Αμφισβητώντας τα Guidelines: MIBC

Βασίλειος Τζώρτζης

Ιστολογικοί υπότυποι

By definition, urothelial carcinoma with divergent differentiation refers to tumours arising within the urothelial tract, in which some percentage of "usual type" urothelial carcinoma is present along with other morphologies

Urothelial carcinoma has long been known to have a remarkable propensity for divergent differentiation, which is seen most commonly in association with high-grade and locally advanced disease The incidence of divergent differentiation in cystectomy specimens is as high as 33%. Its

EUROPEAN UROLOGY 70 (2016) 106–119

Third edition [51]:	Fourth edition [1]:
Invasive urothelial tumours	*Invasive urothelial tumours*
Infiltrating urothelial carcinoma	Infiltrating urothelial carcinoma with divergent differentiation
with squamous differentiation	Nested, including large nested
with glandular differentiation	Microcystic
with trophoblastic differentiation	Micropapillary
Nested	Lymphoepithelioma-like
Microcystic	Plasmacytoid/signet ring cell/diffuse
Micropapillary	Sarcomatoid
Lymphoepithelioma-like	Giant cell
Lymphoma-like	Poorly differentiated
Plasmacytoid	Lipid rich
Sarcomatoid	Clear cell
Giant cell	Tumours of maüllerian type
Undifferentiated	Tumors arising in a bladder diverticulum

WHO 2016

; however, it is recommended that pathologists report the percentage of divergent histologies in the pathology report.

Ιστολογικοί υπότυποι

Disease	Optimal Treatment	Grade of Recommendation
Squamous cell carcinoma	Radical cystectomy	B
Primary adenocarcinoma	Radical cystectomy	B
Urachal adenocarcinoma	En bloc excision of urachus and umbilicus with partial cystectomy	B
Metastatic adenocarcinoma involving the bladder	Complete resection of involved portion of the bladder; partial cystectomy with negative margins or radical cystectomy	B
Small cell carcinoma	Local treatment and chemotherapy	B
Bladder sarcoma	Radical cystectomy	C
Carcinosarcoma, sarcomatoid tumors	Multimodality therapy	C
Paraganglioma and pheochromocytoma	Partial cystectomy with pelvic lymph node dissection; perioperative adrenergic blockade	C
Pseudotumor	Transurethral resection or partial cystectomy	C
Melanoma, primary, of bladder	Radical cystectomy	C
Lymphoma, primary	Local irradiation	C

Nonurothelial Cancer of the Bladder

Hassan Abol-Enein, Bruce R. Kava, and Adrienne J. K. Carmack

UROLOGY 2007.

Κλινικές πληροφορίες

Intravesical immunotherapy (BCG, interferon-α)	Reparative urothelial atypia Denudation of urothelium with frequent ulceration Bladder wall granulomatous inflammation Eosinophilic cystitis (moderate to severe, occasional) Persistence of CIS in von Brunn's nests Lamina propria oedema and mild perivascular inflammation with neutrophils, lymphocytes, dendritic reticulum cells and eosinophils (interferon-α)
Mitomycin C	Denudation of the surface epithelium Atypia in the surface umbrella urothelial cells Denuding papillae of persistent papillary neoplasia Less significant abnormalities in the deeper layers of the urothelium Low nuclear/cytoplasmic ratio Associated eosinophilic cystitis (mild to moderate; common) Encrusted cystitis or haemorrhagic cystitis (rare)
Cyclophosphamide	Necrosis of urothelium of the bladder and upper urinary tract Atypical form of regeneration Large, bizarre nuclei with coarse chromatin and small to medium sized nucleoli Reactivation of polyomavirus infection Bladder cancer following cyclophosphamide therapy (uncommon) Haemorrhagic cystitis (currently uncommon) Encrusted cystitis (rare)
Ketamine	Urothelium diffusely denuded with frequent urothelial ulceration Reactive urothelial changes that can mimic CIS Inflammatory cell infiltration infiltrated predominantly by lymphocytes and a variable number of eosinophils Lamina propria with prominent granulation tissue with congested vessels Varying degrees of bladder wall fibrosis (late stage) Upper urinary tract damage and hydronephrosis High p53 and Ki67 (frequent); normal CK20

