

Treatment of advanced cancer

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Introduction

In most patients, cancer is diagnosed in an advanced stage. As a result of public awareness and screening programs, cancer diagnosis can be made at an earlier and more treatable stage, but many oncologists are still faced with patients with advanced disease.

It is important to know that, even in advanced cancer, anticancer treatment may improve survival and quality of life. Some tumors may be cured even in an advanced stage or quality of life may be improved or maintained with anticancer therapy. Supportive and palliative care should always be integrated in anticancer therapy, but the oncologist should be aware that even patients with advanced cancer benefit from anticancer therapy. Selection of patients as candidates for anticancer treatment is guided by sociocultural factors, the general condition of the patient, comorbidities, tumor type and stage, and available treatment modalities.

Curative anticancer treatment

Several tumor types may be treated with curative intent by surgery, radiotherapy, medication or a combination of these treatment modalities, even when the disease presents at an advanced stage (Table 1.1). Most childhood cancers and some of the cancers of adulthood and later ages are curable by combination therapy.

Palliative anticancer treatment

Several studies have compared the impact of both first- and second-line anticancer therapy with best supportive care in patients with advanced metastatic cancer. In patients with a good performance status, these treatments showed improved quality of life and improved survival (Table 1.2). However, for

Table 1.1 Advanced-stage cancer that can be treated with curative intent

Chemotherapy
■ Germ cell tumors of testis and ovary
■ Choriocarcinoma
■ Hodgkin's disease
■ High-grade non-Hodgkin's lymphoma
■ Acute lymphoblastic leukemia (children)
■ Acute myeloid leukemia
■ Small-cell lung cancer
Combination of chemotherapy and surgery
■ Rhabdomyosarcoma
■ Wilms' tumor
■ Osteosarcoma
■ Ewing sarcoma
■ Breast cancer
■ Epithelial ovarian cancer
■ Colorectal cancer
Combination of chemotherapy and radiotherapy
■ Cervical cancer
■ Anal cancer
■ Non-small cell lung cancer
■ Head and neck cancer
■ Lymphoma

several tumor types, there is a lack of randomized data comparing first- or second-line anticancer therapy with best supportive care, although many oncologists are in favor of treating these patients empirically if they have a good performance status (Table 1.3).

Treatment selection should be based on life expectancy and expected benefit for the patient (Figure 1.1).

Patients in good general condition should be offered the opportunity to participate in clinical trials.

Table 1.2. Improved quality of life and survival with anticancer therapy compared with best supportive care as shown in randomized trials

Tumor type	First-line therapy	Second-line therapy
Non-small cell lung cancer	Platinum-based	Docetaxel/pemetrexed
Colorectal cancer	5-Fluorouracil-based	Irinotecan
Pancreatic cancer	Gemcitabine	
Hormone-refractory prostate cancer	Mitoxantrone	
Gastric cancer	5-Fluorouracil-based	

Table 1.3. Empirical anticancer therapy suggested for therapy in advanced cancer in the absence of randomized studies with a best supportive care arm

Tumor type	First-line therapy	Second-line therapy
Adrenocortical carcinoma	Mitotane	
Head and neck cancer	Methotrexate Platinum-based	
Bladder cancer	Platinum-based	
Malignant glioma	Temozolomide	
Hormone-sensitive breast cancer	Tamoxifen Aromatase-inhibitors	Aromatase inhibitors
Hormone-refractory breast cancer	Anthracycline-based	Taxane-based
Hormone-sensitive prostate cancer	Castration	Antiandrogens
Gastrointestinal stromal tumor	Imatinib	
Endometrial cancer	Doxorubicin	
Renal cell cancer	Interleukin-2	
Malignant melanoma	Dacarbazine	
Ovarian cancer	Platinum-based	Taxane-based Topotecan Liposomal doxorubicin
Small-cell lung cancer	Platinum-based Anthracycline-based	
Thyroid cancer	Radioactive iodine	

