# Table of Contents

1.0 ADVICE FOR PRIMARY CARE ............................................................................................................. 3  
2.0 RENAL CANCER PATHWAY .................................................................................................................. 4  
3.0 PURPOSE ........................................................................................................................................... 5  
4.0 SCOPE ............................................................................................................................................... 5  
5.0 REFERRAL PATHWAY .......................................................................................................................... 5  
  5.1 GENERAL PRINCIPLES ...................................................................................................................... 5  
  5.2 AGREED REFERRAL CRITERIA ........................................................................................................... 6  
6.0 IMAGING ............................................................................................................................................ 6  
7.0 PATHOLOGY ....................................................................................................................................... 6  
8.0 KIDNEY CANCERS .............................................................................................................................. 6  
  8.1 STAGING ........................................................................................................................................ 6  
  8.2 SURVEILLANCE ................................................................................................................................. 6  
9.0 MDT DISCUSSION ............................................................................................................................... 7  
10.0 REFERRAL TO THE SUPRANETWORK TEAM .................................................................................. 7  
11.0 CHILDREN & YOUNG PEOPLE ......................................................................................................... 8  
12.0 ONCOLOGY PROVISION ................................................................................................................... 8  
13.0 FOLLOW UP PROTOCOLS .................................................................................................................. 8  
14.0 SURVEILLANCE GUIDELINE ................................................................................................................. 9  
15.0 SUPPORTIVE & PALLIATIVE CARE ................................................................................................. 10  
16.0 DATA, DATA COLLECTION ................................................................................................................. 10  
17.0 APPENDIX 1 ...................................................................................................................................... 12  
18.0 APPENDIX 2 ..................................................................................................................................... 13  
19.0 PERSONNEL AND CONTACT INFORMATION .................................................................................... 14  
20.0 GLOSSARY ........................................................................................................................................ 14  
21.0 DOCUMENT ADMINISTRATION ....................................................................................................... 15
**PATIENT HAS DIPSTICK URINE TEST**

1. When basing results on Dipstick testing – the kit must be “in-date”
2. Dipstick testing should only be carried out on “fresh” specimens
3. If there is any doubt (borderline results) about the result the test should be repeated after an interval of 2 weeks
4. If the patient has an infection the test should be repeated after treatment at an interval of 2 weeks
5. Women presenting with haematuria who are menstruating should be retested after an interval of 2 weeks

---

**Dipstick is Positive**
- History
- Examination
- FBC, E&Cr & eGFR
- MSU Performed

---

**Dipstick/MSU is Negative**
- Manage Symptoms
- Investigate other signs
- Refer if appropriate
- Re-test in 6 months

---

**MSU**

**MSU SHOWS**
- Non-visible haematuria
- No casts
- No proteinuria

**MSU SHOWS UTI**
- TREAT UTI
- RE-TEST

**Any patient who has**
- Persistent UTI
- Recurrent UTI
- Is Male

---

**REFER UROLOGY**

**FORMS AND ENCLOSURES**
- Rapid Access Proforma
- Covering letter (if desired)
- Enclose E&Cr, eGFR, FBC, MSU & PSA (in men)

**URGENT 2 WEEK RAPID ACCESS PROFORMA – Referral suspected cancer**
- Macroscopic haematuria in the absence of infection
- Persistent or recurrent UTI with haematuria in patients aged >40 years
- Unexplained persistent non-visible haematuria, confirmed on MSU and without infection in patients aged >50 years

**NON URGENT 8 WEEK REFERRAL**
- Patients with non-visible haematuria, with no evidence of infection, aged ≤50 years
- Any male patient who has had a UTI requires Urological assessment

---

**CHECK**
- Blood pressure
- Creatinine
- eGFR
- FBC

**PATIENT HAS**
- Elevated creatinine
- Hypertension
- Micro Haematuria
- Casts
- Proteinuria

---

**REFER NEPHROLOGY**

**ENCLOSE**
- E&Cr
- eGFR
2.0 Renal Cancer Pathway

**SYMPTOMATIC PATIENT**
- Haematuria – go to haematuria pathway
- Metastatic Disease

**ASYMPTOMATIC PATIENT INCIDENTAL FINDING**
- Tumour must be confirmed on CT Chest/Abdomen/Pelvis
- Consider MRI if in renal failure

**RENNAL CANCER PATHWAYS**
- Ensure staging is complete by CT Chest/Abdomen/Pelvis
- Assess Renal Function

**GP Consultation**
History+Examination including MSU, FBC E&Cr, LFTs, Ca, Abdominal Ultrasound
REFER BY RAPID ACCESS PROFORMA TO HAEMATURIA CLINIC IF HAEMATURIA PRESENT
- Refer to haematuria protocol
REFER BY RAPID ACCESS PROFORMA
- If Ultrasound confirms renal tumour or complex renal cysts (not simple cysts)