REVIEW

Iatrogenic changes in the urinary tract

Antonio Lopez-Beltran,[1,2] Gladell P Paner,[3] Rodolfo Montironi,[4] Maria R Raspollini[5] & Liang Cheng[6]

Iatrogenic changes in the urinary tract

Antonio Lopez-Beltran,[1,2] Gladell P Paner,[3] Rodolfo Montironi,[4] Maria R Raspollini[5] & Liang Cheng[6]

Neoadjuvant systemic chemotherapy	Urothelium with minor atypia Hyalinization of the wall and fewer foreign body giant cells Frequent lymph node hyalinization Xanthoma (occasional) Persistence of urothelial CIS or NMIBC (frequent) Residual tumour grade: (i) no tumour; (ii) tumour <50%; (iii) tumour >50%
Radiation therapy	Denudation of urothelium with frequent ulceration Overall increase in urothelial cell size with normal nuclear to cytoplasmic ratio Acute inflammatory reaction in lamina propria with atypical stromal cells Blood vessels thrombosis and bladder wall fibrosis (late stage) Intensified eosinophilic staining of cytoplasm (common) Pseudocarcinomatous hyperplasia (uncommon); xanthoma (rare)
Photodynamic and laser therapy	Coagulation and/or haemorrhagic necrosis Normal tissues range from oedema to coagulation necrosis Well demarcated from non-irradiated tissues Vascular endothelium enlargement Dystrophic calcification (occasional) Spindling artefact of urothelial cells
Surgery related alterations	Postsurgical necrobiotic granuloma and nonspecific granulomatous reaction Xanthoma (rare) Postoperative spindle cell nodule Fistula or suture granuloma Recurrent cancer in bladder augmentations and intestinal conduits
Gene therapy	Marked cytoplasmic vacuolization of tumour cells (early) Inflammatory infiltrate mainly of B cells and macrophages Apoptosis-mediated tumour necrosis Non-neoplastic tissues unaffected

Intravesical and systemic therapeutic agents, as well as other therapeutic procedures, including mitomycin C, cyclophosphamide, BCG, platin-based chemotherapy agents, radiotherapy, photodynamic and laser treatment and gene therapy, produce a host of changes and alterations in the urothelium, some of them mimicking carcinoma. The diagnosis of these lesions relies upon haematoxylin and eosin (H&E)-based pathological evaluation, and therefore pathologists must be aware of the altered morphology secondary to therapy.

A conservative approach with repeat cystoscopy and biopsy after the inflammation has resolved is suggested in equivocal cases.

Ορισμός BCG-refractory

Radical cystectomy is also strongly recommended in patients with BCG-refractory tumours, defined in the NMIBC guideline as:

- whenever muscle-invasive tumour is detected during follow-up;
- if high-grade, non-muscle-invasive papillary tumour is present at 3 months;

