The National Cancer Institute funds numerous clinical trials that employ radiation therapy either as the primary question in the trial or as standard of care adjuvant therapy that is only secondary to the primary agent. In any case it has been shown that the validity of the trial is strongly dependant upon the quality and reproducibility of the radiation administered. In all cases it is of paramount concern that the risks of the treatments be as quantified as possible so that the study design is valid and there can be a true informed consent. Toward those ends the NCI also funds efforts to ensure the correctness of the physical dosimetry (ie. Radiological Physics Center ) and the comparability of advanced technical methods (ie. The Advanced Technology Consortium). This presentation will explain these cooperative agreements and highlight some of their accomplishments that impact upon the risks of using advanced radiotherapy methods in clinical trials.