**HAEMATURIA SERVICE PATHWAY**
- RAP form completed and faxed
- Enclose MSU, FBC, E&Cr
- Covering letter is appreciated
- DRUGS esp. Warfarin clopidogrel

**HAEMATURIA PATHWAY OF CARE (Appendix 1)**

**Local Urology Cancer MDT**

**K&M Joint Specialist Urology Cancer MDT**

**Complex Renal Cyst**
- Bosniac I - Discharge
- Bosniac II - Surveillance

**TCC in Renal Pelvis or Ureter**
- Surgery Nephroureterectomy or if unfit consider laser ablation

**RCC Organ confined**
- OPTIONS
  1. Observation
  2. Intervention Radical Nephrectomy +/- Adrenal Partial Nephrectomy Ablation of Tumour (Cryo/RFA)

**RCC - Metastatic**
- OPTIONS
  1. Observation
  2. Oncological Treatment
  3. Intervention palliative nephrectomy palliative embolisation palliative ablation

**Symptomatic Patient**
- Haematuria – go to haematuria pathway
- Metastatic Disease

**Renal Cancer Pathway**
- Bosniac I - Discharge
- Bosniac II - Surveillance

**Options**
- 1. Observation
- 2. Intervention Radical Nephrectomy
- 3. Intervention palliative nephrectomy palliative embolisation palliative ablation

**All patients requiring –**
1. Observation
2. Oncological treatment
3. Palliative care

**Bosniac III – consider surgery**
Bosniac IV - surgery

**Supra Network MDT Referral**

- DISEASE ABOVE DIAPHRAM - TUMOUR SIGNIFICANTLY INVADAS INFERIOR VENA CAVA
- REFER TO GKT FOR JOINT INTERVENTION WITH LIVER/CARDIOThorACIC UNIT

- MULTIPLE TUMOURS - NEED FOR DIALYSIS SUPPORT
- CONSIDER NEPHRON-SPARING SURGERY OR ABLATION

- POTENTIALLY RESECTABLE LIVER LUNG METASTASES
- REFER TO GKT FOR JOINT INTERVENTION WITH LIVER/ CARDIOThorACIC UNIT

**RENNAL INPUT**

**PALLIATIVE CARE**
3.0 Purpose

To describe the process for ensuring that all Renal Cancer cases diagnosed within the Kent & Medway Cancer Collaborative (KMCC) region are managed by the East and West Kent & Medway Urology Specialist Teams and the GKT Supranetwork MDT achieving a coordinated seamless patient pathway, in accordance with the best possible evidence based practice, and to facilitate advancement in the specialty in the field of renal cancer management.

4.0 Scope

This Standard Operating Procedure (SOP) applies to all cases, and suspected cases, of renal cancer within Kent & Medway (K&M). The Kent & Medway renal cancer specification of delivery of care requires all Trusts within the area to adopt an agreed policy for the delivery of care. The policy relates to the expected pathway of care / treatment regimes for patients diagnosed with renal cancer.

5.0 Referral Pathway

5.1 General Principles

- Both K&M Urology Teams function at both Local & Specialist levels and the flow chart in section 2.0 reflects this two tier approach to care
- Patients should be referred according to the agreed referral criteria set out in section 4.0
- All patients with a new diagnosis of a urological cancer should be discussed by urology MDTs which will function in compliance of the IOG, recommendations of the K&M Urology Tumour Site Specific Group (TSSG) and the operational policies of those MDTs as well as within the bounds of good practice
- Any K&M secondary care NHS haematuria service or clinic must be provided, or lead by, a clinician who:
  - Is a member of a recognised K&M Urology MDT and attends Multidisciplinary Team Meetings (MDMs) at least to levels (2/3rd) specified in the Quality Measures
  - Is a member of the KMCC Urology TSSG and attends at least 75% of Urology TSSG meetings in any 2 year period
- Patients diagnosed with renal cancers will be managed in accordance with the management principles agreed by the KMCC Urology TSSG as set out in this document
- Radical surgery for all urological cancers will be undertaken at one of 2 surgical centres:
  - Kent and Canterbury Hospital (East Kent)
  - Medway Foundation Trust Hospital (For West Kent and Medway)
- Patients with potentially resectable Liver /Lung Metastases should be considered by the MDT for referral to a Supranetwork Centre (King’s/Guy’s)
- Patients with disease above the diaphragm and/or where tumour significantly invades the inferior vena cava should be considered by the MDT for referral to a Supranetwork Centre (GKT)
- Following radical surgery, patients with renal cell carcinoma will undergo regular follow up with chest x-rays, abdominal ultrasounds, and CT scans at intervals determined by stratification into recurrence risk groups
- Patients with transitional cell carcinoma of the kidney will undergo regular cystoscopic surveillance
- Patients will be offered a Key Worker and should expect to receive clinical and supportive care of the highest standards at all stages along the Pathway of Care
- All patients should be considered for entry into an approved clinical trial
- Where patients fall into the Children’s & Young Peoples (CYP) age group (Please see section 10.0) an appropriate referral will be made
5.2 Agreed Referral Criteria

