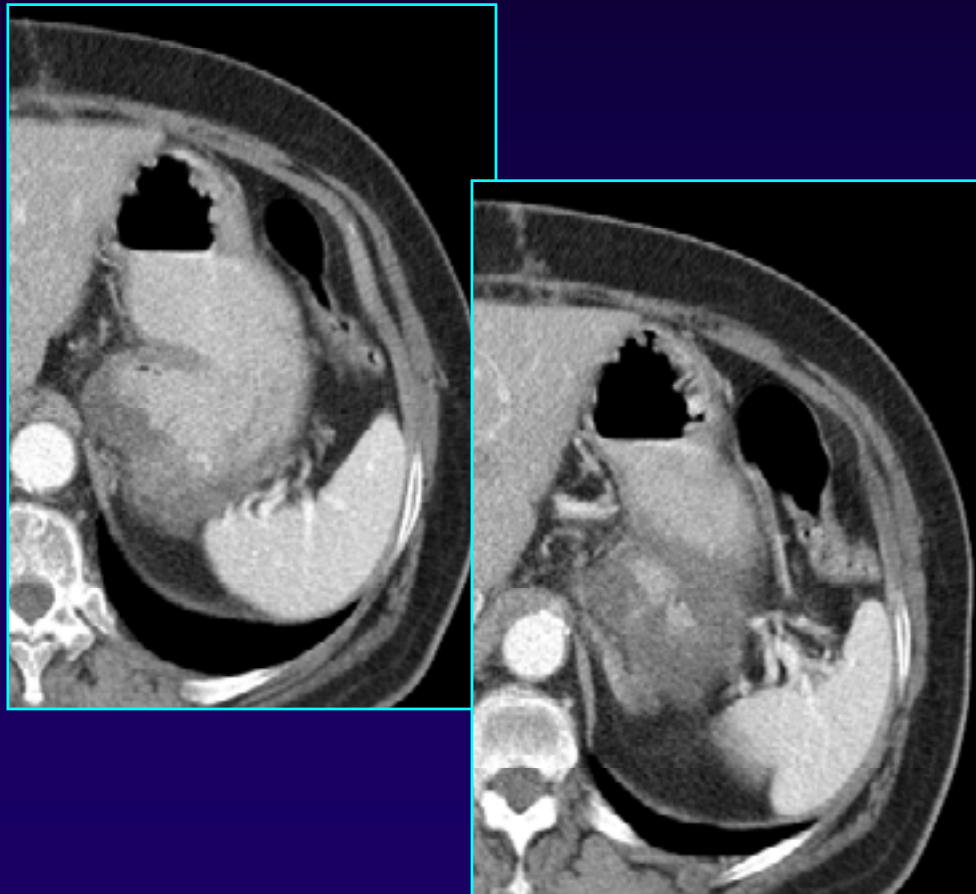
GIST gastrico



Imatinib
12 mesi

Terapia neoadiuvante

- ✓ Riduzione resezioni multiviscerali



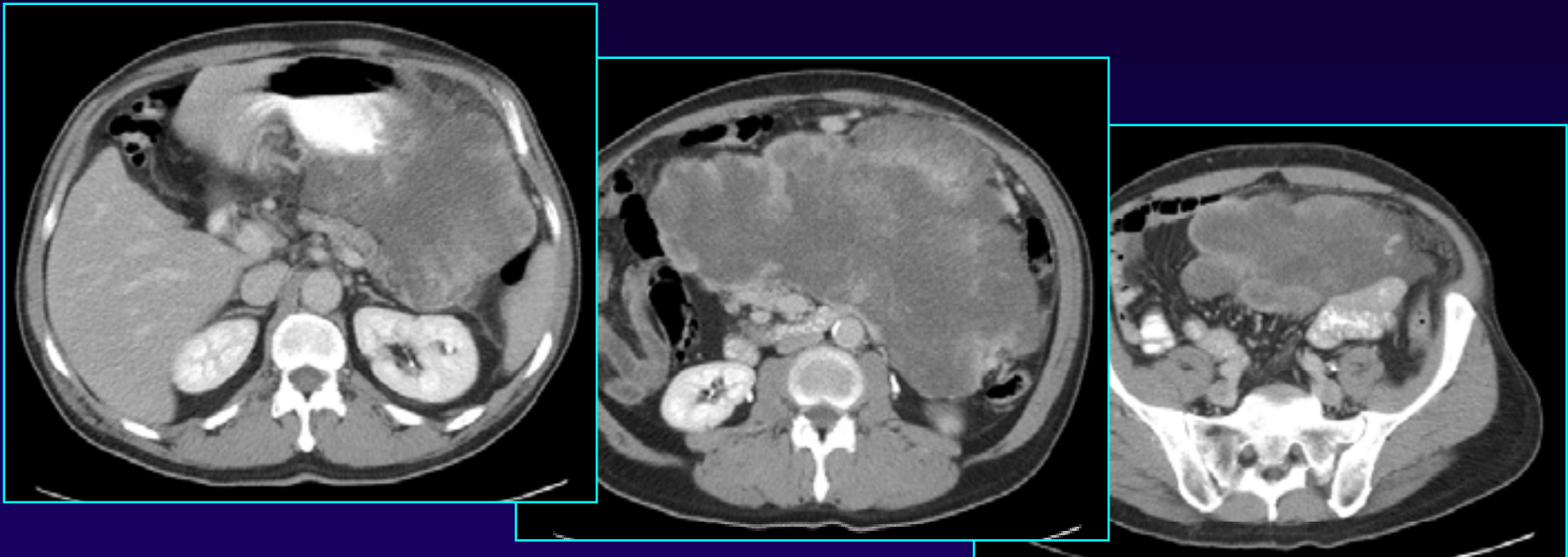
Gastrectomia totale

Trasformaz mixoide

DF 54 mesi

Terapia neoadiuvante

- ✓ Tumore borderline resectable



M 55aa

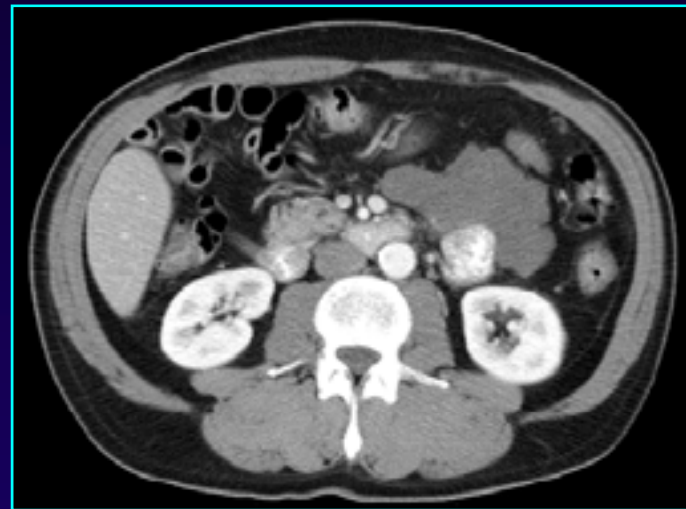
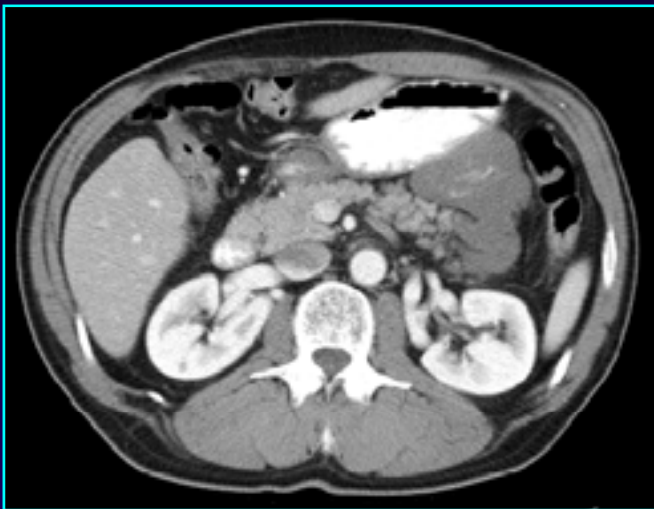
GIST emiaddome sn
27cm



Imatinib
15 mesi

Terapia neoadiuvante

- ✓ Tumore borderline resectable



Resezione tassello gastrico

Microfocolai 5% massa neoplastica

PD peritoneale e epatica - 42 mesi

Era post-imatinib

- ✓ GIST localizzato
- ✓ GIST 'localmente avanzato'
- ✓ GIST recidivo / metastatico



PD diffusa
PD mono/oligofocale
PR (chirurgia del residuo)



shared decisions

GIST recidivo / metastatico

✓ Malattia in PD diffusa → debulking ?

