### **APRIL - 2001**

### [KD 059]

Sub. Code: 1804

### M.Ch. DEGREE EXAMINATION

(Higher Specialities)

Branch VII - Surgical Oncology

(Revised Regulations)

### Paper IV — RECENT ADVANCES IN SURGICAL ONCOLOGY

Time: Three hours Maximum: 100 marks

- Define the role of ILP (Isolated Limbs Perfusion) and surgery in management of melanoma of extremities. (25)
- 2. Describe Limb conservative surgical procedures in Soft Tissue Sarcomas. (25)
- 3. Write short notes on:  $(5 \times 10 = 50)$ 
  - (a) Peyronie's disease
  - (b) Plasma cell neoplasm
  - (c) Photo dynamic therapy
  - (d) Porama
  - (e) Paget's disease.

### **NOVEMBER - 2001**

[KE 059]

Sub. Code: 1804

3 Write short notes on

M.Ch. DEGREE EXAMINATION

(Higher Specialities)

(Revised Regulations)

Branch VII - Surgical Oncology

Paper IV — RECENT ADVANCES IN SURGICAL ONCOLOGY

Time: Three hours Meximum: 100 marks

### Answer ALL questions

- Define Proximal Gastric Cancers. Give a classification for them. Discuss the surgical management (25).
- Discuss the limb salvage management of malignant Bone Tumors under following headings:
  - (a) Biopsy
  - (b) Radiological investigations
  - (c) Extendable prosthesis
  - (d) Neo adjuvant chemotherapy
  - (e) Rehabilitation.

(25)

- (a) Autologus Bone Marrow Transplant
- (b) Naproxen sodium
- (c) Cancer Related Alopecia
- (d) Re-irradiation
- (e) Complications of Retroperitoneal lymph adenectomy.  $(5 \times 10 = 50)$

### **MARCH - 2002**

### [KG 059] Sub. Code: 1804

### M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII - Surgical Oncology

### Paper IV — RECENT ADVANCES IN SURGICAL ONCOLOGY

Time: Three hours Maximum: 100 marks

Answer ALL questions.

- 1. Immunotherapy for cancer. (25)
- 2. Treatment of Sarcoma Right Deltoid (25)
- 3. Write briefly on:  $(5 \times 10 = 50)$ 
  - (a) Laparoscopy.
  - (b) Fibroadenoma.
  - (c) FNAC.
  - (d) Cancer Chachexia.
  - (e) Solitary metastatic nodule right lobe of liver.

### SEPTEMBER - 2002

### [KH 059]

Sub. Code: 1804

### M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

Branch VII - Surgical Oncology

(Revised Regulations)

### Paper IV — RECENT ADVANCED IN SURGICAL ONCOLOGY

Time: Three hours Maximum: 100 marks

### Answer ALL questions

1.	Rapid access Breast clinic.	(25)
2.	Treatment of renal cell carcinoma.	(25)

- 3. Write briefly on:  $(5 \times 10 = 50)$ 
  - (a) Laser treatment for cancer
  - (b) Immune deficiency states in cancer patients
  - (c) Role of cancer support groups
  - (d) MRI in cancer
- (e) Peritonesoscopy for management of cancer liver.

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### **APRIL - 2004**

KK 059]

Sub. Code: 1804

B. Short notes:

 $(10 \times 5 = 50)$ 

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII - Surgical Oncology

Paper IV — RECENT ADVANCES IN SURGICAL
ONCOLOGY

Time: Three hours Maximum: 100 marks

Theory : Two hours and forty Theory : 80 marks

minutes

M.C.Q.: Twenty minutes M.C.Q.: 20 marks

Answer ALL questions.

A. Essay:

 $(2 \times 15 = 30)$ 

- (1) Discuss gene therapy for cancer.
- (2) Discuss the role of vaccines in cancer prevention and treatment.

- (1) Image guided surgery.
- (2) Proton beam therapy.
- (3) Minimal Residual Cancer.
- (4) Radio immuno guided surgery.
- (5) Endoscopic ultrasound.
- (6) Nonsteroidal anti inflammatory drugs for cancer prevention.
  - (7) Monoclonal antibodies for cancer therapy.
  - (8) Differentiation therapy.
  - (9) Anti angiogenic agents.
  - (10) Fish.

