Adjuvant Therapy

Adjuvant therapy refers to any treatment that is given for cancer after the main treatment, with the goal of making the main treatment more likely to be successful.

What Is Adjuvant Therapy?

As noted of *neoadjuvant therapy* in a previous Patient Page, the concept of *adjuvant therapy* is that it serves as a "helper" to the primary, definitive treatment for cancer. While neoadjuvant therapy refers to treatment given *before* the primary treatment, adjuvant therapy refers to treatment given *after* the primary treatment. The most common setting for adjuvant therapy is when a patient with early-stage cancer undergoes surgery, which is then followed by additional systemic treatments, which may include any of the following:

- · Chemotherapy, often given for several months.
- Hormone or endocrine therapy, often given for many years to patients with a hormone-sensitive cancer.
- Molecularly targeted therapy, often given for years to patients with a cancer driven by a specific mutation.
- Radiation therapy, often given over several weeks if there is a high risk of local recurrence near the initial location of the cancer.

Why Is Adjuvant Therapy Beneficial?

Even though adjuvant therapy increases the overall cancer treatment time, it has been shown to improve the chance of cure for many types of cancer. Compared with neoadjuvant therapy, adjuvant therapy has some specific advantages. One advantage of starting with surgery is that it can be performed quickly after diagnosis. Thus, the benefit of the most important treatment approach is delivered as soon as possible.

Another important benefit of starting with surgery is that once the tumor is removed, doctors have more information about the stage, location, and molecular features of the tumor. This is more accurate than preoperative scans, which sometimes can give misleading information about the size of a cancer, how extensively it invades surrounding tissues, and whether or not regional lymph nodes are involved. After surgery, the removed tissue can be carefully examined under a microscope by a pathologist, and the exact size, extent of spread, and tissues involved by the cancer can be determined. In addition, a pathologist can carefully look for specific hormone receptors or specific mutations that may be present, which may affect which form of adjuvant therapy would be best to use.

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Sequential cancer treatment

Neoadjuvant therapy	Primary therapy	Adjuvant therapy
Purpose		
Reduce primary tumor size Eliminate cancer cells that spread to other locations		Eliminate remaining cancer cells
Treatment (alone or in com	bination)	
Chemotherapy Hormone therapy Targeted therapy Radiation therapy	Surgery Radiation therapy	Chemotherapy Hormone therapy Targeted therapy Radiation therapy
Tumor shrinkage Cancer Cancer Calls Original tumor size	Surgical removal Primary tumor Lymph nodes with cancer cells	Local therapy Systemic therapy

Adjuvant therapy can therefore be **precisely tailored** to the needs of a patient based on the prognosis of his or her individual cancer to provide an optimal recipe for cure.

FOR MORE INFORMATION

- Global Resource for Advancing Cancer Education (GRACE). http://cancergrace.org/cancer-101/2015/06/07/faqadjuvrx/
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