



**Wessex**  
Cancer Alliance

# Acute Oncology

By

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# What is Acute Oncology?



Acute Oncology is the prompt recognition and timely management of patients who develop an acute cancer-related or cancer treatment related problem, ensuring that they receive the care they need quickly and in the most appropriate setting.





# Who Are Acute Oncology Patients?

15%

- **Type I: Patients in whom a first diagnosis of cancer is suspected in the emergency setting. Acute Oncology Teams (AOT) have a key role in Malignancy of unknown Origin (MUO) and Carcinoma Unknown Primary (CUP)**

34%

- **Type II: Patients with known cancer who present as an emergency with acute complications of non-surgical treatment – including Systemic Anti-Cancer Therapy (SACT) or radiotherapy.**

51%

- **Type III a. Patients with known cancer that are acutely ill because of the disease itself: This group represent the largest proportion of emergency patients and often present with complex issues including comorbidity, progressive cancer and end of life care (EOL) needs.**
- **Type III b. Patients with known cancer that are acutely ill because of comorbidity. This group of patients will be managed by admitting physicians but may require AOS input where a cancer diagnosis or treatment might impact on the medical management and to support care planning, prognosis and ceiling of care.**



# Why?



TRUE 'SIZE' OF UNPLANNED CANCER CARE  
MACMILLAN NORTH MERSEY URGENT CANCER CARE PROJECT 2018-20 GRAVES E,  
MARSHALL E

## Cancer patients account for:

>10% of paramedic activity  
60% conveyance rate

Southwest Ambulance Service Trust

5% of ED presentations  
15% of ED admissions

80% of cancer patients presenting to ED admitted  
vs 25% of 'non-cancer' cancer

28% of chemotherapy patients presented to/admitted via ED during treatment

>10,000 SACT pts/year  
Merseyside & Cheshire

- A 3-year, 2361-patient study in an AOS ambulatory assessment unit, with clear clinical pathways and exclusive use of investigation equipment, resulted in an 18% admission rate compared with a 79% rate for oncology patients attending the emergency department
- AOS reduced length of stay by 6 to 8.4 days in two UK pilot studies

(Navani, 2014)





# How do acute oncology patients present at Primary care?

- Patient does not know – remember there is an acute oncology service
- Carers don't know don't understand what the problem may be and who to refer to
- Care Homes
- Type IIIa and b patients – Primary care teams may not be aware of this remit of the AOS team and these patients have a high potential to see Primary care in the first instance
- DN referrals
- 111/999 referrals

**28% of chemotherapy patients admitted to ED during treatment. Of these patients 8% were admitted by their GP** (North Mersey Macmillan Project)

*'All patients receiving systemic anti-cancer treatment are provided with emergency contact numbers for a 24-hour advice line, they are asked to contact this number if they are worried about any symptoms or problems that arise. Though the majority of patients do contact the advice lines as directed, some may not recognise the significance of symptoms or are not sure whom to contact. This group of patients may instead present to a number of health care professionals: accident and emergency, general practitioner, community nursing team or community pharmacists'*

(RCP 2022)

## What are your thoughts?





# Primary care roles and teams with potential acute oncology symptom exposure

Reception	Triage	GP	Nurse
Advanced Clinical Practitioners	Acute Visiting Team	ARRS	Frailty Team
Palliative Team	Enhanced Health Care in Care Home	District Nursing	111/999



# Common acute oncology emergencies

## Key questions to ask your patient who has a diagnosis of cancer

- > What matters to you?
- > What is your understanding of your cancer and the goal of your cancer treatment?
- > Do you have a cancer keyworker / cancer nurse specialist?
- > Have you been given an alert card for cancer treatment?
- > Are you currently taking any tablets/injections for cancer treatment?
- > Have you had any cancer treatment (chemotherapy) (by injection/infusion or by mouth) in the past week?
- > Have you had any immune treatment for cancer in the past 12 months?
- > Have you ever had radiotherapy for cancer?

