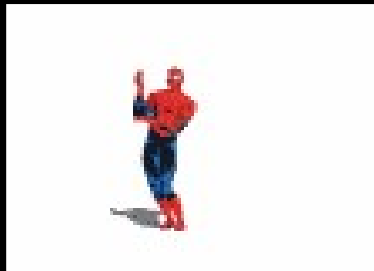


Practical aspects in oncology



Mirosława Püsküllüoğlu MD



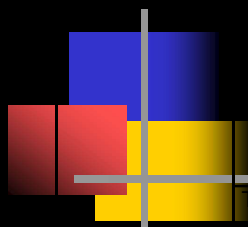
Introduction

- Always ask
 - Review, review, review
 - Have: white coat, stethoscopes, students' ID with you
 - Be on time
 - Try to pick up practical things
 - What is SAES?
 - What are „rotations“? And what are they for
 - How does workshop look like?
 - PBL- sth you will teach us!
 - Exam Is difficult- when do you want it?



- The topics of these presentations should be chosen by students from the available list :
 - 1. Bowel obstruction in cancer patients
 - 2. VTE and cancer
 - 3. Onco emergency: increased intracranial pressure
 - 4. Pericardial tamponade due to malignant pericardial effusion
- Students are asked to divide into 4 equal groups (per each SAES meeting) and prepare ppt. The time is 7-10 minutes for presentation plus 1-2 minutes for discussion/questions, which means no more than 12 slides (including 'hello' and 'thank you' slide;
- Not only the presentation itself, but also the way it is presented are taken into consideration.

07.30-09:00 09:15-10:45 10.45-12.15 12.45-13.30	Seminar Seminar Seminar Lecture	2 2 2 1	2 2 2 2	Introduction to the course Practical aspects in clinical oncology Multidisciplinary approach to colorectal cancer Multidisciplinary approach to urological malignancies Breaking bad news	Dr Mirosława Puskulluoglu Dr Kamil Konopka Dr Mirosława Puskulluoglu/ Dr Paweł Potocki Dr Mirosława Puskulluoglu	LHB, CDK, ul. Łazarza 16 LHB, CDK, ul. Łazarza 16 LHB. LHB
13.45-15.15 15.15-16:45	PBL PBL	2 2	2A(1) 2B(1) 2A(2) 2B(2)	Case 1 Case 2 Case 1 Case 2	MP/PP AS/IG MP/PP AS/IG	S2, 218 CDK
10.15-11.45 12.00- 13.30	Seminar Seminar	2 2	2 2	Multidisciplinary approach to breast cancer Multidisciplinary approach to lung cancer + case reports	Dr Izabela Głanowska Dr Agnieszka Słowik	LHA LH B
13.45-15.15 15.15-16:45	PBL PBL	2 2	2A(1) 2B(1) 2A(2) 2B(2)	Case 1 Case 2 Case 1 Case 2	MP/PP AS/IG MP/PP AS/IG	S3, S1 S1, LHC
07.30- 10.30	Exercices	4	2A	Presentation of patients, clinical cases	KK, ABN, IŁ, PP, IG	Sniadeckich 10
10.45-11.30 12.00-13.30	Seminar Lecture	1 2	2 2	Modern therapy in oncology - Metastatic melanoma Oncology - from carcinogenesis to treatment	Dr Anna Buda-Nowak Prof Piotr Wysocki	LHC, CDK S1, CDK
14.00-17.45	Exercices	4	2B	Supportive care in oncology Presentation of patients, clinical cases	KK, ABN, IG, PP, IŁ	Sniadeckich 10
08.30-10.45	Exercices	3	2A	Presentation of patients, clinical cases	KK, ABN, AS, PP, IG	Sniadeckich 10
11.00-12.45	Lecture	2	2	Introduction to clinical oncology	Prof Piotr Wysocki	218, CDK
13.00-14.30 14.30-16:00	PBL PBL	2 2	2A(1) 2B(1) 2A(2) 2B(2)	Case 1 Case 2 Case 1 Case 2	MP/PP AS/IG MP/PP AS/IG	S2, 218
16.15-17.00	Seminar	1	2	Multidisciplinary approach to head and neck malignancies	Dr Kamil Komopka	LH C, CDK
Please be at 8:30 am in the Seminar Room in Prokocim (Seminar room in front of "kawiarnia za witrażm")	Seminar Exercices Exercices	2 2 2	2 2A 2B	Principles of radiotherapy Presentation of patients, clinical cases Presentation of patients, clinical cases	Dr Małgorzata Bolek-Górska Doctors: MBG, Ach	Childrens' University Hospital



