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## Scientific Symposium (Sat, 24 Sep, 16:00-18:00) New Insights in the Management of Renal Cancer

68 INVITED

Genetics of Clear Cell Renal Carcinoma

Abstract not received

69 INVITED

Drug Availability in England – the Health Economics and Politics of Drugs for Advanced Renal Cancer

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The National Health Service (NHS) in the UK offers free healthcare at the point of delivery. It is funded directly by taxation, has a fixed central budget and is subject to much political direction. Like all healthcare systems, the NHS cannot afford every intervention for every patient.

NICE was set up to assess value for money for the NHS so that clinically-effective and cost-effective treatments are instituted but cost-ineffective treatments do not displace more cost-effective therapies. NICE does this by estimating the incremental cost effectiveness ratio (ICER) which divides the cost of the new treatment minus that of current therapy by the health gain of the new treatment minus that of current therapy. Health gain is expressed as quality adjusted life years (QALY), this being a measure of a person's life weighted by a valuation of their health related quality of life. NICE recommends treatment to the NHS if the ICER is less than £20–30K.

A positive NICE recommendation has a statutory funding directive to healthcare commissioners. NICE does not have the power to negotiate price directly with manufacturers but the cost of drugs to the NHS can be reduced by the manufacturer agreeing patient access schemes with government. NICE aims therefore to create a level playing field between drugs and diseases.

None of the renal cancer drugs appraised had ICERs below this funding threshold of £20–30K/QALY. The first renal cancer drug appraisal (sunitinib, temsirolimus, sorafenib and bevacizumab) led to a change in this cost effectiveness threshold for life-extending end of life treatments: for small patient populations in whom life expectancy is less than 2 years with robust data to indicate an extension of life of at least 3 months with a particular treatment, the cost effectiveness threshold can be raised to approximately £50K. NICE has since approved the use of sunitinib and pazopanib as first line treatments (with patient access schemes) but not the use of temsirolimus, bevacizumab, sorafenib or everolimus (despite patient access schemes). Examples of how the ICERs were calculated will be discussed.

The current UK government has announced its intention to introduce a system of value-based pricing from 2014 in which value will be assessed by NICE and a drug price set according to its cost-effectiveness. Following an election manifesto pledge in 2010 and in the interim period before 2014, the government has allocated £200m of additional funding per year for cancer drugs that have not been recommended by NICE or are for rare cancers and will therefore not be refered to NICE. Early projected information suggests that this fund will not be wholly spent in 2011–12. In the UK there is currently a tension between rational rationing across all diseases/interventions and the politics of denying cancer drugs. The increasing rate of drug discovery and high cost of all new cancer drugs will stress this tension. The solution of value-based pricing is attractive but one that has many hurdles to overcome.

## 70 INVITED New Approaches in Surgical Management of Renal Cancer

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Thanks to advances in cross-sectional imaging and liberal use for unrelated causes, most kidney cancers are diagnosed at an earlier stage when they are small and localized. We now know that preservation of renal function is crucial in long-term survival. Individuals with compromised renal function are at higher risk of cardiovascular disease, hospitalization and death. Despite the lack of prospective randomized trials, urologists have adopted nephron-sparing surgery for small kidney tumours. Today, when feasable, partial nephrectomy is the standard of care unrelated to the size of the tumour.

Minimally invasive techniques have been used for surgical treatment of kidney cancer for 2 decades, however, laparoscopic partial nephrectomy has only been popularized in the last decade. Superselective identification and ligation of the vascular supply to the tumour allows maximal parenchyma preservation with minimal morbidity. Today, even the most complicated kidney cancers can be dealt with by robotic partial nephrectomy. This technique allows precise excision of tumours in the kidney with minimal blood loss and morbidity.

Another advance in the management of small renal tumours is the emergence of ablative technologies. Radiofrequency ablation and cryoablation are now utilized either laparoscopically or percutaneously for well selected cases

Finally, we now have a better understanding of the natural history of small kidney cancers. They grow at a small rate and usually do not metastasize untill they get larger. Since most renal cancers are observed in the elderly with multiple co-morbidities, active surveillance may be an option when the potential risks of surgical intervention is gretaer than the risk of metastatic spread.

Surgery can also be used in metastatic kidney cancer. Cytoreductive nephrectomy in metastatic kidney cancer is well established in the cytokine era and currently used with targeted agents. Metastasectomy in selected cases, and after stabilization with systemic therapy can also be curative. Times are fast changing in management of kidney cancer. We rapidly moved from the old dogma of wide excision of localized cancer to a complete change in paradigm to preserve as much renal function as possible. Well-timed surgery with the aim of maximal renal parenchyma preservation can be curative with long term survival in majority of kidney cancer patients even in metastatic disease.