Acute oncology emergency	Definition / further information
Febrile neutropenia (FN)	Defined as a neutrophil count of $<0.5 \times 10^9/L$ with a Temperature $>38^\circ C$ or $<36^\circ C$ , and is associated with mortality between 2% and 21%
Metastatic spinal cord compression (MSCC)	Includes both spinal cord and cauda equina compression in patients with known malignancy
Hypercalcaemia of malignancy	A common complication of malignancy. Patients often require bone-directed therapy
Oncological immunotherapy (IO) complications	Immune checkpoint inhibitors (ICIs) can elicit a wide spectrum of autoimmune-like side effects, including dermatitis, colitis, pneumonitis, hepatitis and endocrinopathies including hypophysitis
New brain lesions	May be primary or secondary. Require liaison with neurosurgery and oncology; commence dexamethasone
Superior vena cava obstruction (SVCO)	Requires histological diagnosis for decision of optimal treatment. Few patients will require immediate intervention

Acute Care Toolkit 7 (2023) Available from:

[Acute care toolkit 7: Acute oncology on the acute medical unit | RCP London](#)





Cancer most commonly causing complication	Presenting symptoms and signs
<p><b>MSCC</b></p> <p>Breast cancer Lung cancer Lymphoma Myeloma Prostate cancer</p>	<p>Persistent back pain Limb weakness Sensory loss Bladder dysfunction Altered bowel habit Loss of anal tone</p>
<p><b>Raised ICP and vasogenic oedema</b></p> <p>Breast cancer Cancer of unknown primary Colon cancer Lung cancer Melanoma</p>	<p>Headache Vomiting Changes in vision Seizures Decreased GCS Vlth nerve palsy Papilledema Cushing's reflex</p>
<p><b>SVCO</b></p> <p>Breast cancer Germ cell tumours Lung cancer Lymphoma Thymic cancers</p>	<p>Shortness of breath Cough Dysphagia Head, neck and upper limb oedema Cyanosis Stridor Non-pustatile JVP</p>
<p><b>Malignant hypercalcaemia</b></p> <p>Breast cancer Lung cancer Myeloma Renal cell carcinoma</p>	<p>Depression Nausea and vomiting Constipation Abdominal pain Polydipsia/polyuria Dehydration Confusion</p>



# The essentials of acute oncology (Palmer et al, 2023)

## Key points

- Patients with cancer presenting with back pain and red-flag symptoms should have a whole-spine MRI scan within 24 h of presentation.
- Neutropenic sepsis should be suspected in any unwell patient with cancer within 60 days of receiving systemic anti-cancer therapy; patients should receive broad-spectrum intravenous antibiotics within 1 h and should not wait for full blood count results.
- Patients with cancer are often prescribed glucocorticoids, especially as supportive care; all unwell patients should be assessed for adrenal insufficiency.
- Do not assume that nausea and vomiting are always treatment related; consider other differential diagnoses.
- Multiple targeted drugs have recently been identified with an elevated risk of pneumonitis and this should be carefully investigated for in any patient presenting with breathlessness or a dry cough.



[Available from: The essentials of acute oncology](#)

[RCP Journals](#)





Symptom	Anti-cancer therapies most common cause	Differential Diagnoses
Nausea and Vomiting	Cranial radiotherapy Abdominal radiotherapy Chemotherapies: Carboplatin Clofarabine Cisplatin Cyclophosphamide Docetaxel Epirubicin Ifosfamide Irinotecan Melphalan Methotrexate Oxaliplatin Streptozocin	Hypercalcaemia Raised intracranial pressure Bowel obstruction Gastrointestinal infection



Symptom	Anti-cancer therapies most common cause	Differential Diagnoses
Diarrhoea	Abdominal/pelvic radiotherapy 5-Fluorouracil Capecitabine	Gastrointestinal infection Constipation with overflow diarrhoea Hyperthyroidism Inflammatory bowel disease Celiac disease Ischaemic colitis

Symptom	Anti-cancer therapies most common cause	Differential Diagnoses
Pneumonitis	Thoracic radiotherapy Bleomycin Irinotecan Paclitaxel	Pneumonia PE Progressive disease Lymphangitis carcinomatosis

# Primary Care Triage Tool: [MAC17579 UKONS-](https://www.macmillan.org.uk/primarycare-poster-june2017-final-printer)

[PRIMARYCARE-POSTER-JUNE2017-FINAL-PRINTER \(macmillan.org.uk\)](https://www.macmillan.org.uk/primarycare-poster-june2017-final-printer)

## Oncology/Haematology Treatment Toxicity Risk Assessment Tool - Primary Healthcare Professionals (June 2017)

### BACKGROUND

Primary Care Risk Assessment Tool for Oncology/Haematology Patients who are:

- Receiving or received systemic anti-cancer therapies.
- Receiving or recently received radiotherapy.
- At risk of disease related immunosuppression.

