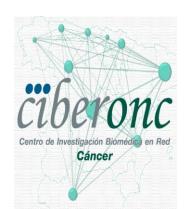


RECTAL CANCER CLINICAL CASE DISCUSSION

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DISCLOSURE

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Others: Executive Board member of ESMO, Chair of Education ESMO, General and Scientific Director INCLIVA, Associate Editor: Annals of Oncology and ESMO Open, Editor in chief: Cancer Treatment Reviews.





CLINICAL PRACTICE GUIDELINES

Rectal cancer: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up[†]

R. Glynne-Jones¹, L. Wyrwicz², E. Tiret^{3,4}, G. Brown⁵, C. Rödel⁶, A. Cervantes⁷ & D. Arnold⁸, on behalf of the ESMO Guidelines Committee^{*}

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[†]Approved by the ESMO Guidelines Committee: August 2002, last update May 2017. This publication supersedes the previously published version—Ann Oncol 2013; 24 (Suppl. 6): vi81-vi88.



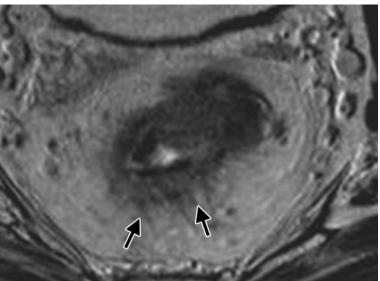
BASIS FOR RECTAL CANCER STAGING AND THERAPY

Integration of knowledge in a multidisciplinary team Optimal staging by MRI
Selective preoperative radiation or chemoradiation
TME surgery
Pathological assessment of the quality of surgery
Non surgical approach for some pCR
Adjuvant chemotherapy for high risk

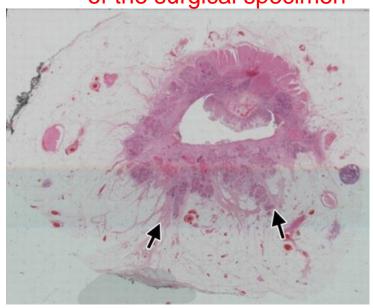


MERCURY Study Group

MRI before TME



Histopathological assessment of the surgical specimen



Mean extramural spread

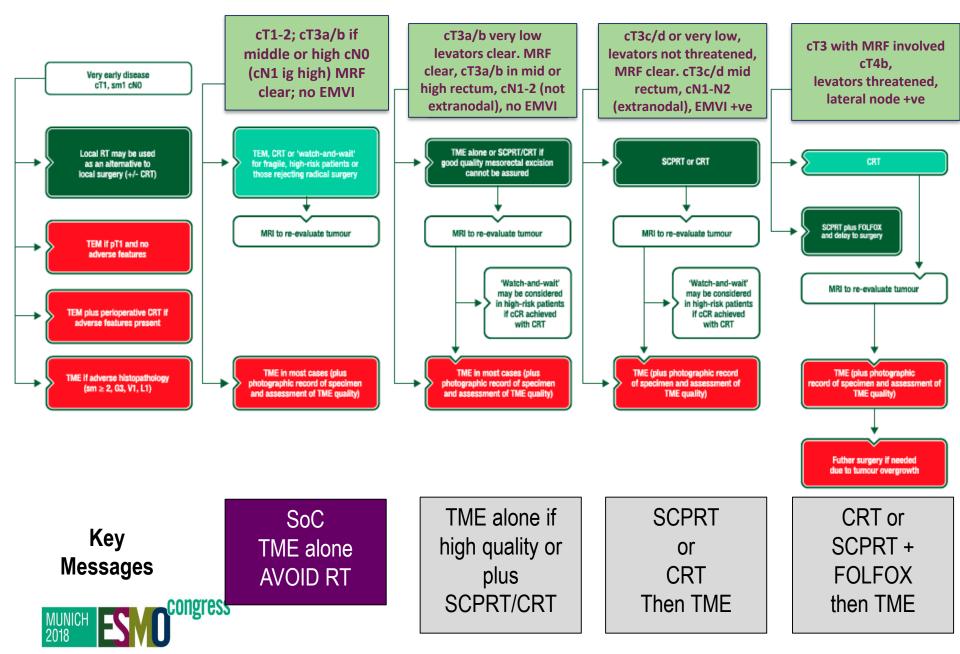
2.8mm = 2.81mm

ESMO Guidelines statement

Rectal MRI for all tumours, including the earliest ones, is required in order to select patients for preoperative treatment and extent of surgery.



