

Virtual Workshop

Low Dose Radiation Therapy for COVID-19: Benefits or Risks?

Date: July 23, 2020

9:30 AM - 3:00 PM (U.S. Eastern)

Organizers

National Council on Radiation Protection and Measurements, Bethesda, MD

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The Coronavirus SARS-CoV-2-COVID19 pandemic brought the need to develop innovative approaches to diagnosis, tracing, and treatment. Several experimental treatment modalities are being explored; as a result, low dose radiation therapy (LDRT) is being considered as a possible approach for therapeutic intervention, particularly in the modulation of the inflammatory response to the disease in the lungs of these patients. Some clinical trials and preclinical studies are currently underway. The goal of this workshop is to bring together radiation oncologists, physicists, and biologists along with virologists and immunologists to weigh the potential benefits as well as risks associated with LDRT of COVID-19 patients. The workshop will focus on three major areas: clinical trials; preclinical studies; and radiobiological/immunological mechanisms of low dose radiation on responses in patients.

This workshop will: (1) review the existing state of clinical and preclinical trials in the treatment of COVID-19; (2) discuss potential benefits and risks of LDRT in these patients; (3) explore possible mechanisms that might be functional in these patients following LDRT; and (4) consider future studies that might better enlighten the field. The workshop specifically does not opine on whether or not this as an appropriate treatment for COVID. Based on the biological knowledge discussed and limited clinical experience to date, an expected result of this workshop is to suggest factors to consider when designing a clinical trial. This could include patient selection (especially timing of radiation treatment during the course of the disease), assessment of efficacy, radiation dose range/fractionation (if not a single dose), and potential comparative arm for a randomized trial. The summary will NOT be a recommended blueprint but will at least provide some guidance for those who might be considering using radiation therapy in the treatment of COVID-19.

Full program details will be available shortly. Individuals interested in attending may contact Ms. Akinyemi Oluwatoni by E-mail at oluwatoni.akinyemi@nih.gov, with a copy to Dr. Pataje G. Prasanna (E-mail: pat.prasanna@nih.gov), by July 15th to receive WebEx information.