



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

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Bethesda, February 12, 2019

John Thomas, PhD, JD
Chair, Governing Board of the CIRM (ICOC)
210 King Street
San Francisco, CA 94107

Re: CLIN2-11431: A monoclonal antibody that depletes blood stem cells and enables chemotherapy free transplants

Dear Dr. Thomas,

My name is Luigi D. Notarangelo, and I am the Chief of the Laboratory of Clinical Immunology and Microbiology at the National Institute of Allergy and Infectious Diseases, NIH. My field of expertise is combined immunodeficiencies, with a special focus on the characterization of the molecular and cellular bases, and development of novel approaches to cellular and molecular therapy for these disorders. In particular, for infants with severe combined immunodeficiency (SCID), hematopoietic stem cell transplantation (HSCT) represents the mainstay of definitive treatment. However, use of alkylating agents during conditioning for HSCT continues to pose significant risks of acute and late toxicity. In this regard, the CIRM-sponsored study referenced above, which is based on use of a monoclonal antibody directed against CD117, may represent a turning point, in that it offers the opportunity to deplete autologous hematopoietic stem cells without causing unwanted toxicity. I understand the early data gathered so far indicate that in fact this approach is safe. In addition, it has also shown to effectively deplete autologous stem cells while allowing engraftment of donor-derived hematopoietic stem cells. Importantly, this approach could also be used in the future as conditioning regimen for gene therapy-based approaches to SCID and other non malignant disorders. Continuation of this trial is extremely important to confirm efficacy without the unwanted and unnecessary toxicity associated with conventional chemotherapy. This the kind of studies that are deeply needed to transform medicine.

Thank you for your consideration,

Sincerely,

A handwritten signature in black ink, appearing to read "Luigi D. Notarangelo".

Luigi D. Notarangelo, M.D