ESMO Rectal Cancer Guidelines: Staging

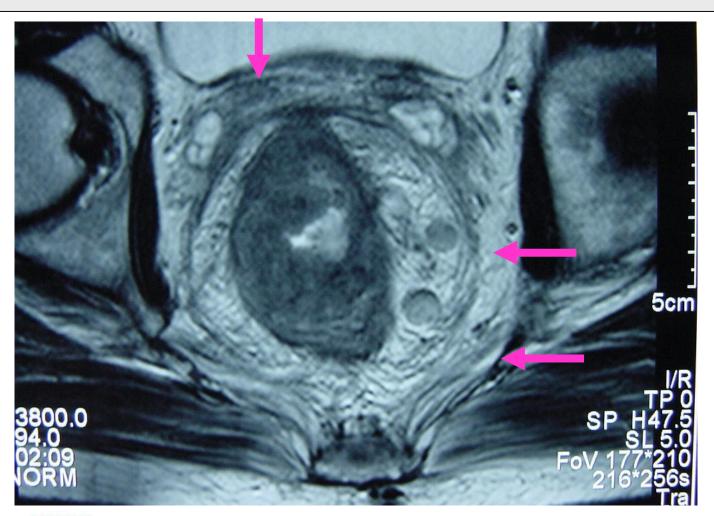


Rectal Cancer: ESMO CPG - Staging Locally advanced Advanced Early Very early cT3a/b very low. cT3c/d or very low, cT3 with MRF levators not levators clear, MRF cT1-2; cT3a/b if involved threatened. MRF middle or high clear, cT3a/b in mid cT4b, clear, cT3c/d mid or high rectum, cT1-2, sm1, cN0 cN0 (cN1 ig high) levators rectum. cN1-N2 cN1-2 (not MRF clear; no threatened, lateral (extranodal), EMVI **EMVI** extranodal), no node +ve **EMVI** +ve cN1-2 (not extranodal), no EMVI (extranodal), EMVI+ TME alone or SCPRT/CRT if Local RT may be used TEM, CRT or 'watch-and-wait' SCPRT or CRT as an alternative to for fragile, high-risk patients or good quality mesorectal excision cannot be assured local surgery (+/- CRT) those rejecting radical surgery SCPRT plus FOLFOX and delay to surgery MRI to re-evaluate tumour MRI to re-evaluate tumour MRI to re-evaluate turnour TEM if pT1 and no adverse features 'Watch-and-wait' 'Watch-and-wait' MRI to re-evaluate tumour may be considered may be considered n high-risk patients in high-risk patients TEM plus perioperative CRT if if cCR achieved adverse features present TME alone if **SCPRT** CRT or SoC Key SCPRT+ TME alone high quality or Messages or plus CRT **FOLFOX Avoid RT** SCPRT/CRT then TME then TME