	Casi	R0	OS mediana	PF mediana
Raut 2006	14	1/14	6 mm	3 mm
De Matteo 2007	7	2/7	11 mm	3 mm

↪ NO chirurgia → studi clinici II linea

GIST recidivo / metastatico

✓ Malattia in PD mono/oligofocale

 exeresi foci in PD

	Casi	Durata imatinib	R0	OS mediana	PF mediana
Raut 2006	32	-	33%	30 mm	8 mm
De Matteo 2007	13	21mm	46%	19 mm	12 mm
Gronchi 2010	21	21mm	45%	-	8 mm

 Chirurgia 'adiuvante' (prolungamento PFS)

GIST recidivo / metastatico

✓ Malattia in PR

 chirurgia del residuo

	Casi	Tipo	Durata Imatinib	R0	DF 2yy
Raut 2006	14	loc/mts	-	78%	-
De Matteo 2007	20	mts	7 mm	85%	61%
Gronchi 2007	15	loc/mts	15 mm	88%	69%

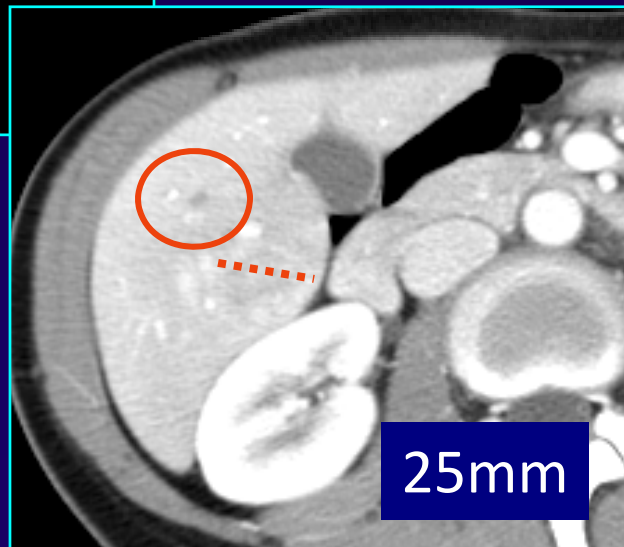
 RCT: imatinib +/- chirurgia

Malattia in PR

✓ Metastasi epatiche



Imatinib
14 mesi



F 36aa

3 mts (Sg8 e Sg6)
da GIST tenue

RF 16 mesi

25mm

Malattia in PR

✓ Metastasi epatiche