It is important that the side effects of treatment are not underestimated and that the significance of symptoms is recognised.

This evidence-based risk assessment tool grades the presenting symptoms and advises action accordingly using a RAG system. It is important that the significance of lower level amber toxicities are recognised.

Systemic anti cancer therapy is an overarching term that includes cytotoxic chemotherapy, immunotherapy, monoclonal antibodies and new novel therapies.

### RISK ASSESSMENT PROCESS INSTRUCTIONS FOR USE

All patients receiving Systemic Anti-Cancer Therapy are provided with a 24 Hour Advice Line telephone number. We recommend that you use this tool to risk assess any symptom the patient mentions to you. Patients might only report symptoms that are most worrying to them, and not mention others that may be significant. It is very helpful to use the risk assessment as a quick checklist to identify any potential problems.

If the patient scores **RED** or **AMBER** for any symptom you should contact the **24 Hour Advice Line** immediately for a full triage assessment unless **URGENT** referral to A&E is advised.

Patients may require urgent assessment in a suitable clinical area that provides access to investigation and treatment facilities. The advice line team will arrange assessment and/or further monitoring for the patient if they feel it is required.

Please be aware that the period of time that patients may experience post treatment side effects/complications may vary according to the treatment they have received, and can be as late as 12 months post treatment.

Patients may present with problems other than those listed below, be cautious, and if in doubt about anything contact the advice line.

### ADVICE LINE NUMBER

Advice line numbers will differ across the country - contact your oncology or acute oncology service to identify your local number before adding here.

The information contained in this guideline is a consensus of the development and consultation group's expert opinions on current treatment. Clinicians using this guideline are expected to use independent clinical judgment in the context of the presenting clinical circumstances to determine any patient's care or treatment.

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CANCER SUPPORT

Please note: If patient is having or has received immunotherapy within the last 12 months or is taking Capecitabine, refer to advice line for review. Please ask patient to delay any oral treatment until they have had advice line review.