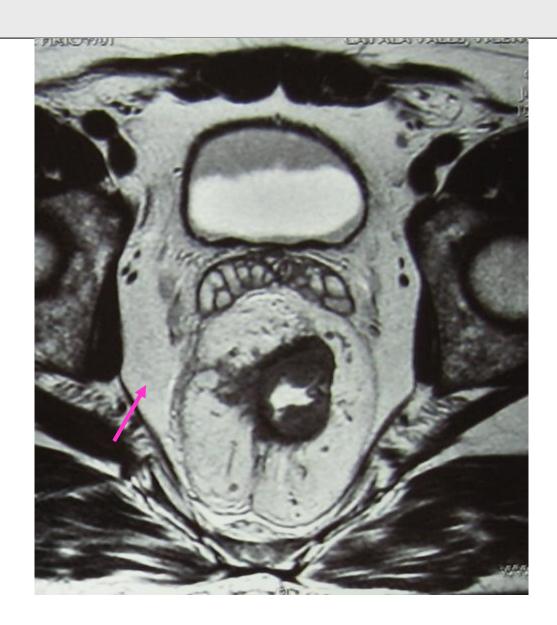
CRT, chemoradiotherapy; EMVI, extramural vascular invasion; FOLFOX, leucovorin/fluorouracil/oxaliplatin; MRF, mesorectal fascia; RT, radiotherapy; SCPRT, short-course preoperative radiotherapy; TME, total mesorectal excision; SoC, standard of care

