

SPECIAL ARTICLE

Advances in uro-oncology ‘‘OncoForum’’: The best of 2010[☆]

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Abstract

Objective: To highlight the most important issues of the 2010 annual meetings of the European Association of Clinical Oncology (EAU), the American Urological Association (AUA), the American Society of Therapeutic Radiology and Oncology (ASTRO).

Methods: A group of experts in oncological urology selected the most important summaries of the four congresses. Subsequently, the revisers assessed the findings in relation to their present and future impacts on clinical practice. This document includes the summaries with the highest points.

Results: The following messages were considered important. In pT3 prostate cancer, postoperative radiotherapy (RT) improves local control and biochemical progression-free survival, with no significant impact on distant metastasis and overall survival. In patients with bladder cancer without muscle invasion and with the risk of intermediate recurrence, maintenance chemotherapy does not increase recurrence-free survival after transurethral resection. There is no evidence of a synergist effect of the combination of Temsirolimus/Bevacizumab in patients with metastatic kidney cell carcinoma without prior treatment. In the SWENOTECA V protocol of metastatic seminomatous germ-cell testicular cancer, the adjuvant RT was interrupted because the concern regarding the induction of secondary cancers was greater than the reduction of relapses.

Conclusions: In 2010, new data were produced on the diagnosis and treatment in oncological urology, thanks to the interesting work of different trials.

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PALABRAS CLAVE

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Neoplasias del pene;
Urología

Avances en uro-oncología "OncoForum": lo mejor del 2010**Resumen**

Objetivo: Destacar lo más relevante de las reuniones anuales 2010 de la Asociación Europea de Urología (*European Association of Urology* [EAU]), la Asociación Americana de Urología (*American Urological Association* [AUA]), la Sociedad Americana de Oncología Clínica (*American Society of Clinical Oncology* [ASCO]) y la Sociedad Americana de Oncología Radioterápica (*American Society for Therapeutic Radiology and Oncology* [ASTRO]).

Métodos: Un grupo de expertos en urología oncológica seleccionó los resúmenes más relevantes de los 4 congresos. Posteriormente, los revisores valoraron los hallazgos en relación con su impacto presente y futuro sobre la práctica clínica. Este documento recoge los resúmenes con mayor puntuación.

Resultados: Se han considerado relevantes los siguientes mensajes. En cáncer de próstata pT3 la radioterapia (RT) postoperatoria mejora el control local y supervivencia libre de progresión bioquímica, sin impacto significativo sobre las metástasis a distancia y la supervivencia global. En pacientes con cáncer vesical sin invasión muscular y con riesgo de recurrencia intermedio, la quimioterapia de mantenimiento no aumentó la supervivencia sin recurrencia después de resección transuretral. No hay evidencia de efecto sinergista de la combinación temsirolimus/bevacizumab para pacientes con carcinoma de células renales metastásico sin tratamiento previo. En el protocolo SWENOTECA V para el tratamiento del cáncer testicular de células germinales seminomatoso se interrumpió la RT adyuvante, porque la preocupación por la inducción de cánceres secundarios superaba a la reducción de las recidivas.

Conclusiones: En el 2010 han surgido nuevos datos sobre el diagnóstico y tratamiento en urología oncológica, gracias al interesante trabajo de diferentes estudios.

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Context

The OncoUrology Forum (OncoForum) is an interactive platform that analyzes the most highlights of the main urology and oncology congresses. Different experts selected the summaries on oncological urology that might have an impact on the clinical practice from the annual meetings of the EAU, the AUA, the ASCO, and the ASTRO that they attended (selection available on: www.oncoforum.org). An independent checking committee reviewed and assessed the impact of the data on current and future clinical practices.

Evidence acquisition

We intend to communicate the highlights in prostate cancer (PCa), renal, urothelial, penile and testicular cancer, presented at the 2010 main annual meetings dealing with urologic oncology issues. In this document, data relating to the summaries that received the highest scores from the inspectors are specified.