08.00-09.30	Seminar	2	2	Radiotherapy in oncological emergencies, supportive care in cancer	Dr Paweł Potocki	LH3
09.45-12.45	Exercices	4	2B	Presentation of patients, clinical cases	KK, ABN, AS, PP, IG	Śniadeckich 10
13.15-14.45 14.45-16:15	PBL PBL	2 2	2A(2) 2B(2) 2A(1) 2B(1)	Case 2 Case 1 Case 2 Case 1	IG/AS PP/MP IG/AS PP/MP	A13 (Department of Anatomy) LHC
10.15-13.15	Exercices	4	2A	Presentation of patients, clinical cases	KK, ABN, AS, PP, IG	Śniadeckich 10
13.30-15.00 15.00-16:45	PBL PBL	2 2	2A(2) 2B(2) 2A(1) 2B(1)	Case 2 Case 1 Case 2 Case 1	IG/AS PP/MP IG/AS PP/MP	S1 S2
08.00-10.15	Exercices	3	2B	Presentation of patients, clinical cases	IŁ, KK, IG, ABN, PP	Sniadeckich 10
10.30-12.45 13.00-15.15	Workshops Workshops	3 3	2B 2A	Drugs, drugs, drugs- review Drugs, drugs, drugs- review	MP MP,	LHC
08.00-09.30 09.30-11:00	PBL PBL	3 2	2A(2) 2B(2) 2A(1) 2B(1)	Case 2 Case 1 Case 2 Case 1	IG/AS PP/MP IG/AS PP/MP	218 S2
11.30-13.00	Seminar	2	2	Clinical cases and summary: breast cancer and colorectal cancer	Dr Izabela Głanowska	LHC
13.30-15.45 16.00-17.30	Exercices SAES	3 2	2A 2A	Presentation of patients, clinical cases SAES* (student-as-an-expert session)	ABN, KK, IG, IŁ, AS MP, KK, IG, AS, PP	Śniadeckich 10 S1
08.00-10.15	Exercices	3	2B	Presentation of patients, clinical cases	PP, KK, IG, IŁ, AS	Śniadeckich 10
10.30-12.00	SAES	2	2B	SAES* (student-as-an-expert session)	MP, KK, IG, AS, ABN	S1
12.00-12.45	Lecture	1	2	Modern therapies in oncology. Summary	Dr Mirosława Puskulluoglu	S1
13.15-15.30	Workshops	3	2	Communication – something we should practice - role playing	MP,	S1
16.00-17.30	EXAM	2	2	EXAM	ALL	S1



Plan of our seminar

- Principles
- Tumor markers
- Anticancer drugs: side effects
- Epidemiology
- Scales in oncology



Principles



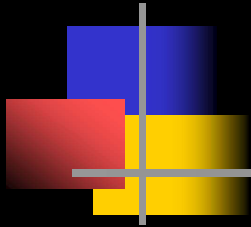
Principles

- Explain the principles of treatment over your patient on **every level** of disease
- Evaluate the prognostic factors: tumor's location, staging, grading, failure of primary treatment, length of time from the treatment to relapse, PS, nutrition
- **Individualize** plan of treatment
- Treat the patient not only the disease: coping with physical symptoms; identification of situations when secondary, negative effects are stronger; psychological support
- Radical and palliative treatment



Principles

- Oncologist – a simple person
- 3 questions rule
- 1. Is it a cancer?
- 2. What type of cancer (WHERE is primary)?
- 3. What is the intention of treatment?
- When to stop/ why not to start the treatment?



