

November 26, 2013  
Nissan Chemical Industries, Ltd.

### Release of “ReproHSC”, a new medium for hematopoietic stem cell

Nissan Chemical Industries, Ltd.(hereinafter, Nissan) co-developed “ReproHSC”, a new medium for hematopoietic stem cells (HSCs) with ReproCELL, Inc.(Yokohama, Japan, CEO: Chikafumi Yokoyama). We are pleased to inform that ReproCELL, Inc. will launch the medium in December of this year. Meanwhile, Nissan will supply chemically-synthesized compound, “NR-102”, as an essential factor of the medium, HSCs’ increasing agent, to ReproCELL Inc.

HSCs are mainly exist in bone-marrow and umbilical cord blood, and differentiate to various blood cells, i.e, erythrocytes, lymphocytes and platelets etc.. It is reported that the transplantation of bone-marrow cells/umbilical cord blood are effective approach to treatment of leukemia and aplastic anemia and also high outcome from the therapy is recognized. However, there is a great urgency that need to be overcome shortage for offering from donors.

Cord blood sampling is very expected to be a promising source of HSCs’ transplantation without strain of donors because of no body invasion. However, its’ collection quantity of the cells is insufficient. It is, therefore, necessary to multiply HSCs out of the body, so that developments of the technique for HSCs multiplication have been implemented in all over the world in transplantation fields.

“ReproHSC” makes it possible to severalfold increase HSCs with adding NR-102 in medium itself, comparing other classical methodologies. In the near future, our latest technology will accelerate investigation for the HSCs amplification and will be used for transplantation of cord blood in many clinical fields.

Nissan hopes to work aggressively to create new products with the artifice of fine organic synthesis and biological evaluation as our core technological capabilities.