Involvement of mesorectal fascia



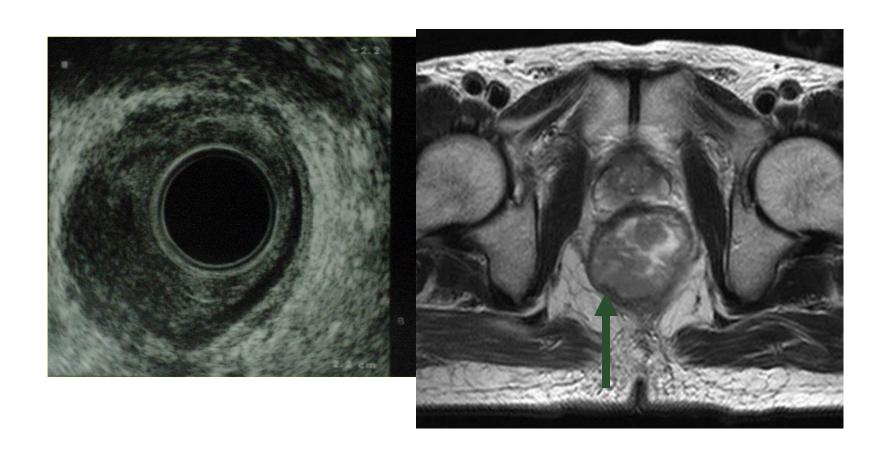


Extramural vein invasion





Involvement of puborectal sphincter



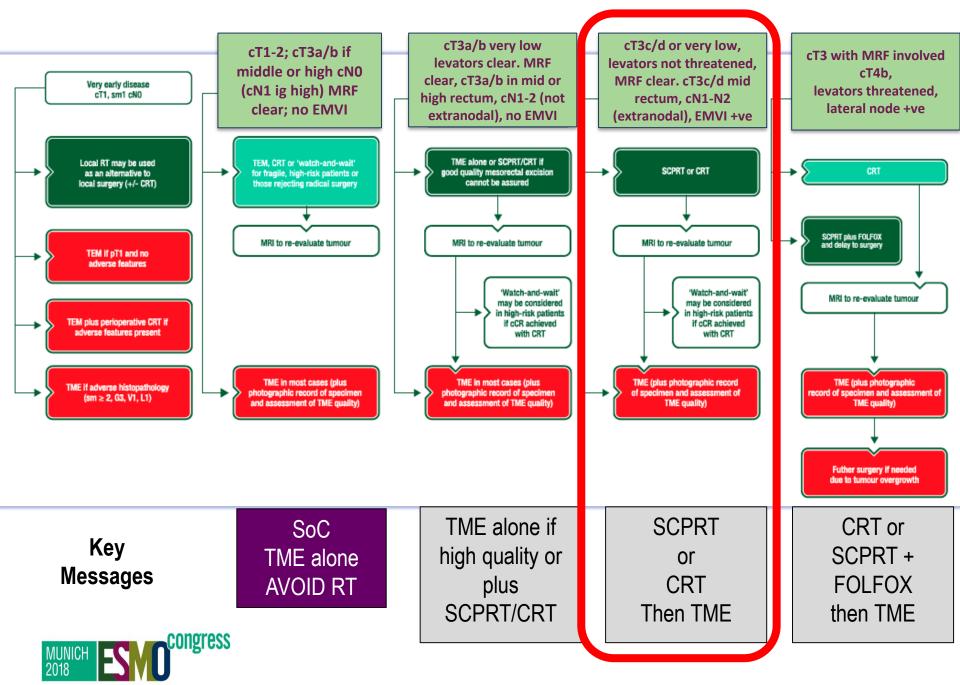


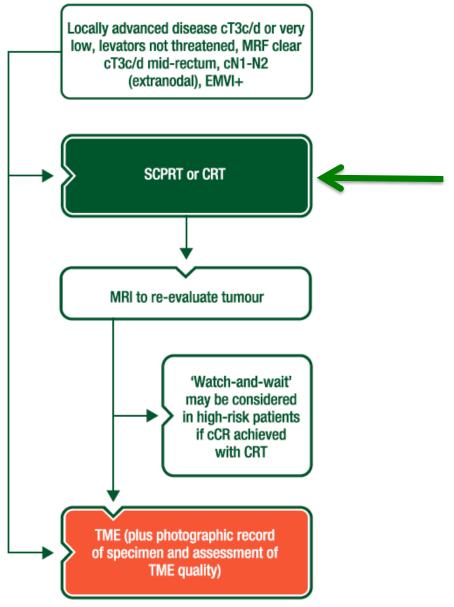
High risk features in our case

- Tumour of the upper rectum (11-16 cm from the a.v.)
- Extramural spread: 13 mm T3c
- > 4 heterogeneous/irregular border lymph nodes
- **EMVI positive** (left middle rectal vein)
- No MRF involvement
- No extramural disease
- No lateral nodes

Stage: cT3cN2M0







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Our case treatment

Long-course chemo-radiotherapy

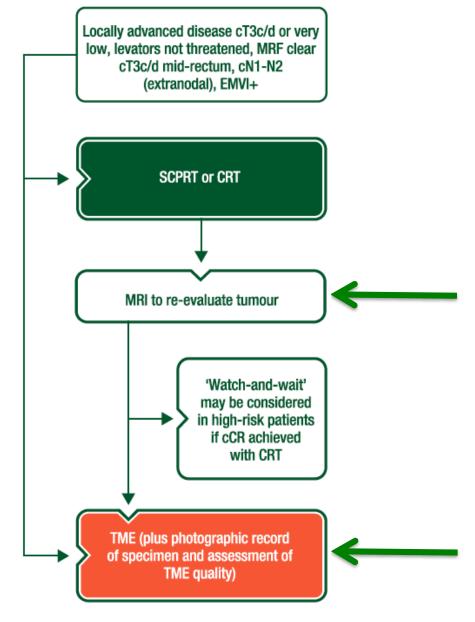
45 Gy in 25 fractions + 9 Gy boost in 5 fractions

Concurrent capecitabine (825 mg/m² twice daily continuously)



Rectal cancer with pre-operative Chemo-RT: OXALIPLATIN NOT RECOMMENDED

Study	Patients	ChemoRT Regimen	ypCR Rate (%)	
ACCORD 12 (JCO 2010)	291	Cape+RT	14	
	293	Cape + Oxali 50mg/m2 wkly+RT	19 (p=0.09)	
STAR-01 (JCO 2011)	379	FU CI+RT	16	
	368	FU CI + Oxali 60mg/m2 wkly+RT	16	
German AIO-04 (Lancet 2012)	623	FU CI+RT	13	
	613	FU CI + Oxali 50mg/m2 wkly+RT	17 (p=0.038)	
PETAAC-6 (PASCO, 2013)	547	Cape+RT	11	
	547	Cape + Oxali 50mg/m2 wkly+RT	13 (p=0.031)	
NSABP R-04 (PASCO, 2012)	636	FU/Cape+RT	18	
	640	FU/Cape + Oxali 50mg/m2 wkly+RT	20 (p=0.42)	