TOXICITY	If your patient scores <b>RED</b> or <b>AMBER</b> for any toxicity you should contact the 24 Hour Advice Line immediately for a full triage assessment.			
<b>Fever and/or generally unwell AND</b> received systemic anti-cancer therapy (chemotherapy oral or I.V.) within the last 6 to 8 weeks, or is at risk of disease related immunosuppression.	If temperature is > 37.5°C or < 36°C or generally unwell, contact telephone advice line for URGENT assessment. <i>Risk of neutropenic sepsis.</i> <b>ALERT</b> - Patients on steroids/analgesics or who are dehydrated, may not present with pyrexia but may still have infection. <i>If in doubt phone for advice.</i>			
<b>Fever</b> In patients who have <b>NOT</b> received oral or I.V systemic anti-cancer therapy within the last 6 weeks or are <b>NOT</b> at risk of disease related immunosuppression.	No fever, 36.0°C - 37.4°C	> 37.5°C - 38°C	> 38°C - 40°C	
<b>Anorexia</b> How much are they eating and drinking? Any recent weight loss? Any contributory factors e.g. diarrhoea, vomiting, nausea or mucositis? If yes, see below for specific problem.	None or no change from normal.	Loss of appetite without alteration in eating habits.	Oral intake altered without significant weight loss or malnutrition.	Oral intake altered in association with significant weight loss/ malnutrition. Possible life threatening complications e.g collapse.
<b>Bleeding</b> Is it a new problem? Is it continuous? What amount? Where from? Is the patient on anticoagulants or antiplatelets? If your clinical assessment gives concern about active blood loss, arrange URGENT A&E attendance for medical assessment.	None or no change from normal.	Mild, self-limited controlled by conservative measures.	Uncontrollable haemorrhage - if haemodynamically unstable and/or large volume blood loss - <b>consider 999</b>	
<b>Bruising</b> Is it a new problem? Is it local/generalised? Is there any trauma involved?	None or no change from normal.	Petechiae/bruising, localised.	Moderate petechia/purpura. Generalised bruising.	Generalised petechia/purpura. Generalised bruising.
<b>Chest pain</b> Onset? What makes it worse? Radiation? Any cardiac history?	None or no change from normal.	<b>URGENT A&amp;E attendance for medical assessment - 999.</b> A number of chemotherapy drugs are cardiotoxic, there is also an increased risk of pulmonary embolism in this group of patients. Urgent assessment is recommended.		
<b>Confusion/cognitive disturbance</b> Is this a new symptom? Is it getting worse & when did it start? Is it constant? Has there been a recent change in medication? Is it associated with any other symptom? If yes, please see specific symptom?	None or no change from normal.	Mild disorientation not interfering with normal activity. Slight decrease in level of alertness.	Moderate disorientation and/or cognitive disability limiting normal activity.	Severe cognitive disability and /or confusion; severely limiting activity/function. Altered level of consciousness - loss of consciousness. <b>999 - urgent A&amp;E assessment.</b>
<b>Constipation</b> How long since bowels opened? What is normal? Any abdominal pain/vomiting? Has the patient taken any medication such as opiates? <b>Consider obstruction and/or perforation.</b>	None or no change from normal.	Mild - no bowel movement for 24 hours over pre-treatment normal. Advice - Dietary advice, increase fluid intake, review supportive medication.	Moderate - no bowel movement in last 48 hours over pre-treatment normal.	Severe - no bowel movement in last 72 hours or more over pre-treatment normal.
<b>Diarrhoea</b> How many days has this occurred for? How many times in a 24 hour period? Any blood or mucus in stool? Has the patient taken any anti-diarrhoeal medication? Does the patient have any abdominal pain/discomfort? For how long? See specific toxicity for pain if applicable.	None or no change from normal.	Increase of up to 3 bowel movements a day over pre-treatment movements or mild increase in ostomy output.	Increase of 4 or more episodes a day over pre-treatment normal or moderate increase in ostomy output. Nocturnal or new incontinence. Moderate to severe cramping. Bloody diarrhoea.	
Patients who are receiving or have received immunotherapy in the previous 12 months are at risk of treatment related colitis and should be managed promptly. Always contact the advice line.				
<b>Urinary Disorder</b> Is this a new problem? Is there any change in urine colour? Any blood in the urine? Any new incontinence, frequency or urgency? Are they passing normal amounts? Drinking normally? Thirsty? <b>Consider hypercalcaemia.</b>	None or no change from normal.	Mild to moderate symptoms, with an increase in frequency, urgency, dysuria or nocturia. Some reduction in output.	Severe symptoms with severe reduction in urine output. Possible retention/obstruction. New incontinence. New or increasing haematuria.	

