

様式第19

学会等発表実績

委託業務題目「厚生労働省科学研究委託費（革新的がん医療実用化研究事業）成人T細胞白血病に対する標準治療としての同種造血幹細胞移植法の確立およびゲノム解析に基づく治療法の最適化に関する研究」

機関名 公益財団法人慈愛会 今村病院分院・宇都宮 與

1. 学会等における口頭・ポスター発表

発表した成果（発表題目、口頭・ポスター発表の別）	発表者氏名	発表した場所（学会等名）	発表した時期	国内・外の別
Prognostic significance of EBMT score and serum soluble IL-2R level on outcomes after allogeneic hematopoietic cell transplantation for adult T-cell leukemia/lymphoma. (Poster)	Tokunaga M, Nakano N, Kubota A, Tokunaga M, Itoyama T, Makino T, Takeuchi S, Takatsuka Y, <u>Utsunomiya A.</u>	40th Annual Meeting of the European Society for Blood and Marrow Transplantation (Milan, Italy)	2014. 3. 30-4. 2	国外
EBMT score only predicts day 100 overall survival and overall survival after allogeneic stem cell transplantation in adult T-cell leukemia/lymphoma patients. (Poster)	Takeuchi S, Nakano N, Kubota A, Tokunaga M, Takatsuka Y, <u>Utsunomiya A.</u>	40th Annual Meeting of the European Society for Blood and Marrow Transplantation (Milan, Italy)	2014. 3. 30-4. 2	国外
Efficacy and feasibility of umbilical cord blood transplantation with myeloablative non-TBI conditioning regimen using Flu180/ivBU12.8/Mel80 for adult patients with advanced hematological diseases. (Poster)	Nakano N, Kubota, Tokunaga M, Takeuchi S, Takatsuka Y, <u>Utsunomiya A.</u>	40th Annual Meeting of the European Society for Blood and Marrow Transplantation (Milan, Italy)	2014. 3. 30-4. 2	国外
染色体異常が成人T細胞白血病／リンパ腫に対する同種移植の成績に及ぼす影響（口頭）	中野伸亮、糸山貴浩、窪田歩、徳永雅仁、徳永真弓、牧野虎彦、竹内昇吾、高塚祥芝、宇都宮與	第1回日本HTLV-1学会学術集会（東京）	2014. 8. 22-24	国内
成人T細胞性白血病／リンパ腫に対する高齢者移植の検討（ポスター）	竹内昇吾、中野伸亮、窪田歩、徳永雅仁、徳永真弓、糸山貴浩、牧野虎彦、高塚祥芝、宇都宮與	第76回日本血液学会学術集会（大阪）	2014. 10. 31-11. 2	国内

Recent significance of allogeneic hematopoietic stem cell transplantation for adult T cell leukemia/lymphoma (ATL). (Poster)	Tokunaga M, Nakano N, Kubota A, Tokunaga M, Itoyama T, Makino T, Takeuchi S, Takatsuka Y, <u>Utsunomiya A.</u>	56th American Society of Hematology Annual Meeting(San Francisco, CA.)	2014.12.6-9	国外
Impact of chromosomal abnormalities in recipients of allogeneic hematopoietic stem cell transplantation with adult T-cell leukemia/lymphoma. 2015 BMT Tandem Meeting. (Oral)	Nakano N, Itoyama T, Kubota A, Tokunaga M, Takeuchi S, Tokunaga M, Makino T, Takatsuka Y, <u>Utsunomiya A.</u>	2015 BMT Tandem Meetings(San Diego, CA.)	2015. 02. 11-15	国外