#### **AUGUST - 2004**

[KL 059]

Sub. Code: 1804

II. Write short notes on :

 $(10 \times 5 = 50)$ 

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII - Surgical Oncology

Paper IV — RECENT ADVANCES IN SURGICAL ONCOLOGY

Time: Three hours Maximum: 100 marks

Theory: Two hours and Theory: 80 marks

forty minutes

M.C.Q.: Twenty minutes M.C.Q.: 20 marks

Answer ALL questions.

I. Essay:

 $(2 \times 15 = 30)$ 

- Discuss the management of prostrate cancer with respect to Surgery Versus Radiotherapy in todays perspective.
- (2) How will you set up the tumor Registry? Discuss its role in India.

- (a) Cell death by suicide.
- (b) DNA Repair mechanisms.
- (c) Oxaliplatin.
- (d) Rituximab.
- (e) Ethical issues in clinical trials.
- (f) Cancer diagnosis and denial.
- (g) Postoperative Adhesion Prevention in laprotomy.
- (h) Multiple Organ Dysfunction Syndrome (MODS).
  - (i) HER-2 nev.
  - (i) Merkel cell carcinoma.

#### FEBRUARY - 2005

**IKM 0591** Sub. Code: 1804 II. Short notes :  $(10 \times 5 = 50)$ Photodynamic therapy. M.Ch. DEGREE EXAMINATION. (b) Thyrosine Kinase inhibitors. (Higher Specialities) TRAM Flap. (Revised Regulations) Chondeoma. Branch VII - Surgical Oncology Primary peritoneal carcinoma Paper IV - RECENT ADVANCES IN SURGICAL ONCOLOGY (f) Staging Laparotomy for Hodgkin's Disease. Time: Three hours Maximum: 100 marks Partial Nephrectomy. (g) Theory: Two hours and Theory: 80 marks Pancreatic cystadenocarcinoma forty minutes Endoscopic spectroscopy M.C.Q.: Twenty minutes M.C.Q.: 20 marks Immunohistochemistry in the diagnosis of Answer ALL questions. cancer. L  $(2 \times 15 = 30)$ Essay:

- Describe the current status of organ transplantation in cancer.
- (2) Diagnosis and management of intraepithelial neoplasis of uterine cervix.

#### FEBRUARY - 2006

[KO 059]

Sub. Code: 1804

II. Short notes:

 $(10 \times 5 = 50)$ 

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII - Surgical Oncology

Paper IV — RECENT ADVANCES IN SURGICAL ONCOLOGY

Time: Three hours Maximum: 100 marks

Theory: Two hours and Theory: 80 marks

forty minutes

M.C.Q.: Twenty minutes M.C.Q.: 20 marks

Answer ALL questions.

Essay questions :

 $(2 \times 15 = 30)$ 

- Define Cellular Immunity. Role of specialised antigen – presenting cells in cancer. Advantages of non specific cytotoxic cells.
- (2) Describe the recent developments in the endocrine therapy of early breast cancer.

- (a) Intra operative ultrasound in cancer surgery
- (b) PET scan in oncology
- (c) Serum calcitonin as tumor marker
- (d) Brachytherapy
- (e) Second look laparotomy
- (f) Screening for colorectal cancer
- (g) Staplers in cancer surgery
- (h) Role of three field Lymphadenectomy in oesophageal cancer
  - (i) Management of pseudomyxoma peritonei
- (j) Technique of Frozen section and its advantages and disadvantages.

### **AUGUST - 2006**

[KP 059]

Sub. Code: 1804

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII - Surgical Oncology

Paper IV --- RECENT ADVANCES IN SURGICAL ONCOLOGY

Time: Three hours

Maximum: 100 marks

Theory: Two hours and

Theory: 80 marks

forty minutes

M.C.Q.: Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

I. Essay questions :

 Discuss the role of laparoscopy in hepatobiliary and pancreatic cancers. (20)

 Recognition and significance of cancer cells in circulation. (15)

 Discuss the management of pseudomyxoma peritonei. (15) II. Short notes:

 $(6 \times 5 = 30)$ 

- (a) Transanal endoscopic microsurgery
- (b) Port site metastasis
- (c) Role of lymphadenectomy in ovarian cancer
- (d) Fast track surgery in surgical oncology
- (e) Prophylactic oopherectomy
- (f) Total mesorectal excision.