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Our case surgery & pathology

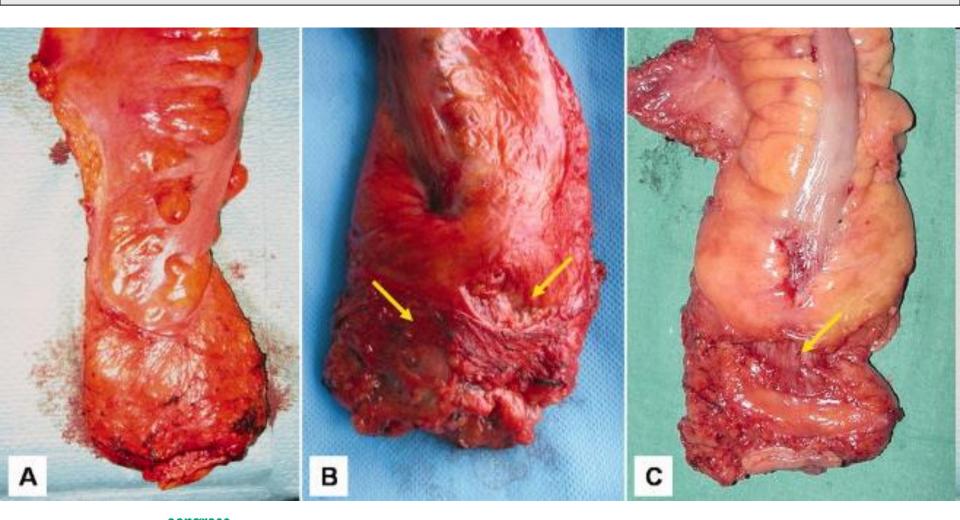
Low anterior resection according to the TME principles and loop ileostomy performed 8 weeks after completion of CRT No post-operative complications.

Histology

- Resection in the mesorectal plane
- Scanty residual moderately differentiated adenocarcinoma (Dworak's TRG 3)
- . ypT3N0 (0/45)
- . No lymphatic or venous invasion



Macroscopic assessment of mesorectal excision





Downstaging after neoadjuvant treatment : neoadjuvant rectal score

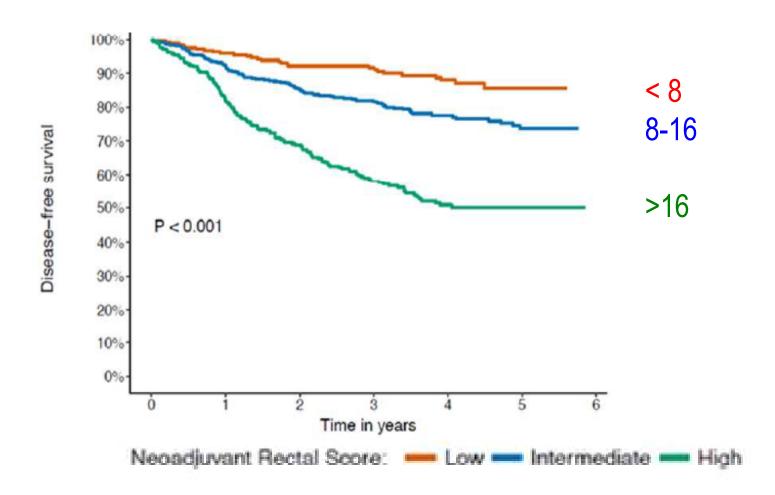
$$NAR = \frac{[5 pN - 3(cT - pT) + 12]^2}{9.61}$$