EAU Guidelines

DEFINING BACILLUS CALMETTE-GUERIN REFRACTORY SUPERFICIAL BLADDER TUMORS

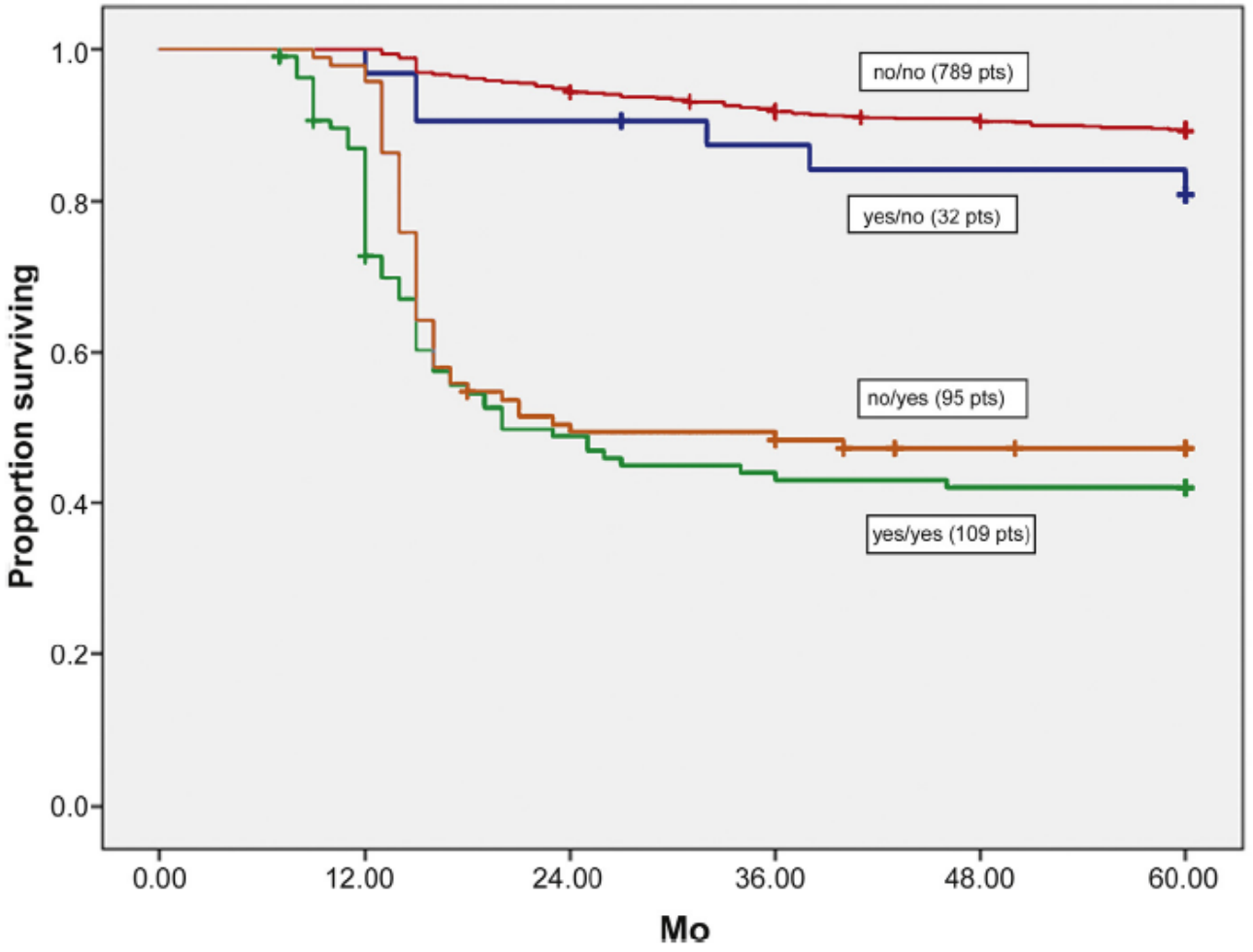
Vol. 169, 1706–1708, May 2003

HARRY W. HERR AND GUIDO DALBAGNI

From the Department of Urology, Memorial Sloan-Kettering Cancer Center, New York, New York

Results: Of the 93 cases 57% were negative for tumor at 3 months and 43% had residual tumor resected. At 6 months 80% of the patients were tumor-free and 20% had persistent or recurrent tumor. Maintenance BCG did not decrease tumor recurrence further than induction BCG. Subsequent tumor-free interval during 24 months of followup were best predicted by response to BCG after 6 months.

Conclusions: A minimum treatment and followup time of 6 months is required to identify high risk, superficial bladder tumors as truly BCG refractory.



3 και 6 μήνες μετά TUR-B

Bacillus Calmette-Guérin Without Maintenance Therapy for High-Risk Non–Muscle-Invasive Bladder Cancer

Harry W. Herr *, *Guido Dalbagni*, *Sherri M. Donat*

Department of Urology, Memorial Sloan-Kettering Cancer Center, New York, NY, USA

EUROPEAN UROLOGY 60 (2011) 32–36

We suggest in the context of visibly complete transurethral resection and sufficient exposure to intravesical BCG, that BCG-refractory patients are best identified after 6 mo rather than 3 mo.

Ορισμός BCG-refractory

The analysis demonstrated that persistent disease at 3 mo after induction BCG disappeared in 23% of patients after a further 3 mo, even without additional BCG. A more important group, however, is the 77% of patients with tumours that still persist at 6 mo, whereby the curves presented show a dramatic 60% 2-yr progression rate. How many of those patients could we render "progression-free" by performing an early radical cystectomy at 3 mo, with potentially better disease-related survival? This is why we should be very cautious in our recommendations.

which could be, as soon as it is published, the key for a potential change in guideline recommendations.

