**Purpose of the exam**

The exam is designed to evaluate the knowledge, diagnostic reasoning, and clinical judgment skills expected of the certified medical oncologist in the broad domain of the discipline. The ability to make appropriate diagnostic and management decisions that have important consequences for patients will be assessed. The exam may require recognition of common as well as rare clinical problems for which patients may consult a certified medical oncologist.

**Exam content**

Exam content is determined by a pre-established blueprint, or table of specifications. The blueprint is developed by ABIM and is reviewed annually and updated as needed for currency. Trainees, training program directors, and certified practitioners in the discipline are surveyed periodically to provide feedback and inform the blueprinting process.

The primary medical content categories of the blueprint are shown below, with the percentage assigned to each for a typical exam:

<table>
<thead>
<tr>
<th>Medical Content Category</th>
<th>% of Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anticancer Therapeutics, Clinical Research Methodology, and Ethics</td>
<td>9.5%</td>
</tr>
<tr>
<td>Palliative Care, Survivorship, and Communication</td>
<td>11%</td>
</tr>
<tr>
<td>Genetics, Genomics, and Tumor Biology</td>
<td>2%</td>
</tr>
<tr>
<td>Hematologic Neoplasms</td>
<td>14%</td>
</tr>
<tr>
<td>Thoracic Cancer</td>
<td>11%</td>
</tr>
<tr>
<td>Breast Cancer</td>
<td>13%</td>
</tr>
<tr>
<td>Genitourinary Cancer</td>
<td>12%</td>
</tr>
<tr>
<td>Gynecologic Cancer</td>
<td>4%</td>
</tr>
<tr>
<td>Gastrointestinal Cancer</td>
<td>13.5%</td>
</tr>
<tr>
<td>Skin Cancer, Sarcomas, and Unknown Primary Site</td>
<td>6%</td>
</tr>
<tr>
<td>Head, Neck, Thyroid, and Central Nervous System Malignancies</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
ABIM is committed to working toward health equity and believes that board-certified physicians should have an understanding of health care disparities. Therefore, health equity content that is clinically important to each discipline will be included in assessments, and the use of gender, race, and ethnicity identifiers will be re-evaluated.

Exam format

The exam is composed of up to 240 single-best-answer multiple-choice questions, of which approximately 40 are new questions that do not count in the examinee’s score. Most or all of the multiple-choice questions will be in the single-best-answer format; a small number may be multiple-response questions that require the selection of two or three correct options. The specific number of options to select will be indicated in text of the multiple-response questions.

Questions ask about the work done (that is, tasks performed) by physicians in the course of practice:

- Making a diagnosis
- Ordering and interpreting results of tests
- Recommending treatment or other patient care
- Assessing risk, determining prognosis, and applying principles from epidemiologic studies
- Understanding the underlying pathophysiology of disease and basic science knowledge applicable to patient care

Clinical information presented may include patient photographs, radiographs, computed tomograms, photomicrographs, magnetic resonance images, an equianalgesic table, bone scans, family pedigree charts, nomograms, and other media to illustrate relevant patient findings. Learn more information on how exams are developed.

A tutorial including examples of ABIM exam question format can be found at http://www.abim.org/certification/exam-information/medical-oncology/exam-tutorial.aspx.

The blueprint can be expanded for additional detail as shown below. Each of the medical content categories is listed there, and below each major category are the content subsections and specific topics that may appear in the exam. Please note: actual exam content may vary.
### Anticancer Therapeutics, Clinical Research Methodology, and Ethics 9.5% of Exam

<table>
<thead>
<tr>
<th>Principles of allied disciplines</th>
<th>&lt;2%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgical oncology</td>
<td></td>
</tr>
<tr>
<td>Radiation oncology</td>
<td></td>
</tr>
<tr>
<td>Interventional radiology</td>
<td></td>
</tr>
<tr>
<td>Pathology</td>
<td></td>
</tr>
</tbody>
</table>

**Anticancer therapeutics 7.5%**

- Cytotoxic chemotherapy agents
  - Alkylating agents
  - Antimetabolites
  - Antitubulin agents
  - Anthracyclines
  - Topoisomerase I inhibitors
  - Topoisomerase II inhibitors
  - Bleomycin and other DNA-damaging agents