Our patient NAR score: 14,95

George TG, et al. Curr Colorectal Cancer Rep 2015



Neoadjuvant rectal score in CAO/ARO/AIO04 trial





Our cases decision on adjuvant chemotherapy

4 months (i.e. 6 cycles) of adjuvant chemotherapy with single agent capecitabine



Adding Oxaliplatin to 5-FU based adjuvant therapy in localised colon/rectal cancer

Trial	N	Control	Ехр.	Stage	DFS HR P value	OS HR P value	Absolute Gain in OS	G3 Neuro Tox
MOSAIC ¹	2246	FULV2	FOLFOX4	II/III	0.80 0.003	0.84 0.046	4,2% at 6 y stage III	12%
NSABP-C07 ²	2407	FULV Roswell	FLOX	11/111	0.80 0.0034	0.82 0.002	2,7 at 5 y Stage III	8,2%
XELOXA ³	1886	FULV Mayo	CAPEOX	III	0.80 0.0038	0.83 0.04	6 % at 7 y	11%



¹André T et al. J Clin Oncol 2007 ²Kuebler JP et al. J Clin Oncol 2007 ³Schmoll HJ et al. J Clin Oncol 2015

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NSABP-C07 ²	2407	FULV Roswell	FLOX	11/111	0.80 0.0034	0.82 0.002	2,7 at 5 y Stage III	8,2%
XELOXA ³	1886	FULV Mayo	CAPEOX	Ш	0.80 0.0038	0.83 0.04	6 % at 7 y	11%
AIO04 ⁴	1233	FU	mFOLFOX	11/111	0.79 0.030	0.96 NS	0.7 at 3 y	9%
NSABP R04 ⁵	1284	FU/Cape	+ Oxali	11/111	0.94 NS	0.94 NS	NR	6%
PETACC6 ⁶	898	Cape	+ Oxali	11/111	1.04 NS	NR	NR	8%



Neoadjuvant ChT plus chemo-RT versus chemo-RT followed by surgery and adjuvant ChT in MRI defined high risk rectal cancer: the Phase II randomised valencian experience

MRI defined
Locally advanced
Rectal Cancer
patients
N=108

Concurrent CRT with
CAPOX

1:1 Randomisation

CAPOX x 4

Concurrent CRT with
CAPOX

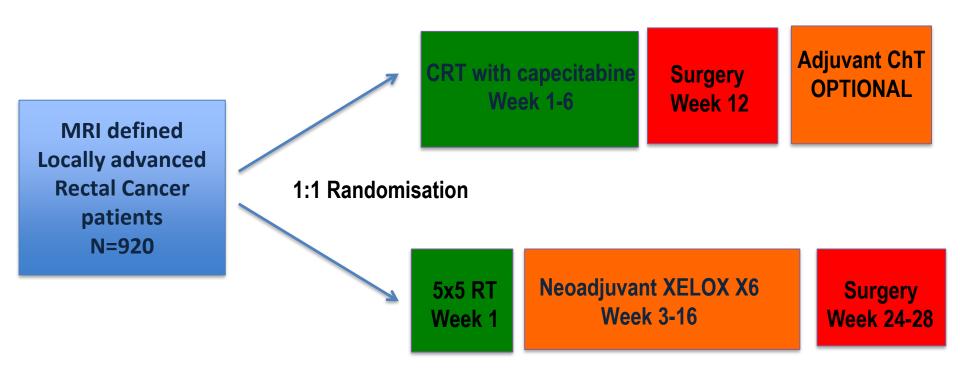
Surgery

Surgery

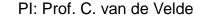




THE WAY FORWARD: THE PHASE III RADOMIZED RAPIDO TRIAL



DFS at 3 years improved by 10% from 50% to 60%





Conclusions

Integration of knowledge in a multidisciplinary team

LoE: IV GoR: A

Optimal staging by MRI LoE: III GoR: A

Selective preoperative radiation or chemoradiation

LoE: I GoR: A

TME surgery LoE: II GoR: A

Adjuvant chemotherapy for high risk patients: LoE II GoR:B



THANKS

