

2012 Genitourinary Cancers Symposium

Novel Mechanisms and Therapies in Multidisciplinary Management

February 2-4, 2012 | San Francisco Marriott Marquis

San Francisco, California



FOR IMMEDIATE RELEASE:

February 2, 2012

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Co-Sponsors Highlight Important Research from the 2012 Genitourinary Cancers Symposium

ALEXANDRIA, Va. – Eight noteworthy abstracts from the 2012 Genitourinary Cancers Symposium will focus on the late effects of prostate cancer treatment, as well as new treatments for prostate and kidney cancers. The findings will be presented during this year's Symposium, which takes place February 2-4 in San Francisco.

Abstract #6

[Effect of denosumab on prolonging bone-metastasis-free survival \(BMFS\) in men with nonmetastatic castrate-resistant prostate cancer \(CRPC\) presenting with aggressive PSA kinetics](#)

Oral Abstract Session A: Prostate Cancer
Yerba Buena Ballroom, Salon 8

Thursday, February 2
2:05-2:15 PM PT

Abstract #18

[Cardiovascular mortality following short-term androgen deprivation in clinically localized prostate cancer: An analysis of RTOG 94-08.](#)

General Poster Session A: Prostate Cancer
Golden Gate Hall
Poster B3

Thursday, February 2
11:45 AM-1:15 PM PT

Abstract #356

[Everolimus therapy for angiomyolipoma in patients with tuberous sclerosis complex or sporadic lymphangiomyomatosis: Results from EXIST-2.](#)

General Poster Session E: Renal Cancer
Golden Gate Hall
Poster A9

Saturday, February 4
11:50 AM-1:05 PM PT

Abstract #186

[Biochemical, pathologic, toxicity, and quality-of-life outcomes in a five-fraction hypofractionated accelerated radiotherapy treatment using standard linear accelerators and gold seed fiducials.](#)

General Poster Session C: Prostate Cancer
Golden Gate Hall
Poster B6

Friday, February 3
12:15-1:45 PM PT

Abstract #101

[Prevalence and characteristics of patients with metastatic prostate cancer who receive no anticancer therapy.](#)

General Poster Session B: Prostate Cancer
Golden Gate Hall
Poster A6

Thursday, February 2
5:05-6:35 PM PT

Abstract #354

[Phase III AXIS trial for second-line metastatic renal cell carcinoma \(mRCC\): Effect of prior first-line treatment duration and axitinib dose titration on axitinib efficacy.](#)

Oral Abstract Session C: Renal Cancer
Yerba Buena Ballroom, Salon 8

Saturday, February 4
11:00-11:10 AM PT

Abstract #181

[Immune responses in prostate tumor tissue following neoadjuvant sipuleucel-T in patients with localized prostate cancer.](#)

General Poster Session C: Prostate Cancer
Golden Gate Hall
Poster B1

Friday, February 3
12:15-1:45 PM PT

Abstract #353

[A multicentered population-based analysis of outcomes of patients with metastatic renal cell carcinoma \(mRCC\) that do not meet eligibility criteria for clinical trials.](#)

Oral Abstract Session C: Renal Cancer
Yerba Buena Ballroom, Salon 8

Saturday, February 4
10:50-11:00 AM PT

More information for media: www.asco.org/GUpresskit

Relevant Links From Cancer.Net, the oncologist-approved cancer information website from the American Society of Clinical Oncology:

- [Guide to Prostate Cancer](#)
- [Guide to Kidney Cancer](#)
- [Guide to Tuberous Sclerosis Syndrome](#)
- [Types of Treatments](#)
- [Bone Health During Cancer Treatment](#)
- [Health Disparities and Cancer](#)
- [Managing the Cost of Cancer Care](#)
- [Survivorship](#)
- [Late Effects](#)

2012 Genitourinary Cancers Symposium News Planning Team

Nicholas J. Vogelzang, MD, American Society of Clinical Oncology (ASCO); Mark Buyyounouski, MD, American Society for Radiation Oncology (ASTRO); Leonard Gomella, MD, Society of Surgical Oncology.

[Click here](#) to view the disclosures for the News Planning Team.

