# Melanoma Case Scenario 1

**History and physical**

11/5/16 Patient is a single, 48-year-old male in good health who presented to his primary physician for a yearly physical exam during which a 3.4 x 2.8 x 1.5 cm suspicious-looking mole was noted on the dorsal upper left arm, just proximal to the elbow. Head, neck, thorax, and abdominal exams were normal, with the exception of a hard, enlarged, non-tender mass felt in the left axillary region.

**Procedure 1**:

11/13/16 Surgical excision with 3 mm margins

**11/13/16 Pathology 1**

* Superficial spreading melanoma with vertical level V invasion, left upper arm.
* Breslow’s thickness approximately 6.0 mm, ulcerated, lesion present at the lateral edge.
* Clark level IV.
* 2 mm margin of resection.
* Coalescent nests of neoplastic cells were noted in the papillary and reticular dermis and in the subcutaneous layer. Large pink-stained cells with pleomorphic nuclei were found spreading radially through the epidermal layer. Proliferating lymphocytic cells noted in dermis surrounding the malignant cells.

**PET/CT scan c/a/p**

11/21/16 Enlarged left axillary lymph nodes highly suspicious for metastasis, in-transit metastasis of upper left arm.

**Lab work**

12/14/16

LDH was within upper range at 735 U/L.

Normal Range LDH 300 – 600 U/L

**Procedure 2**

12/15/16 Wide re-excision with margins in excess of 2cm, left upper arm; sentinel node biopsy, axillary lymphadenectomy.

**12/15/16 Pathology 2**

* Residual melanoma in situ found in left upper arm; 2cm margins of resection are negative.
* Sentinel lymph nodes 2 of 4 nodes positive for metastatic melanoma.
* Radical axillary node dissection reveals 8 of 27 nodes positive for disease.

Bottom of Form

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| --- | --- |
| * **What is the primary site?**

**C44.6*** **What is the histology?**

**8743/3** | * **What is the grade/differentiation?**

**9** |
| **Stage/ Prognostic Factors** |
| Summary Stage | 4  | Tumor Size Summary | 034 |
| TNM Clin T | c4b | TNM Path T | p4b |
| TNM Clin N | c3 | TNM Path N | p3 |
| TNM Clin M | c0 | TNM Path M | c0 |
| TNM Clin Stage | 3 | TNM Path Stage | 3c |
| TNM Clin Descriptor | 0 | TNM Path Descriptor | 0 |
| TNM Clin Staged By | 20 | TNM Path Staged By | 20 |
| CS SSF 1 | 600 |  |  |
| CS SSF 2 | 010 | Regional Nodes Positive | 10 |
| CS SSF 3 | 150 | Regional Nodes Examined | 31 |
| CS SSF 4 | 999 | Mets at Dx - Bone | 0 |
| CS SSF 7 | 999 | Mets at Dx - Brain | 0 |
|  |  | Mets at Dx - Liver | 0 |
|  |  | Mets at Dx - Lung | 0 |
|  |  | Mets at Dx - Other | 0 |
|  |  | Mets at Dx – Distant LN | 0 |
|  |  |  |  |
| **Treatment** |
| Diagnostic Staging Procedure | 00 |  |  |
| **Surgery Codes** |  | **Radiation Codes** |  |
| Surgical Procedure of Primary Site | 47 | Radiation Treatment Volume | 00 |
| Scope of Regional Lymph Node Surgery | 6 | Regional Treatment Modality | 00 |
| Surgical Procedure/ Other Site | 0 | Regional Dose | 00000 |
| **Systemic Therapy Codes** |  | Boost Treatment Modality | 00 |
| Chemotherapy | 00 | Boost Dose | 00000 |
| Hormone Therapy | 00 | Number of Treatments to Volume | 000 |
| Immunotherapy | 00 | Reason No Radiation | 1 |
| Hematologic Transplant/Endocrine Procedure | 00 | Radiation/Surgery Sequence | 0 |
| Systemic/Surgery Sequence | 0 |  |  |

# Melanoma Case Scenario 2

**History and Physical**

3/3/16 A 60-year-old Hispanic male was hospitalized for investigation with a two month history of abdominal pain, altered intestinal function, lack of appetite and asthenia, accompanied by chills and night fever. The patient reported an unquantifiable weight loss and he had been smoking twenty cigarettes a day for the last 30 years.

Physical examination revealed nodular lesions over the whole body of approximately 1cm diameter, fiber-elastic in nature, without infiltration into deeper tissues, with one nodule of approximately 2 cm diameter, in the posterior face of the left outer ear that was a hardened, ulcerated and associated with nearby angiomas. The liver was observed to be 12 cm below the right costal margin, hardened on its costal edge, nodular, painful, and the Traube’s space was massive.