### FEBRUARY - 2007

[KQ 059]

Sub. Code: 1804

### M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII - Surgical Oncology

### Paper IV — RECENT ADVANCES IN SURGICAL ONCOLOGY

Time: Three hours Maximum: 100 marks

Theory: Two hours and Theory: 80 marks

forty minutes

M.C.Q.: Twenty minutes M.C.Q.: 20 marks

### Answer ALL questions.

- I. Essay Questions:
- 1. Describe the clinical and pathological characteristics of the primary germ cell tumors of the mediastinum and their management. (20)

- Classify the metastatic disease of liver. Describe the diagnosis and management of hepatic metastases.
   Role of RFA in hepatic metastases. (Radio Frequency Ablation). (15)
- 3. Define the risk factors of secondary cancers and their management. (15)
- II. Short notes:  $(6 \times 5 = 30)$
- Endo sonography in GI cancers.
- Hereditary diffuse Gastric cancer syndrome.
- Diagnosis and management of Gastro Intestinal stromal tumors.
- 4. Intensity Modulated Radio Therapy (IMRT).
- Intra vescical therapy of bladder cancer.
- Granulocyte colony stimulating factor in cancer treatment.

[KR 059]

Sub. Code: 1804

#### M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII — Surgical Oncology

### Paper IV — RECENT ADVANCES IN SURGICAL ONCOLOGY

Time: Three hours

Maximum: 100 marks

Theory: Two hours and

Theory: 80 marks

forty minutes

M.C.Q.: Twenty minutes

M.C.Q.: 20 marks

### Answer ALL questions.

- I. Essay Questions:
- 1. Discuss neoplasms in acquired immunodeficiency syndrome and their management. (20)
- 2. Discuss hormonal management of breast cancer in pre and post menopausal women. (15)
- 3. Discuss about minimally invasive surgery in Cancer. What are the advantages and disadvantages of minimally invasive surgery in cancer? (15)

II. Write short notes on:

 $(6 \times 5 = 30)$ 

- (a) Discuss total mesorectal excision in rectal cancer.
  - (b) Write on LASERS in cancer.
  - (c) Classification and staging of neuroblastoma.
  - (d) Monoclonal antibodies in cancer management.
- (e) Discuss on moori's law in oncologic informatics.
- (f) Isolated Limb Perfusion in Melanoma of extremities.

[KS 059]

Sub. Code: 1804

### M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII — Surgical Oncology

### Paper IV — RECENT ADVANCES IN SURGICAL ONCOLOGY

Q.P. Code: 181804

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

- I. Essay questions:
- 1. Discuss the present status and use of Minimally Invasive Surgery in Oncology. (20)
- 2. Discuss the management of a middle aged woman presenting with malignant ascites. (20)
- II. Short notes:

 $(10\times 6=60)$ 

- (1) Proteonomics
- (2) Chromoendoscopy
- (3) PET scan

- (4) Management of Hormone Refractory Prostate Cancer
  - (5) Tissue expanders in Malignancy
  - (6) Immunotoxins
  - (7) Discuss on Mooris law in Cancer informatics
  - (8) Uterine sarcomas
  - (9) Radiofrequency ablation in Cancer
- (10) Management of Superior Vena Cava Syndrome.

### August 2008

[KT 059]

### M.Ch. DEGREE EXAMINATION

(Higher Specialities)

(Revised Regulations)

### **Branch VII – SURGICAL ONCOLOGY**

### Paper IV – RECENT ADVANCES IN SURGICAL ONCOLOGY

Q.P. Code: 181804

Time: Three hours Maximum: 100 Marks

### ANSWER ALL QUESTIONS Draw suitable diagrams wherever necessary.

I. Essays:  $(2 \times 20 = 40)$ 

- 1. Discuss the role of surgery in cancer prevention.
- 2. Discuss the current trends in optimization of colorectal surgery.