Reply to Harry Herr's Letter to the Editor re: Marko Babjuk, Andreas Böhle, Maximilian Burger, et al. Carcinoma of the Bladder: Update 2016. Eur Urol.

Χρειαζόμαστε άλλες οδηγίες για τις γυναίκες;

- 4η συχνότερη νεοπλασία Άνδρες
- 8η Γυναίκες

Site	% Localized		% Regional		% Distant	
	Male	Female	Male	Female	Male	Female
Lung + bronchus	15.1	18.2	22.1	21.7	54.5	51.1
Colon + rectum	40.8	38.9	35.2	36.3	18.7	18.5
Skin melanoma	82.4	85.8	9	7.3	4.4	2.8
Bladder	72.8	67.6	14.2	15	6.6	9.5
NonHodgkin lymphoma	27.6	30.4	14.3	15.1	49.2	44.5
Kidney + renal pelvis	60.1	63.3	17.8	15.4	17.3	15.5
Thyroid	58.1	70.5	30.5	22.9	8.4	4.2
Pancreas	7.4	9.1	26	26.4	53.2	47.8
Liver	38.4	38.4	26	22.7	18.2	17.2
Brain + other nervous system	74.3	71.6	15.7	16	2.2	2.3

Najari B. J Urol 2013

Χρειαζόμαστε άλλες οδηγίες για τις γυναίκες;

Study	Patients (*n*)		Pathologic stage (%)		Median	5-yr CSS (%)		MVA of CSS association with gender		
	F	M	pT0/pTa/pTis/pT1/pT2/pT3/pT4		FU	F	M			
			F	M	(mo)			HR	95% CI	*p* value
Kluth et al [7]	1605	6497	5.3/4.5/7.4/11.0/25.0/ 37.0/9.5	5.6/4.3/8.2/15.0/24.0/ 31.0/12.0	41.0	72.0	76.0	1.17	1.05–1.30	0.004
Messer et al [74]	890	3186	pT0/1 28.9%; pT2 24.6%; pT3/4 46.6%	pT0/1 32.1%; pT2 23.9%; pT3/4 44.3%	31.5	63.0	69.6	1.25	1.09–1.44	0.002
Tilki et al [75]	50	193	8.2/7.8/48.1/13.2/11.9/4.9/5.8		37.3	64.8	92.8	2.45	1.10–5.48	0.029
Tilki et al [76]	40	188	pT0 after radical cystectomy only		48.2	87.6	94.3	4.47	1.37–14.6	0.013
Soave et al [10]	119	398	10.1/2.59/4.2/8.4/23.5/34.5/16.8	9.8/4.8/10.6/14.1/17.1/26.6/17.1	44.0	60.0	72	NP		
Mitra et al [11]	414	414	pT0/pTa/pTis 20.1%; pT1 14.5%; pT2 23.7%; pT3 35.0%; pT4 6.0%		12.2 yr	60 [a]	70 [a]	NP [b]		
Tilki et al [79]	94	488	pT4 cancers only		55.0	23.8	39.8	1.67	1.22–2.28	0.001
May et al [80]	36	192	pT4a cancers only		30.0 [c]	15.0	40.0	1.83	1.17–2.85	0.008
Liberman et al [81]	1506	4119	pT4 cancers only		43.0	62.0	1.18	NP		<0.001
Kaushik et al [82]	37	91	pT4 cancers only		10.5 yr	17.2	31.1	1.05	0.62–1.77	0.87
Otto et al [93]	507	1976	pT≤1 24.7%; pT2 27.6%; pT3 38.8%; pT4 8.9%	pT≤1 29.5%; pT2 26.8%; pT3 32.6%; pT4 11.1%	42.0	60.0	66.0	1.26	1.05–1.49	0.011
May et al [94]	133	388	pT≤2 42.9%; pT3/4 57.1%	pT≤2 41.0%; pT3/4 59.0%	59.0	53.0 [d]		1.35	NP	0.04

Γιατί;

- Αναζήτηση βοήθειας από την ασθενή
- Γενικοί ιατροί
- Βιολογικές διαφορές
  - Ιστολογικοί τύποι
  - Οδοί μεταβολισμού καρκινογόνων
  - Ορμόνες (οιστρογόνα)