Prostate cancer selection

A subanalysis by the ERSPC (European Randomised Study of Screening for Prostate Cancer, Gothenburg group data) was presented at the AUA meeting to assess the PSA screening affects the erectile function and incontinence after radical prostatectomy (RP). Postoperative morbidity was assessed among 272 patients with PCa 18 months after

RP, comparing the usual PSA screening versus standard clinical care.¹ The extrapolated data show that in order to save a patient from death from PCa with screening and surgery, other 6 men remain impotent/sexually inactive and one incontinent due to surgery-induced morbidity.

Localized prostate cancer: follow-up after radical prostatectomy

The risk of PCa-specific mortality in the 15 years following surgery is not decreasing; this includes an analysis of the SEER (Surveillance, Epidemiology and End Results) registry, which included 119,987 men undergoing RP. In addition, in high-grade and non-organ-confined tumor, PCa-specific mortality increases annually to 3.5% per year 15 years after the surgery.² Thus, the biochemical relapse after the RP must be treated, especially in patients with high-grade and non-organ-confined tumors.

The analysis of a database of a center that included 1593 men with undetectable PSA 10 years after the RP showed that none of these patients died from PCa in the 20 years after the RP.³ Thus, the PSA screening may be discontinued 10 years after the RP in a selected group of patients, for example, pT2 with negative margins that continue without progression 10 years after the operation.

Aspects of local control in high-risk disease

There are more and more data indicating that local control is important in high-risk PCa, and these patients are a

heterogeneous population. Therefore, the RP may be an option for a number of high-risk patients.⁴ This is illustrated in an analysis of the database of a tertiary care center in Italy. Patients with high-grade PCa without lymph node involvement (Gleason 8-10) and confined disease after the RP (i.e., pT2 disease/pT3a and negative surgical margins) showed a 6.8 times greater chance of not dying from cancer compared to patients with non-organ-confined cancer.⁵

The analysis of a multicenter European database, with 1584 patients with high-risk PCa, suggests that age ≥ 70 years is not a predictor of cancer-specific survival, and the median overall survival of patients ≥ 70 years was 161 months.⁶ Therefore, some elderly men (≥ 70 years) with localized high-risk PCa and limited comorbidity can be treated with RP and pelvic lymph node dissection. However, a prospective study of 1179 patients undergoing RP, and a median follow-up of 2.2 years showed that age was a predictor of urinary incontinence, with an increased relative risk of 6.0% yearly.⁷ These results should be taken into account when choosing between RP and active follow-up (AFU).

Adjuvant treatment to radical prostatectomy

A significant number of patients with high-risk PCa present recurrence after the RP. Adjuvant treatment can reduce recurrence, but it is associated with adverse events and is not beneficial in all patients. Thus, another important aspect of the treatment of PCa is to determine who should and should not receive adjuvant treatment to RP.

At the ASTRO meeting, results at 10 years were presented of the EORTC 22911 randomized controlled clinical trial (RCCT) conducted in 1005 patients with pT3N0 PCa or positive margins, which compared adjuvant radiotherapy (RT; 60 Gy) to observation after RP.⁸ Although the biochemical progression-free survival and local control were significantly better in the RT group, there were no significant differences in distant metastases and overall survival (Table 1).

In a meta-analysis of SWOG 8794, EORTC 22911 and ARO 96-02, subgroups were evaluated in accordance with the presence of positive surgical margins, extracapsular extension and invasion of seminal vesicles.⁹ Regarding the biochemical progression-free survival, all subgroups benefited from adjuvant RT. The SWOG data analysis indicated that patients with positive surgical margins, extracapsular extension or seminal vesicle invasion had an overall survival benefit.