- Chemotherapy-drug interactions
- Hormonal therapies
  - Estrogens and selective estrogen response modifiers
  - Progestins and antiprogestins
  - Aromatase inhibitors
  - Androgens and antiandrogens
  - Gonadotropin-releasing hormone analogues
  - Glucocorticoids

- Small molecule kinase inhibitors
  - BCR-ABL1 inhibitors
  - Epidermal growth factor receptor (EGFR) inhibitors
  - Vascular endothelial growth factor receptor (VEGFR)/multitargeted inhibitors
  - BRAF inhibitors
  - Anaplastic lymphoma kinase (ALK) and mesenchymal epithelial transition (MET) growth factor inhibitors
  - RET, ROS1, and NTRK inhibitors
  - Mitogen-activated protein kinase (MEK) inhibitors
  - Bruton tyrosine kinase (BTK) inhibitors
  - Janus kinase (JAK) inhibitors
  - Phosphoinositide-3 kinase (PI3K) inhibitors
Mammalian target of rapamycin (mTOR)/AKT inhibitors
Cyclin-dependent kinase (CDK) inhibitors
Agents with epigenetic activity
Histone deacetylase (HDAC) inhibitors
DNA methyltransferase inhibitors
Metabolic inhibitors other than antimetabolites
Monoclonal antibodies and antibody conjugates other than immune checkpoint inhibitors
Monoclonal antibodies targeting EGFR, HER2, HER3
Monoclonal antibodies targeting VEGFR pathway
Monoclonal antibodies targeting B cell antigens
(including CD20)
Bispecific monoclonal antibodies
Monoclonal antibody immune checkpoint inhibitors
Agents targeting cytotoxic T-lymphocyte-associated antigen 4 (CTLA4)
Agents targeting programmed cell death protein 1 (PD-1)
and programmed cell death ligand 1 (PD-L1)
Tumor vaccines and viral-based immunotherapeutics
Agents with other novel or specific targets
Proteasome inhibitors
Immunomodulatory drugs (IMiDs)
Poly(ADP-ribose) polymerase (PARP) inhibitors
Arsenicals
Cellular therapeutics
High-dose therapy with stem cell rescue
(autologous and allogeneic)
Chimeric antigen receptor (CAR) T-cell therapy

**Clinical research methodology and ethics**

Clinical research methodology
Design and interpretation of clinical trials
Tumor assessment, imaging, and end points
Ethics
Human subjects and regulatory and legal issues
Conflict of interest
Clinical manifestations of advanced cancer and its treatment 4.5%
- Cutaneous and mucosal manifestations
- Endocrine manifestations
- Gastrointestinal manifestations
- Hematologic manifestations
- Musculoskeletal manifestations
- Neurologic manifestations
- Renal, metabolic, and nutritional manifestations
- Paraneoplastic syndromes
- Cardiothoracic manifestations
- Fatigue
- Psychiatric manifestations
- Infectious risks and complications
- Lymphedema

Cancer pain 2%
- Use of opioids
- Use of nonopioids

Survivorship issues <2%
- Fertility and sexual health
- Second primary cancers
- Secondary cancer prevention
- Nonmalignant sequelae
- Surveillance

End-of-life issues 2%
- Hospice
- Feeding and nutrition
- Decision making/communication

Procedure-related issues <2%
- Chemotherapy administration
- Bone marrow aspiration, biopsy, and interpretation
- Tumor assessment
- Thoracentesis
- Paracentesis
- Feeding tubes
### Communication
- Communicating prognosis and other clinical information
- Discussing goals of care
- Discussing survivorship issues

### Genetics, Genomics, and Tumor Biology 2% of Exam

#### Cancer biology and genetics <2%
- Carcinogenesis
- Genomics

#### Tumor immunology <2%

#### Heritable cancer syndromes <2%
- Li-Fraumeni syndrome (*TP53*)
- *BRCA1* and *BRCA2* syndromes
- Familial colorectal cancer
  - Familial adenomatous polyposis
  - Lynch syndrome (hereditary nonpolyposis colorectal cancer)
- Multiple endocrine neoplasia and familial medullary thyroid cancer syndromes