# Primary Care Triage Tool

## continued.....

<b>Dyspnoea/shortness of breath</b> Is it a new symptom? Is dyspnoea worsening? Is there any chest pain? - link to specific toxicity. What can the patient do? (Alteration in performance status.) Consider SVCO / Anaemia / Pulmonary Embolism / Pneumonitis etc.	None or no change from normal.	New onset shortness of breath with moderate exertion.	New onset shortness of breath on minimal exertion and / or shortness of breath at rest.
<b>Extravasation - drug leakage around infusion site or along infusion pathway</b> Has the patient got pain, soreness or ulceration around or along the infusion pathway/ injection site/central venous catheter?	None.	History of receiving intravenous infusion via central venous line or peripheral cannula with pain, burning, soreness and/or inflammation or swelling around or along infusion site pathway. Certain chemotherapy drugs can cause long term severe tissue damage if extravasation occurs.	
<b>Infection - what is the patients temperature? if abnormal see fever above.</b> Patients who are receiving chemotherapy or are at risk of immunosuppression that have any signs/symptoms of infection, should be referred to the advice line for assessment.	None.	Generally well with localised signs of infection.	Generally unwell with signs/symptoms of infection. <b>If there are signs of severe symptomatic infection consider possible life threatening sepsis and dial 999 for urgent A&amp;E assessment.</b>
<b>Nausea and/or Vomiting</b> How many days/episodes? What is the patient's oral intake? Is the patient taking antiemetics as prescribed? Assess patient's urinary output. Does the patient have constipation or diarrhoea? (See specific toxicity)	None.	Mild symptoms - able to eat/drink with reasonable intake and/or 1 episode of vomiting in 24 hours. <b>Advice - review antiemetics and ensure patient is taking as prescribed.</b>	Can eat/drink but intake significantly decreased and/or 2-5 episodes of vomiting in 24 hours.
<b>Neurological symptoms (sensory and/or motor)</b> When did the problem start? Is it continuous? Is it getting worse? Is it affecting mobility/function? Any constipation or urinary or faecal incontinence? Does the patient have back pain? Consider spinal cord compression.	None.	Any of the following signs or symptoms - mild paraesthesia, subjective weakness with no objective findings, back pain.	Mild or moderate sensory loss, moderate paraesthesia, mild weakness with no loss of function with or without back pain.
<b>Oral/Stomatitis - Sore Mouth</b> How many days? Is there evidence of mouth ulcers? Is there evidence of infection? Are they able to eat/drink? Assess patient's urinary output.	None.	Painless ulcers, erythema, mild soreness, able to eat/drink. <b>Advice - use mouthwash as recommended.</b>	Painful erythema, oedema or ulcers but can eat/drink.
<b>Pain</b> Is it a new problem? Where is it & when did it start? Any analgesia? Consider thrombosis - any swelling/redness? Back pain - consider spinal cord compression. Headache - consider brain metastases.	None or no change from normal.	Mild pain. Not interfering with function. <b>Advice - analgesia review.</b>	Moderate pain. Pain interfering with function and/or daily activities.
<b>Red hands and/or feet (palmar - plantar syndrome)</b> This may be a side effect of certain chemotherapy treatments and requires specific action to be taken.	None.	Numbness, tingling, erythema or swelling of hands and/or feet, with or without pain.	Moist desquamation, ulceration, blistering and severe pain.
<b>Performance status and/or Fatigue</b> Has there been a recent change in performance status/activities of daily living? How many days has this occurred for? Any other associated symptoms? If yes, see specific symptom.	No recent change from patients normal.	Symptomatic but completely ambulant. Increased fatigue but not affecting normal activities. Ask the patient to discuss this with their key worker. <b>N.B. If receiving or received immunotherapy then please see below.</b>	Symptomatic, but ambulatory and capable of all self care, but unable to carry out any work activities. Up and about more than 50% of waking hours. Moderate or severe fatigue causing difficulty or loss of ability to perform some activities.
Patients who are receiving or have received immunotherapy in the previous 12 months are at risk of treatment related endocrinopathies, any new or increasing fatigue should be investigated. Please contact the advice line.			
<b>Rash</b> Is the patient systemically unwell? Is it localised or generalised? How long has it been there? Any signs of infection, such as pus or pyrexia? Is it itchy? For haematology patients, contact haematology team.	None or no change from normal.	Rash covering less than 10% of the body surface (mild) with or without other symptoms, pruritis, burning, tightness.	Rash covering greater than 10% of the body surface area; with or without symptoms. Or bleeding with or without trauma. Or signs of infection. Or generally unwell.
<b>Ocular/eye problems</b> Any pain, redness, visual disturbance or discharge.	None or no change from normal.	Mild symptoms not interfering with function.	Moderate to severe symptoms, interfering with functions or any visual disturbance.



# For your patients:



## Your traffic light system

**Call the 24 hour advice line immediately or call 999 if told to do so**

- Chest pain.
- Difficulty breathing.
- Generally unwell.
- Shivery episodes or flu like symptoms.
- Temperature above 37.5°C.
- Temperature below 36°C.
- Being sick (vomiting).
- Diarrhoea (4+ loose bowel movements in 24 hours).
- Bleeding or unusual bruising.
- Swollen or painful legs.
- Sore mouth that stops you eating or drinking.

**Call the advice line within 24 hours but call immediately if your symptoms get worse**

- Sore mouth but can still eat and drink.
- Itchy or painful skin changes.
- Sore, watery eyes.
- Increase in pain.
- Constipation.
- Feeling sick (nausea).
- Diarrhoea (2-4 loose bowel movements in 24 hours).

**Be vigilant and if things get worse or continue contact the 24 advice line**

- Tiredness.
- Skin changes that are not itchy or painful.
- Mood changes.
- Difficulty in coping with the treatment.
- Loss of appetite.