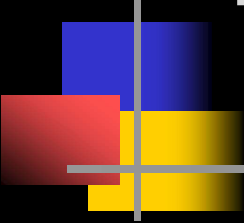
Patients treated at the comprehensive cancer center
have considerably better survival than those treated
in a local hospital!

(Harding et al, 1993, Junior et al, 1994, Gillis et al, 1996)

Rules

- ONCOLOGY-multidisciplinary game
- Team game
- Different symptoms-Patients diagnosed in different wards





Team game

Radiotherapeutist

Surgeon

Oncologist

Radiologist

Pathologist

Social
worker

...

Special. of
palliative med..



Rules

Are all methods of treatment equal?

Surgery > Radiotherapy > Systemic treatment



Chemotherapy- types

Adjuvant - given after the surgery to maximize a patient's chance for cure

Neoadjuvant - given before the surgery

Palliative - given to patients whose cancer cannot be removed to delay or reverse cancer-related symptoms and improve quality and length of life



Definitions

- Is the treatment successful?
 - Remission:
 - CR- complete remission
 - PR- partial remission
 - SD- stable disease
 - PD- progressive disease

RECIST

RECIST 1.1. Overall Response Tables

Target Lesion	Nontarget Lesion	New Lesion	Overall Response
CR	CR	No	CR
CR	Non-CR/non-PD	No	PR
CR	NE	No	PR
PR	Non-PD or NE	No	PR
SD	Non-PD or NE	No	SD
Not all evaluated	Non-PD	No	NE
PD	Any	Yes or No	PD
Any	PD	Yes or No	PD
Any	Any	Yes	PD

CR – complete response

PR – partial response

SD – stable disease

PD – progressive disease

NE – non-evaluable

Source: Perceptive Informatics, www.recist.com.

Table 2. A breakdown of how subjects with measurable disease react to treatment of lesions.



Tumor
markers

Definitions:

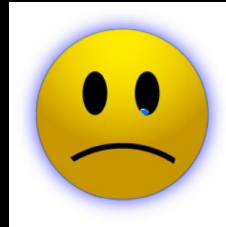
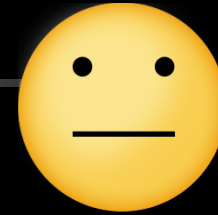


- Risk factor
- Prognostic factor
- Predictive factor

Tumor markers

The use of tumor markers:

- Screening a population (healthy or high risk)
- Diagnosing a malignancy/ type of malignancy
- Determining the prognosis for pts
- Monitoring the patient in remission or during the treatment



