



## The correct way to answer

1. **Read the entire question and all related answers carefully prior to marking your answer on both the Examination booklet and the answer sheet.**
2. **First mark all your answers in the Examination booklet.**  
For Type A, B and E questions, circle only one correct answer.  
For Type K' questions, each answer you consider True, mark (+), each answer you consider False, mark (-).
3. **Answer every question.** If you don't know the correct answer, mark the one you consider most appropriate.

**Type A, B and E** questions, correct answers are '1' (one) point.

**Type K'** questions are scored as follows:

if 1 out of 4 answers correct:	0 (zero) points
if 2 out of 4 correct:	0 (zero) points
if 3 out of 4 correct:	0.5 (half) point
if 4 out of 4 correct:	1 (one) point

An unanswered question is considered incorrect.

There is no negative marking for incorrect answers.

4. Before you copy your answers onto **the answer sheet** make sure you have properly marked all answers onto the Examination booklet. In the event of loss or destruction of the answer sheet, the answers marked onto the Examination booklet will be assessed.

**Allow enough time to copy answers from the Examination booklet to the answer sheet.**

The answer sheet is the primary document for scoring the Examination. Incomplete or erroneous transfers of answers to the answer sheet are not valid grounds for an appeal.

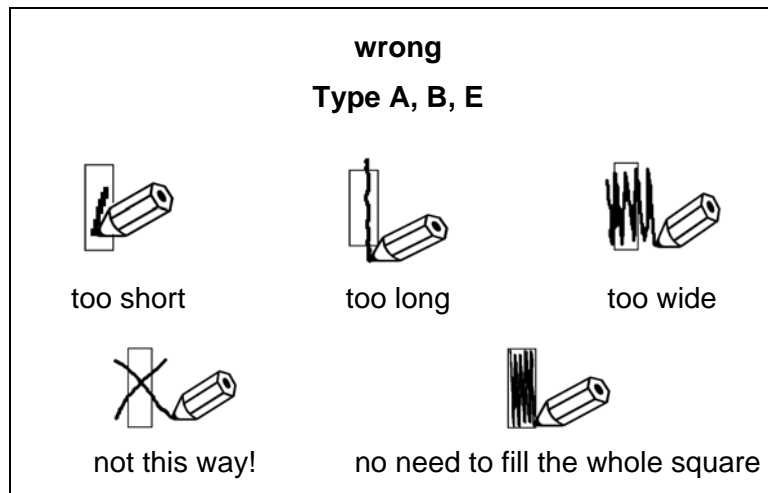
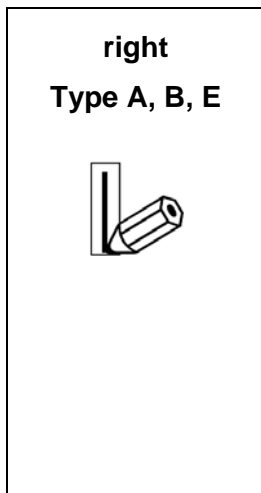
5. **Sign the Examination booklet and the answer sheet.** By signing, you confirm you understand and adhered to the regulations.

## Correct marking of the answer sheet

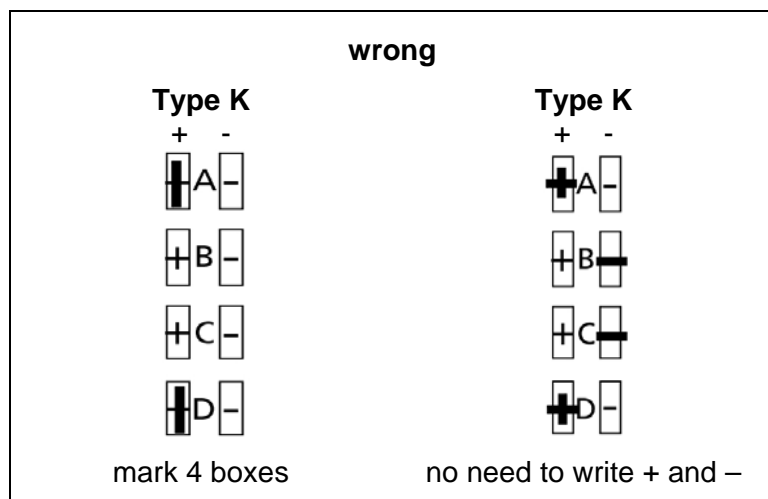
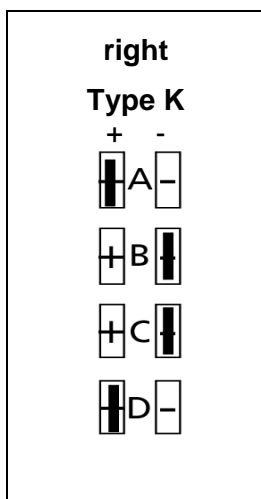
### Instructions

