### BREAST CANCER

**Red Flag referral, patients:**
- of any age with a discrete, hard lump with fixation, with or without skin tethering
- of any age, with previous breast cancer, who present with an further lump or suspicious symptoms
- with unilateral eczematous skin or nipple change that does not respond to topical treatment
- with nipple distortion of recent onset
- with spontaneous unilateral bloody nipple discharge

**Red Flag referral, females:**
- aged 30 years and older with a discrete lump that persists after their next period, or presents after menopause
- aged younger than 30 years:
  - with a lump that enlarges
  - with a lump that is fixed and hard
  - in whom there are other reasons for concern such as family history

**Non-urgent referral:**
- women aged younger than 30 years with a lump
- patients with breast pain and no palpable abnormality, when initial treatment fails and/or with unexplained persistent symptoms. (Use of mammography in these patients is not recommended.)

### COLORECTAL CANCER

**Red Flag referral:**
- aged 40 years and older, reporting rectal bleeding with a change of bowel habit towards looser stools and/or increased stool frequency persisting 6 weeks or more
- aged 60 years and older, with rectal bleeding persisting for 6 weeks or more without a change in bowel habit and without anal symptoms
- aged 60 years and older, with a change in bowel habit to looser stools and/or more frequent stools persisting for 6 weeks or more without rectal bleeding
- of any age with a right lower abdominal mass consistent with involvement of the large bowel
- of any age with a palpable rectal mass (intraluminal and not pelvic; a pelvic mass outside the bowel would warrant an urgent referral to a urologist or gynaecologist)
- men of any age with unexplained iron deficiency anaemia and a haemoglobin of 11g/100ml or below
- who are non-menstruating women with unexplained iron deficiency anaemia and a haemoglobin of 10g/100ml or below.

### LUNG CANCER

**Immediate referral, patients with:**
- signs of superior vena caval obstruction (swelling of the face/neck with fixed elevation of jugular venous pressure)
- stridor

**Red Flag referral, patients with:**
- persistent haemoptysis (in smokers or ex-smokers aged 40 years and older)
- a chest X-ray suggestive of lung cancer (including pleural effusion and slowly resolving consolidation)
- a normal chest X-ray where there is a high suspicion of lung cancer
- a history of asbestos exposure and recent onset of chest pain, shortness of breath or unexplained systemic symptoms where a chest X-ray indicates pleural effusion, pleural mass or any suspicious lung pathology.

**Urgent chest X-ray (the report should be returned within 5 days) for patients with any of the following:**
- haemoptysis
- unexplained or persistent (longer than 3 weeks):
  - chest and/or shoulder pain
  - dyspnoea
  - weight loss
  - chest signs
  - hoarseness
  - finger clubbing
  - cervical or supraclavicular lymphadenopathy
  - cough
  - features suggestive of metastasis from a lung cancer (for example, secondaries in the brain, bone, liver, skin)
- underlying chronic respiratory problems with unexplained changes in existing symptoms.

### SKIN CANCER

**Red Flag referral (Melanoma), patients with:**
- a lesion suspected to be melanoma. (Excision in primary care should be avoided.)

**Red Flag referral (Squamous cell carcinomas), patients:**
- with non-healing keratinizing or crusted tumours larger than 1 cm with significant induration on palpation. They are commonly found on the face, scalp or back of the hand with a documented expansion over 8 weeks.
- who have had an organ transplant and develop new or growing cutaneous lesions as squamous cell carcinoma is common with immunosuppression but may be atypical and aggressive
- with histological diagnosis of a squamous cell carcinoma

**Non-urgent referral (Basal cell carcinomas):**
- Basal cell carcinomas are slow growing, usually without significant expansion over 2 months, and usually occur on the face. If basal cell carcinoma is suspected, refer non-urgently.

### HEAD AND NECK CANCER INCLUDING THYROID CANCER

**Red Flag referral, patients with:**
- an unexplained lump in the neck, of recent onset, or a previously undiagnosed lump that has changed over a period of 3 to 6 weeks
- an unexplained persistent swelling in the parotid or submandibular gland
- an unexplained persistent sore or painful throat
- unilateral unexplained pain in the head and neck area for more than 4 weeks, associated with otalgia (ear ache) but a normal otoscopy
- unexplained ulceration of the oral mucosa or mass persisting for more than 3 weeks
- unexplained red and white patches (including suspected lichen planus) of the oral mucosa that are painful or swollen or bleeding.

