NCD
SYMPOSIUM

Acute Oncology Service (AOS)- UK experience

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What we will cover today:

Statistics on Cancer- Global and UK.

Routes of new cancer presentations (UK).

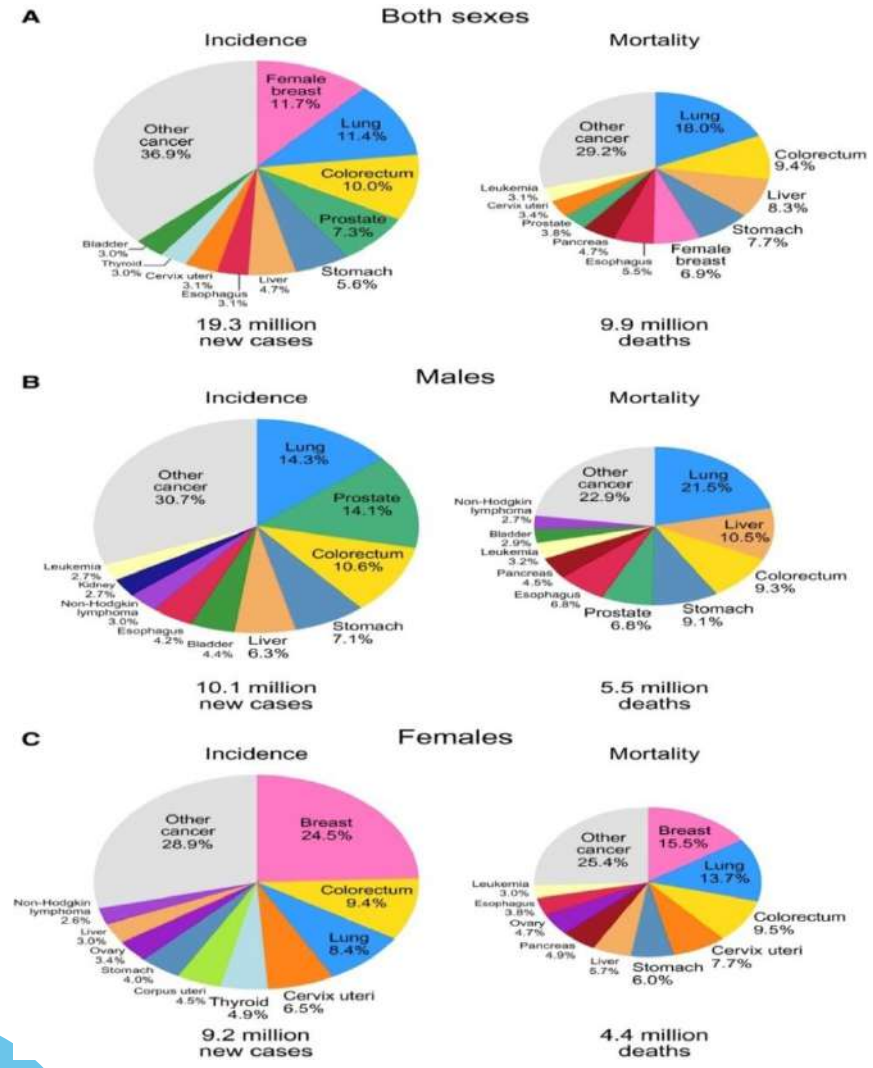
History and Role of Acute Oncology Service (AOS).

Audit Data from one NHS Trust.

Key aspects of acute oncology care.

Impact of AOS on cancer patient journey.

How common is cancer:



Distribution of Cases and Deaths for the Top 10 Most Common Cancers in 2020 for (A) Both Sexes, (B) Men, and (C) Women.

Source: GLOBOCAN 2020
(on line database that provide data for 36 types of cancer in 185 countries) (1)

2019- UK Cancer statistics

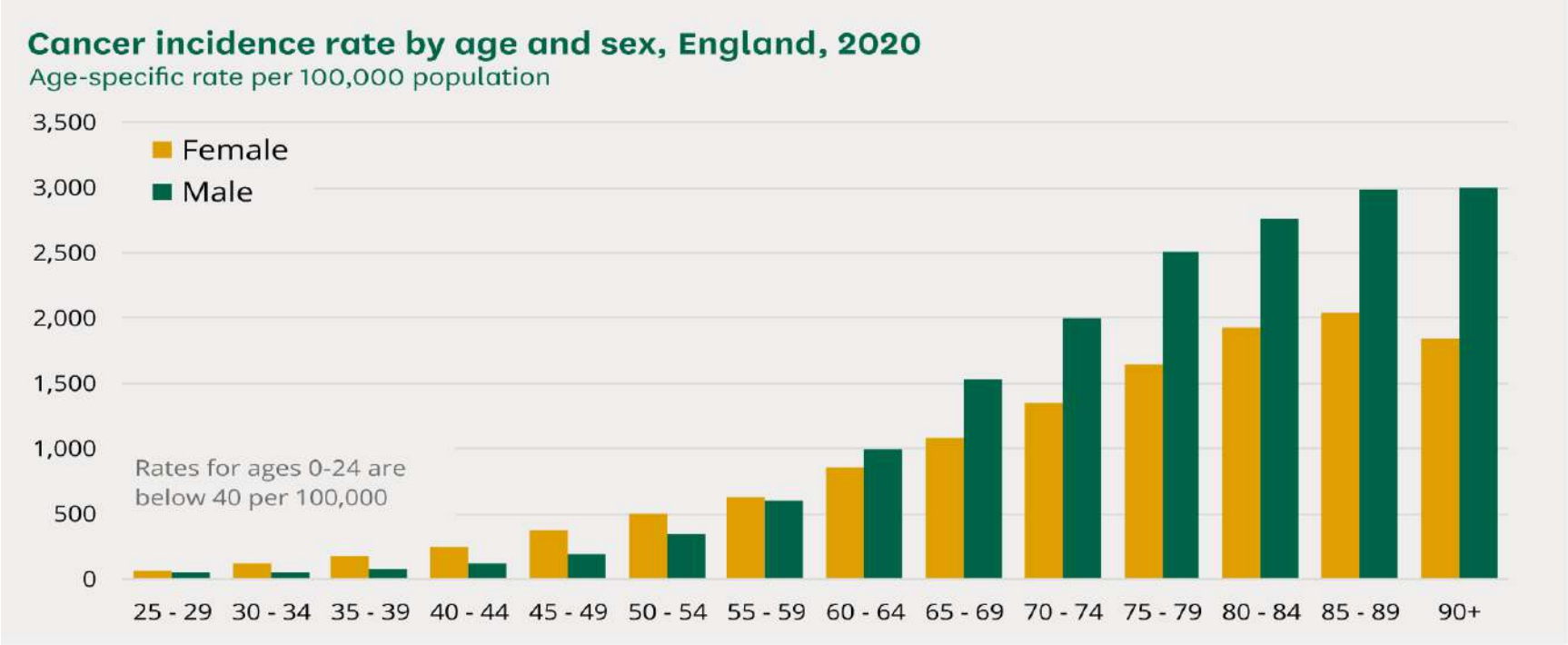
New diagnosis- 387,820 patients

200,386 were in men
187,434 were in women

Compared to 2017 -this is an increase of just over 21,500 cases (around 5.8%).