Locally advanced prostate cancer: combination of androgen deprivation and radiotherapy for locally advanced prostate cancer

At the ASCO meeting, two phase III randomized clinical trials in which the addition to RT of androgen deprivation (AD) was compared with RT alone in men with locally advanced PCa were presented.^{10,11} Both studies showed that the combination of AD and RT was superior to AD alone. The international study showed that, in 1205 patients, the lifelong addition of AD to RT significantly improved the disease-specific survival at 7 years (hazard ratio [HR]: 0.57; $p=0.001$) and overall

Table 1 Results at 10 years of EORTC 22911.^a

Result at 10 years	RT (n = 503)	Under observation wait (n = 502)	p value
Biochemical PFS	60.6%	41.1%	<0.0001
Local-regional failure	7.3%	16.6%	<0.001
Distant metastases	10.1%	11.0%	>0.1
Overall survival	76.9%	80.7%	>0.1
Cumulative grade 3 toxicity	5.3%	2.5%	0.052

PFS: progression-free survival.

The EORTC 22911 trial is a phase III randomized controlled clinical trial that compared adjuvant radiotherapy or an observation waiting approach after radical prostatectomy in patients with positive surgical margins or pT3 prostate cancer, shows that conventional postoperative radiotherapy improves survival without biochemical progression and local control, but without a significant impact on distant metastases or overall survival at 10 years.⁸

survival (HR: 0.77; $p=0.0331$).¹⁰ In the French multicenter study RT + three years of AD significantly reduced the risk of disease progression at 5 years (39% vs. 91%; $p<0.001$) and metastatic progression at 5 years (3% vs. 11%; $p<0.018$), compared with AD alone in 263 patients.¹¹ These studies confirm that the RT + AD should be the standard treatment for locally advanced PCa patients.

Castration-resistant prostate cancer

It is very likely that in the near future new drugs will change the treatment of metastatic castration-resistant prostate cancer (CRPC). A phase 1-2 study suggests that MDV3100 androgen receptor antagonist is promising for metastatic and progressive CRPC as it reduces PSA levels (Fig. 1), stabilizes bone lesions (56% of patients), has antitumor effects in soft tissues (22% of patients), and makes an unfavorable count of circulating tumor cells favorable (49% of patients).^{12,13} In patients without prior chemotherapy, there was no PSA progression, and the median time to PSA progression in the patients previously treated with chemotherapy was 186 days.

There is a survival phase III placebo controlled clinical essay under way in patients with CRPC after treatment with docetaxel.

Bladder cancer carcinoma in situ: prognostic factors for recurrence and progression

A study with 5 years of follow-up, which included selected patients with 5 Spanish CUETO RCTs, showed that the carcinoma in situ (CIS) not associated with bladder carcinoma without muscle invasion (BCWMI) ($n=46$) had lower risk of recurrence with associated CIS ($n=92$), regardless of the dose of intravesical bacillus Calmette-Guerin (BCG) (30% vs.

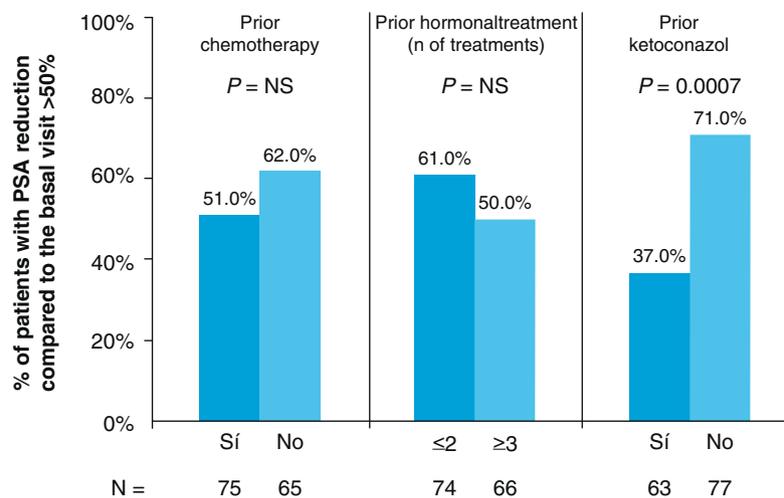


Figure 1 MDV3100 antitumor activity is promising, as represented by the high percentage of patients with castration-resistant prostate cancer ($n = 140$) treated with MDV3100 and a > 50% reduction in the PSA level compared to the basal visit.^{12,13}

46%).¹⁴ The dose of BCG (81 mg [standard dose] compared with 27 mg) did not significantly affect the recurrence rate (36.5% vs. 48.9%; $p = 0.218$) or the progression rate (24.7% vs. 33.3%; $p = 0.213$). Predictive factors of recurrence were gender, age and presence of associated BCWMI; predictive factors of progression were age and a greater number of instillations.