For patients with persistent symptoms or signs related to the oral cavity in whom a definitive diagnosis of a benign lesion cannot be made, refer to follow up until the symptoms and signs disappear. If the symptoms and signs have not disappeared after 6 weeks, make an urgent referral.

**Red Flag referral to a dentist:**
- patients with unexplained tooth mobility persisting for more than 3 weeks – monitor for oral cancer patients with confirmed oral lichen planus, as part of routine dental examination. Advise all patients, including those with dentures, to have regular dental checkups.

**Red Flag referral for a Chest X-ray:**
- patients with hoarseness persisting for more than 3 weeks, particularly smokers aged older than 50 years and heavy drinkers – if there is a positive finding, refer urgently to a team specialising in the management of lung cancer. If there is a negative finding, refer urgently to a team specialising in head and neck cancer.

**Non-urgent referral:**
- a patient with unexplained red and white patches of the oral mucosa that are not painful, swollen or bleeding (including suspected lichen planus).

**Immediate referral (Thyroid Cancer):**
- patients with symptoms of tracheal compression including stridor due to thyroid swelling.

**Red Flag referral (Thyroid Cancer):**
- patients with a thyroid swelling associated with any of the following:
  - a solitary nodule increasing in size
  - a history of neck irradiation
  - a family history of an endocrine tumour
  - unexplained hoarseness or voice changes
  - cervical lymphadenopathy
  - very young (pre-pubertal) patient
  - patient aged 65 years and older
Northern Ireland Referral Guidance for Suspected Cancer — Red Flag Criteria
Source: NICE Referral Guidelines for Suspected Cancer; 2005
http://publications.nice.org.uk/referral-guidelines-for-suspected-cancer-cg27

Red Flag referral (Prostate), patients:
- with a hard, irregular prostate typical of a prostate carcinoma.
- Prostate-specific antigen (PSA) should be measured and the result should accompany the referral. (An urgent referral is not needed if the prostate is simply enlarged and the PSA is in the age-specific reference range.)
- with a normal prostate, but rising/raised age-specific PSA, with or without lower urinary tract symptoms. (In patients compromised by other comorbidities, a discussion with the patient or carers and/or a specialist may be more appropriate.)
- with symptoms and high PSA levels.

Red Flag referral (Bladder and Renal), patients:
- of any age with painless macroscopic haematuria
- aged 40 years and older who present with recurrent or persistent urinary tract infection associated with haematuria
- aged 50 years and older who are found to have unexplained microscopic haematuria
- with an abdominal mass identified clinically or on imaging that is thought to arise from the urinary tract.

Red Flag referral (Testicular), patients:
- with a swelling or mass in the body of the testis.

Red Flag referral (Penile), patients:
- with symptoms or signs of penile cancer. These include progressive ulceration or a mass in the glans or prepuce particularly, but can involve the skin of the penile shaft. (Lumps within the corpora cavernosa can indicate Peyronie’s disease, which does not require urgent referral.)

Non-urgent referrals:
- patients under 50 years of age with microscopic haematuria.
- Patients with proteinuria or raised serum creatinine should be referred to a renal physician. If there is no proteinuria and serum creatinine is normal, a non-urgent referral to a urologist should be made.

Red Flag referral (Gynaecological), patients:
- with clinical features suggestive of cervical cancer on examination. A smear test is not required before referral, and a previous negative result should not delay referral
- not on hormone replacement therapy with postmenopausal bleeding
- on hormone replacement therapy with persistent or unexplained postmenopausal bleeding after cessation of hormone replacement therapy for 6 weeks
- taking tamoxifen with postmenopausal bleeding
- with an unexplained vulval lump
- with vulval bleeding due to ulceration.

Consider red flag referral for patients with persistent intermenstrual bleeding and negative pelvic examination

Ovarian Cancer
- Following clinical history and pelvic examination if ovarian cancer is suspected measure CA125. If ≥35 IU/ml arrange an ultrasound of pelvis and abdomen / refer as red flag.