In men this was 7.2% increase (up from 186,883) and in women up for 4.4% (up from 179,420) (2).

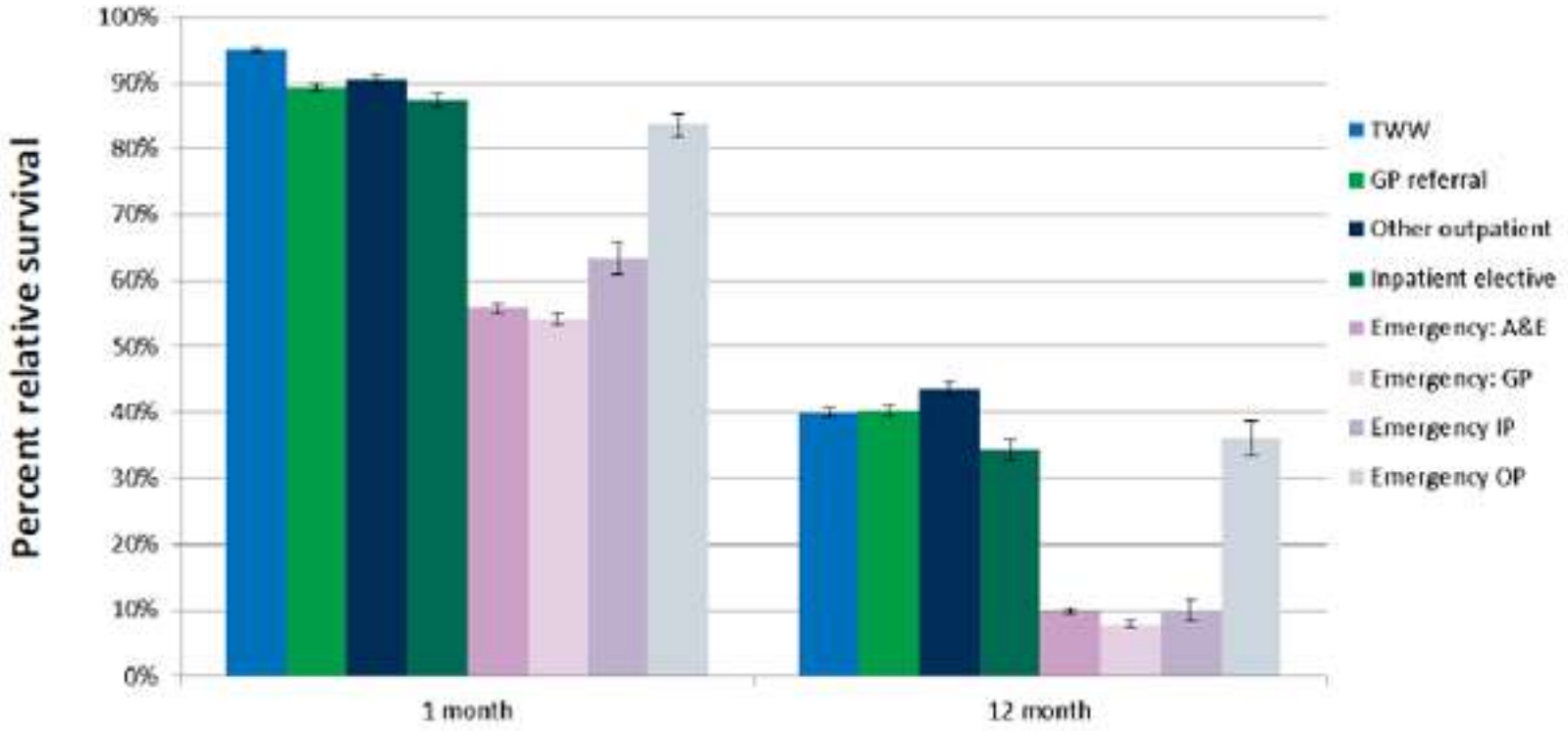
Cancer incidence varies with age and sex



Overall incidence of cancer was 21% higher in men than in women in 2020. Over half of people newly diagnosed with cancer are aged over 70. Among people aged 25 to 59, incidence rates are higher in women than in men. Among people aged over 65, incidence rates are around 50% higher in men than in women (3).

What percentage of first presentations come via an emergency route?

20%- 60.000 a year



1-month and 12-month relative survival estimates for lung cancer for non-emergency Routes and Emergency subgroups, England, 2006-2008 (4)

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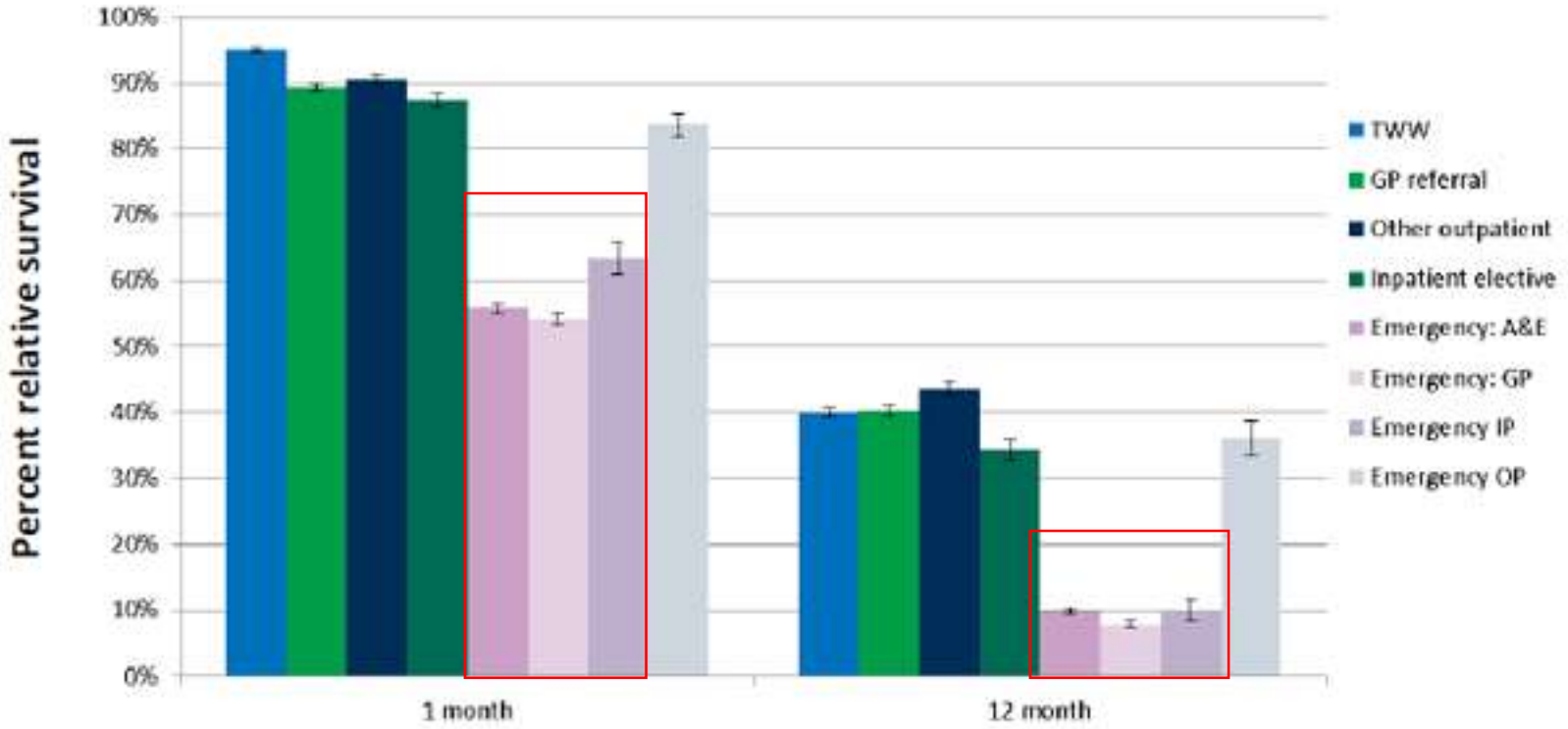