**ATTRIBUTION TO THE 2012 GENITOURINARY CANCERS SYMPOSIUM IS REQUESTED
IN ALL NEWS COVERAGE.**

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Abstract #6

Title: Effect of denosumab on prolonging bone-metastasis-free survival (BMFS) in men with nonmetastatic castrate-resistant prostate cancer (CRPC) presenting with aggressive PSA kinetics.

Authors: Matthew R. Smith, Fred Saad, Neal D. Shore, Stephane Oudard, Kurt Miller, Bertrand Tombal, Paul Sieber, Karim Fizazi, Peter J. Van Veldhuizen, Ronaldo Damião, Gavin M. Marx, Juan Morote, Amy Feng, Roger Dansey, Carsten Dietrich Goessl; Massachusetts General Hospital Cancer Center, Boston, MA; University of Montreal Hospital Center, Montreal, QC; Carolina Urologic Research Center, Myrtle Beach, SC; Georges Pompidou European Hospital, Paris, France; Department of Urology, Charité Universitätsmedizin, Berlin, Germany; Université Catholique de Louvain, Cliniques Universitaires Saint-Luc, Brussels, Belgium; Urological Associates of Lancaster, Ltd., Lancaster, PA; Institut Gustave Roussy, University of Paris Sud, Villejuif, France; Kansas City VA Medical Center, Kansas City, MO; Hospital Universitario Pedro Ernesto, Rio de Janeiro, Brazil; Sydney Haematology Oncology Clinics, Sydney, Australia; Urology Department, Vall d'Hebron University Hospital, Barcelona, Spain; Amgen Inc., Thousand Oaks, CA

Topic Selection: Oral Abstract Session A: Prostate Cancer

Background: Denosumab, an anti-RANK-ligand monoclonal antibody, has been shown to prolong BMFS by a median 4.2 months and with a 15% risk reduction vs. placebo in men with non-metastatic CRPC and baseline PSA value ≥ 8.0 ng/mL and/or PSA doubling time (DT) ≤ 10.0 months. To determine the efficacy of denosumab in men at greatest risk for bone metastases, we evaluated BMFS in a subset of men with PSADT < 6 months, a cutoff based on a previous report (Smith MR, et al: *J Clin Oncol.* 23:2918-2925, 2005). **Methods:** 1432 men with non-metastatic CRPC (baseline [median] PSA: 12.3 ng/mL, PSADT: 5.1 months, ADT duration: 47.1 months) were randomized 1:1 to receive monthly subcutaneous denosumab 120 mg or placebo. The first patient enrolled February 2006; primary analysis cut-off was July 2010, when > 660 men had developed bone metastasis or died. The primary endpoint was BMFS (time to first bone metastasis or death from any cause). BMFS results are presented for men with baseline PSADT < 6 months. **Results:** Median BMFS in the placebo group of men with PSADT < 6 months was 6.5 months shorter than for the placebo group in the full population (18.7 months vs. 25.2 months), indicating that these men are at particularly high risk. In this group of men with PSADT < 6 months, denosumab prolonged BMFS by a median of 7.2 months and with a 23% reduction in risk compared with placebo (Table). **Conclusions:** Patients with shortened PSADT are at higher risk of developing bone metastasis and denosumab is markedly effective at prolonging BMFS in this subset of patients. **Disclosures:** **Matthew R. Smith, MD, PhD**, Consultant or Advisory Role with Amgen, Exelixis and Novartis; **Fred Saad, MD, FRCS**, Consultant or Advisory Role with Amgen, Honoraria from Amgen, Research Funding from Amgen, **Neal D. Shore, MD**, Consultant or Advisory Role with Amgen, Janssen Pharmaceutical, Dendreon, Astellas Pharma and sanofi-aventis, Research Funding from Amgen, Dendreon and sanofi-aventis; **Stephane Oudard, MD, PhD**, Consultant or Advisory Role with Pfizer and sanofi-aventis, Honoraria from Bayer, Research Funding from Novartis; **Kurt Miller, MD**, Consultant or Advisory Role with Amgen, Novartis, Honoraria from Amgen, Novartis; **Bertrand Tombal, MD**, Consultant or Advisory Role with Amgen, Honoraria from Amgen, Research Funding from Amgen; **Paul Sieber, MD**, Consultant or Advisory Role with Amgen, Honoraria from Amgen, Research Funding from Amgen; **Karim Fizazi, MD, PhD**, Consultant or Advisory Role with Amgen, Novartis, Honoraria from Amgen and Novartis; **Amy Feng, PhD**, Employment or Leadership Position with Amgen, Stock Ownership with Amgen; **Roger Dansey, MD**, Employment or Leadership Position with Amgen, Stock Ownership with Amgen; **Carsten Dietrich Goessl, MD**, Employment or Leadership Position with Amgen, Stock Ownership with Amgen.