Χρειαζόμαστε άλλες οδηγίες για τις γυναίκες;

Gender and Bladder Cancer: A Collaborative Review of Etiology, Biology, and Outcomes

EUROPEAN UROLOGY 69 (2016) 300–310

Jakub Dobruch [a,], Siamak Daneshmand [b], Margit Fisch [c], Yair Lotan [d], Aidan P. Noon [e], Matthew J. Resnick [f], Shahrokh F. Shariat [g], Alexandre R. Zlotta [e], Stephen A. Boorjian [h]*

Conclusions: Numerous potential biologic and epidemiologic factors probably underlie the gender differences observed for bladder cancer incidence, stage at diagnosis, and outcomes. Continued evaluation to define clinical applications for manipulation of the sex steroid pathway and to improve the standardization of hematuria evaluation in women may improve future patient outcomes and reduce these disparities.

Neoadjuvant Chemotherapy in Invasive Bladder Cancer: Update of a Systematic Review and Meta-Analysis of Individual Patient Data

European Urology 48 (2005) 202–206

Advanced Bladder Cancer (ABC) Meta-analysis Collaboration

Results: Updated results are based on 11 trials, 3005 patients; comprising 98% of all patients from known eligible randomised controlled trials. We found a significant survival benefit associated with platinum-based combination chemotherapy (HR = 0.86, 95% CI 0.77–0.95, $p = 0.003$). This is equivalent to a 5% absolute improvement in survival at 5 years. There was also a significant disease-free survival benefit associated with platinum-based combination chemotherapy (HR = 0.78 95% CI 0.71–0.86, $p < 0.0001$), equivalent to a 9% absolute improvement at 5 years.

Conclusions: These results provide the best available evidence in support of the use of neoadjuvant platinum-based combination chemotherapy.

year survival. The results are convincing, but one may ask if they may be generalised to the whole patients population in the routine treatment of invasive bladder cancer. For this purpose a review of inclusion criteria and patients characteristics has been made in the three major trials of this study [2–4] which represent 1913

International Collaboration of Trialists Lancet 1999
Grossman HB et al New Engl J Med 2003
Sherif A et al Eur Urol 2004

In conclusion this meta-analysis demonstrates very clearly a 5% survival advantage of neoadjuvant cisplatin-based chemotherapy in T2–4a N0 bladder cancer patients before local curative therapy. Nevertheless these results are valid in a selected patients population who have a PS 0/1, a creatinine clearance >50 ml/mn and who are less than 70 years old. The 30 to 40% proportion of patients who are actually older than 70 years, those with PS 3/4 or impaired renal function are unlikely to benefit from this treatment strategy. As they represent more than a third of patients with localised bladder cancer, their treatment requires further specific studies.

Editorial Comment

Jean-Pierre Droz, *Lyon, France*

European Urology 48 (2005) 202–206


JAMAICA
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BEIJING 20

Neoadjuvant Χημειοθεραπεία

Low Incidence of Perioperative Chemotherapy for Stage III Bladder Cancer 1998 to 2003: A Report From the National Cancer Data Base

Kevin A. David,*,† Matthew I. Milowsky,* Jamie Ritchey,* Peter R. Carroll‡ and David M. Nanus§,‖

TABLE 2. *Treatment patterns for stage III bladder TCC, 1998–2003*

	No. Stage III Bladder TCC (%)
Surgery of interest + chemotherapy (974):	
Surgery + adjuvant chemotherapy	744 (10.4)
Neoadjuvant chemotherapy + surgery	82 (1.2)
Surgery + chemotherapy (nonadjuvant)	148 (2.1)

Treatment of Muscle Invasive Bladder Cancer: Evidence From the National Cancer Database, 2003 to 2007

Ugo Fedeli, Stacey A. Fedewa* and Elizabeth M. Ward

Results: The proportion of patients treated with cystectomy (42.9%) and radiation therapy (16.6%) remained stable with time while the incidence of those who received chemotherapy increased from 27.0% in 2003 to 34.5% in 2007 due to an increase in neoadjuvant chemotherapy and chemotherapy without surgery. The

Πραγματικότητα

Risk based neoadjuvant chemotherapy in muscle invasive bladder cancer

Isuru S. Jayaratna, Neema Navai, Colin P. N. Dinney

Department of Urology, MD Anderson Cancer Center, Houston, TX 77030, USA

which patients will have the poorest outcomes. These can be roughly divided into those factors that represent locally advanced disease [palpable or fixed mass on examination under anesthesia (EUA)], cross-sectional imaging revealing signs of extravesical extension or local organ involvement, hydronephrosis) and those factors that predict regional/ distant metastasis [lymphovascular invasion (LVI), and variant histology]

Preoperative RT

Anticancer Res. 1998 May-Jun;18(3B):1931-4.