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History of Acute Oncology Service (AOS)

In United Kingdom–wide appreciation of the systemic failings of emergency cancer care- led to the creation of a new subspecialty, Acute Oncology.

It was meant to bridge the gap between admitting teams, oncology and palliative care and providing support to cancer patients.

History of AOS

Acute Oncology Services were developed in response to following:

- A National Confidential Enquiry into Patient Outcome and Death (2008)
- National Chemotherapy Advisory Group (NCAG, 2009),

Recommendations to how the Acute Oncology service can be run (with the aim of ensuring that systematic approach is taken to dealing with cancer related emergencies) were offered based on Acute Oncology Quality Indicators (Peer Review) and The Clinical Advice to Cancer Alliances for the Commissioning of Acute Oncology Services.

AOS

- Acute oncology is a new subspecialty that is rapidly evolving field. Liaises closely with other specialties such as Emergency Care, Acute Medicine, Palliative care, other specialities and Allied professionals in order to provide a cohesive patient service for patients with cancer.

- The AOS supports admitting medical teams by streamlining the care of the unplanned cancer-related admission. i.e. treatment related toxicities, cancer related complications or new presentations of cancer.

AOS (Tertiary care, Secondary care or District General hospitals)

The AOS is typically based in a hospital:

- Doctors
- Specialist AOS nurses

The team works closely with other hospital departments, medical, surgical and palliative care department.

Cancer/treatment related complications/Oncological emergencies

- Febrile Neutropenia or Neutropenic sepsis- treatment related
- Metastatic Spinal Cord Compression- cancer related
- Hypercalcaemia-cancer related
- Superior Vena Cava Obstruction (SVCO)-cancer related
- Tumour lysis syndrome (TLS)-treatment related/cancer related
- Anaemia, Bleeding, Electrolyte imbalance, pain, mucositis, infection, effusions etc - treatment related/cancer related
- New cancer diagnosis