Population	Sample Size	BMFS Median (Months)	BMFS Treatment Difference (Months)	Hazard Ratio	95% Confidence Interval	P - Value
All Patients	D: 716	D: 29.5	4.2	0.85	0.73 - 0.98	0.028

	P: 716	P: 25.2				
PSADT <6 months	D: 419	D: 25.9	7.2	0.77	0.64 - 0.93	0.0064
	P: 427	P: 18.7				
D=Denosumab; P=Placebo						

Research Funding Source: Amgen Inc.

Abstract #18

Title: Cardiovascular mortality following short-term androgen deprivation in clinically localized prostate cancer: An analysis of RTOG 94-08.

Authors: Jason Alexander Efstathiou, Rebecca Paulus, Matthew R. Smith, Christopher U. Jones, Mark H. Leibenhaut, Siraj M. Husain, Marvin Rotman, Luis Souhami, Howard Mark Sandler, William U. Shipley; Massachusetts General Hospital, Boston, MA; RTOG, Philadelphia, PA; Massachusetts General Hospital Cancer Center, Boston, MA; Radiological Associates of Sacramento, Sacramento, CA; Baker Cancer Centre, Calgary, AB; SUNY Health Science Center, Brooklyn, NY; McGill University, Montreal, QC; Samuel Oschin Comprehensive Cancer Institute, Cedars-Sinai Medical Center, Los Angeles, CA

Topic Selection: General Poster Session A: Prostate Cancer

Background: Androgen deprivation therapy (ADT) is associated with greater risk of diabetes and coronary heart disease in men with prostate cancer but there is significant controversy surrounding its potential impact on cardiovascular mortality especially among men with lower rates of cancer-specific death. We assessed the relationship between ADT and mortality in a large randomized trial of men treated with or without short-course ADT and radiation therapy (RT) for clinically-localized prostate cancer. **Methods:** Between 1994-2001, 1979 eligible men (median age 71) with clinically-localized (T1-2, PSA<20) prostate cancer were enrolled on a phase III trial (RTOG 94-08) and randomized to RT and 4 months of neoadjuvant/concurrent ADT or RT alone. Fine-Gray proportional hazards model was used to evaluate the relationship between treatment arm and mortality (disease-specific and cardiovascular). Covariates included PSA, Gleason score, T-stage, age, race, weight, prevalent cardiovascular disease (CVD), diabetes (DM), and hypertension. **Results:** After a median follow-up of 8.2 years, use of ADT improved overall and disease-specific survival but there was no ADT-related increase in cardiovascular mortality or non-prostate cancer death. There were a total of 191 cardiovascular-related deaths. At 10-years, cardiovascular mortality for men treated with RT+ADT was 9.8% vs 10.7% for men treated with RT alone. In multivariate analyses, treatment arm was not significantly associated with an increased risk of cardiovascular mortality [adjusted hazard ratio (HR)=0.93, 95% confidence interval (CI) 0.69-1.26, p=0.64]. Traditional cardiac risk factors, including prevalent CVD and DM, were significantly associated with greater cardiovascular mortality. Results were similar when limiting analyses to patient subsets at high risk for cardiovascular mortality and at low risk for disease-specific mortality. **Conclusions:** Use of short-course ADT improves overall and disease-specific survival but does not appear to increase cardiovascular mortality in men with clinically-localized prostate cancer. Supported by RTOG grant U10 CA21661 and CCOP grant U10 CA37422 from NCI. **Disclosures:** Nothing to disclose.

Abstract #356

Title: Everolimus therapy for angiomyolipoma in patients with tuberous sclerosis complex or sporadic lymphangioliomyomatosis: Results from EXIST-2.