In the following illustrations, the answer boxes have been enlarged, for easier reading.

- Mark the boxes as shown on the left of the illustration. **In pencil**, you should mark, from the top to the bottom of the box for both Type A and Type K questions.
- For **Type A** questions, mark **only one box** with a vertical line.



- For **Type K** questions, mark **4 boxes** with a vertical line (+ stands for True, - stands for False). See the illustration, below.



**Erase as little as possible.** If you have to erase, make sure that no traces of the eraser remain on the sheet and no other answers are affected.



## ESMO Examination in Medical Oncology - 2010

### Typ A Single choice

Mark **exactly one answer** for each question by circling the appropriate letter:

- in positively formulated questions mark **the only correct** respectively **the most appropriate answer**.
- for negatively formulated questions mark **the only exception**, the **only incorrect answer** respectively **the answer that appears least appropriate**. (The negation is written in bold.)

- A. 1 Most glioblastoma patients will die during 24 months after diagnosis despite operations and radiation therapy.  
How many months does chemotherapy improve the median overall survival time, when concomitant and adjuvant temozolomide is added to radiotherapy:
- (A) about 12 months
  - (B) about 9 months
  - (C) about 6 months
  - (D) about 3 months
  - (E) no survival benefit
- A. 2 A 60-year-old male patient presents with enlarged lymph nodes. A biopsy is performed. A lymphoid population consisting of small cleaved cells is seen. The lymphoid cells are CD23 negative and CD5 positive. In addition at (11;14) is found and the cells stain positively for cyclin D1.  
What is the most likely diagnosis:
- (A) Follicular lymphoma
  - (B) Large cell B cell lymphoma
  - (C) Peripheral T cell lymphoma
  - (D) Mantle cell lymphoma
  - (E) Chronic lymphocytic leukemia

A. 3 The optimal adjuvant treatment for patients with node-positive breast cancer is subject of ongoing studies. However, recent results of randomised trials help the medical oncologist in her/his choice.

Select below the statement that you find **incorrect**:

- (A) A taxane added to an anthracycline containing regimen improves the disease free survival.
- (B) In postmenopausal node-positive patients with oestrogen-positive tumours, chemotherapy does not improve the outcome obtained with adjuvant hormonal treatment.
- (C) In case of HER2 overexpressing tumours, trastuzumab combined with adjuvant chemotherapy improves disease-free survival.
- (D) The cumulative incidence of congestive heart failure in patients who have received a taxane plus anthracyclin regimen is 1.5 to 2 percent.
- (E) The cumulative probability of secondary acute leukaemia or myelo-dysplastic syndrome after an anthracyclin-based regimen is at least 1 percent.

A. 4 According to meta-analyses in >3000 patients neoadjuvant cisplatin-based chemotherapy is recommended prior to locoregional treatment in locally advanced (stage II or III) bladder cancer because the expected overall survival benefit is approximately:

- (A) 5 %
- (B) 15 %
- (C) 25 %
- (D) 35 %
- (E) 50 %

A. 5 Which of the following oncogenes is a tumor suppressor gene:

- (A) c-myc
- (B) c-erb-2
- (C) BRCA-2
- (D) bcl-2
- (E) None

**Typ B Matching task**

For each group of five answers labelled with the letter (A) to (E) follows a group of numbered questions or statements.

To each of these questions or statements match **one answer**, i.e. the only correct, respectively the most appropriate answer by circling the corresponding letter.

A given answer can occur with more than one question or statement.