Non-muscle invasive bladder cancer: intravesical chemotherapy

According to a randomized clinical trial in 482 patients with intermediate-risk BCWMI treated with TUR, the monthly maintenance for one year with intravesical chemotherapy (epirubicin) improved recurrence-free rates, compared with 6 weeks of intravesical adjuvant chemotherapy, but only up to 18 months after initiation (Fig. 2).^{15,16} Patients with multiple primary tumors and grade G1 tumors benefited from maintenance chemotherapy more than other patients ($p = 0.03$ and $p = 0.05$). In 39 patients, the treatment was discontinued due to toxicity and one patient died from toxicity of early instillation. These findings are important in the light of the discussion on immunotherapy/chemotherapy in intermediate-risk BCWMI.

Quality of treatment

Two studies presented at the AUA meeting showed that most patients with BCWMI did not receive the quality of treatment recommended by the best practice guidelines.^{17,18} The first one, with 160 patients with bladder cancer (BCa) showed that repeated resection of newly diagnosed bladder tumors within 60 days of diagnosis was extremely rare (2.5%), although it has been shown to favor the detection of indolent disease and to improve the response to intravesical therapy.¹⁷ The second study showed that compliance with the best practice guidelines ranged from

3% for postoperative treatment with mitomycin C (MMC) up to 98% for upper tract imaging in 8513 patients with high-grade BCa without muscle invasion, included in the SEER registry between 1992 and 2002. Compliance is 15% for follow-up cystoscopies and 22% for urinary cytologies. Only 12% of patients received the 6 BCG recommended instillations.¹⁸

Muscle-invasive bladder cancer: early enteral nutrition versus parenteral nutrition after cystectomy

At the EAU meeting, a study of 108 patients with cystectomy and ileal urinary diversion due to BCa, which compared the impact of early enteral nutrition versus parenteral on postoperative complications, was presented. An early enteral nutrition was associated with a lower incidence of complications (especially infectious), compared with parenteral nutrition (4% vs. 16%; $p = 0.021$).¹⁹ This highlights the importance of an early removal of the nasogastric tube after the cystectomy.

Urinary diversion

After the radical cystectomy, the urinary tract can be reconstructed by abdominal, urethral or rectosigmoid diversion. A retrospective study presented at the EAU meeting examined the renal function in 131 patients who had urinary diversion: ileal conduit in 131 patients and ileal orthotopic neobladder in 94 patients.²⁰ The type of diversion did not appear to affect the 5-year probability of deterioration of overall renal function or achieve glomerular filtration rate (GFR) < 60 ml/min (Table 2). Age proved to be an independent risk factor for the new onset of GFR < 60 ml/min ($p = 0.004$).