The following should be referred to be seen within 2 weeks. The 2 week referral proforma should be used and sent or e-mailed to the relevant central referral office:

- Frank haematuria
- Palpable renal mass on examination
- Solid renal mass defined on imaging

Patients with frank haematuria will be seen in a haematuria clinic. Patients with a renal mass will be seen in a urology clinic.

Patients with non-visible haematuria, with no evidence of infection, age <50 years should be referred to the haematuria clinic NON-URGENTLY and will be seen within 8 weeks.

Patients with non-visible haematuria, with no evidence of infection, age > or equal 50 years should be referred to the haematuria clinic and will be seen within 2 weeks.

Non-visible haematuria accompanied by proteinuria, red cell casts on microscopy, and hypertension is suggestive of a nephrological disorder. The patient should be referred to a Nephrologist.

6.0 Imaging


7.0 Pathology


8.0 Kidney Cancers

8.1 Staging

1. CT chest and abdomen and pelvis unenhanced and enhanced
2. MR/ CT or doppler ultrasound
   If IVC invasion suspected consider above to clarify upper level

8.2 Surveillance

9.0 MDT Discussion

The following outcomes are possible:

1. *Transitional cell carcinoma of the renal pelvis or calyces.* Usually treated by nephro-ureterectomy. An endourological approach should be considered for nephron-sparing surgery. Laparoscopic surgery should be offered to all patients.

2. *Transitional cell carcinoma of the ureter.* Can be managed by nephro-ureterectomy, local excision or endoscopically, depending on the grade, size and position.

3. *Organ confined renal cell carcinoma* is usually treated by radical nephrectomy (+/- adrenalectomy). Robotic Partial nephrectomy should be considered for tumours less than 4 cm in diameter. A laparoscopic robotic approach is the standard of care. Ablative therapy with radiofrequency ablation, or cryotherapy, is a treatment option for patients with tumours less than 3.5cm, or for patients with larger tumours if partial or radical nephrectomy is deemed high risk or inappropriate.

4. *Palliative therapy.* For patients with symptomatic tumours, which are unsuitable for excision, embolisation of the tumour should be considered.

5. *Metastatic / Recurrent disease.* Treatment options are tyrosine kinase inhibitors therapy, or immune-oncology (IO) therapy.

6. *High-risk tumours.* In the following situations, referral to a supraregional MDT should be considered:
   - Resection of metastatic disease
   - Resection of both primary and associated metastatic disease
   - Resection of bilateral primary tumours
   - Resection of any primary where it is predicted that the patient will subsequently require dialysis
   - Surgical management of patients of Von Hippel-Lindau disease or hereditary papillary tumours

7. *Consider biopsy* in the following:
   - before treatment with TKI’s to confirm clear cell histology
   - in the presence of another primary tumour source
   - before ablative treatment
   - to assist in determining prognosis in patients undergoing surveillance
   - In patients undergoing NSS

10.0 Referral to the Supranetwork team

1. The team making the referral to the Supranetwork MDT is responsible for ensuring that appropriate notes, imaging and pathological slides are sent to the Supranetwork MDT. The local MDTs have key contacts outlined in their Operational Policies.

2. The Supranetwork team is responsible for:
   a. Returning notes, imaging and pathological slides
   b. Communicating with the referring MDT (with a copy to the GP) in a timely manner to outline:
      - MDM decisions
      - Treatment discussions and decisions held with the patient
      - Outcome of surgery
      - Discharge summary
   c. Communicating with the K&M Specialist MDT
11.0 Children & Young People

Children and Young People with renal cancers will be treated in accordance with principles set out in the CYP IOG.

All Children and Young People up to the end of their 18th year must be referred to the CYP Principle Treatment Centre which for K&M is based at the Royal Marsden Hospital.