Tumor markers



Germinal tumors

→ B-HCG , AFP, LDH

- Colon ca

→ CEA , Ca 19-9

- Prostate ca

→ PSA

- Medullary thyroid ca

→ calcitonin

- Ovarian ca

→ Ca125

- Pancreatic ca

→ Ca 19-9

- Gastric ca

→ Ca 19-9

- Hepatocellular ca

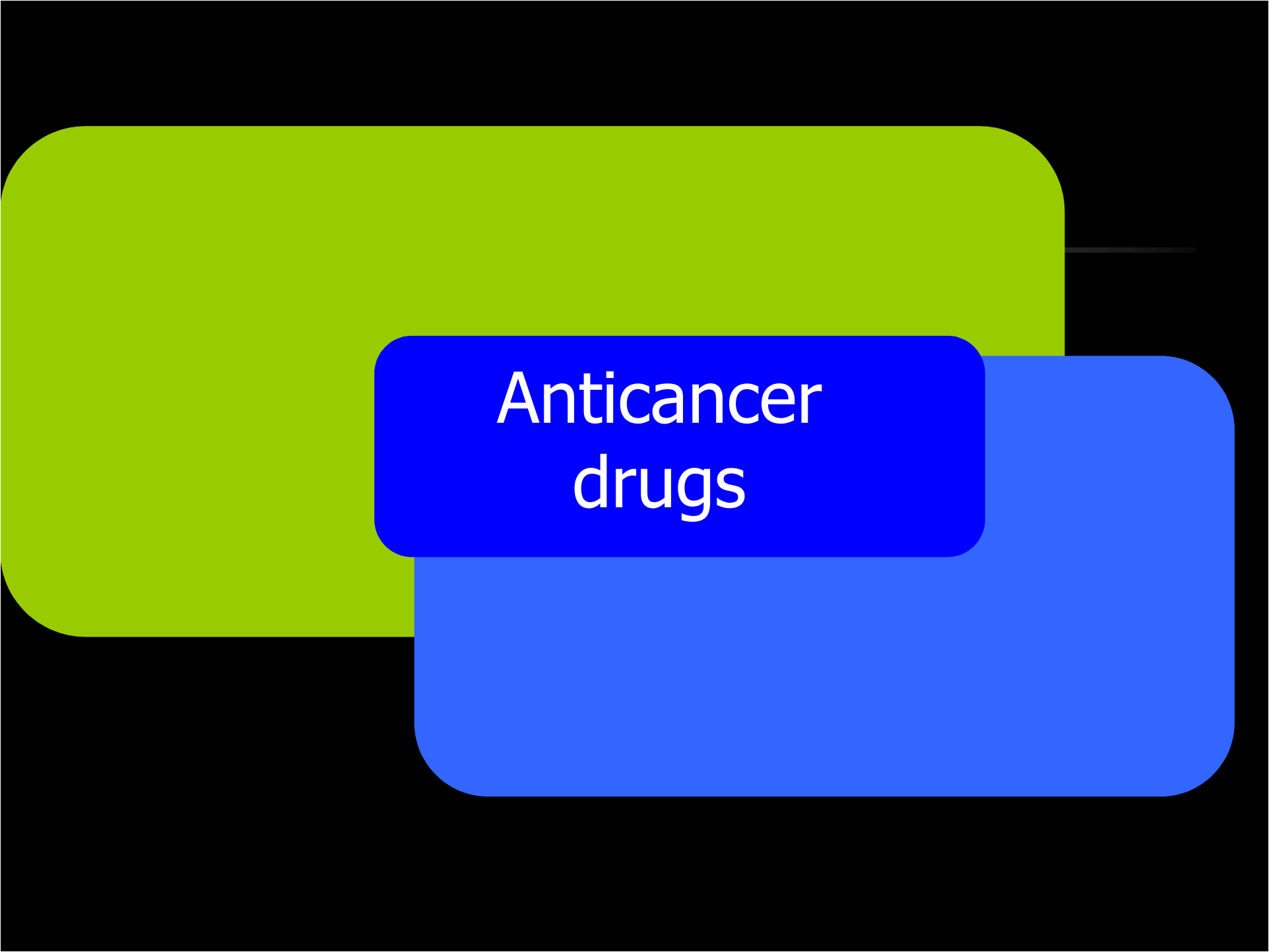
→ AFP

- Breast ca

→ Ca 15-3?


- Neuroblastoma

→ neuron specific enolase

The image features a black background with two overlapping rounded rectangular shapes. The top shape is lime green, and the bottom shape is blue. The text 'Anticancer drugs' is centered in the blue shape in white font.

Anticancer
drugs

Anticancer drugs- side effects



Many drugs !