Authors: John J. Bissler, J. Chris Kingswood, B. A. Zonnenberg, Michael Frost, Elena Belousova, Elzbieta Radzikowska, Michael Fischereder, Akitaka Nonomura, Susan Brakemeier, Petrus de Vries, Tarek Sahmoud, Gaurav Shah, Sara Miao, Diep Gray, Klemens Budde; Division of Nephrology, Cincinnati Children's Hospital Medical Center, Cincinnati, OH; Sussex Renal Unit, Royal Sussex County Hospital, Brighton, United Kingdom; Department of Internal Medicine and Dermatology, Hereditary Disease Clinic, University Hospital Utrecht, Utrecht, Netherlands; Minnesota Epilepsy Group, St. Paul, MN; Moscow Research Institute of Pediatrics and Pediatric Surgery, Moscow, Russia; National Tuberculosis and Lung Diseases Research Institute, Warsaw, Poland; Medizinische Klinik I – Campus Grosshadern, Klinikum der Ludwig-Maximilians Universität, Munich, Germany; Department of Diagnostic Pathology, Nara Medical University, School of Medicine, Kashihara, Nara, Japan; Department of Nephrology, Charite-Universitätsmedizin Berlin, Berlin, Germany; Neurodevelopmental Service, Cambridgeshire & Peterborough NHS Foundation Trust, UK and Developmental Psychiatry Section, University of Cambridge, Cambridge, United Kingdom; Novartis Pharmaceuticals, Florham Park, NJ; Novartis Pharmaceuticals, Florham Park, NJ; Novartis Pharmaceuticals, East Hanover, NJ

Topic Selection: General Poster Session E: Renal Cancer

Background: We evaluated everolimus, an oral mTOR inhibitor, for treating angiomyolipoma (AML) in patients with tuberous sclerosis complex (TSC) or sporadic lymphangioliomyomatosis (sLAM). **Methods:** EXIST-2 (NCT00790400) is a prospective, international, randomized, double-blind, placebo-controlled, phase 3 study. Patients (≥ 1 AML with longest diameter ≥ 3 cm) were stratified by (i) TSC and enzyme-inducing anti-epileptic drug (EIAED) use, (ii) TSC and EIAED non-use, (iii) sLAM and randomized 2:1 to receive everolimus 10 mg daily (n=79) or placebo (n=39). Kidney CT/MRI was performed at baseline, at 12, 24, and 48 weeks, and then annually. Primary efficacy endpoint was the proportion of patients with AML response (best overall confirmed $\geq 50\%$ reduction in sum of volumes of all target AML relative to baseline). Secondary efficacy endpoints included time to AML progression and skin lesion response rate in patients with >1 skin lesion at baseline (n=114). Adverse events (AE) were monitored every visit. Core phase results (6 months from last patient randomized) are presented. **Results:** Patient characteristics were balanced across the 2 groups; median patient age was 31 years. Median treatment duration was 38.1 weeks (everolimus) and 34.0 weeks (placebo). Everolimus best overall response rate (41.8%) was superior to placebo (0%) for the primary efficacy endpoint ($p < 0.0001$). Median time to AML progression was 11.4 months for placebo and was not reached for everolimus. The everolimus group had a significantly higher best overall skin lesion response rate (complete or partial response) than placebo (26% vs. 0%; $p = 0.0002$). Everolimus was associated with an acceptable safety profile consistent with previous reports in TSC, with most AEs being grade 1 or 2. Serious AE incidence was similar in the treatment arms (everolimus 19.0% vs. placebo 17.9%). **Conclusions:** Everolimus treatment produced a clinically and statistically significant reduction in AML volume compared with placebo and showed a safety profile consistent with previous reports. Everolimus represents the first potential pharmacologic treatment option for patients with AML. **Disclosures:** **John J. Bissler**, Consultant or Advisory Role with Gambro, Honoraria from Novartis, Research Funding with Novartis; **Petrus de Vries, MD, PhD**, Consultant or Advisory Role with Novartis; **Tarek Sahmoud, MD, PhD**, Employment/Leadership Role position with Novartis, Stock Ownership with Novartis; **Gaurav Shah**, Employment/Leadership position with Novartis; **Sara Miao**, Employment/Leadership position with Novartis; **Diep Gray**, Employment/Leadership position with Novartis.

Research Funding Source: Novartis

Abstract #186

Title: Biochemical, pathologic, toxicity, and quality-of-life outcomes in a five-fraction hypofractionated accelerated radiotherapy treatment using standard linear accelerators and gold seed fiducials.