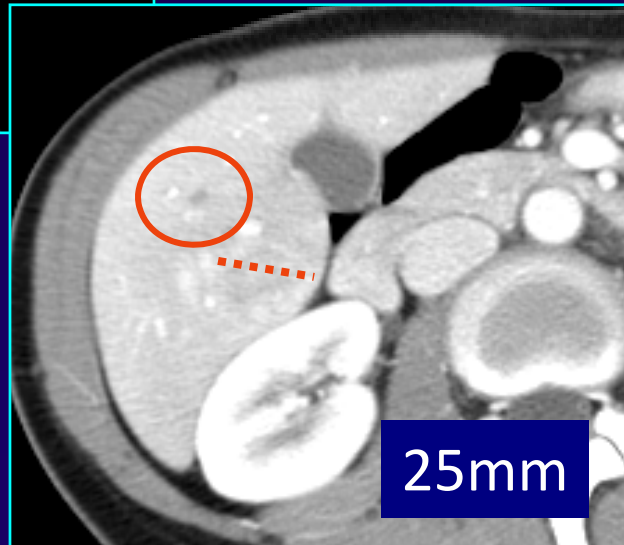
F 36aa

3 mts (Sg8 e Sg6)
da GIST tenue

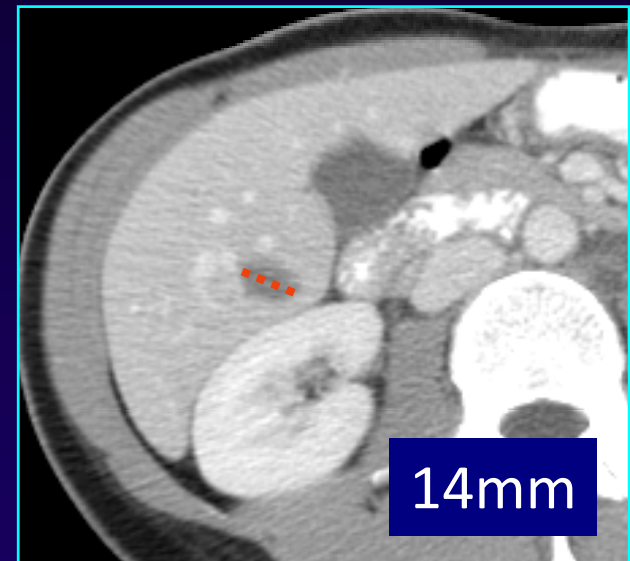
RF 16 mesi



Imatinib
14 mesi



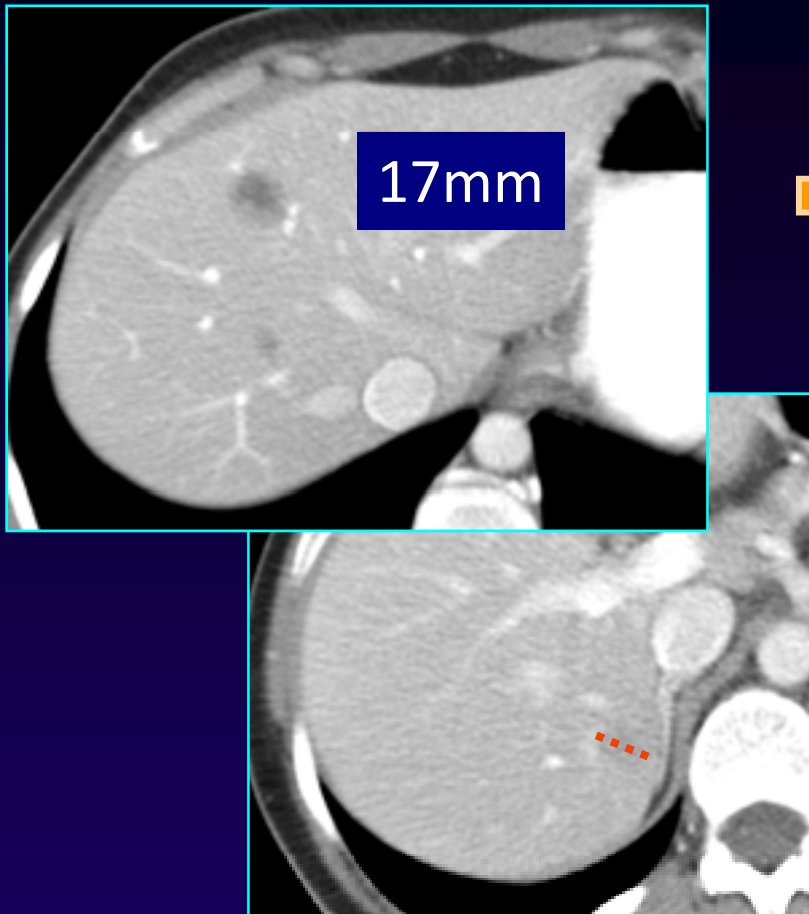
25mm



14mm

Res atipica Sg6
+ imatinib

DF 48 mesi

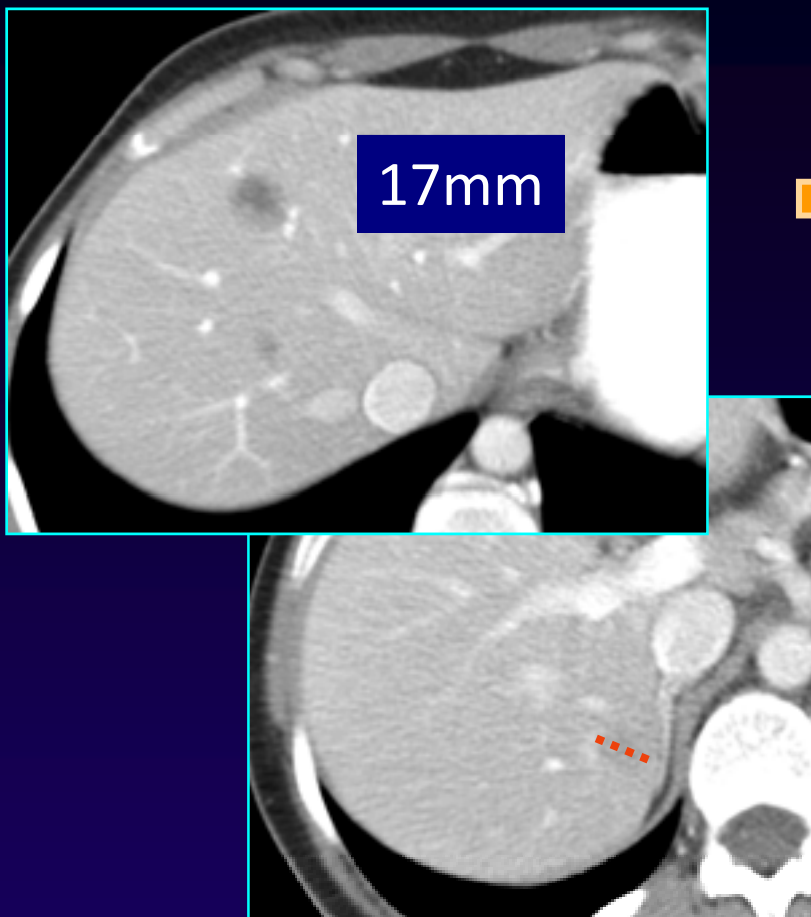


Imatinib
9 mesi

F 36aa

3 mts (Sg8 e Sg7)
da GIST tenue

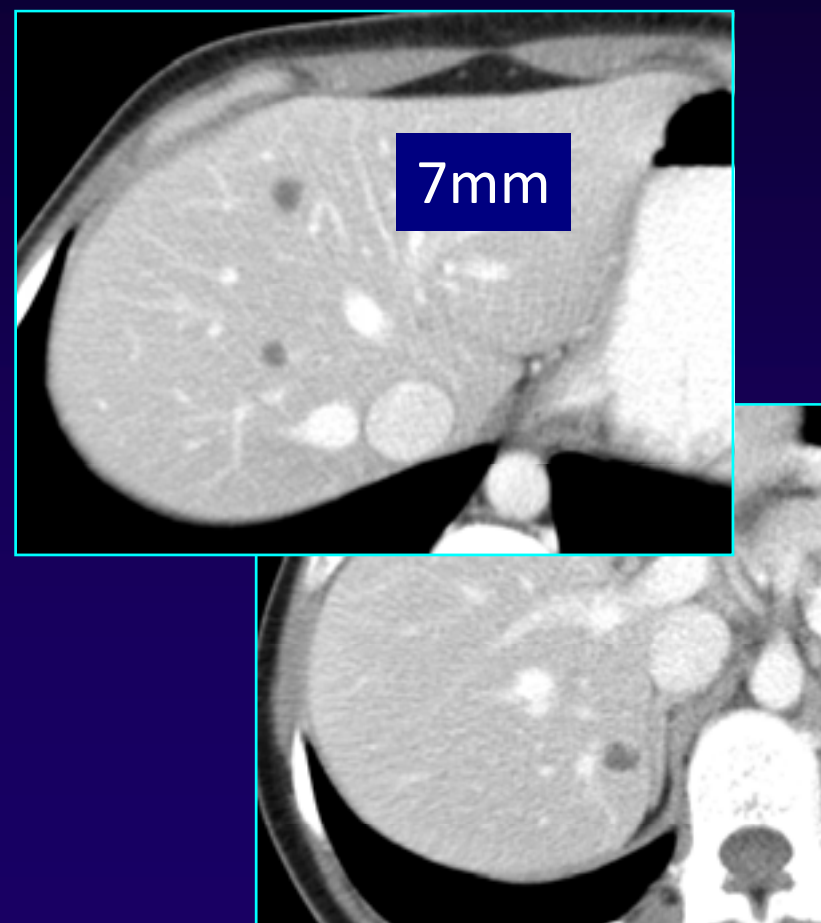
RF 8 mesi



17mm



Imatinib
9 mesi

