ACRO STANDARDS FOR THE USE OF
PHARMACOLOGIC MODIFYING, ADJUNCTIVE AND
SUPPORTIVE AGENTS IN RADIATION ONCOLOGY
Developed by the American College of Radiation Oncology

INTRODUCTION

Radiation Oncology is the independent field of medicine that deals with the therapeutic applications of radiant energy and its modifiers as well as the study and management of cancer and other diseases. The American College of Radiation Oncology (ACRO) is a nonprofit professional organization whose primary purposes are to advance the science of radiation oncology, improve service to patients, study the socioeconomic aspects of the practice of radiation oncology, and provide information to and encourage continuing education for radiation oncologists, medical physicists, and persons practicing in allied professional fields.

As part of its mission, the American College of Radiation Oncology has developed a Practice Accreditation Program, consisting of standards for Radiation Oncology. Accreditation is a voluntary process in which professional peers identify standards indicative of a high quality practice in a given field, and which recognizes entities that meet these high professional standards. Each standard in ACRO’s Practice Accreditation Program requires extensive peer review and the approval of the ACRO Standards Committee as well as the ACRO Board of Chancellors. The standards recognize that the safe and effective use of ionizing radiation requires specific training, skills and techniques. The ACRO will periodically define new standards for radiation oncology practice to help advance the science of radiation oncology and to improve the quality of service to patients throughout the United States. Existing standards will be reviewed for revision or renewal as appropriate on their third anniversary or sooner, if indicated.

The ACRO standards are not rules, but rather attempts to define principles of practice that are indicative of high quality care in radiation oncology. It is important to note that the ACRO standards should not be deemed inclusive of all proper methods of care or exclusive of other methods of care reasonably directed to obtaining the same results. Similarly, the ACRO standards should not be considered a substitute for compliance with federal, state, and local laws and medical licensing board requirements. ACRO cannot, and does not, guarantee, warrant, endorse, or otherwise make representations with regard to the ability of any accredited practice or its practitioners or staff to perform adequately or to meet its patients’ needs. The Radiation Oncologist in light of all circumstances presented by the individual situation must make the ultimate judgment regarding the propriety of any specific procedure or course of conduct.
II. PURPOSE

The use of pharmacologic modifying, adjuvant and supportive agents in conjunction with radiation therapeutic treatment is well established. Further, research continues in this area with the primary goal being improvement in patient care.

The radiation oncologist must be an active participant in the use of pharmacologic agents given during radiotherapeutic treatment since the radiation oncologist is ultimately responsible for care of the patient receiving radiotherapeutic treatment. In addition, the radiation oncologist is the only physician specialty specifically trained in the complex radiobiologic interactions that occur when pharmacologic agents are given to patients receiving radiotherapeutic treatment. Further, the radiation oncologist is in a unique position to formulate strategies to improve radiotherapeutic response to treatment, assess treatment-related side effects and relieve or prevent treatment-related side effects.

The purpose of this document is to establish general standards for the use of these agents in the clinical practice of Radiation Oncology.

III. PHARMACOLOGIC MODIFYING, ADJUNCTIVE AND SUPPORTIVE AGENTS

A wide variety of pharmacologic modifying, adjunctive and supportive agents are available to the radiation oncologist for general clinical use or use in the investigational setting. These agents can be categorized as follows:

A. Radiation protectors
B. Radiation sensitizers
C. Hormonal agents
D. Cytotoxic agents
E. Photosensitizers
F. Immunologic agents
G. Biologic agents
H. Molecular therapeutic agents
I. Antiemetics
J. Pain medications
K. General medications

III. PERSONNEL

A. Qualifications/Certification

1. Radiation Oncologist. A Radiation Oncologists must have (1) satisfactorily completed a radiation oncology residency in an ACGME (American Council of Graduate Medical Education) approved
program, or (2) be certified in radiation oncology or therapeutic radiology by the American Board of Radiology, the American Osteopathic Board of Radiology, or the Royal College of Physicians and Surgeons of Canada.

2. Patient Support Staff. Individuals involved in the care of patients included nurses, physician’s assistants or other staff consistent with applicable state and federal regulations. Certification as an oncology nurse (OCN), advanced oncology nurse (AOCN), or pediatric oncology nurse (POCN) is desirable.

B. Availability

A Radiation Oncologist should be available for direct patient care and quality review on a daily basis. The Radiation Oncologist, facility, and support staff should be available to initiate urgent treatment within a medically appropriate response time on a 24-hour basis, 365 days per year. When not physically present within the facility, the Radiation Oncologist should be accessible by phone, beeper, or other designated means. When unavailable, the Radiation Oncologist is responsible for arranging appropriate coverage. A Radiation Oncologist’s availability should be consistent with state and federal requirements.

IV. PROCESS FOR USE OF PHARMACOLOGIC AGENTS

A. Clinical Evaluation. A practice must demonstrate that it performs an adequate clinical evaluation by taking a patient history, performing a physical examination, reviewing pertinent diagnostic studies and reports, determining the extent of the tumor for staging purposes, and communicating with the referring physician and certain other physicians involved in the patient’s care.

B. Establishing Treatment Goals. A Practice must have a process for clearly defining the goal of treatment (curative, palliative, or achievement of local tumor control), including discussing the relative merits and risks of various treatment options should be discussed with the patient.

C. Informed Consent. Prior to simulation and treatment, informed consent must be obtained and documented.

D. Treatment Plan. For Combined Modality Therapy. If the Radiation Oncologist determines that other treatment modalities (e.g., radiation sensitizers, radioprotectors, chemotherapy, immunotherapy, etc.) should be combined with external beam irradiation or brachytherapy, the Radiation Oncologist must document the treatment plan in the radiation therapy chart, including such critical factors such as drug(s), dose(s), route(s) of
administration and timing of such therapy in relation to the delivery of the radiation therapy. Any changes in the planned treatment, or even a new treatment plan, must be documented in the medical record.

E. Administration.

1. The Radiation Oncologist, physician’s assistant, nurse or other staff consistent with applicable state and federal regulations may administer pharmacologic agents.

2. Pharmacologic agents should be handled, mixed and administered in a safe manner consistent with the manufacturer’s recommendation.

F. Patient Evaluation During Treatment.

1. The Radiation Oncologist should monitor the patient's progress, check entries in the medical chart, and discuss the plan of therapy, as well as any changes thereto, with appropriate team members during the course of radiation therapy.

2. Regular evaluations of the patient must be done during the course of treatment. When the patient is receiving radiation therapy examinations should be done at least weekly or more often when warranted. Pertinent laboratory and imaging studies should be periodically ordered and reviewed.

3. Patients should be monitored for treatment related side effects. The Radiation Oncologist should institute appropriate treatment for side effects or the patient should be referred to a medical specialist for consultation or treatment.

4. The patient and/or referring physician should be informed of the progress of treatment whenever deemed appropriate by the Radiation Oncologist.

G. Follow-up Evaluation. At the time of completion of a course of treatment and periodically after treatment, the Radiation Oncologist must follow the patient’s progress and assess tumor response and sequelae of treatment.

VI. QUALITY ASSURANCE

A. The Medical Director should establish and provide ongoing supervision of a Quality Assurance (QA) program as outlined in the ACRO Standards for External Beam Radiation Therapy Treatment.
References

1. American Board of Radiology Certification Examination Manual