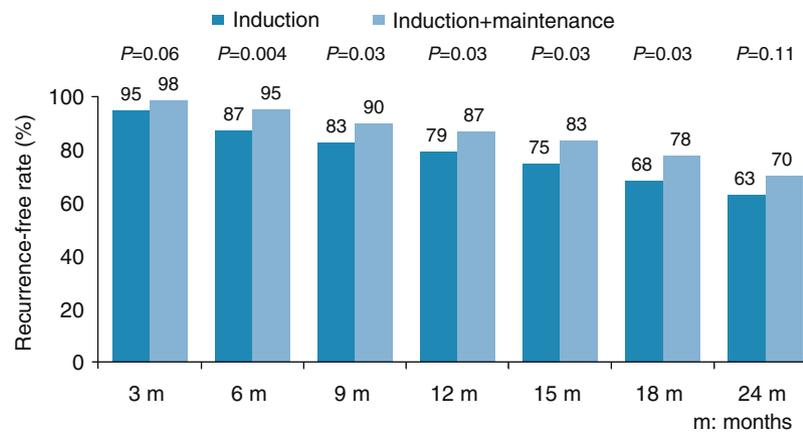


Figure 2 In patients with bladder cancer without muscle invasion, intermediate risk of recurrence and treatment with transurethral resection, and early intravesical chemotherapy, the recurrence-free rate is better in those receiving maintenance therapy than in those not receiving maintenance therapy, but only up to a follow-up of 18 months.¹⁶

Chemoradiotherapy in patients unfit for radical cystectomy

A large-scale phase III RCT, whose results were presented at the ASCO and ASTRO meetings, compared the efficacy and safety of chemoradiotherapy (CRT) (5-fluorouracil, MMC, and RT) vs. RT in patients with pT2-T4a N0 M0 BCa.^{21,22} One part of the study compared randomized patients to receive CRT (*n*=182) with those who received only RT (*n*=178). A second part compared the standard RT (*n*=108) versus the reduced high-dose RT (*n*=111). After a median follow-up of 40 months, loco-regional disease-free survival was significantly better in patients with CRT than in those with RT (HR: 0.61; confidence interval [CI] 95%; 0.42–0.90). So far, the overall survival has not been significantly different between the groups (HR: 0.78, 95% CI: 0.57–1.05), but it probably will with longer follow-up. The survival at two years was 63% in the CRT and 58% in the RT group. The proportion of patients who completed the treatment and the incidence of grade 3-4 early and late toxicity were not significantly different between both groups. The dose reduction for the bladder without involvement (reduced high-dose RT) had a minimal effect on toxicity or loco-regional disease-free survival.

Chemotherapy in patients unfit for cisplatin-based therapy

About half of the patients with advanced BCa are not fit for standard treatment with cisplatin-based chemotherapy due to impaired renal function, functional status or comorbidity. At the ASCO meeting, the phase III results of a phase II/III clinical trial (EORTC 30986) in patients with advanced urothelial cancer unfit for platinum-based therapy were presented.²³ Two hundred and thirty-eight patients were randomized to gemcitabine/carboplatin (GC) or methotrexate/carboplatin/vinblastine (M-CAVI). After a median follow-up of 4.5 years, chemotherapies M-CAVI and GC proved to be comparable in terms of overall response rate (30.3% vs. 41.2%; *p*=0.08) and overall survival (8.1 months vs. 9.3 months; *p*=0.64), but the severe acute toxicity of GC was lower than the M-CAVI (9.3% vs. 21.2%).

Kidney cancer treatment of small renal masses: active follow-up

According to the AUA guidelines,²⁴ active follow-up (AFU) of small renal masses (SRM; stage T1) is indicated: (a) in elderly

Table 2 The risk of overall deterioration of renal function or of achieving a glomerular filtration rate <60 ml/min is similar in patients with ileal conduit and ileal orthotopic neobladder.²⁰

	Ileal conduit (<i>n</i> = 131)	Ileal orthotopic neobladder. (<i>n</i> = 94)	<i>p</i> value
Probability at 5 years of absence of a new global deterioration of renal function	47.8%	44.8%	0.73
Probability at 5 years of appearance of GFR <60 ml/min	79.4%	87.1%	0.16

GFR: glomerular filtration rate.