Antracyclines
Trastuzumab



Cisplatin
Methotrexate



Cyclofosamid
ifosfamid

Mesna



Vincristine
Cisplatin
Paclitaxel



Bleomycine





Cancer etiology



Smoking and cancer

- Tobacco and tobacco smoke contain at least 4000 chemicals, of which 55 are known carcinogens
- The most notable carcinogen classes include: polycyclic aromatic hydrocarbons, N-nitrosamines, and miscellaneous organic compounds.
- Metabolic activation of these agents incite DNA adduct formation, gene mutations and can lead to cancer.
- More than 60,000 studies have confirmed the devastating impact of tobacco use on human health.
- The leading cause of preventable death in the United States



Smoking and cancer

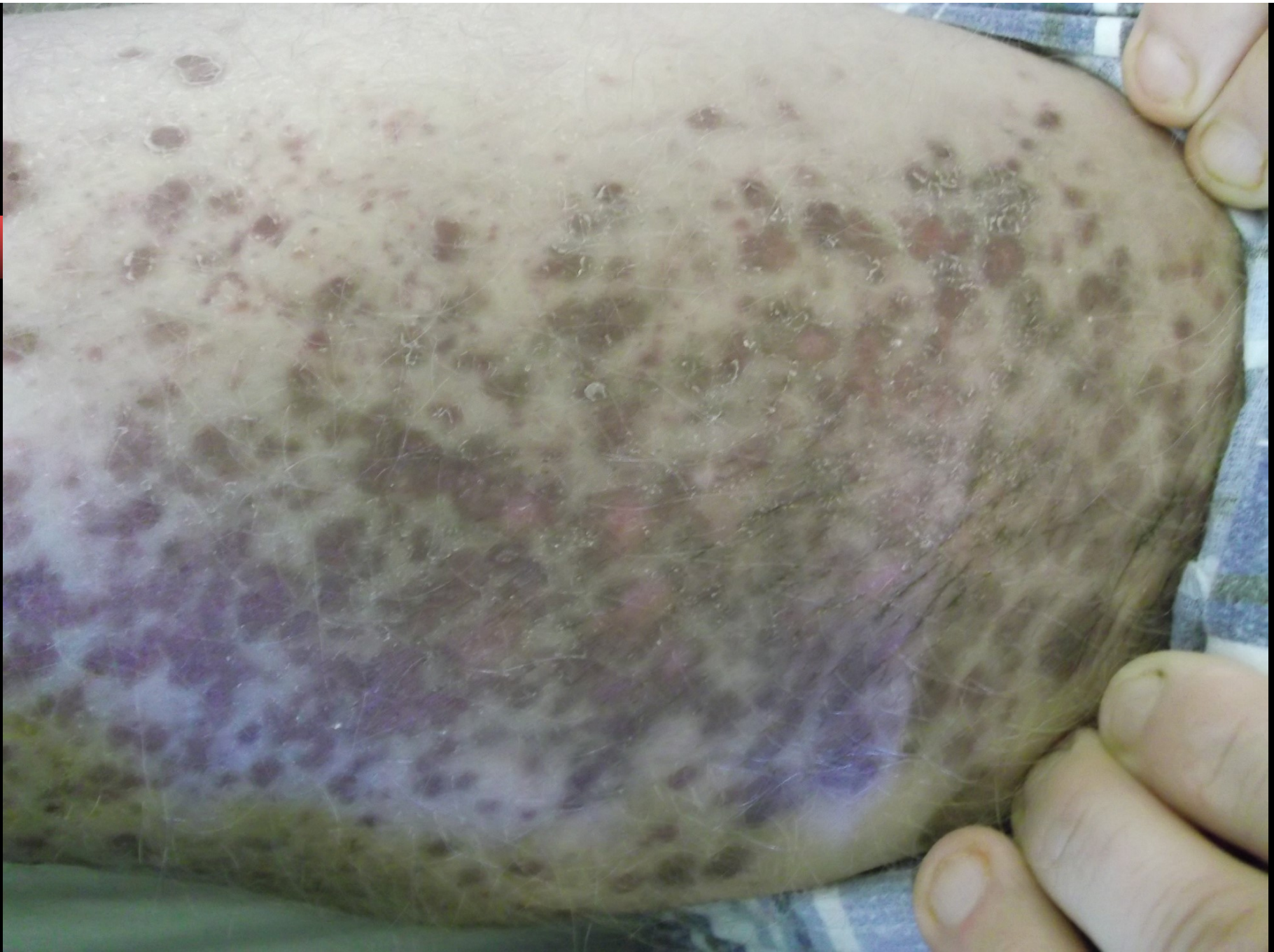
Level of Evidence for a Causal Association between Smoking and Cancer