All Young People between 19 and 24 years of age must be offered a choice of where they would like their treatment. This could either be their local adult service, or the TYA Principle Treatment Centre which for K&M is based at the Royal Marsden Hospital.

Referral to a Principle Treatment Centre does not necessarily mean that treatment will be undertaken at that centre; shared care management protocols may allow some treatments to be undertaken locally.

12.0 Oncology Provision

The Non-Surgical Oncological management of all patients with urological cancers defined by the Non-Surgical Oncology Sub Group (NOG) of the Urology TSSG is set out in the document entitled ‘The Oncological Treatment of Urological Cancers which can be found on the KMCC website: http://www.kmcc.nhs.uk/resource-library/urology-tssg/

13.0 Follow up Protocols

Risk stratification:

<table>
<thead>
<tr>
<th>T-stage</th>
<th>Fuhrman Grade</th>
<th>Risk Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>1-2</td>
<td>Low Risk</td>
</tr>
<tr>
<td>T2</td>
<td>3-4</td>
<td>Intermediate Risk</td>
</tr>
<tr>
<td>T3</td>
<td>1-4</td>
<td>High Risk</td>
</tr>
<tr>
<td>T4</td>
<td>1-2</td>
<td></td>
</tr>
</tbody>
</table>

Post nephrectomy follow up schedule for RCC:

<table>
<thead>
<tr>
<th>Tumour Group</th>
<th>3M</th>
<th>9M</th>
<th>12M</th>
<th>15M</th>
<th>21M</th>
<th>3Yr</th>
<th>4Yr</th>
<th>5Yr</th>
<th>Thereafter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Risk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CT</td>
<td></td>
<td></td>
<td>Discharge at 1 year if CT clear</td>
</tr>
<tr>
<td>Intermediate Risk</td>
<td>CT</td>
<td>USS/CXR</td>
<td>CT</td>
<td>USS/CXR</td>
<td>CT</td>
<td>USS/CXR</td>
<td>CT</td>
<td>Discharge At 5 years if CT clear</td>
<td></td>
</tr>
<tr>
<td>High Risk</td>
<td>CT</td>
<td>CT</td>
<td>CT</td>
<td>CT</td>
<td>CT</td>
<td>CT</td>
<td>CT</td>
<td>CT</td>
<td>Discharge at 5 years if CT clear</td>
</tr>
</tbody>
</table>
14.0 Surveillance Guideline

All Patients

3-6 Weeks
- Post-operative Bloods
- Physical Examination
- Histology

Then:

Table 13.1 - Surveillance

<table>
<thead>
<tr>
<th>Tumour</th>
<th>6/12</th>
<th>1yr</th>
<th>18/12</th>
<th>2yr</th>
<th>3yr</th>
<th>4yr</th>
<th>5yr</th>
<th>6yr</th>
<th>7yr</th>
<th>8yr</th>
<th>9yr</th>
<th>10yr</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low risk</td>
<td>CT</td>
<td>C+A</td>
<td>CT</td>
<td>USS</td>
<td>CT</td>
<td>C+A</td>
<td>CT</td>
<td>USS</td>
<td>CT</td>
<td>USS</td>
<td>USS</td>
<td>USS</td>
<td>Discharge if CT clear</td>
</tr>
<tr>
<td>Intermediate</td>
<td>USS /</td>
<td>CT</td>
<td>USS</td>
<td>CT</td>
<td>USS</td>
<td>CT</td>
<td>USS</td>
<td>CT</td>
<td>USS</td>
<td>USS</td>
<td>USS</td>
<td>USS</td>
<td>Discharge</td>
</tr>
<tr>
<td>High</td>
<td>CT</td>
<td>C+A</td>
<td>CT</td>
<td>C+A</td>
<td>CT</td>
<td>C+A</td>
<td>CT</td>
<td>C+A</td>
<td>CT</td>
<td>USS</td>
<td>USS</td>
<td>USS</td>
<td>CT C+A</td>
</tr>
<tr>
<td>Partial: Low Risk</td>
<td>CT</td>
<td>C+A</td>
<td>USS</td>
<td>CT</td>
<td>USS</td>
<td>USS</td>
<td>USS</td>
<td>CT</td>
<td>USS</td>
<td>USS</td>
<td>USS</td>
<td>USS</td>
<td>CT C+A</td>
</tr>
<tr>
<td>Partial: Intermediate Risk</td>
<td>CT</td>
<td>C+A</td>
<td>CT</td>
<td>C+A</td>
<td>CT</td>
<td>C+A</td>
<td>CT</td>
<td>C+A</td>
<td>USS</td>
<td>USS</td>
<td>USS</td>
<td>USS</td>
<td>USS / CXR</td>
</tr>
</tbody>
</table>