Planned preoperative radiation therapy in muscle invasive bladder cancer; results of a meta-analysis.

Huncharek M[1], Muscat J, Geschwind JF.

CONCLUSION: The available clinical trial data do not support a role for routine use of pre-operative radiation therapy in the treatment of muscle invasive bladder cancer. Additional well designed trials are needed to address this issue.

A meta-analysis of the five randomised trials showed an OR for the difference in 5-year survival of 0.71 (95% CI: 0.48-1.06) in favour of pre-operative RT [232]. However, the meta-analysis was potentially biased by the patients in the largest trial who were not given the planned treatment. When the largest trial was excluded, the OR became 0.94 (95% CI: 0.57-1.55), which is not significant.

Preoperative RT

Guideline on Muscle-Invasive and Metastatic Bladder Cancer (European Association of Urology Guideline): American Society of Clinical Oncology Clinical Practice Guideline Endorsement

J Clin Oncol 34:1945-1952. © 2016

Matthew I. Milowsky, R. Bryan Rumble, Christopher M. Booth, Timothy Gilligan, Libni J. Eapen, Ralph J. Hauke, Pat Boumansour, and Cheryl T. Lee

Preoperative radiotherapy for operable MIBC can result in tumor down-staging after 4-6 weeks.

Not endorsed by ASCO based on the evidence that the EAU reviewed

Adjuvant Χημειοθεραπεία (μη μεταστατικό)

Table 1. Reported Randomized Trials of Adjuvant Therapy for MIBC

First Author	Eligibility	Regimen	Total Patients Randomly Assigned	Completed Accrual	Improved Survival
Bono[26]	pT2-T4a	Cisplatin plus methotrexate	90	Yes	No
Freiha[27]	p3b-4, N0 or N+	CMV	55	No*	No
Otto[28]	pT3	MVEC	108	Yes	No
Skinner[29]	pT3-4 or N+	Multiple cisplatin-based combinations	102	No*	No
Lehmann[30]	pT3-4a and/or pN+	MVAC or MVEC	49	No*	No
Studer[31]	Multifocal recurrent pT1 or pT2-T4a	Cisplatin	91	No†	No
Stadler[32]	pT1/T2 N0M0	MVAC	114	Yes	No
Cognetti[33]	pT2 grade 3, N0-2; pT3-4, N0-2, any grade; or pN1-2, any T, any grade	GC	194	No	No
Paz-Ares[34]	pT3-4 and/or pN+	PCG	142	No	Yes
Sternberg[35]	pT3-4 and/or pN+	GC, MVAC, or DD-MVAC	284	No	No

Abbreviations: CMV, cisplatin, methotrexate, and vinblastine; DD-MVAC, dose-dense methotrexate, vinblastine, doxorubicin, and cisplatin; GC, gemcitabine plus cisplatin; MIBC, muscle-invasive bladder cancer; MVAC, methotrexate, vinblastine, doxorubicin, and cisplatin; MVEC, methotrexate, vinblastine, epirubicin, and cisplatin; PCG, paclitaxel, cisplatin, and gemcitabine.

*Stopped early because interim analysis favored adjuvant chemotherapy.

†Stopped early because interim analysis favored control arm of no adjuvant chemotherapy.