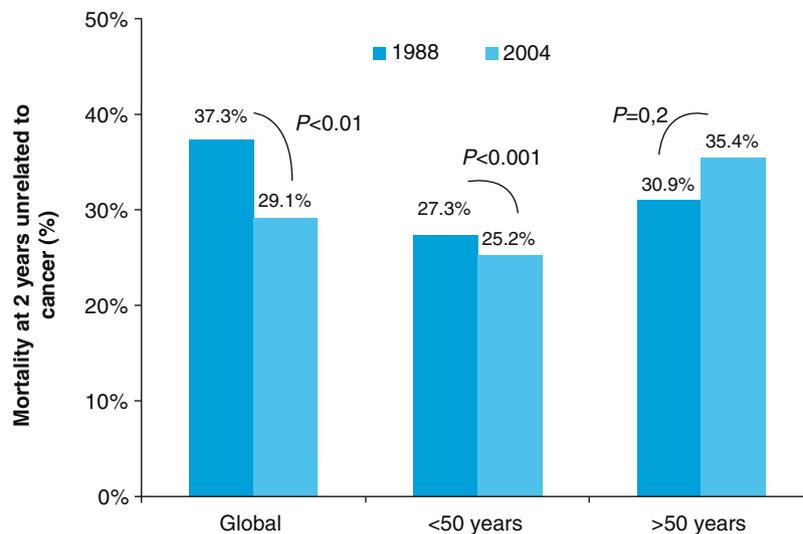


Figure 3 In patients with small renal masses controlled by active follow-up ($n = 1404$), the mortality rate unrelated to cancer declined between 1988 and 2004.²⁴

patients, (b) in patients with reduced life expectancy, and (c) in patients with medical comorbidities that make the therapeutic intervention risky. In an analysis of the SEER database, in 1404 patients with T1a renal cell carcinoma (RCC) under AFU, the mortality rate unrelated to cancer decreased significantly between 1988 and 2004 (Fig. 3).²⁵ Patients >80 years were more likely to die from causes unrelated to cancer than younger patients (<50 years). Thus, the indications for AFU in patients with small renal masses should be re-evaluated.

Radiofrequency ablation

In general, recurrence is more frequent after radiofrequency ablation (RFA) than after nephron-sparing surgery (NSS). Kroeze et al. suggested a possible explanation, using a murine model of RCC.²⁶ The RFA of SRM could induce hypoxia on the edge of the lesion in RFA, which would cause renal tumor cell proliferation in this region. Thus, to avoid local recurrence induced by hypoxia on the edge of the lesion of RFA, it is important to achieve complete tumor ablation.

Treatment of localized renal cancer: partial nephrectomy versus radical nephrectomy in T1 renal cancer

Although NSS is the standard treatment recommended for T1a RCC, its advantages over radical nephrectomy are not clear enough. Therefore, mortality rates from other causes in 23,613 patients with pT1apN0M0 RCC were assessed in an analysis of the SEER database.²⁷ Radical nephrectomy ($n = 16,565$) was associated with a statistically significant increase in mortality from other causes, compared with the NSS ($n = 7048$) (HR: 1.29, 95% CI: 1.18–1.41, $p < 0.001$). The NSS should be used, if technically feasible, to reduce the number of deaths unrelated to the RCC.

Kidney function after laparoscopic or open surgery with preservation of neurons

The oncological results of laparoscopic and open NSS appear to be similar after a limited follow-up, but the renal ischemia time was greater during laparoscopic NSS and, therefore, after the laparoscopic procedure, it was expected that postoperative renal function would be worse. In a retrospective and multicenter cohort study, the long-term kidney function (3–18 months) was evaluated in 1396 patients undergoing laparoscopic or open NSS.²⁸ The type of ischemia (hot or cold) and the surgical procedure (open or laparoscopic) were not independent predictors of postoperative renal function. Although this study shows that postoperative renal function is not reduced after laparoscopic NSS, compared to open NSS, more studies would be needed before drawing firm conclusions.

Risk of complications, recurrence and metastasis after curative nephrectomy

In a retrospective study conducted between 2000 and 2008, 560 patients undergoing radical nephrectomy for a clinically localized and apparently sporadic RCC were examined.^{29,30} The incidence of occult multifocality was 7.8%, and its risk proved to associate with the male sex, family history of kidney cancer, smaller renal lesions, histologic subtype of kidney cancer, smaller renal lesions, histologic subtype from the clear cells and a high Fuhrman grade (Table 3).