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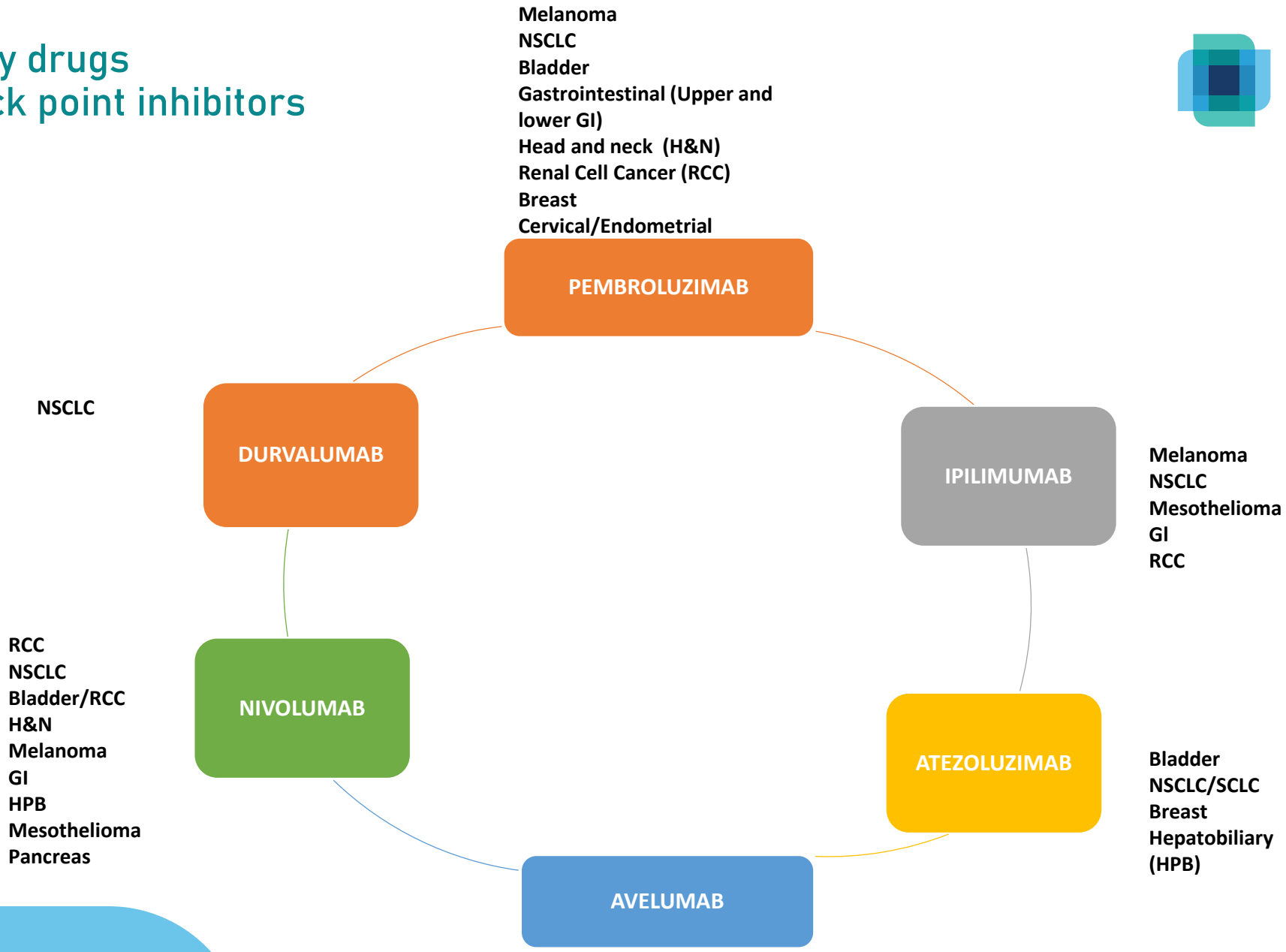
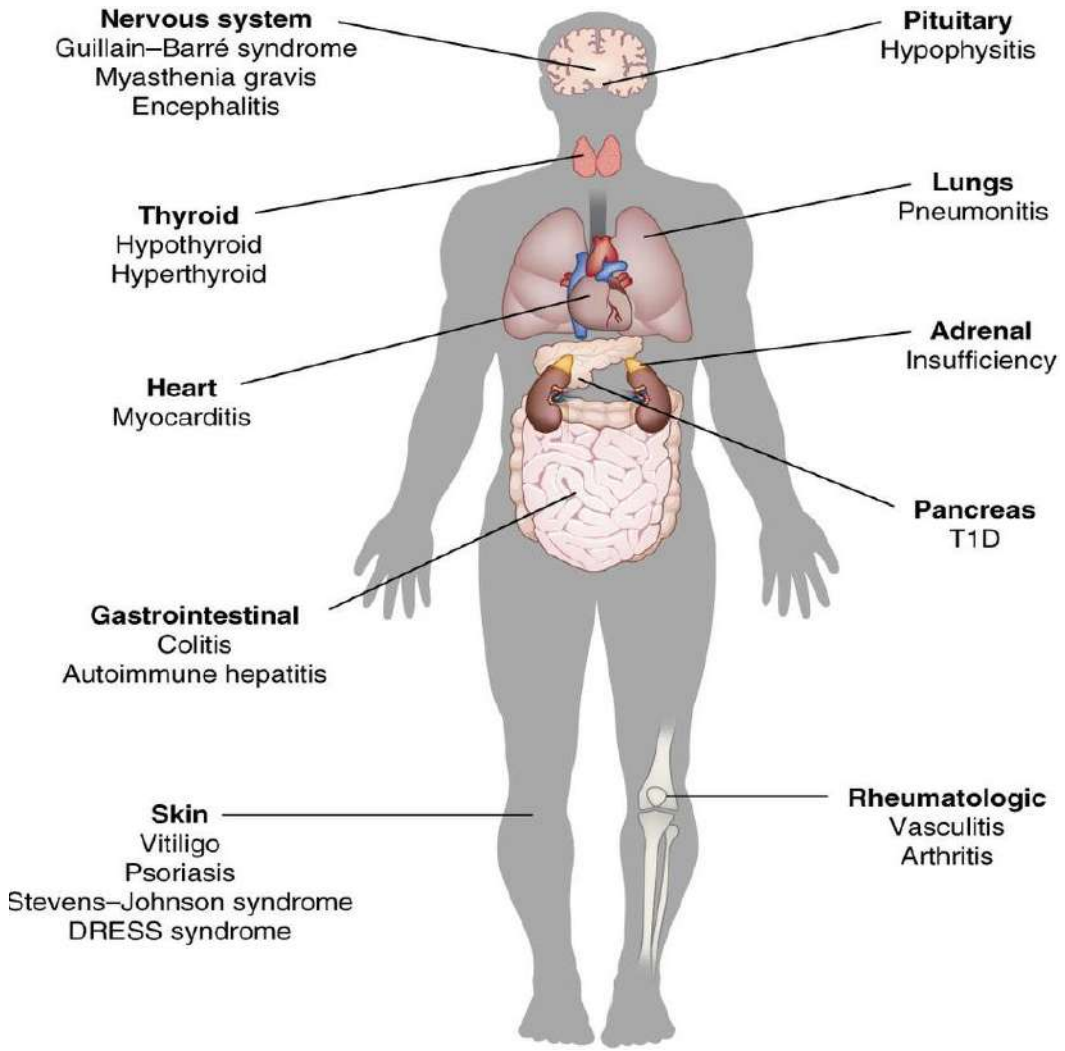
Immunotherapy drugs
PD1/PDL1/Check point inhibitors



Immunotherapy related toxicities



Nature Medicine **23**, 540–547 (2017) (5)

Suspected neutropenic sepsis

ONCOLOGICAL/MEDICAL EMERGENCY

- Patients die and die quickly
- Neutrophil count of <1.0 x 10^9 / L
- Fever (38° and above) +/- other signs or symptoms consistent with clinically significant sepsis.

Consider this in all patients on chemotherapy (or within 60 days of last dose)

Initial investigations

Clinical Examination:

As per any septic patient and:

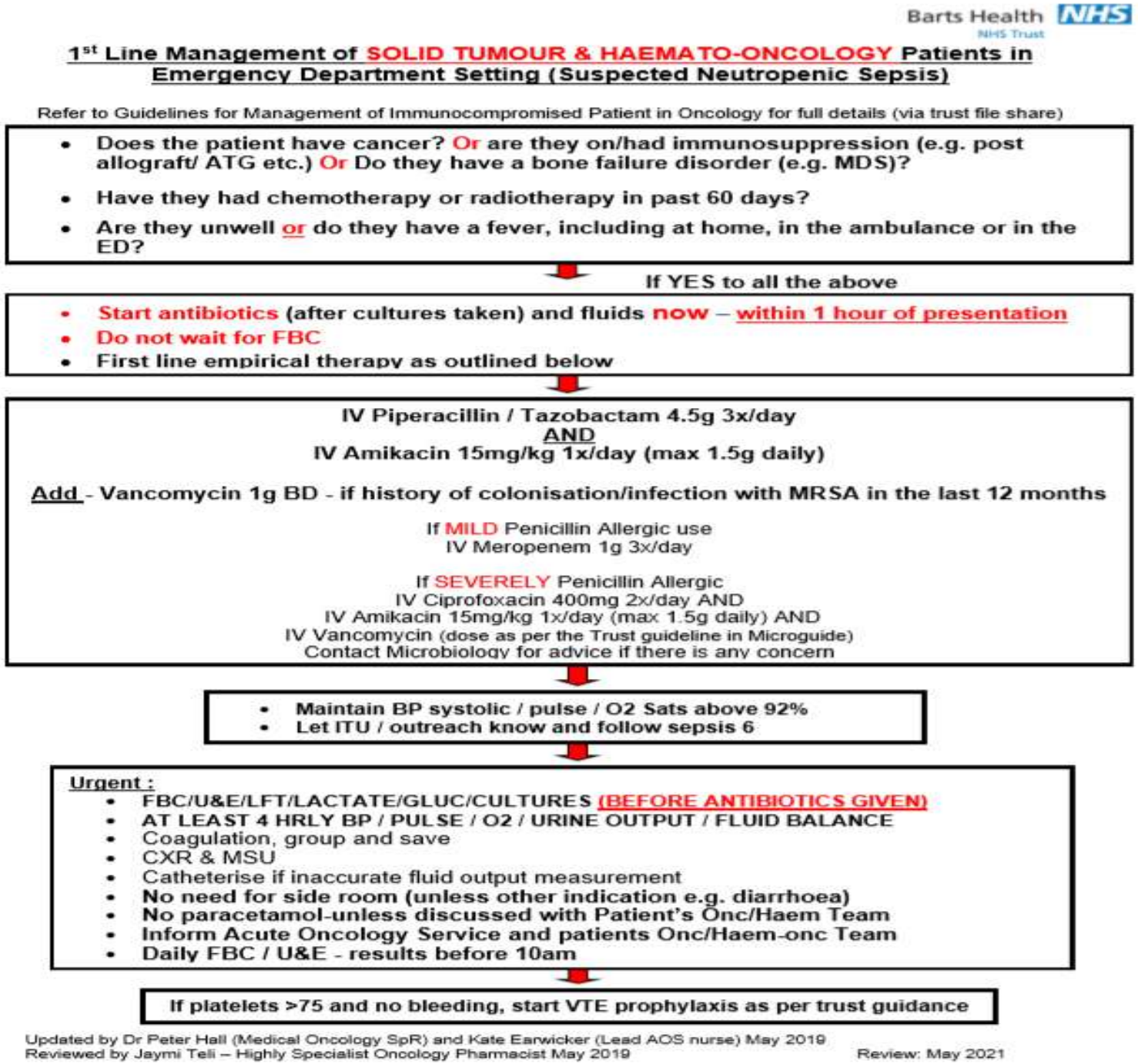
- Check in their mouth - may have oral candidiasis
- Check skin - may have rash/cellulitis
- Check vascular access - may be infected

Investigations:

- Haematology: FBC, U&E, LFT, (CRP),
- Microbiology: Blood cultures (peripheral and central), Urine MSU
- Radiology: CXR

Management of neutropenic sepsis (febrile neutropenia)

- DO NOT wait for the neutrophil count **Give the antibiotics**
- Antibiotics should be given within 1 hour of admission according to NICE guidelines



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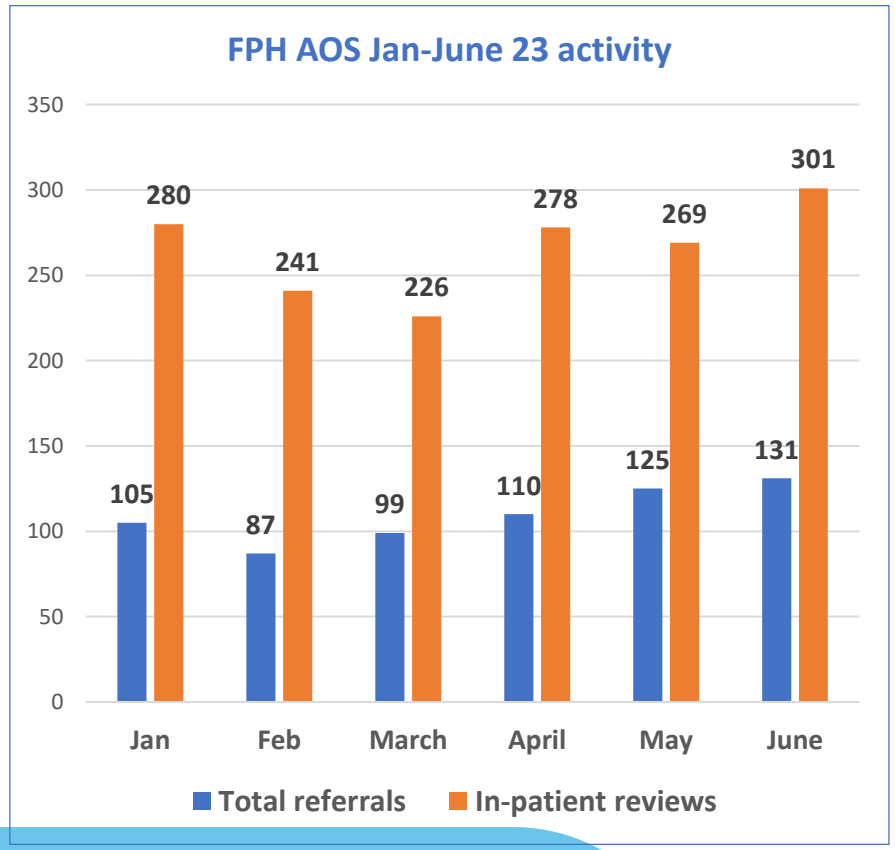
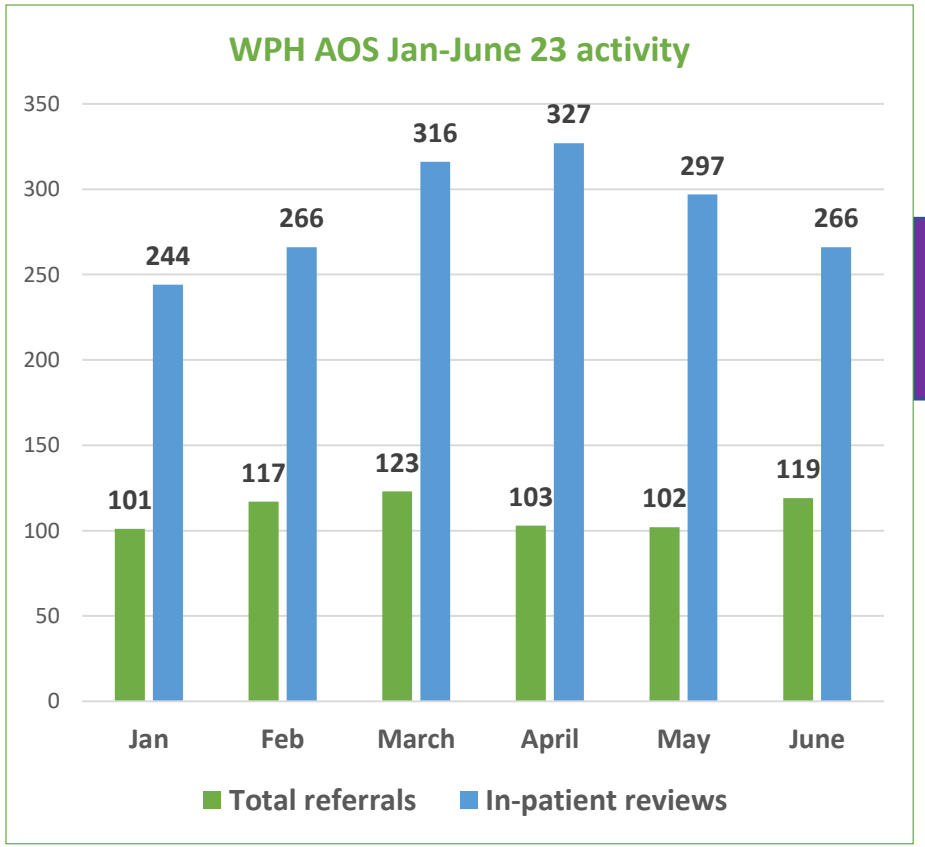
Trust guidelines on management of neutropenic sepsis (Bart's health NHS Trust)