Amber + Amber = Red

VCT003





# Opportunities

- Coding- Cancer Treatments
- Cancer Care Reviews
  - Understand the role of AOS
  - How to contact
  - Review patient understanding and knowledge of service
- Advice
  - Primary care utilise their AOS colleagues for advice and guidance
  - Look to admit via this service
- Education & Resources
  - Primary Care UKONS Tool
  - Acute Oncology Presentations
  - UKONS Acute oncology passport
- Admission reviews -LERNs
- Shared Care/Collaboration
  - Assist with facilitation of discharge
  - On-going care
  - Reducing risk for re-admission



# In the Future

- Wessex Cancer Alliance Acute Oncology Page
- Comprehensive Directory of Acute Oncology Services
- UKONS Acute Oncology Passport Level 1-4

**What is Acute Oncology?** Acute Oncology is the prompt recognition and timely management of patients who develop an acute cancer-related or cancer treatment related problem, ensuring that they receive the care they need quickly and in the most appropriate setting. **Furthermore, there is an acknowledgement that the responsibility of recognition, assessment and management of acute oncology presentations does not lie solely with the members of the acute oncology service and that acute oncology care begins at the first presentation of the patient to a health care professional**

## Who are Acute Oncology Patients?

- **Type I:** Patients in whom a first diagnosis of cancer is suspected in the emergency setting. Acute Oncology Teams (AOT) have a key role in Malignancy of unknown Origin (MUO) and Carcinoma Unknown Primary (CUP)
- **Type II:** Patients with known cancer who present as an emergency with acute complications of non-surgical treatment – including Systemic Anti-Cancer Therapy (SACT) or radiotherapy.
- **Type III a.** Patients with known cancer that are acutely ill because of the disease itself: This group represent the largest proportion of emergency patients and often present with complex issues including comorbidity, progressive cancer and end of life care (EOL) needs.
- **Type III b.** Patients with known cancer that are acutely ill because of comorbidity. This group of patients will be managed by admitting physicians but may require AOS input where a cancer **diagnosis or treatment might impact on the medical management and to support care planning, prognosis and ceiling of care.**

## UKONS Primary Care Triage Tool

**Primary Care advice for side effects of cancer treatment (including immunotherapy, radiotherapy and patients at risk of immunosuppression)**

As new cancer treatments are developed it is increasingly difficult for primary care to know what actions to take when patients present with new symptoms. [Some of these actions should be immediate.](#)

Macmillan and the UK Oncology Nursing Society have created a tool to support Primary Care download here:

<https://www.macmillan.org.uk/healthcare-professionals/news-and-resources/guides/haematology-and-oncology-risk-assessment-tool>



**UKONS**  
Oncology Nursing Society

## ACUTE ONCOLOGY INITIAL MANAGEMENT GUIDELINES

Version 4.0  
13.02.2023 (review date: 3 years or sooner if required due to new evidence)  
Please check that you have the latest version.

**Guidelines for the initial management of adult patients who have a cancer diagnosis, and present as an emergency or unplanned admission with a complication of their disease or cancer treatment.**

Download here:

[https://www.ukons.org/site/assets/files/1067/ukons\\_ao\\_initial\\_management\\_guidelines\\_final\\_version\\_2023.pdf](https://www.ukons.org/site/assets/files/1067/ukons_ao_initial_management_guidelines_final_version_2023.pdf)



# The Macmillan Learning Hub

MACMILLAN  
CANCER SUPPORT



## Acute Oncology Teams:

Hampshire Hospitals:

**01962 825561**

University Hospital Southampton:

**02381 201345**

Portsmouth Hospital:

**02392 283316**

University Hospital Dorset

**0300 019 4302**

Our education and training can be easily accessed on the Macmillan Learning Hub. By creating a free account, you can explore a range of practical and trusted resources to support you in your work.

## Level 1 Acute Oncology e-learning module with competence passport



### Description

Are you looking to enhance your understanding of Acute Oncology? This e-learning module will equip you with the essential knowledge required to support people with the problems they may experience as a result of living with cancer or from its treatment.

On completion of the module, you will:

- Understand the meaning of acute cancer care and the oncology emergency services
- Be aware of common acute symptoms that patients may experience as a result of their cancer or its treatment
- Identify some common patient presentations of symptoms with acute cancer or cancer treatment complications
- Be able to recognise potential emergency symptoms and take appropriate action within your sphere of responsibility to ensure urgent care and optimal outcomes for people with cancer
- Provide information, care, support, and signposting for people living with cancer within your sphere of responsibility

This module is aligned with national acute oncology competencies and provides learners with Level 1 (core) knowledge.