#### II. Write short notes on:

 $(10 \times 6 = 60)$ 

**Sub. Code: 1804** 

- 1. IGRT.
- 2. Intra-operative radiotherapy.
- 3. Biologic therapy in breast cancer.
- 4. Pitfalls in meta analysis.
- 5. Recent trends in management of cancer pain.
- 6. Male sexual dysfunction after cancer treatment.
- 7. Gene therapy.
- 8. Marginal mandibulectomy.
- 9. Management of liver metastasis.
- 10. Abdominal compartment syndrome.

### February 2009

[KU 059] Sub. Code: 1804

# M.Ch. DEGREE EXAMINATIONS (Higher Specialities) (Revised Regulations)

### Branch VII – Surgical Oncology Paper IV – RECENT ADVANCES IN SURGICAL ONCOLOGY O.P. Code: 181804

Time: Three hours Maximum: 100 Marks

### ANSWER ALL QUESTIONS Draw suitable diagrams wherever necessary.

I. Essays:  $2 \times 20 = 40 \text{ Marks}$ 

- 1. Describe the classification and staging of Oesophageal cancer. Indications for neoadjuvant treatment and mention types of surgical procedures done for operable lesions.
- 2. Discuss classification, staging and management of Testicular tumors.

#### II. Write short notes on:

 $10 \times 6 = 60 \text{ Marks}$ 

- 1. Management of superior vena caval syndrome.
- 2. Role of sialastic implants in cancer.
- 3. Psychological disorders in cancer patients.
- 4. Carcinoid management.
- 5. Discuss on Radioactive gold seeds in cancer treatment.
- 6. Discuss Paraneoplastic syndrome.
- 7. Treatment of chordoma.
- 8. MEN IIb.
- 9. Role of retinoids in cancer.
- 10. Acute and long term complications of Radiation therapy and how do you prevent Radiation toxicity?

### August 2009

[KV 059] Sub. Code: 1804

# M.Ch. DEGREE EXAMINATIONS (Super Specialities) (Revised Regulations)

### Branch VII – Surgical Oncology Paper IV – RECENT ADVANCES IN SURGICAL ONCOLOGY *Q.P. Code: 181804*

Time: Three hours Maximum: 100 Marks

### **ANSWER ALL QUESTIONS Draw suitable diagrams wherever necessary.**

I. Essays:  $2 \times 20 = 40 \text{ Marks}$ 

- 1. Discuss current evidence in the management of axilla in clinically node negative breast cancer.
- 2. Discuss recent advances in radiation therapy techniques and approaches.

### II. Write short notes on: $10 \times 6 = 60 \text{ Marks}$

- 1. RADPLAT regime in head neck cancer.
- 2. Sphincter preservation in rectal cancer.
- 3. Cutaneous melanoma.
- 4. Pathophysiology and management of chronic cancer pain.
- 5. Video assisted thoracoscopic surgery (VATS).
- 6. Role of sentinel node biopsy in head neck cancers.
- 7. Cervical cancer vaccine.
- 8. Herceptin (Trastuzumab).
- 9. Discuss instruments used in quality of life analysis in laryngeal cancer.
- 10. Radio frequency ablation.

### February 2010

[KW 059]

#### M.Ch. DEGREE EXAMINATIONS

(Super Specialities) (Revised Regulations)

### Branch VII – Surgical Oncology (Common to all candidates) Paper IV – RECENT ADVANCES IN SURGICAL ONCOLOGY O.P. Code: 181804

Time: Three hours

Maximum: 100 Marks

### ANSWER ALL QUESTIONS

Draw suitable diagrams wherever necessary.

I. Essays:

 $2 \times 20 = 40 \text{ Marks}$ 

**Sub. Code: 1804** 

- 1. Discuss the management of a 40 year old man presenting with Jaundice of one month's duration.
- 2. Classify bone tumours and discuss the management of a 18 year old girl presenting with a tumour lower end of femur (including the chemotherapy regimens/ schedules used and the various types of prosthesis available / used).