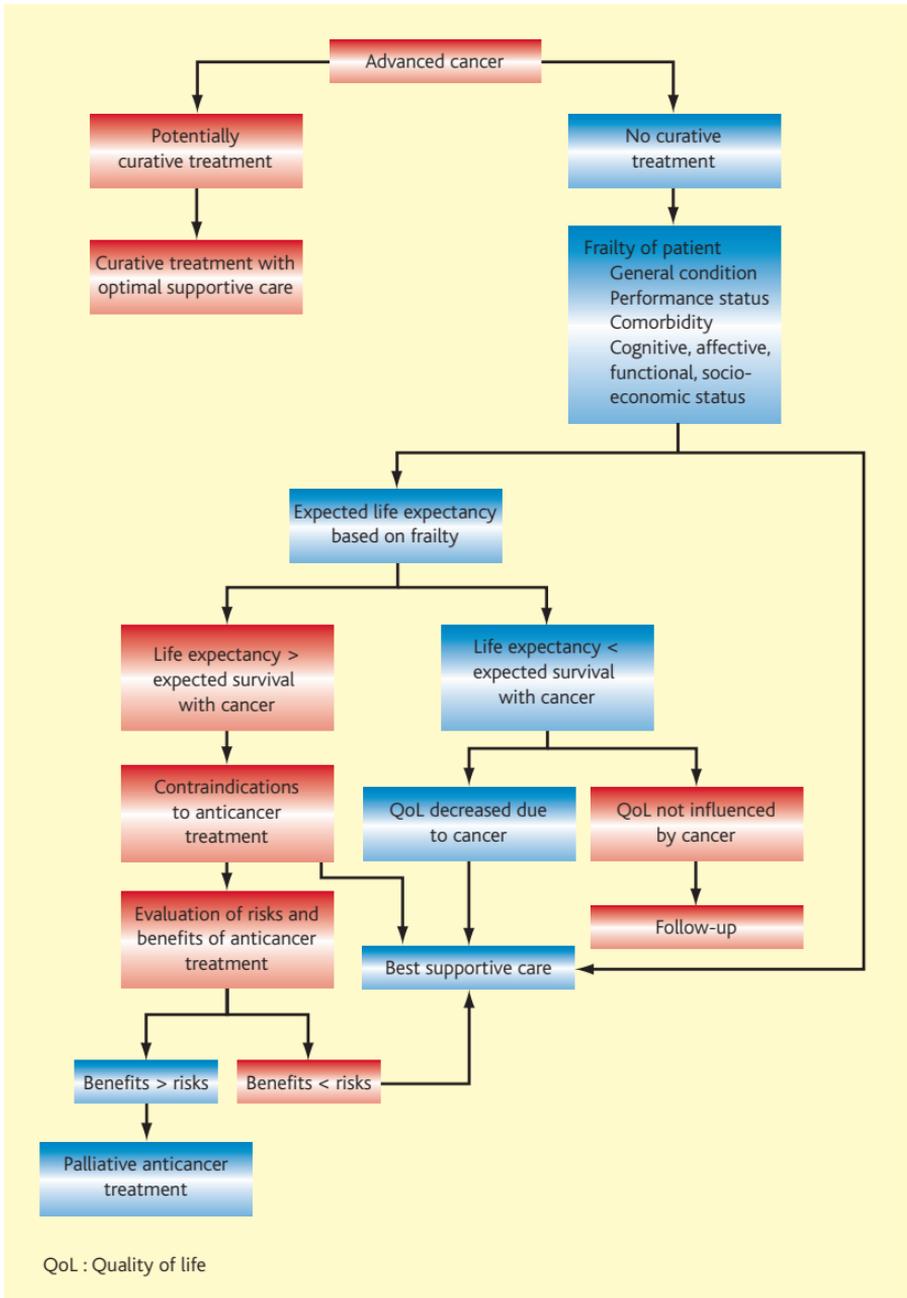


Figure 1.1 Approach to a patient with advanced cancer