Corporation obtaining approval, the name of its representative, and the address of its main office

Name: The Cancer Institute Hospital of Japanese Foundation for Cancer Research
Applicant: Tetsuichiro Muto, Director (Seal)
Address: Ariake 3-10-6, Koto, Tokyo

Approved Type 1 Use Regulation

| Name of the Type of Living Modified Organism | Nonproliferative and genetically modified Harvey murine sarcoma virus that contains the gene sequence of human multidrug resistance gene MDR1, and has env protein of mouse amphotropic virus 4070A in its envelope (HaMDR) |
| Content of the Type 1 Use of Living Modified Organism | Used in clinical facilities for human gene therapy, including storage, transportation, disposal and acts incidental to them |
| Method of the Type 1 Use of Living Modified Organism | Address: Kami-Ikebukuro 1-37-1, Toshima-ku, Tokyo; and Kami-Ikebukuro 1-30-10, Toshima-ku, Tokyo
Name: The Cancer Institute Hospital and the Cancer Chemotherapy Center of Japanese Foundation for Cancer Research |

(1) The HaMDR solution should be sealed in containers, transported to a clinical facility in the frozen state, and stored in a freezer in a P2 level laboratory at the facility. Before use, it should be transported in doubly sealed containers to an exclusive P2 level clean room for gene therapy located in the Cancer Chemotherapy Center (hereinafter referred to as "clean room").

(2) Thawing, dilution and dispensing of the frozen HaMDR solution has to be performed in a closed system in a safety cabinet of a clean room or in a clean room itself. Transfer of HaMDR into the CD34+ cells collected from the subject, incubation of the cells to which HaMDR was transferred, or other handling of HaMDR dilutions and cells to which HaMDR was transferred should be similarly performed in a closed system in a safety cabinet of a clean room or in a clean room itself. The diluted HaMDR and the cells to which HaMDR was transferred should be stored in a refrigerator, freezer, or liquid nitrogen tank in a clean room or in the P2 level laboratory as described above. Note that when the diluted HaMDR or its frozen form or the cells to which HaMDR was transferred is transported to another P2 level area through an open area, it should be kept inside a doubly sealed container.

(3) When disposing of the solution (including dilutions) of HaMDR or the cells to which HaMDR was transferred, these should be sterilized and...
then disposed of according to the infectious waste management protocol defined by the facility (hereinafter referred to as "the infectious waste management protocol").

(4) Administration of the cells to which HaMDR was transferred, to a subject has to be performed by infusion in a single room in the ward of the Ariake Hospital that has appropriate containment measures (hereinafter referred to as “ward clean room”). Additionally, devices that come in direct contact with the cells to which HaMDR was transferred at the time of administration, such as syringes and tubes, etc., should be disposable ones, and after use, these should be appropriately disinfected in the ward clean room, followed by disposal in accordance with the infectious waste management protocol.

(5) The subject should be cared for in the ward clean room until the tenth day after administration. When the subject enters the open area outside the ward clean room for examinations, etc., viral leakage prevention measures including the wearing of a mask and a gown must be compulsory. Blood and body fluids of the subject during the period of being taken care of in the ward clean room should be disinfected appropriately in the ward clean room and disposed of in accordance with the infectious waste management protocol. In addition, the excreta of the subject including urine and feces or devices that come in contact with the excreta should be appropriately disinfected in the ward clean room and disposed of in accordance with the infectious waste management protocol until the existence of replication competent HaMDR (hereinafter referred to as “RCR”) is denied by the polymerase chain reaction (PCR) test using subject blood, which is performed after the day following administration. Note that the blood and body fluids from the subject that are to be used as clinical samples should be handled in accordance with the handling of the HaMDR solution or the cells to which HaMDR was transferred.

(6) During the period of being taken care of in the ward clean room, invasive devices that have been used in the subject and those that have been in contact with excreta, etc., should be appropriately disinfected in the ward clean room and disposed of in accordance with the infectious waste management protocol, or be washed sufficiently in the ward clean room.

(7) Before releasing the subject from the ward clean room, confirm that the RCR is negative in the peripheral blood and the bone marrow of the subject. If RCR is detected, the subject should continually be cared for in the ward clean room.

(8) If RCR is detected in the peripheral blood or the bone marrow of the subject after releasing the subject from the ward clean room, immediately transfer the subject back to the ward clean room, and take the same measures as in (5) to (7) above.