Level 2 – Intermediate (Still in pilot stage) will be delivered by e-learning Guy's Cancer Academy  
Aimed at: Registered healthcare professionals working in areas that accept, assess and/or admit acutely unwell patients:

## About our primary care top tips

Macmillan GP advisers have collaborated with members of the Macmillan primary care community to develop a '10 top tips' series of downloads. The PDFs below offer practical hints, tips and information on a variety of different primary care situations and scenarios.

Spinal cord compression, Vomiting in cancer, GI Symptoms, Breathlessness

[macmillan.org.uk/healthcare-professionals/for-your-role/doctor/gp/top-tips-for-primary-care](http://macmillan.org.uk/healthcare-professionals/for-your-role/doctor/gp/top-tips-for-primary-care)



## Other Clinical Resources:

**The essentials of acute oncology:**  
[www.rcpjournals.org/content/23/1/45](http://www.rcpjournals.org/content/23/1/45)



**Acute Care Toolkit 7 (2023)**  
Available from:  
[www.rcplondon.ac.uk/guidelines-policy/acute-care-toolkit-7-acute-oncology-acute-medical-unit](http://www.rcplondon.ac.uk/guidelines-policy/acute-care-toolkit-7-acute-oncology-acute-medical-unit)



**CKS: Neutropenic Sepsis**  
Available from:  
[www.cks.nice.org/topics/neutropenic-sepsis](http://www.cks.nice.org/topics/neutropenic-sepsis)

**ONCOASSIST – APP Version**  
Free app provides Drug info - side effects and drug interaction checker.



# Case Studies



# Case Study 1

- 74 year old lady, breast cancer with bone metastases and hypertension
- Medication – ramipril 10mg, amlodipine 5mg, adcal D3 twice daily
- Denosumab treatment, last given 1 week ago
- Diarrhoeal illness for 5 days which is settling
- Comes with weakness, tingling in the hands and muscle cramps



# Cast Study 1 Answer

- Hypocalcaemia secondary to denosumab and eGFR dip
- Ensure calcium, vitamin D and U&E checked
- Stop ramipril whilst eGFR improves
- Check adcal D3 compliance
- Increase adcal D3 dose
- Admission depends on blood levels and symptoms
- Could her ramipril be switched for something less nephrotoxic?



# Case Study 2

- 40 year old lady. On ipilimumab for metastatic melanoma
- Second cycle of treatment given 4 days ago
- Comes with a 1 day history of severe watery diarrhoea and abdominal pain. 10 episodes of diarrhoea
- Examination – globally tender abdomen. Pulse 105, BP 108/70, oxygen saturation 98%, temperature 36.5



# Case Study 2 Answer

- Ipilimumab is immunotherapy
- Immunotherapy has a different side-effect profile to standard chemotherapy
- Side-effects generally related to over-activation of the immune system and can involve GI, liver, skin, nervous and endocrine systems
- Requires urgent admission for assessment



# Case Study 3

- 67 year old lady. Recent breast cancer diagnosis. On neoadjuvant chemotherapy. No other PMH
- Has come to see you in a morning surgery
- Cough and cold for 2 days, temperature measured this morning at home 37.8, rigors
- First cycle of treatment 10 days ago
- Examination – chest left basal crackles, sounds bugged up, temperature 37.7, oxygen saturation 97%, pulse 87, BP 118/74, respiratory rate 24



# Case Study 3 Answer

- Have to assume this is neutropenic sepsis
- Urgent transfer to ED for assessment unless unstable then 999 to A&E
- Encourage all patients in the community at risk to have their own thermometer
- Clarify if patient has had any recent anti-pyretics
- NICE CKS has a page on neutropenic sepsis



# Case Study 4

- 60 year old man. On adjuvant chemotherapy for colorectal cancer.
- No other PMH
- Comes with a sore mouth and painful swallow for 3 days. Last chemotherapy 7 days ago
- Examination – temperature 36.7, pulse 78, BP 132/84, oxygen saturation 98%. Inflamed oropharynx with ulceration and evidence of oral thrush



# Case Study 4 Answer

- Chemotherapy-induced stomatitis and possible oral thrush
- Consider risk of neutropenic sepsis and would you check bloods?
- Treat with anti-fungals (caution with fluconazole drug-interactions)
- Mouth care with difflam initially, but Secondary care may have further options (some unlicensed)