Consider stopping surveillance if co-morbidity would preclude surgery or TKI/IO treatment
Consider specific investigations directed at symptoms
Annual FBC U&E's LTF and calcium – to be continued in primary care following discharge

If eligible for trial then CT within 3/12

CT C+A = CT Chest and Abdomen
USS / CXR = Ultrasound abdomen plus chest X-Ray

Follow up for UUT TCC pTa-1:
- Cystoscopy at 3 months then annually
- Annual CT-U or every 2 years

Follow up for UUT TCC >pT1:
- Cystoscopy at 3 month then annually
- 6 monthly CTU for 2 years then annually

Patients post ablative therapy require early phase CT kidney at 3/12 – then surveillance as high risk

Note: these patients need to be subject to audit as required by NICE
Patients who have inoperable kidney cancer should be referred to the specialist supportive & palliative team. The prime aim of the treatment is to alleviate symptoms.

Open and frank discussions with patients should take place with patients at all stages of their journey so that patients are not confused about their prognosis or have unrealistic expectations of any of the forms of treatment offered to them.

Relatives and carers will need to be appropriately supported and given appropriate information. However, in accordance with the recommendations set out in various Improving Outcomes Guidance (IOG), relatives and carers should not be given information different to that given to the patient.

Palliative care provision should be made for all patients:
- Hospital teams, including the Clinical Nurse Specialists for urology patients
- Primary Health Care Team would provide for palliative care at home
- General Practitioner should be informed within 24 hours of the diagnosis, treatment plan and medication

The management of symptoms, psychological, social and spiritual issues, and the communication of the diagnosis, and any associated problems, should be within the domain of all health care professionals.

Referral to specialist palliative care services should be considered when these issues have not been resolved and in particular for patients with:
- Complex symptom management issues, which are difficult to manage
- Difficulties in adjusting to the diagnosis or disease progression
- Psychological and family issues – such as communication problems within the family
- Spiritual issues – such as the challenging of belief system/faith/cultural values as a result of the cancer

Consideration of specialist palliative care or support should be given throughout the patient pathway, particularly:
- At the Multidisciplinary Team Meeting
- When no active treatment is considered
- After active treatment
- At relapse
- In the terminal stages

16.0 Data, Data Collection

Collection of data at each stage of the pathway is the responsibility of the team looking after the patient at that time. The minimum dataset agreed by the TSSG will be a combination of those data items that meet national requirements, and additional items as agreed by the TSSG.

National data requirements will include:
- Cancer Waiting Times monitoring, including Going Further on Cancer Waits. The data items required will be as defined in ISB0147 at the time of referral and/or treatment.

Details of the Cancer Waiting Times dataset are available from: http://nww.connectingforhealth.nhs.uk/nhais/cancerwaiting/documentation

Cancer Waiting Times data will be submitted according to the timetable set out in the National Contract for Acute Services.
• The Cancer Outcomes and Services Dataset. The data items will be as defined in ISB1521, and any subsequent versions, at the time of diagnosis and/or treatment. The requirement will include those fields listed in the “Core” section of the dataset, and any additional tumour site specific sections, as applicable.

Details of the COSD are available from: http://www.ncin.org.uk/collecting_and_using_data/data_collection/cosd.aspx

Cancer Registration and Cancer Outcomes and Services (COSD) data will be submitted according to the timetable set out by the National Cancer Registration Service (NCRS).

• Where applicable, teams will also collect additional data items as defined in any corresponding National Clinical Audit Support Programme (NCASP) audit dataset.

Details of these datasets are available from: http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/cancer

Data for NCASP audits will be submitted, where applicable, according to timetables as agreed by the TSSG, and within the overall submission deadlines for each audit.

Submission of data to meet these national requirements will be the responsibility of each individual Trust.

Note that these standards are subject to variation from time to time, and where these requirements change, the data items required to be collected by the team will also change in line with national requirements.

Local data requirements will include any additional data items as agreed by the TSSG. These must be selected to avoid overlap with any existing data items, and where possible must use standard coding as defined in the NHS Data Dictionary.

Where possible and applicable, InfoFlex will be used for the collection and storage of data.