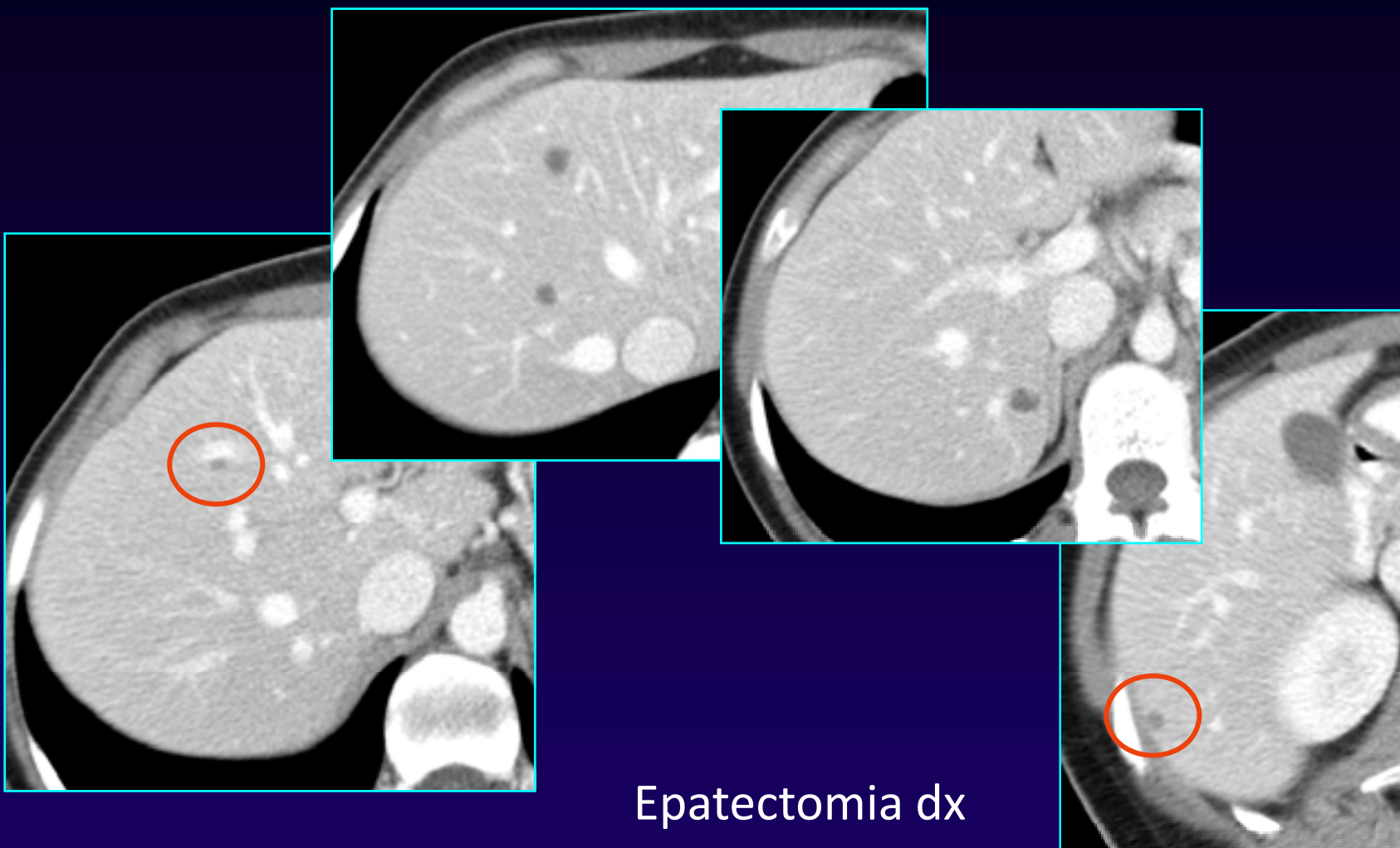


7mm

F 36aa

3 mts (Sg8 e Sg7)
da GIST tenue

RF 8 mesi



Epatectomia dx
+ imatinib

DF 48 mesi

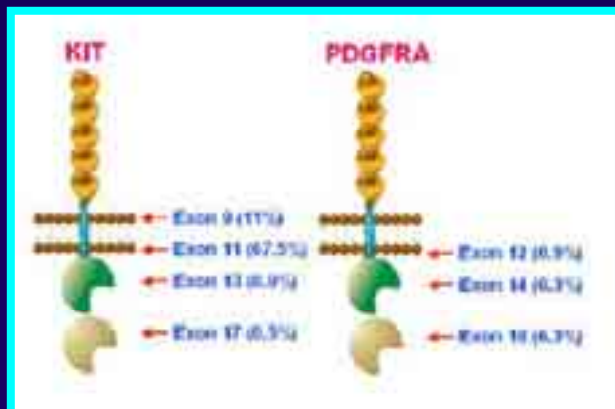
GIST recidivo / metastatico

- ✓ Timing intervento ?
 - maximum effect / best response

Andtbacka (MDA) – *Ann Surg Oncol* 2007

Bonvalot – *Ann Surg Oncol* 2006

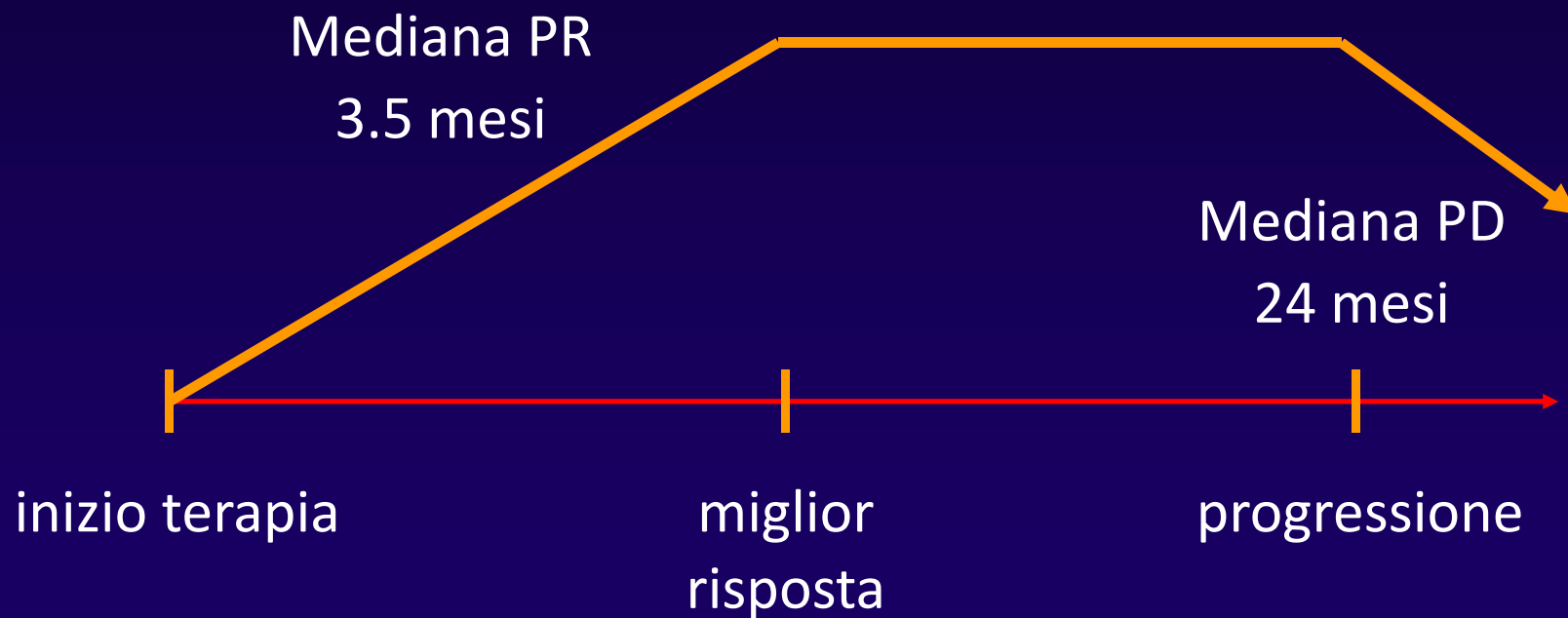
- ‘race against secondary mutations’