[Please note: CA125 should not be ordered without a pelvic examination]

Upper GI Cancer
- Red Flag referral for endoscopy/referral to specialist, patients of any age with dyspepsia and any of the following:
  - chronic gastrointestinal bleeding
  - dysphagia
  - progressive unintentional weight loss
  - persistent vomiting
  - iron deficiency anaemia
  - epigastric mass
  - suspicious barium meal results

Red Flag referral for patients presenting with:
- dysphagia
- unexplained upper abdominal pain and weight loss, with or without back pain
- upper abdominal mass without dyspepsia
- obstructive jaundice (depending on clinical state) – consider urgent ultrasound if available

Consider red flag referral for patients presenting with:
- persistent vomiting and weight loss in the absence of dyspepsia
- unexplained weight loss or iron deficiency anaemia in the absence of dyspepsia
- unexplained worsening of dyspepsia and:
  - Barrett’s oesophagus
  - Known dysplasia, atrophic gastritis or intestinal metaplasia
  - Peptic ulcer surgery over 20 years ago

Urgent endoscopy:
- patients aged 55 years and older with unexplained and persistent recent-onset dyspepsia alone.

Concerns regarding liver disease should be referred to a hepatologist

Brain and Cns Cancer
- Red Flag referral, patients with:
  - symptoms related to the CNS, including:
    - progressive neurological deficit
    - new-onset seizures
    - headaches
    - mental changes
    - cranial nerve palsy
    - unilateral sensorineural deafness in whom a brain tumour is suspected
  - headaches of recent onset accompanied by features suggestive of raised intracranial pressure, for example:
    - vomiting
    - drowsiness
    - posture-related headache
    - pulse-synchronous tinnitus or by other focal or non-focal neurological symptoms, for example blackout, change in personality or memory
    - a new, qualitatively different, unexplained headache that becomes progressively severe
    - suspected recent-onset seizures (refer to neurologist).

Consider red flag referral (to an appropriate specialist) in patients with rapid progression of:
- subacute focal neurological deficit
- unexplained cognitive impairment, behavioural disturbance or slowness, or a combination of these
- personality changes confirmed by a witness and for which there is no reasonable explanation even in the absence of the other symptoms and signs of a brain tumour.

Non-urgent referral or discussion with specialist for:
- unexplained headaches or recent onset:
  - present for at least 1 month
  - not accompanied by features suggestive of raised intracranial pressure.

Hematology Cancer
- Combinations of the following symptoms and signs warrant full examination, further investigation (including a blood count and film) and possible referral:
  - fatigue
  - drenching night sweats
  - fever
  - weight loss
  - generalised itching
  - breathlessness
  - bruising
  - bleeding
  - recurrent infections
  - bone pain
  - abdominal pain
  - lymphadenopathy
  - splenomegaly

The urgency of referral depends on the symptom severity and findings or investigations. [Please note lymphadenopathy as a single symptom does not normally need to be referred to haematology.]

Immediate referral, patients with:
- a blood count/film reported as acute leukaemia
- spinal cord compression or renal failure suspected of being caused by myeloma.

Red Flag referral:
- patients with persistent unexplained splenomegaly.

Bone and Sarcoma Cancer:
- a patient with a suspected spontaneous fracture.
- If the X-ray:
  - indicates possible bone cancer, refer urgently
  - is normal but symptoms persist, follow up and/or request repeat X-ray, bone function tests or referral.
- Red Flag referral (Soft tissue sarcomas), if a patient presents with a palpable lump that is:
  - greater than about 5cm in diameter
  - deep to fascia, fixed or immobile
  - increasing in size
  - painful
  - a recurrence after previous excision

If a patient has HIV, consider Kaposis’s sarcoma and make an urgent referral if suspected.

Urgently investigate:
- increasing, unexplained or persistent bone pain or tenderness, particularly pain at rest (and especially if not in the joint), or an unexplained limp. In older people metastases, myeloma or lymphoma, as well as sarcoma, should be considered.
### Cancer in Children and Young People