Additional areas of the COSD, relating to pathology, radiotherapy, SACT, diagnostic imaging and basic procedure details will feed into the dataset from other nationally mandated sources. It is the responsibility of each team to ensure that the whole of the relevant dataset is collected, and it is acknowledged that this may come from a variety of sources.
HAEMATURIA clinIC
- HISTORY & EXAMINATION
- Plain Film KUB
- UPPER TRACT SCAN
  - U/S Abdomen
    - Kidneys, Bladder
    - Liver, Aorta
  - CT UROGRAM if preferred
- FLEXIBLE CYSTOSCOPY
  - Normal examination
  - Unsure/poor views
  - Stone/BPE
  - Bladder Lesion
- URINE CYTOLOGY
  - Not used routinely
  - Only if indicated by MDT

GP Consultation
History + Examination including DRE, MSU, FBC ECr, PSA
(in men)
REFER BY RAPID ACCESS PROFORMA (RAP) TO
HAEMATURIA SERVICE (2 week appointment)
- Visible unexplained* haematuria >=45 years (without
  current UTI or stone disease)
- Visible explained haematuria >=45 years that persists or
  recurs after successful treatment of UTI
Note for the above two situations: if male consider PSA
test and DRE prior to referral
- Microscopic/non-visible unexplained haematuria >=60
  years and either dysuria or raised white cell count on
  blood test
- Palpable renal mass on examination
- Solid renal mass identified on imaging

HAEMATURIA SERVICE PATHWAY
- RAP form completed and faxed
- Enclose MSU, FBC, ECr
- Covering letter is appreciated
- DRUGS esp Warfarin and Clopidogrel

K&M JOINT LOCAL/SPECIALIST UROLOGY CANCER MDT

NORMAL U/S, KUB & FLEXIBLE CYSTOSCOPY
- NON-VISIBLE HAEMATURIA = DISCHARGE & MSU 3
  months
- Re-refer if persistent haematuria

HAEMATURIA CLINIC
- HISTORY & EXAMINATION
- Plain Film KUB
- UPPER TRACT SCAN
  - U/S Abdomen
    - Kidneys, Bladder
    - Liver, Aorta
  - CT UROGRAM if preferred
- FLEXIBLE CYSTOSCOPY
  - Normal examination
  - Unsure/poor views
  - Stone/BPE
  - Bladder Lesion
- URINE CYTOLOGY
  - Not used routinely
  - Only if indicated by MDT

OTHER PATHWAYS
- UROLOGY
- NEPHROLOGY
- GYNAECOLOGY
- COLORECTAL

NORMAL U/S, KUB & FLEXIBLE CYSTOSCOPY
- MACROSCOPIC HAEMATURIA=IVU or CT Urogram
  - If upper tract lesion present MDT review
  - If IVU/CT normal and haematuria persists consider
    - Cytology & uretero-renoscopy
  - If IVU/CT normal and no further haematuria
  - MSU in 3 months & consider cytology

OTHER UROLOGY = move patient to correct pathway

RENAL MASS = KIDNEY CANCER PATHWAY

SYMMPTOMATIC PATIENT
C/O Blood in Urine

A SYMPTOMATIC PATIENT
DIPSTICK HAEMATURIA
- Dipstick kit must be in date
- Specimen must be fresh
- Repeat 2 week if borderline
- If UTI suspected get MSU
  - Treat with Trimethoprim
  - Change after sensitivities
- Retest at 2 weeks if
  - Menstruating
  - UTI needs treating

NON-VISIBLE HAEMATURIA = DISCHARGE & MSU 3
months
Re-refer if persistent haematuria
HAEMATURIA Clinic
- HISTORY & EXAMINATION
- ULTRASOUND OR CT UROGRAM
- FLEXIBLE CYSTOSCOPY

HISTORY
- Duration (start date), number of episodes, length of episode
- Painful/painless, Initial (start of stream, prostatic) Terminal or pan haematuria. Clots.
- LUTS (Frequency Urgency, nocturia, hesitancy, flow, emptying, dysuria)
- Risk factors, Smoking, chemicals, previous history
- Review of Systems
- Drug history, Family history, travel abroad

EXAMINATION
- Blood Pressure, Pulse, BMI, Temperature
- General
- Abdomen INCLUDING DRE

ULTRASOUND ABDOMEN
- COMPETENCY TRAINED OPERATOR
  - Kidneys – Size, Hydronephrosis, cysts, masses
  - Bladder – Volume, masses, prostate, thickness
  - Other Organs – Liver, Pancreas, Aorta

NORMAL U/S UPPER TRACTS
- RENAL MASS
  - Urgent CT CAP
  - Renal Cancer Pathway
  - Needs Flexible cystoscopy anyway
  - KIDNEY PATHWAY
    - Clinic review

OTHER FINDING
- Aneurysm
- Pancreas
- Liver
- Retention
- Hydronephrosis
- Stones