#### Cancer epidemiology <2%

### Hematologic Neoplasms 14% of Exam

#### Acute leukemia and myelodysplasia 3%
- Acute myeloid leukemia (AML)
  - Acute promyelocytic leukemia (APL)
  - AML with recurrent genetic abnormalities
  - AML with myelodysplasia-related changes
  - AML not otherwise specified
  - Myeloid sarcoma
- Acute lymphoblastic leukemia/lymphoma
- Myelodysplastic syndromes
- Chronic myelomonocytic leukemia
Chronic myeloid leukemia and myeloproliferative neoplasms  
Chronic myeloid leukemia  
Myeloproliferative neoplasms  

Chronic lymphoproliferative leukemias  
Chronic lymphocytic leukemia/small lymphocytic lymphoma  
Hairy cell leukemia  
T-cell prolymphocytic leukemia  
T-cell large granular lymphocytic leukemia  
Monoclonal B-cell lymphocytosis

Hodgkin lymphoma  
Early-stage disease  
Advanced disease

Multiple myeloma and plasma cell dyscrasias  
Multiple myeloma/plasma cell leukemia  
Solitary plasmacytoma  
Primary amyloidosis  
Monoclonal gammopathy of undetermined significance (MGUS)  
Lymphoplasmacytic lymphoma (including  
Waldenström macroglobulinemia)

Non-Hodgkin lymphoma  
Diffuse large B-cell lymphoma  
Follicular lymphoma  
Burkitt lymphoma  
Mantle cell lymphoma  
NK-T cell lymphoma  
Anaplastic large cell lymphoma  
Extranodal marginal zone lymphoma of  
mucosa-associated lymphoid tissue (MALT lymphoma)  
Nodal marginal zone lymphoma  
Human immunodeficiency virus  
(HIV)-associated lymphoma  
Cutaneous T-cell lymphoma  
Primary central nervous system lymphoma  
Post-transplantation lymphoproliferative syndromes  
Peripheral T-cell lymphoma
## Thoracic Cancer  
**11% of Exam**

<table>
<thead>
<tr>
<th>Non-small cell lung cancer</th>
<th>9%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early-stage disease</td>
<td></td>
</tr>
<tr>
<td>Resectable disease</td>
<td></td>
</tr>
<tr>
<td>Unresectable disease</td>
<td></td>
</tr>
<tr>
<td>Locally advanced disease</td>
<td></td>
</tr>
<tr>
<td>Stage IIIA disease</td>
<td></td>
</tr>
<tr>
<td>Stage IIIB disease</td>
<td></td>
</tr>
<tr>
<td>Stage IIIC disease</td>
<td></td>
</tr>
<tr>
<td>Metastatic disease</td>
<td></td>
</tr>
<tr>
<td>Adenocarcinoma</td>
<td></td>
</tr>
<tr>
<td>Squamous cell carcinoma</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Small cell lung cancer</th>
<th>&lt;2%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limited disease</td>
<td></td>
</tr>
<tr>
<td>Extensive disease</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mesothelioma and thymus cancer</th>
<th>&lt;2%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mesothelioma</td>
<td></td>
</tr>
<tr>
<td>Thymus cancer</td>
<td></td>
</tr>
</tbody>
</table>

## Breast Cancer  
**13% of Exam**

<table>
<thead>
<tr>
<th>Premalignant conditions and high-risk factors</th>
<th>&lt;2%</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-risk histologies (including atypical ductal hyperplasia and atypical lobular hyperplasia)</td>
<td></td>
</tr>
<tr>
<td>Genetic predispositions</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Carcinoma in situ</th>
<th>&lt;2%</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Early-stage and locally advanced invasive carcinoma</th>
<th>4.5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>HER2-positive disease</td>
<td></td>
</tr>
<tr>
<td>HER2-negative, hormone receptor–positive disease</td>
<td></td>
</tr>
<tr>
<td>HER2-negative, hormone receptor–negative (triple-negative) disease</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inflammatory disease</th>
<th>&lt;2%</th>
</tr>
</thead>
</table>
Locally recurrent disease  <2%
  In-breast recurrence
  Chest wall recurrence