Convincing	Probable	Possible	Unlikely
Bladder cancer	Acute myeloid leukemia	Adrenal gland cancer	Acute lymphocytic leukemia
Esophageal cancer	Cervical cancer	Gallbladder cancer	Breast cancer
Kidney (renal) cancer	Colorectal cancer	Genital cancers	Childhood cancers
Laryngeal cancer	Liver cancer	Sinonasal cancers	Ovarian cancer
Lung cancer	Prostate cancer mortality	Thyroid cancer	Skin cancer
Oropharyngeal cancer			Testicular cancer
Pancreatic cancer			
Stomach cancer			



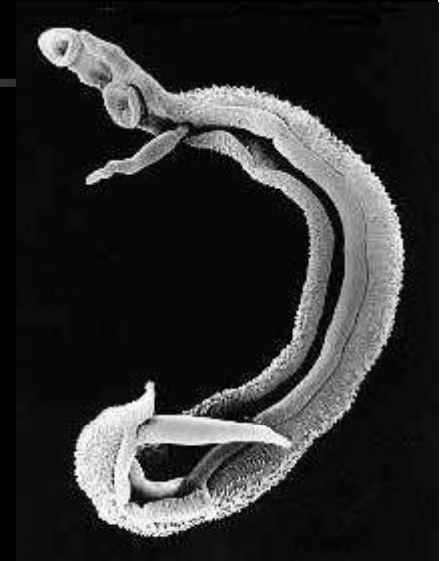
Infections and cancer

- Viruses:
 - Epstein Barr Virus (Burkitt lymphoma, nose ca, Hodgkin's disease)
 - HPV 16, 18, 31, 33 (Cervical ca, Throat ca)
 - HHV-8 (Kaposi's Sarcoma)
 - Hepatitis B and C (Hepatocellular ca)
 - HTLV-1, HIV



Infections and cancer

- Bacteria:
 - **Helicobacter pylori** (gastric ca, lymphomas of the stomach)
- Parasites:
 - **Schistosoma haematobium** (bladder cancer)
 - **Human liver fluke** (cholangiocarcinoma)





Epidemiology



Epidemiology

- Incidence

The number of new cases of a disease in a specified period of time divided by the total population

- Prevalence

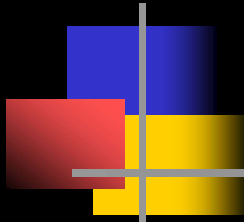
The number of all cases of a disease in a specified period of time divided by the total population