#### II. Write short notes on:

 $10 \times 6 = 60 \text{ Marks}$ 

- 1. DNA micro-array.
- 2. Uterine sarcomas.
- 3. Hormonal management of prostate cancer.
- 4. Management of a 45 year old man presenting with a poorly differentiated malignant tumour mass, in a cervical lymph node mass (CUP).
- 5. Concurrent chemoradiotherapy.
- 6. Cancer vaccines.
- 7. Sentinel node biopsy.
- 8. Voice conservation / restoration in laryngeal cancer.
- 9. Use of Monoclonal antibodies in treatment of cancer.
- 10. Chemoprevention.

### February 2011

[KY 059] Sub. Code: 1804

### MASTER OF CHIRUGIAE (M.Ch.) DEGREE EXAMINATIONS

(Super Specialities)

### Branch VII - SURGICAL ONCOLOGY

(Revised Regulations)

**Common to all candidates** 

### Paper IV – RECENT ADVANCES IN SURGICAL ONCOLOGY

Q.P. Code: 181804

Time: Three hours Maximum: 100 Marks

### **Answer ALL questions**

Draw suitable diagrams wherever necessary.

I. Essays:  $(2 \times 20 = 40)$ 

- 1. What is Genetic counselling? Discuss the hereditary cancer syndromes.
- 2. Discuss the role of Endoscopy in the management of Cancer.

#### II. Write short notes on:

 $(10 \times 6 = 60)$ 

- 1. Retinoids.
- 2. Trans arterial chemo embolization.
- 3. Supraglottic laryngectomy.
- 4. Small cell lung cancer.
- 5. Barret's Oesophagus.
- 6. Stenting in oesophageal cancers.
- 7. Hepatoblastoma.
- 8. Hereditary colorectal cancer.
- 9. Meso rectal excision.
- 10. Van-Hippel's Lindau's Disease.

[KZ 059] Sub. Code: 1804

## MASTER OF CHIRUGIAE (M.Ch.) DEGREE EXAMINATION (SUPER SPECIALITIES)

### **BRANCH VII – SURGICAL ONCOLOGY**

### RECENT ADVANCES IN SURGICAL ONCOLOGY

Q.P. Code:181804

Q.P. Code:181804				
Time: 3 hours		Maximum: 100 marks		
(180 Min)  Answer ALL questions in the same ord	er			
I. Elaborate on:	Pages		Marks ) (Max.)	
1. Discuss the pathology and management of Tumours of				
the mandible.	11	35	15	
2. Discuss the current status of PET scan in Oncological				
practice.	11	35	15	
II. Write notes on :				
1. MALT Lymphoma.	4	10	7	
2. Hairy cell Leukemia.	4	10	7	
3. Magnetic Resonance Spectroscopy.	4	10	7	
4. Chordoma.	4	10	7	
5. Retinoblastoma.	4	10	7	
6. H. pylori and Cancer.	4	10	7	
7. Microarray.	4	10	7	
8. Indiana Pouch.	4	10	7	
9. Neutron Beam therapy.	4	10	7	
10. VATS.	4	10	7	

### [LA 059] Februray 2012

### MASTER OF CHIRUGIAE (M.CH) DEGREE EXAMINATION

**Sub. Code: 1804** 

### (SUPER SPECIALITIES)

### **BRANCH VII – SURGICAL ONCOLOGY**

### RECENT ADVANCES IN SURGICAL ONCOLOGY Q.P. Code: 181804

Time: 3 hours (180 Min)		Maximum: 100 marks		
Answer ALL questions in the same or I. Elaborate on :		Time (Max.)	Marks (Max.)	
1. Discuss the role of Metastatectomy in Cancer.	16	35	15	
2. Discuss the various methods of preparing for Liver resections.	16	35	15	
II. Write notes on:				
1. Vannes Rotationplasty.	4	10	7	
2. Mammoprint.	4	10	7	
3. Role of surgery in Wilm's Tumour.	4	10	7	
4. Molecular classification of Breast Cancer.	4	10	7	
5. Management of triple negative Breast Caner.	4	10	7	
6. Molecular targeted therapies.	4	10	7	
7. PDT.	4	10	7	
8. Accelerated Partial Breast Radiation.	4	10	7	
9. Paraganglionoma.	4	10	7	
10. Temporal bone resections.	4	10	7	