FLEXIBLE CYSTOSCOPY
- If has UTI cover Trust recommended antibiotic or defer until treated
- If no UTI suspected AB cover not essential – see GP if UTI develops

NORMAL FLEXI
- NON-VISIBLE HAEMATURIA
  - Back to GP
  - MSU & Blood pressure 6 months
- MACROSCOPIC HAEMATURIA
  - URGENT IVU OR CT urogram
  - Pre-book clinic review after
- LUTS/Retention
  - To BPE pathway
- STONES
  - To stone service
- ROBUST FOLLOW UP AS REQUIRED
  - Primary care
  - Clinical nurse specialist
  - Urologist

MANAGEMENT
- Urology
- Vascular
- Upper GI

LESION SEEN, POOR VIEWS, NO ACCESS
- Inform patient of diagnosis
  - If probably TCC then inform
  - If uncertain explain investigations
- Give literature
- Assign Key-worker
- Get Date for TURBT/GA cystoscopy
  - Within 4 weeks
  - Give patient date
- URGENT IVU or CT Chest + Urogram
- Pre-Book MDT Histology review 2 weeks after TURBT
- Pre-book review clinic appointment 1 week after MDT
- Ensure advice on warfarin, clopidogrel given
- If UTI suspected, repeat a Urine culture and treat
- If no access due to stricture
  - Urgent Udil/Optical Urethrotomy + scope
19.0 Personnel and Contact Information

A comprehensive, up to date list of MDM contact details can be found on the KMCC website via the following link: [http://www.kmcc.nhs.uk/resource-library/](http://www.kmcc.nhs.uk/resource-library/)

20.0 Glossary

Acronyms in common usage throughout KMCC documentation:

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNB</td>
<td>Cancer Network Board</td>
</tr>
<tr>
<td>CYP</td>
<td>Children &amp; Young People (in relation to the IOG)</td>
</tr>
<tr>
<td>DCCAG</td>
<td>Diagnostic Cross Cutting Advisory Group</td>
</tr>
<tr>
<td>DOG</td>
<td>Disease Orientated Group (NSSG/TSSG/TWG)</td>
</tr>
<tr>
<td>DVH</td>
<td>Darent Valley Hospital</td>
</tr>
<tr>
<td>EK</td>
<td>East Kent</td>
</tr>
<tr>
<td>EKHUFT</td>
<td>East Kent Hospitals University Foundation Trust</td>
</tr>
<tr>
<td>HoP</td>
<td>High Level Operational Policy</td>
</tr>
<tr>
<td>IOSC</td>
<td>Improving Outcomes: A Strategy for Cancer</td>
</tr>
<tr>
<td>K&amp;C</td>
<td>Kent &amp; Canterbury Hospital, Canterbury, (EKHUFT)</td>
</tr>
<tr>
<td>KMCC</td>
<td>Kent &amp; Medway Cancer Collaborative</td>
</tr>
<tr>
<td>KMCN</td>
<td>Kent &amp; Medway Cancer Network</td>
</tr>
<tr>
<td>KMCRN</td>
<td>Kent &amp; Medway Cancer Research Network</td>
</tr>
<tr>
<td>LSESN</td>
<td>London &amp; South East Sarcoma Network</td>
</tr>
<tr>
<td>MFT</td>
<td>Medway Foundation Trust</td>
</tr>
<tr>
<td>MTW</td>
<td>Maidstone &amp; Tunbridge Wells NHS Trust</td>
</tr>
<tr>
<td>NOG</td>
<td>Non-Surgical Oncology Group (Permanent oncologist sub group of the TSSGs with a specific responsibility for chemo/rad pathways and advice to the TSSG, K&amp;M and geographical locations on new drugs)</td>
</tr>
<tr>
<td>PoC</td>
<td>Pathway of Care (KMCC agreed disease site specific clinical guidelines)</td>
</tr>
<tr>
<td>QEQM</td>
<td>Queen Elizabeth the Queen Mother Hospital, Margate (EKHUFT)</td>
</tr>
<tr>
<td>QoL</td>
<td>Quality of life</td>
</tr>
<tr>
<td>RAT</td>
<td>Research and Trial Group (Permanent sub-group of the TSSGs with a specific responsibility for taking forward the clinical trials agenda)</td>
</tr>
<tr>
<td>RMH</td>
<td>Royal Marsden Hospital</td>
</tr>
<tr>
<td>RNOH</td>
<td>Royal National Orthopaedic Hospital</td>
</tr>
<tr>
<td>QVH</td>
<td>Queen Victoria Foundation Trust Hospital East Grinstead</td>
</tr>
<tr>
<td>UCLH</td>
<td>University College Hospital London</td>
</tr>
<tr>
<td>WHH</td>
<td>William Harvey Hospital, Ashford (EKHUFT)</td>
</tr>
<tr>
<td>WK</td>
<td>West Kent</td>
</tr>
</tbody>
</table>
# 21.0 Document Administration

