SYSTEMIC TREATMENT FOR KIDNEY CANCER

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Kidney Cancer the problem:

• 10,100 new cases annually
• More common in men than women
• Around half of patients will either present with or ultimately develop spread of their cancer
Systemic treatment – historical perspective

- Chemotherapy ineffective
  - Multiple research trials showing no benefit

- Interferon alpha
  - Shown to prolong survival (marginally)
  - Significant side effects – flu-like symptoms
  - Dramatic responses in a few

- High dose IL-2
  - Remains standard of care in US
  - Offered in limited UK centres
  - High side effects (inpatient treatment)
  - Possibility of cure for some
Systemic treatment – the era of TKIs

- VEGF appears critical in the development of most clear cell kidney cancers
- A variety of drugs are now available to switch this chemical off
Interferon IL-2

Axitinib
Sorafenib
Sunitinib
Bevacizumab
Everolimus
Pazopanib
Temsirolimus
What does systemic therapy mean?

- Drug treatments
- Most given as tablets
- Generally given on an ongoing basis as long as they work
What are the benefits?

- Shrinking tumours
- Improving symptoms
- Extending life
What are the risks?
71 year old female

- June 2008
- Back pain and leg weakness
- Anaemic
- Combined nephrectomy and vertebrectomy
- Path grade 3 clear cell RCC
- Post op - pain and
• RT T spine
• Commenced temsirolimus 25mg IV weekly September 08
• Complicated by deteriorating renal function
• January 2009
  • PD in lung Dec-Jan
  • Increased back pain and leg weakness
  • Further deterioration in renal function
  • Commenced sunitinib 37.5mg 4/2
• Admitted following 3 weeks – nausea, vomiting
• Recommenced 25mg 4/2
• Stable disease post 2 cycles – dose increased to 25mg continuous
• BP 200/100 after further 3 cycles – 1 week interruption and commenced and

• December 09 – back to walking, but new hip pain

• July 2010 Right THR

• Last seen November 2014 well (27 months post diagnosis 20 months post sunitinib)
What about surgery?

- Clear role for nephrectomy before good drugs available
- Resection of low volume metastatic disease
- Ablation of isolated sites of recurrence
Current NHS funded treatment

- 1\textsuperscript{st} line therapy
  - Sunitinib (NICE)
  - Pazopanib (NICE)

- 2\textsuperscript{nd} line therapy
  - Everolimus (CDF)
  - Axitinib (CDF – NICE)
The future?

- Immunotherapy highly successful in other similar cancers
- New interest in IL-2
  - Ability to pick the winners?
- PD1 targeting drugs
Conclusions

• Significant improvements in treatment in last 10 years

• Average survival exceeds 2 years

• Chronic disease for many

• Cure remains elusive

• Immunotherapy may offer new hope