- (A) Acanthosis nigricans
- (B) Hypercalcemia
- (C) Minimal change glomerulonephritis
- (D) Necrolytic migratory erythema
- (E) Subacute cerebellar degeneration

Associate the mentioned paraneoplastic syndromes with the most likely neoplasms:

B. 1. Squamous cell cancer of lung

A            B            C            D            E

B. 2. Small cell lung cancer

A            B            C            D            E

- (A) filgrastim
- (B) granisetron
- (C) megestrol acetate
- (D) oxycodon
- (E) zolendronate

Associate supportive care agents with their potential adverse events:

B.3. osteonecrosis of the jaw

A            B            C            D            E

B.4. constipation

A            B            C            D            E



## ESMO Examination in Medical Oncology - 2010

- (A) pancreatic cancer stage I
- (B) seminoma testis stage I
- (C) Non small cell lung cancer stage IV
- (D) ovarian cancer stage III
- (E) breast cancer stage III C

Associate tumour stages with 5 year survival rates:

B.5. 35 %

A            B            C            D            E

B.6. 98 %

A            B            C            D            E

**Typ E**

**Causal relationships**

51 - 60

Circle the appropriate letter:

- (A) (+because+) Both statements are correct as is the relationship between the two.
- (B) (+ / +) Both statements are correct, but there is no causal relationship.
- (C) (+ / -) The first statement is correct, the second statement is incorrect.
- (D) (- / +) The first statement is incorrect, the second statement is correct.
- (E) (- / -) Both statements are incorrect.

E. 1. Children with hereditary retinoblastoma possess a high risk of developing bilateral retinoblastomas

because

they carry a mutated RB1 tumour suppressor gene (germline mutation of chromosome 13 band q14).

- |           |     |     |     |     |
|-----------|-----|-----|-----|-----|
| A         | B   | C   | D   | E   |
| +because+ | +/+ | +/- | -/+ | -/- |

E. 2. Four cycles of BEP (bleomycin, etoposide, cisplatin) is no longer considered standard treatment for patients with poor prognostic metastatic germ cell tumours

because

a phase III study using 2 cycles of the BEP regimen followed by high dose chemotherapy with autologous stem cell support showed an improved survival compared to standard dose treatment.

- |           |     |     |     |     |
|-----------|-----|-----|-----|-----|
| A         | B   | C   | D   | E   |
| +because+ | +/+ | +/- | -/+ | -/- |

E. 3. Positron emission tomography with 18-fluorodeoxyglucose (18-FDG) is a recommended preoperative staging tool in early stage NSCLC

because

18-FDG uptake is highly specific for malignant disease involvement in mediastinal lymph nodes in NSCLC.

- |           |     |     |     |     |
|-----------|-----|-----|-----|-----|
| A         | B   | C   | D   | E   |
| +because+ | +/+ | +/- | -/+ | -/- |



## ESMO Examination in Medical Oncology - 2010

**Typ K'**                      **Quadruple correct/incorrect decision**                      K1 – K10

To each question or incomplete statement there are **four** answers or statement completions. Decide of each of those four parts whether they are **correct** or **incorrect** and mark them appropriately with a (+) or (-).

**On your coding sheet mark your results in the + or - field with a vertical stroke.**

Independent of the grammatical formulation of the question in singular or plural, 1, 2, 3, 4 or none of the answers may be correct

Marking all four questions or completions correctly results in a full mark, 3 correct marks result in half a point.

- K.1. According to ESMO and ASCO recommendations which of the following tumour markers is/are applicable for the follow up of patients who underwent curative surgery for colorectal cancer:
- (A) CEA
  - (B) CA 19-9
  - (C) none
  - (D) CEA + CA 19-9
- K.2. The use of G-CSF as primary prophylaxis according to EORTC guidelines is recommended in which of the following conditions:
- (A) Bone marrow infiltration by tumour cells
  - (B) Likelihood for neutropenic fever >20 %
  - (C) Splenectomised patients
  - (D) CHOP chemotherapy in patients >70 years
- K.3. Which of the following cancer(s) has/have an increased incidence rate in cigarette smokers:
- (A) Lung cancer
  - (B) Melanoma
  - (C) Testicular cancer
  - (D) Bladder cancer