Treatment of advanced/metastatic renal cell cancer: systemic therapy with angiogenesis inhibitors

The targeted (or biological) drugs cannot cure metastatic RCC (mRCC), but they stabilize it for a prolonged period;

Table 3 Several predictors of occult multifocality were identified in patients undergoing radical nephrectomy for clinically localized renal cell carcinoma ($n = 560$; logistic regression analysis).^{29,30}

Variable	Probability quotient	CI 95%	<i>p</i> value
<i>Sex, male</i>	4.796	1.872–12.291	0.001
<i>Family history of kidney cancer</i>			
RCC	2.996	0.667–13.458	0.152
Others different from RCC	0.267	0.097–0.740	0.011
<i>Radiographic size (cm)</i>	0.827	0.733–0.934	0.002
<i>Subtype of RCC (reference: clear cell carcinoma)</i>			
Papillary	7.542	3.202–17.766	<0.0001
Chromophobe	3.962	0.876–17.923	0.074
Medullary/CDC	10.742	1.404–82.188	0.022
<i>Fuhrman grade</i>			
Grade 2	0.936	0.296–2.962	0.910
Grade 3	0.988	0.262–3.722	0.986
Grade 4	8.086	1.516–43.142	0.014

RCC: renal cell carcinoma; CDC: collecting duct carcinoma; CI: confidence interval.

however, their efficacy must be weighed against the toxicity profile and the patient's quality of life. At the ASCO meeting, the TORAVA phase II open multicenter non-comparative clinical trial, which evaluated whether the combination of temsirolimus and bevacizumab could improve the effectiveness in 171 patients with previously untreated mRCC compared with sunitinib monotherapy or combination therapy of bevacizumab and interferon- α (IFN- α).³¹ The toxicity of the temsirolimus-bevacizumab combination was higher than expected, with a higher giving up rate than in the other groups (Table 4). The lowest rate of absence of progression after 48 weeks was that of the temsirolimus and bevacizumab group. Although this study had no power to directly compare the three treatment groups, these results suggest that there is no evidence of synergistic effect with the combination of temsirolimus and bevacizumab.

Neoadjuvant systemic treatment

The efficacy and safety of two or three cycles of sunitinib before cytoreductive nephrectomy (CN) were evaluated in two phase II prospective parallel single-group studies which included 52 patients with mRCC classified as low (17%) or intermediate (83%) risk clear cell RCC (CCRCC).³² The response (according to the RECIST criteria) of primary tumors was only 6%, but the primary tumor size was reduced in the majority (79%), with a median reduction of 14.5% (range: from -51 to +14%). Thus, neoadjuvant sunitinib could facilitate NC by reducing the tumor size in patients with mRCC.

Prediction of response to aldesleukin

The prospective and multicenter SELECT trial, presented at the ASCO meeting, showed that 28% of the 120 patients with mRCC responded to high doses of aldesleukin (IL-2 DA), a

figure higher than previously published maximum rates of 14% ($p = 0.0016$).³³ The median progression-free survival was 4.2 months. Although previous publications showed that the expression of carbonic anhydrase IX (CA IX) in tumor samples could predict the response to IL-2, in this clinical trial CA IX was not a predictor of response to IL-2 DA. Patients with non-cc RCC did not respond to treatment with IL-2 DA.

Testicular cancer: treatment of testicular cancer

In a small prospective study, lumpectomy was performed in 22 patients with testicular masses.³⁴ Most of the small testicular nodules (<1 cm) were benign, especially impalpable nodules or the ones diagnosed during infertility studies. Thus, an initial lumpectomy with intraoperative histological study could be an alternative to immediate orchiectomy.

