

## Supplementary Online Content

Jan I, Chen K, Sayan M, et al. Prevalence of surface contamination with SARS-CoV-2 in a radiation oncology clinic. *JAMA Oncol*. Published online August 27, 2020.

doi:10.1001/jamaoncol.2020.3552

**eAppendix.** Supplementary Methods for Sample Collection and Testing and Protocols to Prevent SARS-CoV-2 Contamination

This supplementary material has been provided by the authors to give readers additional information about their work.

## **eAppendix. Supplementary Methods for Sample Collection and Testing and Protocols to Prevent SARS-CoV-2 Contamination**

Environmental swabbing occurred at 4:30 PM following World Health Organization protocols for coronavirus disease 2019 (COVID-19) surface sampling. This time was chosen to maximize potential patient and staff interaction with surfaces and to collect samples before scheduled cleaning and disinfection services at 5 PM. To preserve swab kits and universal viral transport medium (UTM), some locations were not tested during every swabbing session. To evaluate environmental surfaces, a sterile swab with a polyester tip and plastic shaft was moistened with UTM, then applied to sites of interest. The swab was then placed in a tube containing 2.5 mL of UTM. Samples were immediately refrigerated at 4 °C and held for fewer than 72 h before being sent to the laboratory within the hospital for analysis.

The specimens were analyzed using the cobas® SARS-CoV-2 Test (Roche Diagnostics) on the cobas® 6800 System. This is a real-time reverse transcription polymerase chain reaction assay that allows for highly sensitive qualitative detection of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) RNA in clinical specimens. This assay has received emergency-use authorization from the Food and Drug Administration for detection of SARS-CoV-2 RNA in nasal, nasopharyngeal, and oropharyngeal swab samples in patients and was used in this study to test environmental samples. One milliliter of each sample was transferred into a secondary container and loaded on the cobas® 6800 System. The specimens were processed according to the package insert. The assay targets 2 regions of the virus: ORF1a/b, a nonstructural region unique to SARS-CoV-2, and E-gene, a structural protein envelope gene for pan-Sarbecovirus, which also indicates SARS-CoV-2 virus. An internal control was added to all the samples, extracted, and amplified to control for efficient polymerase chain reaction amplification. Validation of results was performed automatically by the cobas® 6800 software based on negative and positive control performance. The cycle threshold value

of the amplification curve was defined as negative if greater than 40 and positive if less than 40.

Protocols to prevent SARS-CoV-2 contamination in the radiation oncology clinic include the following: (1) Screen patients for symptoms suggestive of an infection before they enter the department. (2) Provide hand-sanitation dispensers near patient waiting areas. (3) Encourage staff to increase routine cleaning and maintain meticulous sanitation of surfaces after patient use. (4) Limit the number of guests and family members in the department unless necessary for patient care. (5) Appropriately space seating arrangements to allow social distancing. (6) Require all staff members, patients, and visitors to wear face masks before entering the department. (7) Treat patients who are positive for COVID-19 if medically necessary; however, they should preferably be asymptomatic at the time of treatment, and staff should be trained and given appropriate personal protective equipment.