

## Author contributions

NM, HY, NW, HN, and ST designed the study; NM, HY, and NW performed the research; NM and HY analysed data; HY, NU, HO, AN, TI, K Ishiwata, NN, MT, Y A-M, K Izutsu, KM, AW, and ST performed transplantation; AY reviewed histopathological findings; and NM, HY, NW, NU, HN, and ST contributed to writing the paper.

## Competing interests

The authors have no competing interests.

Naofumi Matsuno<sup>1,2\*</sup>

Hisashi Yamamoto<sup>2\*</sup>

Nobukazu Watanabe<sup>1</sup>

Naoyuki Uchida<sup>2</sup>

Hikari Ota<sup>2</sup>

Aya Nishida<sup>2</sup>

Taichi Ikebe<sup>2</sup>

Kazuya Ishiwata<sup>2</sup>

Nobuaki Nakano<sup>2</sup>

Masanori Tsuji<sup>2</sup>

Yuki Asano-Mori<sup>2</sup>

Koji Izutsu<sup>2</sup>

Kazuhiro Masuoka<sup>2</sup>

Atsushi Wake<sup>2</sup>

Akiko Yoneyama<sup>3</sup>

Hiromitsu Nakauchi<sup>4</sup>

Shuichi Taniguchi<sup>2,5</sup>

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<sup>1</sup>Laboratory of Diagnostic Medicine, Division of Stem Cell Therapy, Centre for Stem Cell Biology and Regenerative Medicine, the Institute of Medical Science, the University of Tokyo, Tokyo, Japan, <sup>2</sup>Department of Haematology, Toranomon Hospital, Tokyo, Japan, <sup>3</sup>Department of Infectious Diseases, Toranomon Hospital, Tokyo, Japan, <sup>4</sup>Division of Stem Cell Therapy, Centre for Stem Cell Biology and Regenerative Medicine, the Institute of Medical Science, the University of Tokyo, Tokyo, Japan and <sup>5</sup>Okinaka Memorial Institute for Medical Research, Tokyo, Japan  
E-mail: nwatanab@ims.u-tokyo.ac.jp

\*The first two authors contributed equally to this work.

**Keywords:** cord blood transplantation, chimerism, human leucocyte antigen-Flow method, naïve and memory T-cell, pre-engraftment immune reaction.

First published online 1 November 2012

doi: 10.1111/bjh.12097

## Supporting Information

Additional Supporting Information may be found in the online version of this article:

**Table S1.** Patient and cord blood characteristics.

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