<table>
<thead>
<tr>
<th>Leukaemia (children of all ages)</th>
<th>Neuroblastoma (all ages)</th>
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</thead>
<tbody>
<tr>
<td>Immediate referral, children or young people with either:</td>
<td>Red flag referral, children with:</td>
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<tr>
<td>- Unexplained petechiae, or</td>
<td>- proptosis</td>
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<tr>
<td>- Hepatosplenomegaly</td>
<td>- unexplained back pain</td>
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<tr>
<td>Lymphomas</td>
<td>- leg weakness</td>
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<tr>
<td>Immediate referral, children or young people with either:</td>
<td>- unexplained urinary retention</td>
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<tr>
<td>- Hepatosplenomegaly, or</td>
<td>Wilms’ tumour (all ages)</td>
</tr>
<tr>
<td>- Mediastinal or hilar mass on chest X-ray</td>
<td>Red flag referral:</td>
</tr>
<tr>
<td>Red flag referral, children or young people:</td>
<td>- a child or young person presenting with haematuria</td>
</tr>
<tr>
<td>- With one or more of the following (particularly if there is no evidence of local infection):</td>
<td>Soft tissue sarcoma (all ages)</td>
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<tr>
<td>- non-tender, firm or hard lymph nodes</td>
<td>Red flag referral, a child or young person:</td>
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<tr>
<td>- lymph nodes greater than 2 cm in size</td>
<td>- presenting with an unexplained mass at almost any site that has one or more of the following features.</td>
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<tr>
<td>- lymph nodes progressively enlarging</td>
<td>- The mass is:</td>
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<tr>
<td>- other features of general ill-health, fever or weight loss</td>
<td>- deep to the fascia</td>
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<tr>
<td>- axillary node involvement (in the absence of local infection or dermatitis)</td>
<td>- non-tender</td>
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<td>- supraclavicular node involvement</td>
<td>- progressively enlarging</td>
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<tr>
<td>- with shortness of breath and unexplained petechiae or hepatosplenomegaly (particularly if not responding to bronchodilators).</td>
<td>- associated with a regional lymph node that is enlarging</td>
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<tr>
<td>Brain and CNS Tumours</td>
<td>- greater than 2 cm in diameter in size</td>
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<tr>
<td>Immediate referral, children or young people with:</td>
<td>Bone sarcomas (all ages)</td>
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<tr>
<td>- a reduced level of consciousness</td>
<td>Red flag referral, children or young people with:</td>
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<tr>
<td>- headache and vomiting that cause early morning waking or occur on waking as these are classical signs of raised intracranial pressure.</td>
<td>- rest pain, back pain and unexplained limp (a discussion with a paediatrician or X-ray should be considered before or as well as referral)</td>
</tr>
<tr>
<td>Immediate referral, children aged younger than 2 years with any of the following symptoms:</td>
<td>- persistent localised bone pain and/or swelling, and X-ray showing signs of cancer. In this case refer urgently.</td>
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<tr>
<td>- new-onset seizures</td>
<td>Retinoblastoma (mostly children less than 2 years)</td>
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<tr>
<td>- bulging fontanelle</td>
<td>Red flag referral, children with:</td>
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<tr>
<td>- extensor attacks</td>
<td>- a white pupillary reflex (leukocoria). Pay attention to parents reporting an odd appearance in their child’s eye</td>
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<tr>
<td>- persistent vomiting</td>
<td>- a new squint or change in visual acuity if cancer is suspected. (Refer non-urgently if cancer is not suspected.)</td>
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<tr>
<td>Red flag or immediate referral, children with any of the following neurological symptoms and signs:</td>
<td>- a family history of retinoblastoma and visual problems. (Screening should be offered soon after birth.)</td>
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<tr>
<td>- new-onset seizures</td>
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<td>- cranial nerve abnormalities</td>
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<td>- visual disturbances</td>
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<td>- gait abnormalities</td>
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<td>- motor or sensory signs</td>
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<td>- unexplained deteriorating school performance or developmental milestones</td>
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<tr>
<td>Red flag referral, children aged 2 years and older, and young people, with:</td>
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<tr>
<td>- a persistent headache where you cannot carry out an adequate neurological examination in primary care.</td>
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<tr>
<td>Red flag referral, children aged younger than 2 years with:</td>
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<tr>
<td>- any of the following symptoms suggestive of CNS cancer:</td>
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<td>- abnormal increase in head size</td>
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<td>- arrest or regression of motor development</td>
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<tr>
<td>- altered behaviour</td>
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<td>- abnormal eye movements</td>
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<tr>
<td>- lack of visual following</td>
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<tr>
<td>- poor feeding/failure to thrive</td>
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<tr>
<td>- squint, urgency dependent on other factors.</td>
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</table>