

Oncology I

- In advanced stage lung cancer, treatment is based upon the histology, presence of driver mutations, and PDL1 status.
 - Molecular targeted therapy is typically preferred in patients with driver mutations.
 - In the absence of driver mutations, chemoimmunotherapy or immunotherapy alone are pursued in patients with an acceptable functional status.
- Adjuvant therapy for early-stage breast cancer is based upon not only the stage but the status of the ER/PR/Her 2 receptors.
- Adjuvant chemotherapy is typically recommended for all patients with Stage III colon cancer.
 - Adjuvant therapy is considered for patients with Stage II colon cancer when certain high-risk features (less than 12 LN removed at the time of surgery, poorly differentiated lesion, T4 disease, presence of lymphovascular or perineural invasion) are present.
- Immunotherapy is becoming more prevalent in the management of multiple malignancies including common cancers such as lung and breast cancer in both early and later stages.
 - Recognizing the side effects of immunotherapy quickly is important, as early initiation of systemic therapy with steroids can help quickly reverse sometimes life-threatening effects.
 - Immunotherapy can cause inflammation in almost any organ, manifested as pneumonitis, transaminitis, colitis, myocarditis, encephalitis.
- Molecularly targeted therapy has revolutionized the treatment of many cancers and making sure appropriate testing is done as early as possible is important to guide treatment and help with prognosis.
 - For example, patients with lung cancers containing Anaplastic lymphoma kinase (ALK) rearrangements, even with metastatic disease, patients can live longer than most patients historically with non-small cell lung cancer.
 - A recent study of one of the available ALK inhibitors showed the majority of patients hadn't progressed after 5 years of treatment.

Oncology II

- For patients with advanced stage indolent variants of B cell Non-Hodgkin Lymphoma, observation without active treatment may be appropriate for many patients.
 - Indications for therapy typically include symptomatic disease, bulky lymphadenopathy, or cytopenias related to the disease.
- In patients for which there is a concern regarding spinal cord compression, MRI of the entire spine is indicated and prompt initiation of steroids as well as consultation with radiation oncology and neurosurgery is paramount.
- In patients with febrile neutropenia related either to antineoplastic therapy or because of the underlying malignancy, prompt acquisition of blood/urine cultures, obtaining appropriate imaging, and initiating broad spectrum antibiotics with potential infectious disease consultation is key.
- Early utilization of palliative care in oncology patients has been shown to improve quality of life and mood and may even prolong survival.
 - Specialty palliative care services are covered by most insurance companies even while patients are undergoing active treatment and can help manage unaddressed physical, psychosocial, or spiritual distress.