**3/5/16 Lab work**

* Hb/Htc 11.2/33
* Wbc 122000
* Dirrential (leukocytes) 2/70/3/13/11
* Platelets 336000
* ASt/Alt 55/47
* AP/gGT 1156/477
* Tb/CGB 0.9/0.4
* PA 57.7%
* Albumin 2.5
* Hematuria Negative
* LDH 5724 Normal Range LDH 300 – 600 U/L
* Na/K 136/3.9

**Sonogram of Abdomen**

3/5/16 Heterogeneous hepatomegaly and splenomegaly with multiple images suggestive of nodular metastatic lesions in the liver and spleen as well as nodular image suggestive of peripancreatic ganglia and a left kidney cyst.

**CT Abdomen**

3/5/16 Widespread hypodense nodules in the hepatic and spleen beds, corresponding to a metastatic neoplasm. Presence of hepatic and spleen nodules suggestive of metastatic neoplasm.

**CT of thorax and bronchoscopy**

3/5/16 Negative

**Procedures**

3/7/16 Core needle biopsies of subcutaneous skin and liver nodules. Excision of skin lesion left ear.

**3/7/16 Pathology Report**

* Specimen Type: Skin left ear
	+ Histologic Type: Malignant melanoma
	+ Maximum Depth of Primary Tumor in this Specimen: 0.45mm
	+ Mitotic Index: Less than 1 mitotic figure per mm2
	+ Ulceration: Absent and less than 1 mitotic figure per mm2
	+ Metastasis to Regional Lymph Nodes and/or Skin (P): Positive
	+ Distant Metastasis (M): MX: Cannot be assessed
	+ Lateral Margins: Involved
	+ Deep Margin: Involved by malignant melanoma
	+ Lymphatic *I* Vascular Invasion (V): Present
	+ *Other Histologic Features*
		- Clark Level (anatomic level of invasion): IV
		- Perineural Invasion: Present
		- Tumor-Infiltrating Lymphocytes: Brisk
		- Tumor Regression: Present involving more than 75%
* Specimen Type: Subcutaneous skin nodule
	+ Metastatic Melanoma
* Specimen Type: Liver nodule
	+ Metastatic Melanoma

The patient’s general state declined rapidly with weight loss, asthenia, painful abdominal distention radiating to the back, ascites, pleural spillage to the right, bilateral edema involving the lower extremities, dyspnea and torpor. After 22 days in hospital, he developed acute anemia and urinary hemorrhage. At this time the patient developed persistent acidosis (pH = 7.25, bicarbonate = 12.1 mmol/L and BE = -12.8) which did not respond to the treatment. Death occurred on the 24th day.

**3/20/16 Lab work**

* Hb/Htc 6.4/19
* Wbc 15500
* Dirrential (leukocytes) 21/64/0/9/6
* Platelets 22700
* AST/ALT 3152/554
* AP/gGT 1518/348
* TB/CB 0.9/0.41.1/0.8
* PA 44.7%
* Albumin 2.1
* Hematuria 320,000
* LDH 12765 Normal Range LDH 300 – 600 U/L
* Na/K 128/6.0

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| --- | --- |
| * **What is the primary site?**

**C442*** **What is the histology?**

**8720/3** | * **What is the grade/differentiation?**

**9** |
| **Stage/ Prognostic Factors** |
| Summary Stage | 7 | Tumor Size Summary | 020 |
| TNM Clin T | cT1a | TNM Path T |  |
| TNM Clin N | cN0 | TNM Path N |  |
| TNM Clin M | pM1c | TNM Path M | pM1c |
| TNM Clin Stage | 4 | TNM Path Stage | 4 |
| TNM Clin Descriptor | 0 | TNM Path Descriptor | 0 |
| TNM Clin Staged By | 20 | TNM Path Staged By | 20 |
| CS SSF 1 | 045 |  |  |
| CS SSF 2 | 000 | Regional Nodes Positive | 98 |
| CS SSF 3 | 005 | Regional Nodes Examined | 00 |
| CS SSF 4 | 020 | Mets at Dx - Bone | 0 |
| CS SSF 7 | 990 | Mets at Dx - Brain | 0 |
|  |  | Mets at Dx - Liver | 1 |
|  |  | Mets at Dx - Lung | 0 |
|  |  | Mets at Dx - Other | 1 |
|  |  | Mets at Dx – Distant LN | 0 |
|  |  |  |  |
| **Treatment** |
| Diagnostic Staging Procedure | 01 |  |  |
| **Surgery Codes** |  | **Radiation Codes** |  |
| Surgical Procedure of Primary Site | 27 | Radiation Treatment Volume | 0 |
| Scope of Regional Lymph Node Surgery | 0 | Regional Treatment Modality | 00 |
| Surgical Procedure/ Other Site | 0 | Regional Dose | 00000 |
| **Systemic Therapy Codes** |  | Boost Treatment Modality | 00 |
| Chemotherapy | 00 | Boost Dose | 00000 |
| Hormone Therapy | 00 | Number of Treatments to Volume | 000 |
| Immunotherapy | 00 | Reason No Radiation | 1 |
| Hematologic Transplant/Endocrine Procedure | 00 | Radiation/Surgery Sequence | 0 |
| Systemic/Surgery Sequence | 0 |  |  |