Authors: D. Andrew Loblaw, Patrick Cheung, Colin I Tang, Harvey Charles Quon, Geordi Pang, Gerard Morton, Alexandre Mamedov, Laura D'Alimonte, Andrea Deabreu, Romeo Tirona, Suneil Jain; Sunnybrook Health Sciences Centre, Toronto, ON; Calvary Mater Newcastle, Newcastle, Australia; CancerCare Manitoba, Winnipeg, MB

Topic Selection: General Poster Session C: Prostate Cancer

Background: Biological dose escalation through hypofractionated image-guided radiotherapy (H-IGRT) holds the promise of improved patient outcomes, system capacity but decreased cost. In 2006 we initiated a prospective trial of H-IGRT of patients with low risk localized prostate cancer. In this report, we report the toxicities, quality of life (QOL), biochemical and pathologic outcomes of this cohort with more mature follow-up. **Methods:** A phase I/II study in which patients with T1-2b, Gleason \leq 6, and PSA \leq 10 ng/ml prostate cancer received 35 Gy in 5 fractions, once a week over 29 days. No patients received hormone therapy. Treatment was delivered with intensity modulated radiotherapy (IMRT) on standard linear accelerators, with daily image guidance using gold seed fiducials, and a 4 mm CTV-PTV margin. CTCAE v3.0 and RTOG late morbidity scores were used to assess acute and late toxicities, respectively. QOL was assessed by the Expanded Prostate Cancer Index Composite (EPIC). Biochemical control (BC) was defined by the Phoenix definition, adjusted for benign bounce.

Results: As of September 2011, 83 patients have completed treatment with a median follow-up of 42 months (range 12-60 months). Median age was 67y (42 – 82y). 78 patients (92%) were T1a-c; all had Gleason 6 cancers; median PSA was 5.3 (0.8 – 9.9 ng/ml). 82 (99%) had BC; the remaining patient had a negative biopsy and a history of chronic prostatitis. The median PSA on last visit was 0.69 ng/ml (.02 – 2.6 ng/ml). Of 59 patients who have had a biopsy to date, 2 (3%) were positive but both are under BC. The following toxicities were observed: acute grade 3+: 0% GI, 1% GU, 0% fatigue; late grade 3+: 1% GI, 1% GU. Median transformed QOL scores at baseline (0.5 SD) and 36mo follow-up are: urinary – 95% (4.1), 93%; bowel – 96% (4.8), 96%; sexual – 65% (13.7), 51%; and hormonal – 95% (5.3), 95%. **Conclusions:** This novel technique employing standard linear accelerators to deliver an extreme hypofractionated schedule of radiotherapy is feasible, well tolerated and shows excellent pathologic and biochemical control. A randomized study versus standard fractionation should be performed. **Disclosures:** Nothing to disclose.

Research Funding Source: Canadian Association of Radiation Oncology ACURA award

Abstract #101

Title: Prevalence and characteristics of patients with metastatic prostate cancer who receive no anticancer therapy.

Authors: Alexander C. Small, Che-Kai Tsao, Erin Moshier, James Godbold, Guru Sonpavde, William K. Oh, Matt D. Galsky; Division of Hematology and Medical Oncology, The Tisch Cancer Institute, Mount Sinai School of Medicine, New York, NY; Texas Oncology, Houston, TX, and Department of Medicine, Section of Medical Oncology, Michael E. DeBakey Veterans Affairs Medical Center, Baylor College of Medicine, Houston, TX

