

May 14, 2024

CIRM Application Review Subcommittee

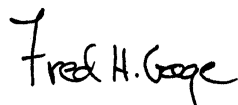
Dear Board members:

I am writing to strongly support your grant application (TRAN4-16091) to CIRM. This application proposes to bring the multiparameter cell sorter isolations of highly purified human CD34+90+ HSC from mobilized peripheral blood [MPB] back into experimental transplantation for a number of applications. These anti-CD34 and anti CD90 monoclonal antibodies were generated by a company called SyStemix, and used effectively in clinical trials 1996-2000, but was then transferred to Novartis, who bought SyStemix. Novartis never brought HSC transplantation into their commercial repertoire. In an agreement with Novartis, Stanford has now an agreement to use these antibodies for carrying out this grant application.

It is important to note that CD34 selection alone does not deplete cancer cells in patients with metastatic disease, and/or T cells that cause graft vs host disease when used in allotransplants. These were the exact contaminating cells are needed to be remove by purifying HSC for clinical transplants. I believe this application has the potential to lead to a very valuable therapy for many different cancers and constitutes precisely the kind of application the CIRM should be supporting.

I hope these few comments are helpful in your deliberation on this application.

Sincerely,



Fred H. Gage, Ph.D.