Gold (MSKCC) – *Ann Surg* 2006

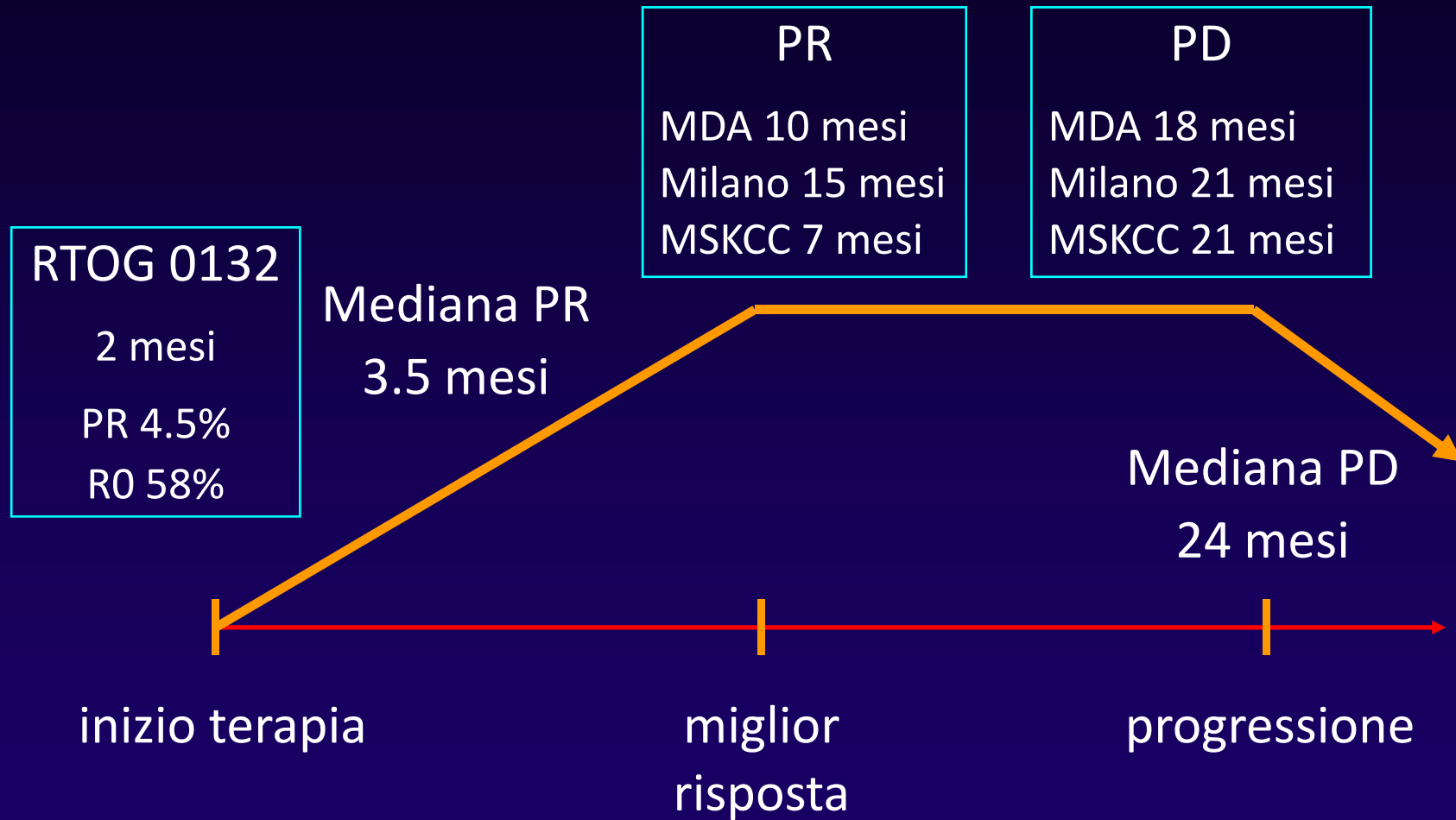
GIST recidivo / metastatico

✓ Timing intervento ?