Immediate versus deferred chemotherapy after radical cystectomy in patients with pT3–pT4 or N+ M0 urothelial carcinoma of the bladder (EORTC 30994): an intergroup, open-label, randomised phase 3 trial

Cora N Sternberg, Iwona Skoneczna, J Martijn Kerst, Peter Albers, Sophie D Fossa, Mads Agerbaek, Herlinde Dumez, Maria de Santis, Christine Théodore, Michael G Leahy, John D Chester, Antony Verbaeys, Gedske Daugaard, Lori Wood, J Alfred Witjes, Ronald de Wit, Lionel Geoffrois, Lisa Sengelov, George Thalmann, Danielle Charpentier, Frédéric Rolland, Laurent Mignot, Santhanam Sundar, Paul Symonds, John Graham, Florence Joly, Sandrine Marreaud, Laurence Collette, Richard Sylvester, for the European Organisation for Research and Treatment of Cancer Genito-Urinary Cancers Group, Groupe d'Etude des Tumeurs Urogénitales, National Cancer Research Institute Bladder Cancer Study Group, National Cancer Institute of Canada Clinical Trials Group, and German Association of Urologic Oncology (AUO)

Interpretation Our data did not show a significant improvement in overall survival with immediate versus deferred chemotherapy after radical cystectomy and bilateral lymphadenectomy for patients with muscle-invasive urothelial carcinoma. However, the trial is limited in power, and it is possible that some subgroups of patients might still benefit from immediate chemotherapy. An updated individual patient data meta-analysis and biomarker research are needed to further elucidate the potential for survival benefit in subgroups of patients.

Re: Immediate Versus Deferred Chemotherapy After Radical Cystectomy in Patients with pT3-pT4 or N+ M0 Urothelial Carcinoma of the Bladder (EORTC 30994): An Intergroup, Open-label, Randomised Phase 3 Trial

Sternberg CN, Skoneczna I, Kerst JM, et al

Lancet Oncol 2015;16:76–86

Consequently, NC should remain the preferred strategy at this time. Perhaps it is time for a randomized trial comparing NC and AC.

Not eligible for cisplatin (unfit)

An international survey among BC experts [448] was the basis for a consensus statement on how to classify patients unfit for cisplatin-based chemotherapy. At least one of the following criteria has to be present: PS > 1; GFR ≤ 60 mL/min; grade ≥ 2 audiometric loss and peripheral neuropathy; and New York Heart Association (NYHA) class III heart failure [449].

More than 50% of patients with urothelial cancer are not eligible for cisplatin-based chemotherapy [450-453].

Renal function assessment in UC is of utmost importance for treatment selection. Calculation of creatinine clearance (CrCl) (24-h urine collection) with current formulae tend to underestimate clearance in patients aged > 65 years compared to measured CrCl [450, 454].

Πραγματικότητα

Chemotherapy for Muscle-Invasive Bladder Cancer: Better Late Than Never?

Guru Sonpavde, *University of Alabama, Birmingham, School of Medicine and Veterans Affairs Medical Center, Birmingham, AL*
Jennifer B. Gordetsky, Mark E. Lockhart, and Jeffrey W. Nix, *University of Alabama, Birmingham, School of Medicine, Birmingham, AL*

VOLUME 34 · NUMBER 8 · MARCH 10, 2016

JOURNAL OF CLINICAL ONCOLOGY

Παρακολούθηση

Surveillance protocols commonly used are built on observed recurrence patterns from retrospective RC series. Prospective trials demonstrating the effectiveness of follow-up after RC, and particularly its impact on survival, are lacking.

EUROPEAN UROLOGY 58 (2010) 486–494

Do Patients Benefit from Routine Follow-up to Detect Recurrences After Radical Cystectomy and Ileal Orthotopic Bladder Substitution?

Gianluca Giannarini[a], *Thomas M. Kessler*[a], *Harriet C. Thoeny*[b], *Daniel P. Nguyen*[a], *Claudia Meissner*[a], *Urs E. Studer*[a,*]

EUROPEAN UROLOGY 58 (2010) 486–494

Site of recurrence	Mode of diagnosis of recurrence	
	Routine follow-up, *n*	Symptoms, *n*
Pelvic	4	8
Bone*	5	33
Lung*	29	7
Extrapelvic lymph nodes	10	6
Liver	4	4
Brain	0	4
Penis	2	0
Peritoneal carcinosis	0	1
Muscle (leg)	0	1
Pelvic and distant*†	3	15
Upper urinary tract	9	5
Urethra*	21	3
Total	87	87

Patients in whom recurrences after RC and ileal orthotopic bladder substitution are diagnosed by routine follow-up investigations have a slightly higher survival probability than patients with symptomatic recurrences. Regular surveillance is particularly effective in detecting urethral, usually noninvasive recurrences, which can be treated conservatively and are associated with good prognosis. Moreover, the predominance of lung and extrapelvic lymph node metastases in long-term survivors may justify the use of routine cross-sectional imaging. Finally, routine follow-up is associated with no serious recurrence-related complications.