FHFT AOS Referral/Reviews -Activity Jan-June 2023





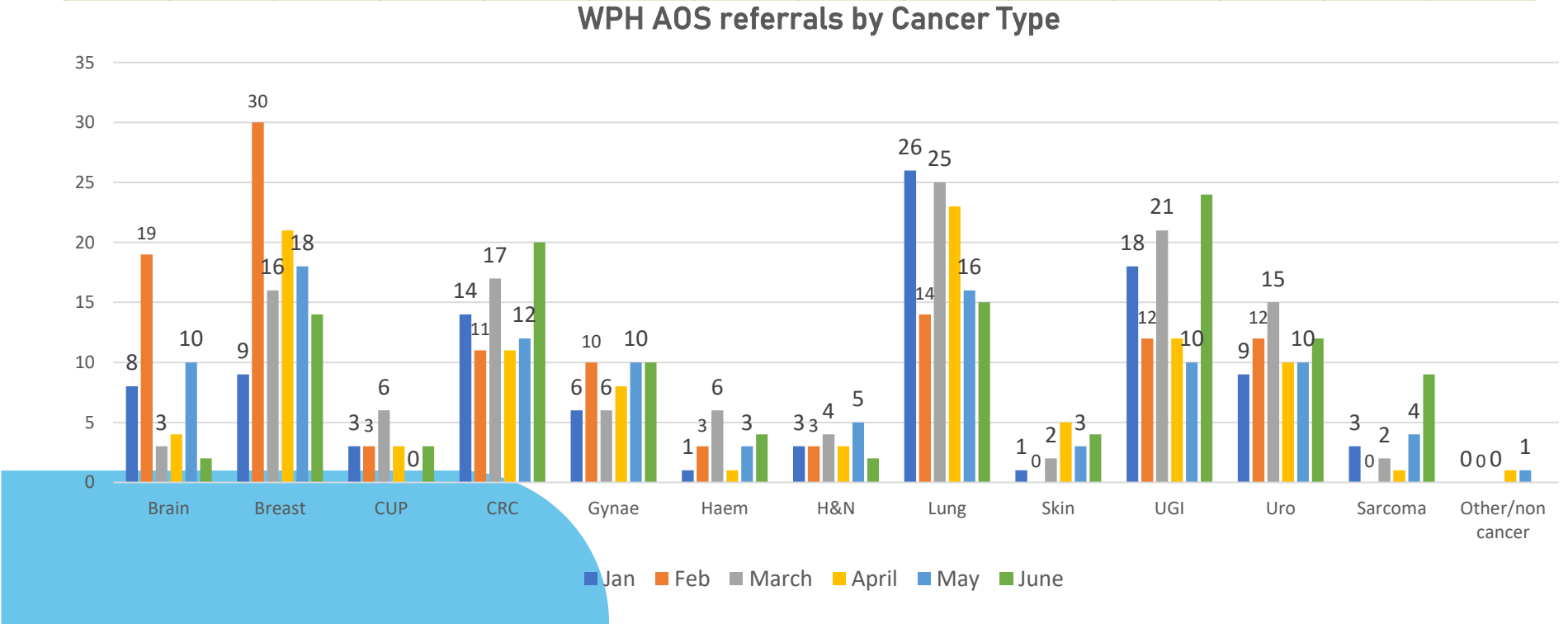
FPH Total referrals: 657
Total in-patient reviews: 1595

FHFT Cross site total referrals 1322
Total in-patient reviews: 3311

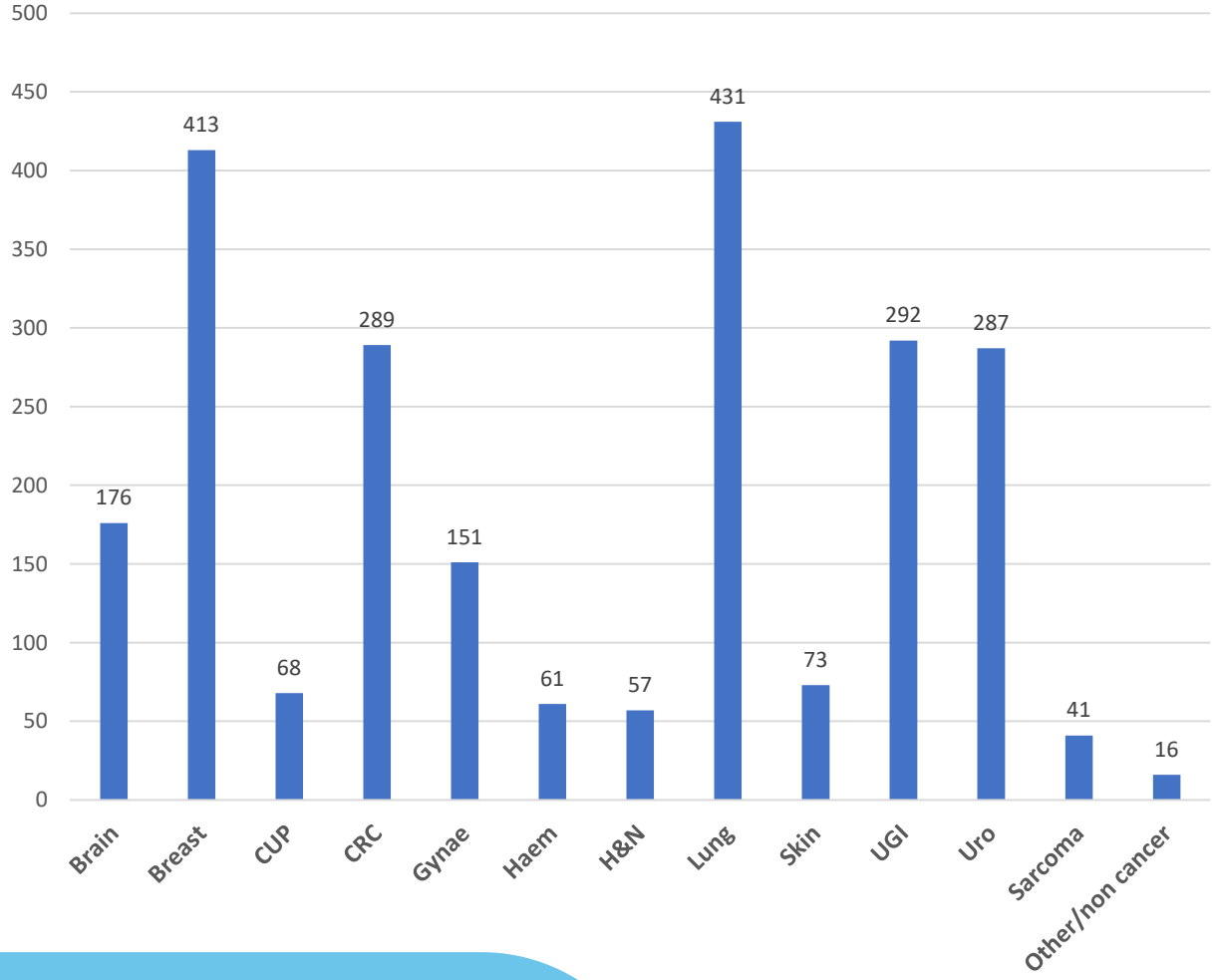
WPH Total referrals: 665
Total in-patient reviews: 1716