Topic Selection: General Poster Session B: Prostate Cancer

Background: Clinical experience reveals that a subset of patients presenting with advanced solid tumors, including prostate cancer, never receive anticancer therapy due to a variety of factors including poor functional status, comorbidities, and patient preference. We sought to determine the prevalence, and characteristics, of this patient population. **Methods:** The National Cancer Database (NCDB) was queried to identify patients diagnosed with stage IV prostate cancer between 2000 and 2008. Patients who received no anticancer therapy (including chemotherapy, hormonal therapy, radiation, and surgery) were identified and were further categorized by age, race, insurance status, and income. For these subcategories, prevalence ratios were generated using the proportion of untreated metastatic prostate cancer (uMPC) to metastatic prostate cancer (MPC). **Results:** Of the 1,201,732 patients with prostate cancer diagnosed between 2000-2008, 59,074 (4.9%) had MPC. Of those patients presenting with MPC, 6582 (11.1%) received no anticancer therapy. With every 10-year increase in age, the prevalence of uMPC increased 43% (PR=1.43; p<0.0001). Blacks (PR=1.32, p<0.0001) and Hispanics (PR=1.41, p<0.0001) were more likely than Caucasians to have uMPC. With every \$10,000 increase in income the prevalence of uMPC decreased by 7% (PR=0.93; p<0.0001). Patients with Medicaid were 57% more likely to be untreated, patients with Medicare were 82% more likely to be untreated, and uninsured patients were 96% more likely to be untreated than those patients with private insurance (p<0.0001). **Conclusions:** A large subset of patients presenting with MPC never receive anticancer therapy. While tumor biology likely plays a role with regard to rapid disease onset and progression, these data suggest that age, racial and socioeconomic disparities exist in the treatment of MPC. **Disclosures:** Nothing to disclose.

Abstract #354

Title: Phase III AXIS trial for second-line metastatic renal cell carcinoma (mRCC): Effect of prior first-line treatment duration and axitinib dose titration on axitinib efficacy.

Authors: Brian I. Rini, Bernard J. Escudier, M. Dror Michaelson, Sylvie Negrier, Martin Eric Gore, Stephane Oudard, Joseph Clark, Jamal Christo Tarazi, Brad Rosbrook, Sinil Kim, Robert John Motzer; Cleveland Clinic Taussig Cancer Institute, Cleveland, OH; Institut Gustave Roussy, Villejuif, France; Massachusetts General Hospital Cancer Center, Boston, MA; Léon-Bérard Cancer Centre, Lyon, France; Royal Marsden Hospital, London, United Kingdom; Georges Pompidou European Hospital, Paris, France; Loyola University Medical Center, Maywood, IL; Pfizer Oncology, La Jolla, CA; Memorial Sloan-Kettering Cancer Center, New York, NY

Topic Selection: Oral Abstract Session C: Renal Cancer

Background: Axitinib is a potent and selective second-generation inhibitor of vascular endothelial growth factor receptors (VEGFRs) 1, 2, and 3. In the phase 3 AXIS trial of axitinib vs sorafenib for second-line mRCC, axitinib significantly prolonged median progression-free survival (mPFS) (6.7 vs 4.7 months; hazard ratio 0.665; $P < 0.0001$). Here, we evaluated the effect of prior sunitinib treatment duration and axitinib dose titration on subsequent axitinib efficacy. **Methods:** Eligible patients had clear-cell mRCC; measurable RECIST-defined progressive disease after 1 prior first-line systemic therapy; and Eastern Cooperative Oncology performance status (PS) 0/1. Patients were stratified by PS and prior therapy, and randomized 1:1 to either axitinib, at a starting dose of 5 mg twice daily (BID), or sorafenib, 400 mg BID. Patients without toxicity $>$ grade 2 and BP $<$ 150/90 mmHg without antihypertensive medication for $>$ 2 weeks were eligible to increase axitinib dose to 7 mg BID and then to 10 mg BID. **Results:** The mPFS for patients receiving at least one total daily axitinib dose $>$ 10 mg (dose-titrated group; $n=132$) was 6.6 months [95% CI 4.7–8.3] and 8.3 months [95% CI 6.0–10.2] for patients receiving axitinib \leq 10 mg ($n=227$). A total of 194 patients (53.7%) in the axitinib arm and 195 patients (53.9%) in the sorafenib arm had prior sunitinib treatment. The mPFS for patients with duration of prior sunitinib treatment \geq 6 months and $<$ 6 months were 4.8 months [95% CI 4.5–6.5] and 4.6 months [95% CI 2.8–8.3] for axitinib patients; and 4.6 months [95% CI 2.9–4.9] and 2.9 months [95% CI 2.8–4.6], for sorafenib patients. The mPFS for duration of prior sunitinib \geq 9 months and $<$ 9 months were 6.3 months [95% CI 4.6–6.7] and 4.5 months [95% CI 2.8–6.4] for axitinib patients; and 4.6 months [95% CI 2.8–4.9] and 2.9 months [95% CI 2.8–4.7]) for sorafenib patients. **Conclusions:** Duration of prior sunitinib \geq 9 months may be associated with a longer PFS on second-line VEGFR tyrosine kinase inhibitors. Both axitinib dose-increased and non-increased patients had longer PFS compared with the sorafenib arm. **Disclosures:** **Brian I. Rini, MD**, Consultant or Advisory Role with Pfizer, Research Funding from Pfizer; **Bernard J. Escudier, MD**, Consultant or Advisory Role with Pfizer, Honoraria from Pfizer; **Sylvie Negrier, MD, PhD**, Honoraria from Pfizer, Research Funding from Pfizer; **Martin Eric Gore, PhD, FRCP**, Consultant or Advisory Role with Pfizer, Honoraria from Pfizer; **Stephane Oudard, MD, PhD**, Consultant or Advisory Role with Pfizer; **Jamal Christo Tarazi, MD**, Employment or Leadership Position with Pfizer, Stock Ownership with Pfizer; **Brad Rosbrook**, Employment or Leadership Position with Pfizer, Stock Ownership with Pfizer; **Sinil Kim, MD**, Employment or Leadership Position with Pfizer, Stock Ownership with Pfizer; **Robert John Motzer, MD**, Employment or Leadership Position with Pfizer, Research Funding from Pfizer.