The resection of the lymph nodes in stage I/II non-seminomatous germ cells tumors (NSGCT) may affect the recurrence of the disease, but there are no studies on the count of lymph nodes in testicular cancer (TC). To assess this, an analysis of the *Memorial Sloan-Kettering Cancer Testis Database* included 255 patients with NSGCT treated with primary retroperitoneal dissection of the lymph nodes. The probability of finding positive lymph nodes increased with a greater total count of nodes, from 23% of positive nodes for a count of ≤ 20 to 48% of positive nodes if >60 nodes were resected.³⁵ Retroperitoneal resection of >60 lymph nodes improved the diagnostic efficacy of the procedure.

After orchiectomy, patients with stage I SGCT can be treated by follow-up, adjuvant RT, stage I platinum-based chemotherapy, salvage radiation or chemotherapy rescue after the relapse. In the national and outpatient SWENOTECA V protocol, from Norway and Sweden, the

Table 4 The toxicity of the combination temsirolimus-bevacizumab was higher and the progression-free rate at 48 weeks was lower compared with the sunitinib or the combination of temsirolimus-bevacizumab and interferon- α .³¹

	Temsirolimus + bevacizumab (n = 88)	Sunitinib (n = 42)	Bevacizumab + IFN- α (n = 41)
Premature discontinuation ^a	43%	12%	23%
Grade 3-4 events	36%	14%	27%
Absence of progression rate in 48 weeks	43.2%	47.6%	65.9%

^a Due to reasons other than progression. IFN- α : interferon- α .

Table 5 Neoadjuvant chemotherapy to lymphadenectomy with paclitaxel, ifosfamide and cisplatin can induce clinically meaningful responses and may improve overall survival, according to a study carried out in 30 patients with N2-3 squamous cell penile cancer.⁴⁰

	N (% of patients)
<i>Objective response (RECIST criteria)</i>	15 (50%)
Complete response	3 (10%)
Partial response	12 (40%)
<i>Dead</i>	19 (63%)
<i>Alive^a</i>	11 (37%)
<i>Median time to progression</i>	8.1 months
<i>Median overall survival</i>	17.1 months

^a Median follow-up: 30 months.

recommended adjuvant RT was interrupted for stage I disease because the concern about the induction of secondary cancers exceeded the reduction of relapses.³⁶

An analysis of long-term survival and patterns of excess mortality in patients with testicular cancer in the SEER database also questioned the use of RT.³⁷ Of 9045 men diagnosed with stage I seminoma between 1973 and 2001, 78% received RT. Testicular cancer mortality after 10 years of follow-up was 1.22% among the men who did not receive RT, and 0.52% among those who received it. The highest rate of testicular cancer mortality among the men not treated with RT is probably associated with the AFU not being common during the years of the study. After 15 years of follow-up, the patients who received RT were more likely to die from a secondary cancer than men who did not receive it (2.57% vs. 1.82%).

Penile cancer: penile cancer diagnosis

The presence and extent of lymph node involvement is the most important predictive factor for survival in penile cancer. A prospective study carried out in a single center evaluated the use of PET/CT with ¹⁸F-FDG for classifying the inguinal lymph node involvement in 35 patients with invasive penile carcinoma.^{38,39} The diagnostic accuracy is promising due to the sensitivity (88.2%), specificity (98.1%) and negative and positive predictive value (96.3 and 93.8%). This study confirms the role of PET/CT to assess the lymph node involvement. In some patients, PET/CT could avoid

surgical staging, although these results should be confirmed in a larger number of patients.

Treatment of penile cancer

A multimodal approach would be desirable in patients with squamous cell carcinoma (SCC) of the penis and pelvic or bilateral lymph node metastases or with extracapsular extension. A phase II prospective study conducted in 30 patients with stage II N2-3 penile SCC, suggests that neoadjuvant chemotherapy to lymphadenectomy with paclitaxel, ifosfamide and cisplatin induces clinically significant responses and might improve overall survival (Table 5).⁴⁰

Conclusions

At the 2010 annual congresses, there have been many interesting studies and with an impact on clinical practice in the field of oncological urology. However, some of them may have raised more questions than answers.

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Conflict of interest

The authors declare that they have no conflict of interest.

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