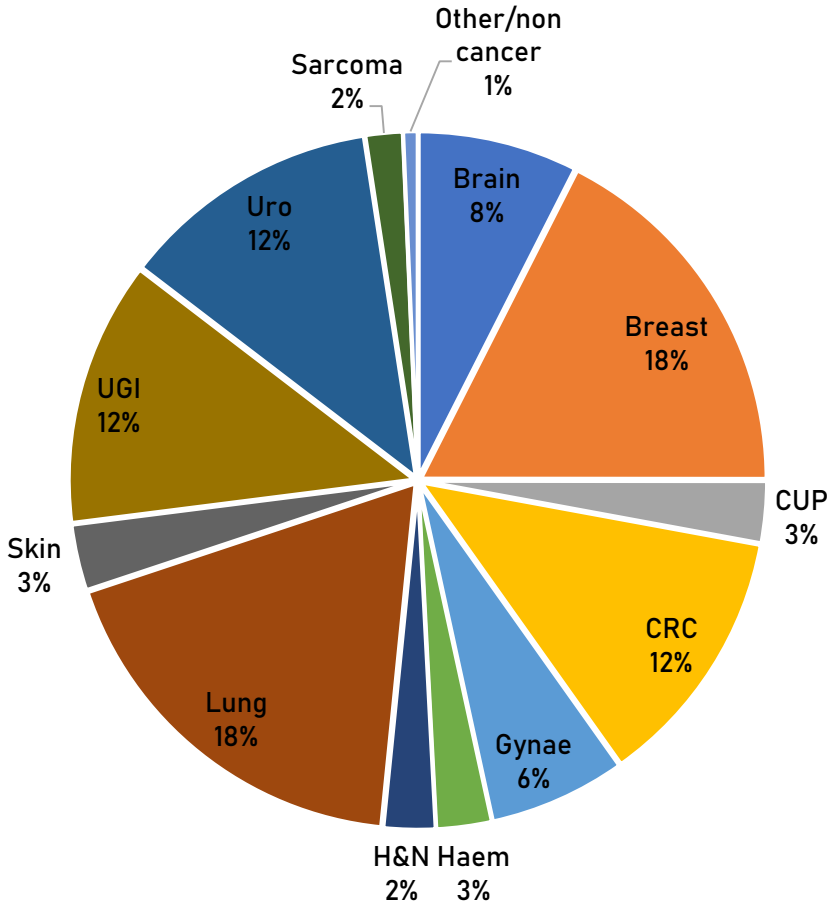
WPH AOS referrals by cancer type Jan-June 2023

WPH	Brain	Breast	CUP	CRC	Gynae	Haem	H&N	Lung	Skin	UGI	Uro	Sarcoma	Other/ non cancer
Jan	8	9	3	14	6	1	3	26	1	18	9	3	0
Feb	19	30	3	11	10	3	3	14	0	12	12	0	0
March	3	16	6	17	6	6	4	25	2	21	15	2	0
April	4	21	3	11	8	1	3	23	5	12	10	1	1
May	10	18	0	12	10	3	5	16	3	10	10	4	1
June	2	14	3	20	10	4	2	15	4	24	12	9	0

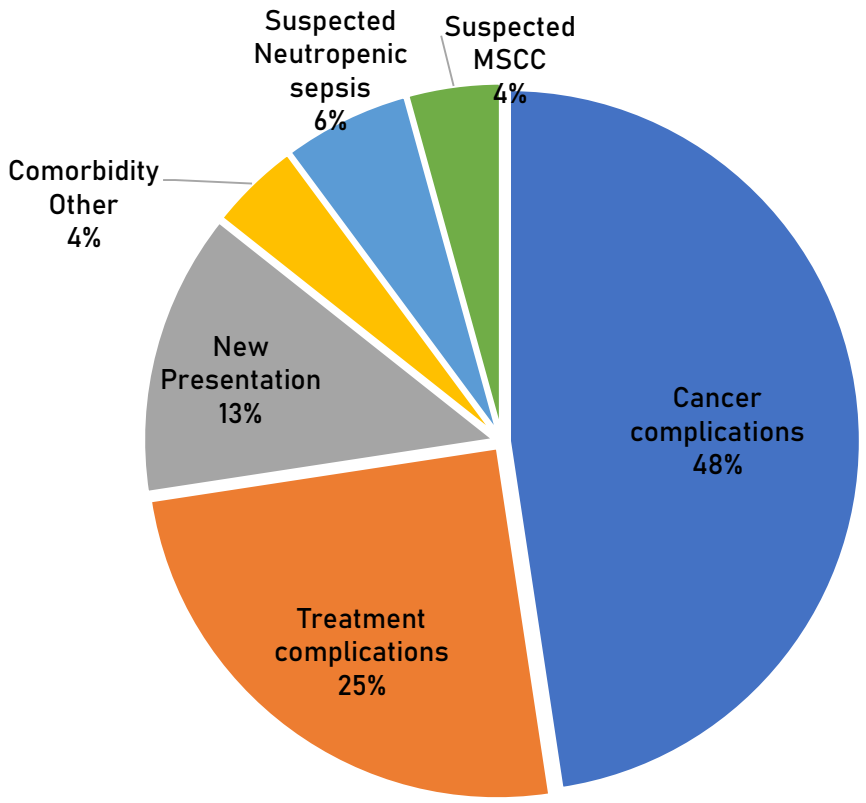


FHFT AOS referral by cancer type Jan- June 2023





FHFT AOS referral reason Jan-June 2023



FPH	Suspected MSCC	Confirmed MSCC	Suspected NS	Confirmed NS
Jan	3	0	1	1
Feb	4	1	3	3
March	5	1	3	2
April	5	1	6	3
May	4	1	8	5
June	5	0	14	8
TOTAL	26	4	35	22