- Mortality

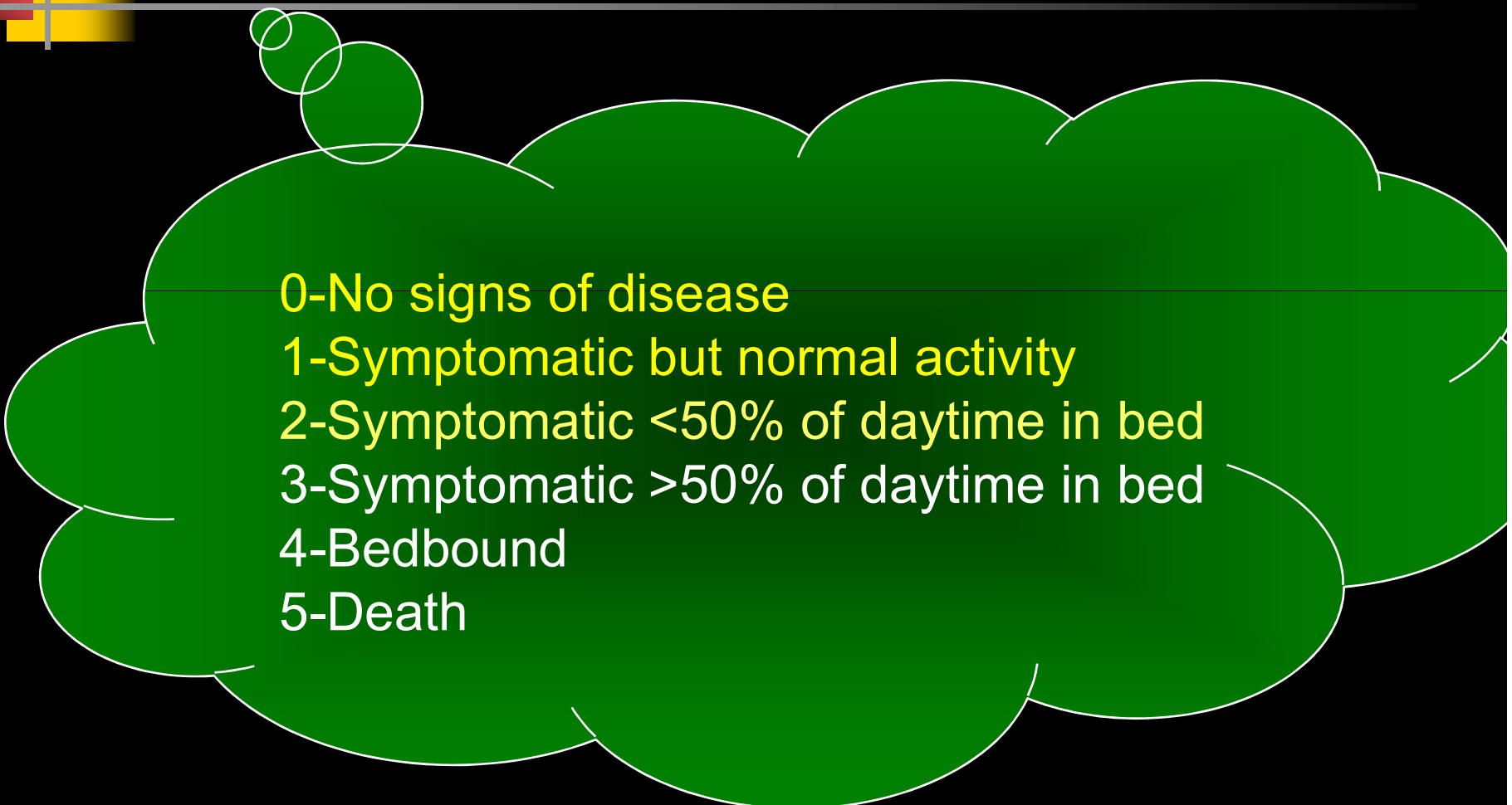
Number of deaths due to a specific cause in a specified period of time scaled to the size of that population



Scales



PS (=ECOG=Zubrod)

- 
- 0-No signs of disease
 - 1-Symptomatic but normal activity
 - 2-Symptomatic <50% of daytime in bed
 - 3-Symptomatic >50% of daytime in bed
 - 4-Bedbound
 - 5-Death



Karnofsky score

- 100% - normal, no complaints, no signs of disease
- 90% - capable of normal activity, few symptoms
- 80% - normal activity with some difficulty, some symptoms or signs
- 70% - caring for self, not capable of normal activity
- 60% - requiring some help, can take care of most personal requirements
- 50% - requires help often, requires often medical care
- 40% - disabled, requires special care and help
- 30% - severely disabled, hospital admission indicated
- 20% - very ill, urgently requiring admission, requires supportive measures or treatment
- 10% - moribund, rapidly progressive fatal disease processes
- 0% - death.



How to use your oncologist?

- When to ask your oncologist for help?
- What to expect?
- When do we need your support?