Introduction  One often hears the term *palliative chemotherapy*, but what exactly does it mean and how can a non-oncologist decide if it has potential value?

**Why is chemotherapy used?**  From the perspective of the patient with locally advanced or metastatic cancer, chemotherapy is used with one of two intents: Hope for cure or hope for life-prolongation.  Oncologists use the term *palliative chemotherapy* as a euphemism for chemotherapy that is not expected to be curative.  What about chemotherapy used solely for symptom control—is that a realistic goal?  Oncologists will occasionally recommend chemotherapy for symptom control, as there are some clinical trial data that in selected cancers chemotherapy may improve quality of life and/or symptom control, without impacting survival.  However, as a general rule, physical symptoms related to the cancer highly correlate with tumor burden; chemotherapy that does not effect tumor growth will generally not improve physical symptoms caused by the tumor.

**What information do you need from the consulting oncologist to help a patient decide on the value of chemotherapy in advanced cancer?**

1.  **What is the Response Rate of the proposed chemotherapy?**  *Response Rate* = (# of complete responses + # of partial responses)/total # of treated patients; as studied in clinical trials.  To qualify as a Response, the reduction in tumor must last for at least one month:
   - *Complete Response* = complete eradication of measurable tumor
   - *Partial Response* = ≥ 50% reduction in measurable tumor
   - *Progressive Disease* = ≥ 25% growth in measurable tumor
   - *Stable Disease* = anything between partial response and progressive disease

   **Note:** response rate data that are generally quoted to patients comes from clinical trials involving closely monitored patients with good performance statuses.  The response rates for patients outside of clinical trials can be expected to be lower – See Fast Fact # 99.

2.  **What is the Median Duration of Response of the proposed chemotherapy regimen?**  This number is vital for patients to make an informed decision and roughly correlates to months of added life to be expected if the chemotherapy is effective.  The MDR, also known as *Time to Progression* (TTP), can be explained to the patient as: *if the chemotherapy is effective at shrinking or stabilizing your cancer (if you are a chemotherapy responder), you can expect it will work for X-X months.*

3.  **What is the potential treatment burden?**  Including acute and delayed toxicities, direct and indirect costs (lost work for family members), need for clinic visits or inpatient stays, need for treatment monitoring (e.g. blood tests, x-rays).  See Fast Facts # 276 and 277 for a discussion of the role of targeted cancer therapies in limiting the potential treatment burden.

4.  **How long must treatment be continued?**  Standard practice is to wait for two full cycles of treatment before assessing response.  However, if a patient is progressing during the first cycle, they will almost always continue to progress through a second cycle.  For responding patients, chemotherapy is generally continued until there is disease progression or intolerable toxicities.

**Reference**