Research Funding Source: Pfizer Inc

Abstract #181

Title: Immune responses in prostate tumor tissue following neoadjuvant sipuleucel-T in patients with localized prostate cancer.

Authors: Lawrence Fong, Vivian K. Weinberg, John M Corman, Christopher L Amling, Robert A Stephenson, Carl Formaker, Stephen E Chan, Jeffrey Simko, Robert Brownell Sims, Peter Carroll, Eric Jay Small; University of California, San Francisco, San Francisco, CA; Virginia Mason Medical Center, Seattle, WA; Oregon Health and Science University, Portland, OR; University of Utah, Salt Lake City, UT; Dendreon Corporation, Seattle, WA

Topic Selection: General Poster Session C: Prostate Cancer

Background: Sipuleucel-T is an FDA-approved autologous cellular therapy that has been demonstrated to prolong overall survival in patients with asymptomatic or minimally symptomatic metastatic castrate resistant prostate cancer (mCRPC). To better understand the immunologic effects of sipuleucel-T, an open-label Phase 2 study (P07-1; NCT00715104) of sipuleucel-T prior to radical prostatectomy (RP) was undertaken in patients with localized prostate cancer. **Methods:** Patients received 3 infusions of sipuleucel-T at approximately 2-week intervals, beginning 6-7 weeks prior to RP. Prostate biopsies (pre-treatment) and tissue from RP (post-treatment) were assessed for the presence of lymphocytes by immunohistochemistry (IHC). **Results:** The median age of the 42 enrolled patients was 61 years, and all had an ECOG performance status of 0. Thirty-eight patients received all 3 pre-RP infusions of sipuleucel-T. To date, tissue IHC analysis has been completed in 19 patients. Treatment-related AEs were manageable and reversible. Sipuleucel-T did not appear to impact surgery, as judged by operative complications, procedure time, and estimated blood loss. Frequent events that occurred ≤ 1 day after infusion ($>10\%$ of patients) were fatigue, headache, and myalgia. Significant increases (>2 -fold) in CD3⁺ and CD4⁺ T cells populations were observed at the tumor rim (where benign and malignant glands interface), compared with the pre-treatment biopsy (ANOVA post hoc Newman-Keuls test: $p=0.0002$, 0.0002 , respectively). CD8⁺ T cells or CD56⁺ cells were not significantly increased at the tumor rim compared with benign biopsy regions. **Conclusions:** Neoadjuvant sipuleucel-T treatment appears to result in an increased frequency of T cells in prostate cancer tissue at the rim between the benign and malignant glands. These data suggest that sipuleucel-T may modulate the presence of lymphocytes at the prostate tumor site. Work is ongoing to more fully characterize the immune response within the prostate tumor tissue and in the peripheral blood. **Disclosures:** **Lawrence Fong, MD**, Research Funding from Dendreon; **Robert Brownell Sims, MD**, Employment or Leadership Position with Dendreon, Stock Ownership with Dendreon; **Peter Carroll, MD, MPH**, Honoraria from Myriad Genetics, Genomic Health and Abbott Laboratories; Research Funding from Myriad Genetics and Abbott Laboratories; **Eric Jay Small, MD**, Honoraria from Dendreon, Other Renumeration from Dendreon.