### [LB 059] AUGUST 2012 Sub. Code: 1804

### M.Ch – SURGICAL ONCOLOGY

### Paper – IV RECENT ADVANCES IN SURGICAL ONCOLOGY

Q.P. Code: 181804

Time : 3 hours		Maximum: 100 marks		
Time	(180 Min)	Maxiii	iiuiii . 10	o mai ks
	Answer ALL questions in the same ord	er		
I. Elal	borate on :	Pages	Time (Max.)	Marks (Max.)
1.	Discuss the etiology, pathophysiology, evaluation and management of Venous thromboembolism in cancer.	16	35	15
2.	Describe the principles and clinical application of Radiofrequency ablation in various cacers.	16	35	15
II W	rite notes on :			
	Discuss the diagnosis work up of a patient with Multiple Endocrine Neoplasia 1.	4	10	7
2.	Describe the advantages and limitations of Capsule endoscopy.	4	10	7
3.	Discuss the scope and advantages of Video Assisted Thor Surgery (VATS).	racic 4	10	7
4.	Discuss the indications and future potential for HPV vaccination as a mode of cancer prevention.	4	10	7
5.	Describe the pathophysiology and role of Transarterial chemo embolisation in the management of hepatocellular carcinoma.	4	10	7
6.	Discuss the advantages and approved indications for the upof Recombinant TSH in thyroid cancers.	ise 4	10	7
7.	Discuss the scope and diagnostic potential of MammaPrinthe management of breast cancers.	nt in 4	10	7
8.	Discuss the role of Peptide receptor radiotherapy in the management of Neuroendocrine tumors.	4	10	7
9.	Discuss the therapeutic applications of Stereotactic Radiosurgery in oncology.	4	10	7
10.	Classify Biliary stents and discuss its role in the management of malignant obstructive jaundice.	4	10	7

### M.Ch. – SURGICAL ONCOLOGY Paper – IV RECENT ADVANCES IN SURGICAL ONCOLOGY Q.P.Code: 181804

Time: Three Hours Maximum: 100 marks

I. Elaborate on: (2X15=30)

1. Discuss the steps of angiogenesis and drugs targeting angiogenic pathway

2. Histologic subtypes, role of immuno histochemical staining, evaluation and management of cancer of unknown primary site.

### **II. Write notes on:** (10X7=70)

- 1. Extralevator abdomino perineal excision technique and advantages.
- 2. Discuss about Bladder preservation approaches.
- 3. Pathology, evaluation and management of Male breast cancer.
- 4. Discuss the etiology, pathology, evaluation and management of early stage epithelial ovarian cancer.
- 5. Discuss the role of Sentinel node biopsy in carcinoma penis.
- 6. Discuss the role and technique of Extra corporeal irradiation in management of bone tumours.
- 7. Discuss about evaluation and Management of brain metastasis.
- 8. Discuss the stepwise management of cancer pain.
- 9. Etiology, diagnosis and management of superior vena caval obstruction.
- 10. Role and types of Stereotactic radiotherapy.

## M.Ch. – SURGICAL ONCOLOGY Paper IV – RECENT ADVANCES IN SURGICAL ONCOLOGY

Q. P. Code: 181804

Time: Three Hours Maximum: 100 Marks

Answer ALL questions in the same order.

I. Elaborate on:  $(2 \times 15 = 30)$ 

- 1. Contraindications for breast conservative surgery and oncomammoplasty.
- 2. Classification of lesions of anal canal and Management of carcinoma of Anal region.

II. Write notes on:  $(10 \times 7 = 70)$ 

- 1. LASER surgery.
- 2. Intraoperative ultra sonography.
- 3. Monoclonal antibodies in cancer management.
- 4. Discuss on Mycosis Fungoides.
- 5. Importance of performance status.
- 6. Meig's syndrome.
- 7. C cell tumors.
- 8. Liposomal doxorubicin.
- 9. Plasmacytoma.
- 10. Glioblastoma multiforme.