Verweij – *Lancet* 2004

GIST recidivo / metastatico



Verweij – *Lancet* 2004

GIST e chirurgia

Chirurgia ?

2 cm

Chirurgia
primaria

2-5 cm

Chirurgia
secondaria

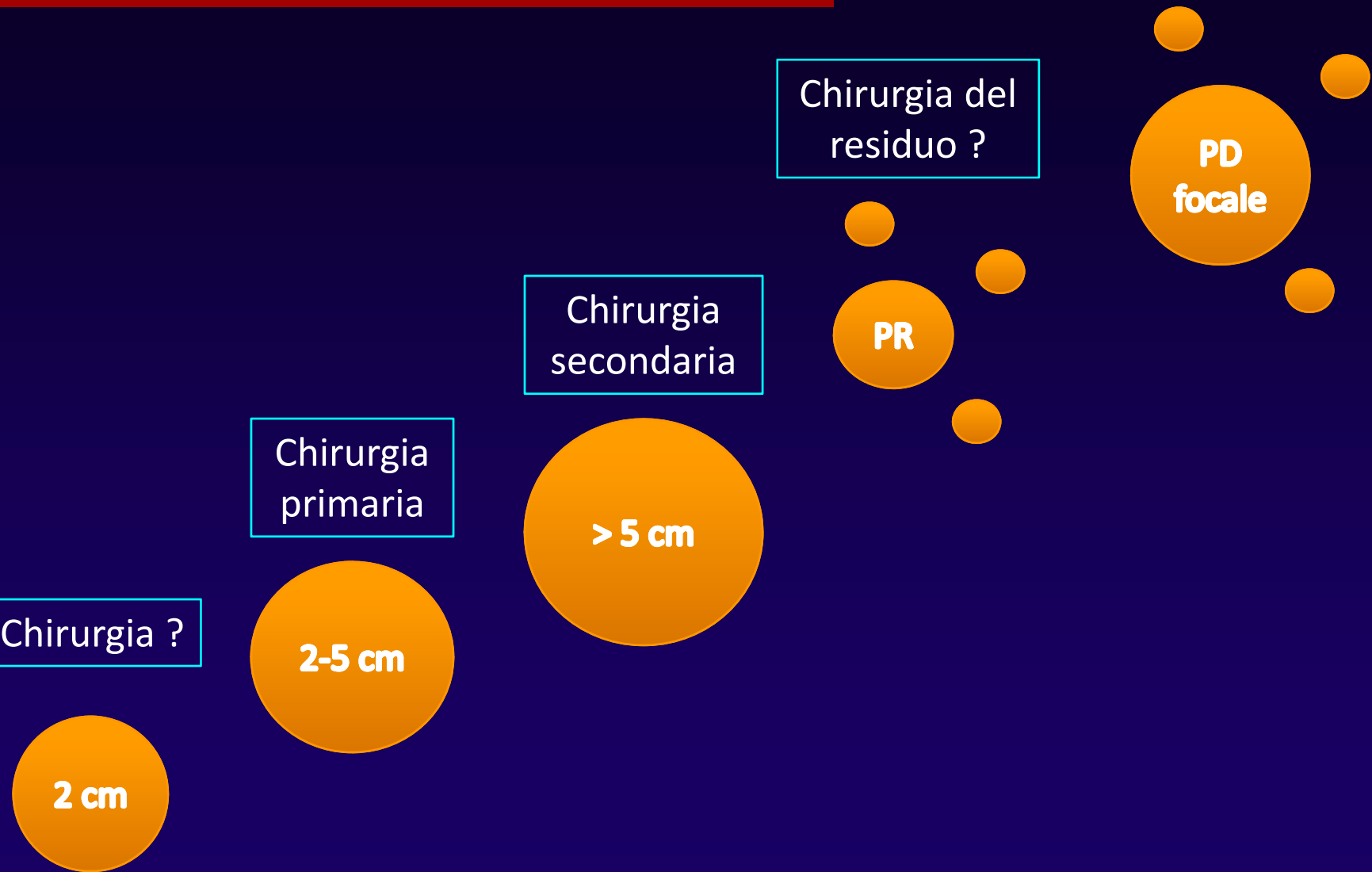
> 5 cm

Chirurgia del
residuo ?

PR

Chirurgia
adiuvante

PD
focale





GIST → GIC