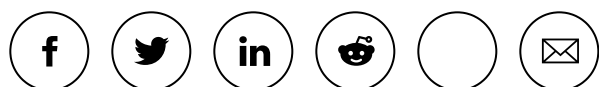


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## Mobile Shields May Reduce Iodine-131 Exposure From Iodine Apamistamab Treatment for AML

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Because lead-lined rooms are not always available, the SIERRA trial sought to establish whether mobile shields could provide a suitable alternative for reducing exposure rates.

Transplantation & Cellular Therapy (TCT) Meetings of the American Society of Blood and Marrow Transplantation (ASBMT) and the Center for International Blood and Marrow Transplant Research (CIBMTR).

Mobile shields, rather than lead-lined rooms, may be sufficient for reducing the radiation exposure rate from anti-CD45 iodine-131 (<sup>131</sup>I) apamistamab (Iomab-B) treatment in patients with active relapsed or refractory acute myeloid leukemia (AML), according to research presented at the 2020

Patients aged at least 55 years with active relapsed or refractory AML are usually unable to undergo allogeneic hematopoietic cell transplantation (HCT) because of ineligibility for myeloablative conditioning. Although lomab-B can effectively condition patients for HCT in this setting, the radioactivity of  $^{131}\text{I}$  requires patients undergoing therapy to be shielded in a private, lead-lined hospital room for 3 to 7 days.

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The phase 3 SIERRA trial (ClinicalTrials.gov Identifier: [NCT02665065](#)) – which is attempting to address the lack of HCT use in this patient population – is evaluating whether mobile shields may be effective for reducing the exposure rate in settings where lead-lined rooms are not available. Shielding calculations were made at 6 of 20 sites involved in SIERRA, with the location and layout of each room taken into account.

In and around each room where lomab-B was delivered, the exposure rate in publicly accessible areas was generally below the regulated limit of 2 mR/hour. This included the areas directly outside patient rooms, the adjacent rooms and nursing stations, and the rooms located above or below. At Memorial Sloan Kettering Cancer Center, where this method was tested in the greatest number of patients (10 patients), the mR/hour rate range was 0.01 to 1.95 outside the room, 0.2 to 1.82 in the adjacent room or nursing station, and 0.5 to 1.88 in the rooms above or below the treatment room.

Similar results were noted for the 7 patients treated at the University of Texas MD Anderson Cancer Center.

“Based on the experience from 6 active study sites, including the [2] highest enrolled sites, it is concluded that lead-lined rooms are not required for treating [relapsed/refractory] AML patients with lomab-B,” the researchers wrote. “The use of mobile shields enables treatment of patients in regular inpatient rooms.”

## Reference

1. Nath R, Chu B, Chen L, et al. Feasibility of administering anti-CD45 iodine ( $^{131}\text{I}$ ) apamistamab [lomab-B] for targeted conditioning in older patients with active, relapsed or refractory AML without lead-lined rooms: ongoing phase III SIERRA trial experience at 6 study sites. Poster presented at: 2019 Transplantation & Cellular Therapy (TCT) Meetings of the American Society of Blood and Marrow

Transplantation (ASBMT) and the Center for International Blood and Marrow Transplant Research (CIBMTR); February 19-23, 2019: Orlando, FL. Poster 291.

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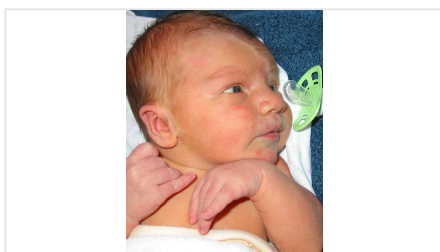
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