Metastatic disease  4.5%
  HER2-positive metastatic disease
  HER2-negative, hormone receptor–positive metastatic disease
  HER2-negative, hormone receptor–negative, (triple-negative) metastatic disease

Less common clinical scenarios  <2%
  Tubular carcinoma
  Male breast cancer
  Pregnancy-associated breast cancer

Genitourinary Cancer  12% of Exam

Germ cell tumors  <2%
  Seminoma
  Nonseminoma
  Germ cell tumor type not specified

Prostate cancer  5%
  Localized disease
  Locally advanced disease
  Prostate-specific antigen-only nonmetastatic disease
    Castration-sensitive disease
    Castration-resistant disease
  Metastatic disease
    Metastatic castration-sensitive disease
    Metastatic castration-resistant disease
  Special issues in prostate cancer
    Small cell carcinoma

Renal cell cancer  2.5%
  Localized disease
  Metastatic disease
  Special issues in renal cell cancer
Urothelial and other genitourinary cancers 2.5%
- Bladder cancer
  - Non-muscle-invasive disease
  - Muscle-invasive disease
  - Metastatic disease
- Other urothelial cancers

Adrenal tumors <2%
- Adrenocortical carcinoma
- Pheochromocytoma and paraganglioma

Gynecologic Cancer 4% of Exam

- Cervical cancer <2%
  - Local-regional disease (stages II and III)
  - Recurrent and metastatic disease
- Ovarian, fallopian tube, and primary peritoneal cancers 2%
  - Epithelial ovarian, fallopian tube, and primary peritoneal cancers
    - Stage I
    - Stages II-IV
  - Nonepithelial ovarian cancers
  - Low malignant potential (borderline) cancers
- Other gynecologic malignancies <2%
  - Uterine sarcoma
  - Gestational trophoblastic disease
  - Cancers of the vulva and vagina

Gastrointestinal Cancer 13.5% of Exam

- Anal cancer <2%
  - Local-regional disease
  - Recurrent and metastatic disease
Biliary tree and gallbladder cancer
  Local-regional disease
  Recurrent and metastatic disease

Colorectal cancer 4.5%
  Colon cancer
    Local-regional disease
    Recurrent and metastatic disease
  Rectal cancer
    Local-regional disease
    Recurrent and metastatic disease

Esophageal cancer <2%
  Local-regional disease
  Recurrent and metastatic disease

Gastric cancer <2%
  Resectable disease
  Unresectable and metastatic disease

Hepatocellular cancer <2%
  Resectable disease
  Unresectable, liver-only disease
  Metastatic disease

Gastrointestinal neuroendocrine tumors <2%

Pancreatic cancer 3%
  Resectable disease
  Unresectable disease
  Metastatic and recurrent disease

Small bowel and appendiceal cancer <2%
  Small bowel cancer
  Appendiceal cancer

Skin Cancer, Sarcomas, and Unknown Primary Site 6% of Exam

Melanoma 2%
  Localized melanoma
  Regional nodal and in-transit metastasis
  Metastatic disease
Other skin cancers
- Squamous cell and basal cell cancer of the skin
  - Local-regional disease
  - Recurrent and metastatic disease
- Merkel cell carcinoma

Bone and soft-tissue sarcomas
- Localized primary disease
- Local disease recurrence
- Metastatic disease
- Gastrointestinal stromal tumor (GIST)
  - Local-regional disease
  - Recurrent and metastatic disease

Unknown primary site

### Head, Neck, Thyroid, and Central Nervous System Malignancies 4% of Exam

Squamous cell carcinoma of the head and neck
- Human papillomavirus–positive disease
  - Local-regional disease
  - Recurrent and metastatic disease
- Human papillomavirus–negative disease
  - Local-regional disease
  - Recurrent and metastatic disease

Salivary gland tumors

Thyroid cancer
- Papillary
- Medullary
- Anaplastic

Nasopharyngeal carcinoma
- Local and regional disease
- Metastatic disease

Central nervous system malignancies
- Primary central nervous system lesions
  - High-grade gliomas (astrocytoma and glioblastoma)
  - Oligodendroglioma and other central nervous system lesions
Metastatic central nervous system lesions
  Parenchymal metastases
  Meningeal metastases

January 2024