

# Domino donor lymphocyte infusion for secondary poor graft function after HLA-mismatched allogeneic stem cell transplantation between HLA-identical sibling pairs with congenital immunodeficiency

Satoru Hamada<sup>1</sup>, Taichi Uehara<sup>1</sup>, Jiro Miyamoto<sup>1</sup>, Shinobu Kiyuna<sup>1</sup>, Tokiko Oshiro<sup>1</sup>, Takeshi Yagi<sup>1</sup>, Shingo Kurokawa<sup>1</sup>, Nobuyuki Hyakuna<sup>1</sup>, and Koichi Nakanishi<sup>1</sup>

<sup>1</sup>Ryukyu Daigaku Igakubu Fuzoku Byoin

September 16, 2020

## Abstract

Poor graft function (PGF) is a major obstacle to successful allogeneic stem cell transplantation after achieving normal bone marrow function. We report a successful treatment of domino DLI for poor graft function in younger brother with hyper IgM syndrome from HLA-identical elder brother with the same disorder with a history of HLA-mismatched unrelated bone marrow transplantation using same donor. Immunological profiling revealed that DLI-induced T-regulatory cells could correct skewed immune responses in the BM microenvironment due to secondary PGF pathogenesis. Immunological tolerized domino DLI can be a new therapeutic option for secondary PGF in HLA-identical sibling pairs with congenital immunodeficiency.

## Hosted file

2020\_09\_13 PBC.pdf available at <https://authorea.com/users/359525/articles/481452-domino-donor-lymphocyte-infusion-for-secondary-poor-graft-function-after-hla-mismatched-allogeneic-stem-cell-transplantation-between-hla-identical-sibling-pairs-with-congenital-immunodeficiency>