Research Funding Source: Dendreon

Abstract #353

Title: A multicentered population-based analysis of outcomes of patients with metastatic renal cell carcinoma (mRCC) that do not meet eligibility criteria for clinical trials.

Authors: Daniel Yick Chin Heng, Toni K. Choueiri, Jae-Lyun Lee, Lauren Christine Harshman, Georg A. Bjarnason, Jennifer J. Knox, Mary J. MacKenzie, Ulka N. Vaishampayan, Min-Han Tan, Sun Young Rha, Frede Donskov, Neeraj Agarwal, Christian K. Kollmannsberger, Scott A. North, Brian I. Rini, Lori Wood, International mRCC Database Consortium; Tom Baker Cancer Centre, University of Calgary, Calgary, AB; Lank Center for Genitourinary Oncology, Dana-Farber Cancer Institute/Brigham and Women's Hospital, Harvard Medical School, Boston, MA; Department of Oncology, Asan Medical Center, University of Ulsan College of Medicine, Seoul, South Korea; Stanford University School of Medicine, Stanford, CA; Sunnybrook Odette Cancer Centre, University of Toronto, Toronto, ON; Princess Margaret Hospital, Toronto, ON; London Regional Cancer Program, London, ON; Karmanos Cancer Institute, Wayne State University, Detroit, MI; National Cancer Centre, Singapore, Singapore; Yonsei Cancer Center, Yonsei University College of Medicine, Seoul, South Korea; Aarhus University Hospital, Aarhus, Denmark; University of Utah Huntsman Cancer Institute, Salt Lake City, UT; British Columbia Cancer Agency, Vancouver, BC; Cross Cancer Institute, Edmonton, AB; Cleveland Clinic Taussig Cancer Institute, Cleveland, OH; Queen Elizabeth II Health Sciences Centre, Halifax, NS

Topic Selection: Oral Abstract Session C: Renal Cancer

Background: Clinical trials have strict eligibility criteria to maintain internal validity. These criteria exclude many patients to whom the trial results are later applied to in clinical practice. Patients that do not meet eligibility criteria are poorly characterized. **Methods:** mRCC patients treated with VEGF targeted therapy were retrospectively deemed ineligible for clinical trials (according to commonly used inclusion/exclusion criteria) if they had a Karnofsky Performance Status (KPS) < 70%, brain metastases, non-clear cell histology, hemoglobin \leq 9 g/dL, creatinine > 2x the upper limit of normal, platelet count of < 100x10³/uL, neutrophil count < 1500/mm³ or corrected calcium \leq 12 mg/dL. **Results:** 894/2076 (43%) patients were deemed ineligible for clinical trials by the above criteria. Between ineligible versus eligible patients, the response rate, median progression free survival (PFS) and median overall survival of first-line targeted therapy were 21% vs 29%, 5.2 vs 8.8 months and 14.5 vs 28.8 months (all p < 0.0001), respectively. Second-line PFS (if applicable) was 3.2 months in the trial ineligible vs 4.4 months in the trial eligible patients (p = 0.0074). When adjusted by the Heng et al prognostic categories, the hazard ratio for death between trial ineligible vs trial eligible patients was 1.621 (95% CI = 1.431-1.836, p < 0.0001). If only KPS, brain metastases and non-clear cell histology were used as exclusion criteria, 672 (32%) patients were excluded and the results were similar. **Conclusions:** The number of patients that are ineligible for clinical trials is high and their outcomes are inferior. Designing more inclusive clinical trials for this "ineligible" patient population are needed. **Disclosures:** Nothing to disclose.

Parameter	Clinical trial ineligible n=894	Clinical trial eligible N=1182	p-value
Median age (yrs)	60.5	60.9	0.2919
Heng et al prognosis: Favorable	5.4%	12.6%	< 0.0001
Intermediate	55.1%	74.2%	
Poor	39.7%	13.2%	
Median KPS (%) (range)	80 (20-100)	90 (70-100)	< 0.0001
Anemia (below LLN)	68.7%	51.4%	< 0.0001
Hypercalcemia (above ULN)	14.5%	6.8%	< 0.0001
Brain metastases present	19%	0%	< 0.0001
Non-clear cell histology	26%	0%	< 0.0001