WPH	Suspected MSCC	Confirmed MSCC	Suspected NS	Confirmed NS
Jan	2	2	2	2
Feb	4	1	5	3
March	3	1	4	3
April	3	1	6	5
May	3	0	5	2
June	3	0	3	2
TOTAL	18	5	25	17

MSCC- Metastatic spinal Cord Compression
NS- Neutropenic sepsis

Key aspects of acute oncology care may include:

1. Multidisciplinary approach:

AO team involves a range of healthcare professionals, Oncologists, Haematologists, Endocrine, Emergency, Neurology etc. Collaboration between these experts ensures comprehensive and rapid decision-making in emergency situations.

2. Rapid assessment and intervention:

The focus is on timely assessment and management of cancer-related emergencies.

Key aspects of acute oncology care may include:

3. Communication and education:

The acute oncology team communicates closely with the patient, their family and everyone involved by making them understanding the situation following presentation/admission i.e. treatment plan and prognosis.

4. Supportive and palliative care:

Acute oncology also includes providing supportive care measures, such as managing pain, alleviating symptoms and addressing psychological and social needs with focus on improvement of quality of life.

Implementation of AOS in Kosova-suggestions…

Institute of Oncology in Prishtina-covers the large area of population suffering from cancer.

Initiation of satellite treatment centres in order to deliver chemotherapy/targeted treatment- just started (Oral medications)

Implementation of AOS on these sites can be cheap and very safe (training of 1-2 specialist nurses, oncology trainees, visiting Oncologist)

Liaison with mother team and communication with Doctors in the main centre can be streamed line.

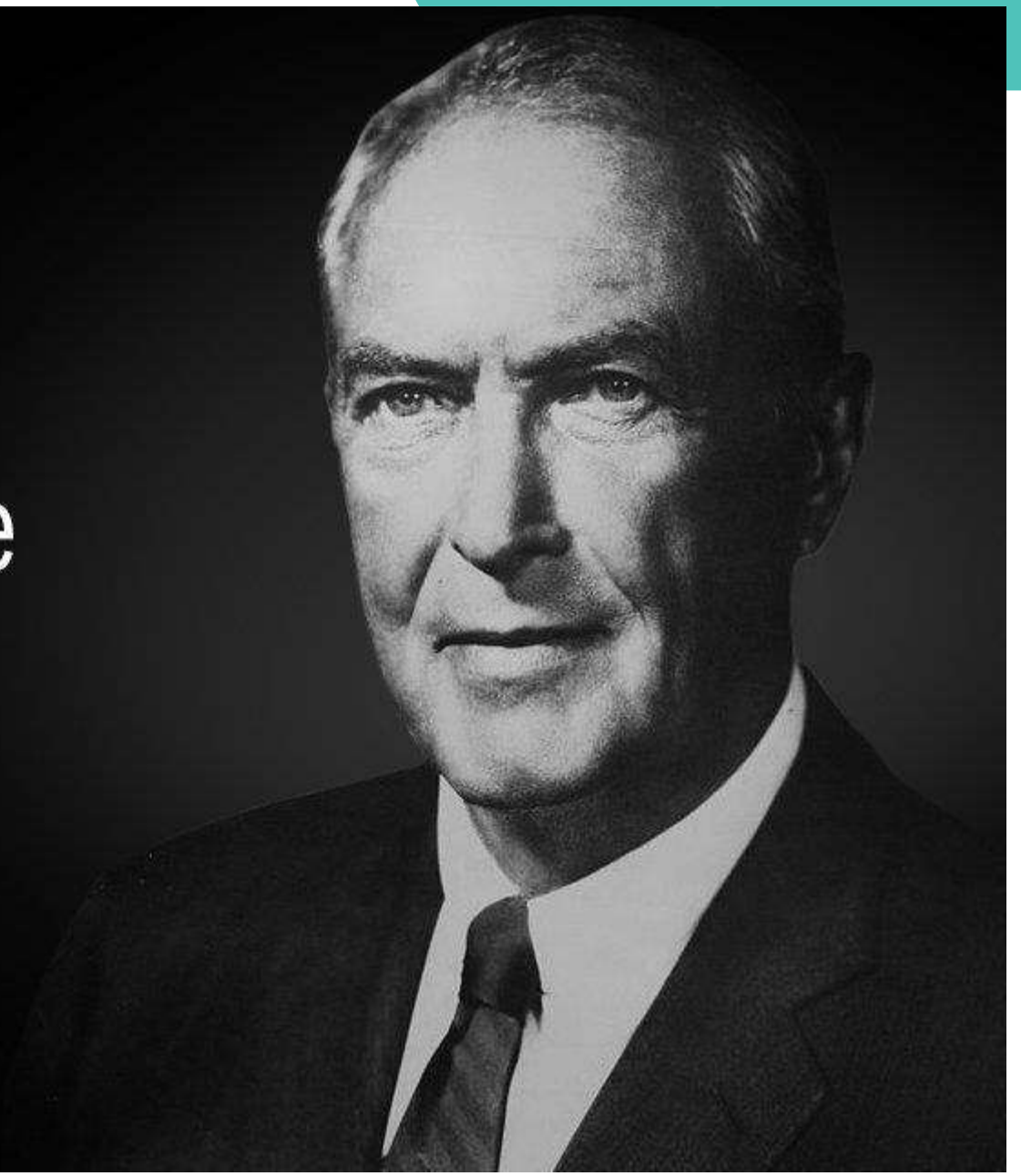
Conclusion

There are a number of benefits to having an acute oncology service in place:

- Improved patient outcomes.
- Reduced risk of complications.
- Increased efficiency of care.
- Improved communication between healthcare professionals and relation patient-clinician.
- Increased patient satisfaction.

We must let go of the
life we have planned,
so as to **accept** the one
that is waiting for us.

– *Joseph Campbell*



AZ QUOTES

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2. UK cancer statistics- World cancer research fund.

3. Cancer statistics for England Published 07 February, 2023 –House of commons library

4. NCRAS -National cancer registration and analysis service-"Routes to diagnosis for cancer – determining the patient journey using multiple routine data sets" Br J cancer, doi:10.1038/bjc.2012.408

5. Nature Medicine 23, 540–547 (2017)

6. AOS Audit Data from FPH Hospital Jan-June 23

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Thank you