<table>
<thead>
<tr>
<th>Document Title</th>
<th>The Management of Renal Cancer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principle author</td>
<td>Mark Cynk</td>
</tr>
<tr>
<td>Co-author(s)</td>
<td>Bill Choi/Ian Vousden</td>
</tr>
<tr>
<td>Current version number</td>
<td>6.0</td>
</tr>
<tr>
<td>Current status</td>
<td>Final/Published</td>
</tr>
<tr>
<td>Agreed as “Fit for Publication” by</td>
<td>March 2020</td>
</tr>
<tr>
<td>Original publication date</td>
<td>September 2005</td>
</tr>
<tr>
<td>Expected review date by</td>
<td>March 2022</td>
</tr>
</tbody>
</table>

**Enquiries:**

[1] Sanjeev Madaan  
  [sanjeev.madaan@nhs.net](mailto:sanjeev.madaan@nhs.net)

  [mark.cynk@nhs.net](mailto:mark.cynk@nhs.net)

**Revision History**

<table>
<thead>
<tr>
<th>Date of revision</th>
<th>New Version Number</th>
<th>Nature of Revision</th>
<th>Confirmation of Accuracy by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept 2005</td>
<td>0.1</td>
<td>Initial draft</td>
<td>A.Jackson/M.Cynk/B.Choi</td>
</tr>
<tr>
<td>Nov 2005</td>
<td>0.2</td>
<td>Agreed changes from 13/10/05 DOG/TSSG (haematuria definitions, possible outcomes section redrafted, follow up agreed)</td>
<td>Urology DOG/TSSG</td>
</tr>
<tr>
<td>Jan 2006</td>
<td>0.3</td>
<td>Corrections</td>
<td>M.Cynk</td>
</tr>
<tr>
<td>April 2006</td>
<td>1.0</td>
<td>Published</td>
<td>M.Cynk</td>
</tr>
<tr>
<td>Feb 2009</td>
<td>1.1</td>
<td>Review Draft</td>
<td>B.Choi/ E.Streeter/ I.Morrison/ A.Jackson</td>
</tr>
<tr>
<td>Mar 2009</td>
<td>1.2</td>
<td>Review Draft - Section 8.0 – deletion of 8.6</td>
<td>M.Cynk</td>
</tr>
<tr>
<td>Mar 2009</td>
<td>2.0</td>
<td>Published - Bosniak Levels III/IV changes, Section 8.0 – changes to 5.0, Addition of comment for post ablative surveillance</td>
<td>Urology DOG/TSSG</td>
</tr>
<tr>
<td>Nov 2011</td>
<td>2.1</td>
<td>Review – Update CYP &amp; TYA section, Changes to Bosniak levels, Addition of local Urology Cancer MDT in pathway, Update of Contacts, Addition of UUT TCC follow up</td>
<td>M.Cynk &amp; Renal Sub Group</td>
</tr>
<tr>
<td>June 2012</td>
<td>3.1</td>
<td>Draft – updated all weblinks inc. imaging, pathology &amp; contacts; general formatting &amp; content checking</td>
<td>C.Tsatsaklas</td>
</tr>
<tr>
<td>September 2012</td>
<td>3.2</td>
<td>Draft – data collection section updated</td>
<td>A.Brittle/C.Tsatsaklas</td>
</tr>
<tr>
<td>July 2013</td>
<td>4.0</td>
<td>Published – final comments from 15/07/13 Urology TSSG inserted &amp; admin text updated</td>
<td>M.Cynk/Urology TSSG</td>
</tr>
<tr>
<td>June 2014</td>
<td>5.0</td>
<td>Final – updated admin text/weblinks etc. Final/Published – ratified by the Operational &amp; Quality Group (25/6/14)</td>
<td>M.Cynk/C.Tsatsaklas</td>
</tr>
<tr>
<td>Dec 2019</td>
<td>5.1</td>
<td>Draft - document updating from June 2014.</td>
<td>M. Cynk</td>
</tr>
<tr>
<td>March 2020</td>
<td>6.0</td>
<td>Final document agreed and updated</td>
<td>M. Cynk</td>
</tr>
<tr>
<td>-----------</td>
<td>-----</td>
<td>----------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>