Oncological Followup After Radical Cystectomy for Bladder Cancer—Is There Any Benefit?

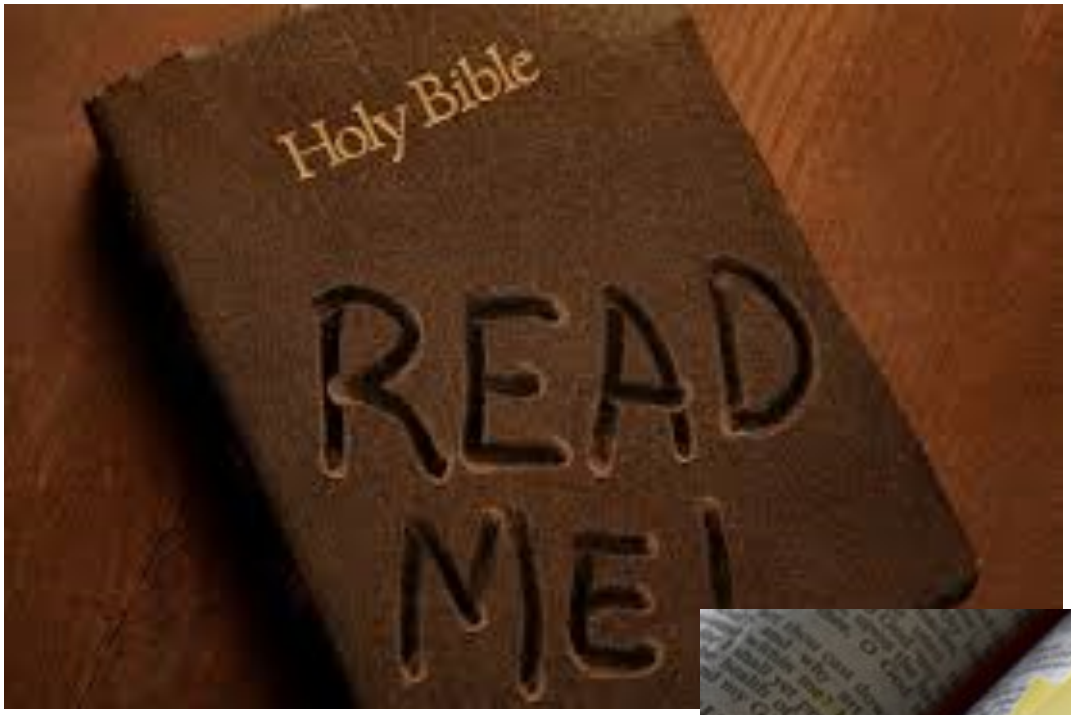
Bjoern G. Volkmer,*,† Rainer Kuefer, Georg C. Bartsch, Jr., Kilian Gust and Richard E. Hautmann

THE JOURNAL OF UROLOGY®
Vol. 181, 1587-1593, April 2009

n=1290

	Symptomatic	Asymptomatic
No. pts	290	154
Age at cystectomy	64.0	64.7
% Tumor stage:		
Ta/Tis/T1 N0 M0	5.2	8.4
T2a/T2b N0 M0	17.6	15.6
T3a–T4b N0 M0	29.3	25.3
TX N+ M0	47.9	50.6
% Local recurrence	45.5	35.1
% Metastasis:		
Bone	30.3	22.0
Pulmonary	15.9	22.7
Liver	19.3	14.3
Mos to recurrence	17.5	20
% Chemotherapy/radiotherapy for tumor recurrence/metastasis	40.0	38.3

Our data show that improved imaging techniques have a tendency to detect tumor recurrence earlier but this does not cause a survival benefit. The tendency toward slightly better survival in our latest patients, in whom recurrence was diagnosed within the last 8 years, was caused by the introduction of gemcitabine as a chemotherapy agent. As long as we do not have a therapy that can offer patients with metastatic bladder cancer better survival rates than today, tumor recurrence will remain a fatal incident.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