2. 学会誌・雑誌等における論文掲載

掲載した論文（発表題目）	発表者氏名	発表した場所(学会誌・雑誌等名)	発表した時期	国内・外の別
Treatment of Patients with adult T-cell leukemia/lymphoma with cord blood transplantation: a Japanese nationwide retrospective survey.	Kato K, Choi I, Wake A, Uike N, Taniguchi S, Moriuchi Y, Miyazaki Y, Nakamae H, Oku E, Murata M, Eto T, Akashi K, Sakamaki H, Kato K, Suzuki R, Yamanaka T, <u>Utsunomiya A.</u>	Biology of Blood and Marrow Transplantation	2014. 12; Vol. 20, Issue 12:1968-1974	国外
High incidence of CMV infection in adult T-cell leukemia/lymphoma patients after allogeneic hematopoietic stem cell transplantation.	Nakano N, Kubota A, Tokunaga M, Tokunaga M, Itoyama T, Makino T, Takeuchi S, Takatsuka Y, <u>Utsunomiya A.</u>	Bone Marrow Transplantation	2014. 12; 49:1548-1549	国外
Recent advances in treatment of adult T-cell leukemia-lymphomas.	<u>Utsunomiya A.</u> , Choi I, Chihara D, Seto M.	Cancer Science	2015(in press)	国外

様式第 19

学 会 等 発 表 実 績

委託業務題目「厚生労働省科学研究委託費（革新的がん医療実用化研究事業）成人T細胞白血病に対する標準治療としての同種造血幹細胞移植法の確立およびゲノム解析に基づく治療法の最適化に関する研究」

機関名 北海道大学 豊嶋 崇徳

1. 学会等における口頭・ポスター発表

発表した成果（発表題目、口頭・ポスター発表の別）	発表者氏名	発表した場所（学会等名）	発表した時期	国内・外の別
造血幹細胞移植：HLAバリアを超えて	豊嶋崇徳	第62回日本輸血・細胞治療学会総会（奈良）	2014. 5. 15	国内

2. 学会誌・雑誌等における論文掲載

掲載した論文（発表題目）	発表者氏名	発表した場所(学会誌・雑誌等名)	発表した時期	国内・外の別
Impact of conditioning intensity and TBI on acute GVHD after hematopoietic cell transplantation.	Nakasone H, Fukuda T, Kanda J, Mori T, Yano S, Kobayashi T, Miyamura K, Eto T, Kanamori H, Iwato K, Uchida N, Mori S, Nagamura-Inoue T, Ichinohe T, Atsuta Y, Teshima I, Murata M.	Bone Marrow Transplant	2014. 12[Epub ahead of print]	国外
Expansion of donor-reactive host T cells in primary graft failure after allogeneic hematopoietic SCT following reduced-intensity conditioning.	Koyama M, Hashimoto D, Nagafuji K, Eto T, Ohno Y, Aoyama K, Iwasaki H, Miyamoto T, Hill GR, Akashi K, Teshima I.	Bone Marrow Transplant	2014. 1; 49:110-115	国外
Mammalian target of rapamycin inhibitors permit regulatory T cell reconstitution and inhibit experimental chronic graft-versus-host disease.	Sugiyama H, Maeda Y, Nishimori H, Yamasuji Y, Matsuoka KI, Fujii N, Kondo E, Shinagawa K, Tanaka T, Takeuchi K, Teshima I, Tanimoto M.	Biology of Blood and Marrow Transplant	2013; Vol. 20, Issue 2:183-191	国外

<p>Bone marrow graft-versus-host disease: evaluation of its clinical impact on disrupted hematopoiesis after allogeneic hematopoietic stem cell transplantation.</p>	<p>Shono Y, Shiratori S, Kosugi-Kanaya M, Ueha S, Sugita J, Shigematsu A, Kondo T, Hashimoto D, Fujimoto K, Endo T, Nishio M, Hashino S, Matsuno Y, Matsushima K, Tanaka J, Imamura M, <u>Teshima T.</u></p>	<p>Biology of Blood and Marrow Transplant</p>	<p>2013; Vol. 20, Issue 4:495-500</p>	<p>国外</p>
<p><i>Stenotrophomonas maltophilia</i> infection during allogeneic hematopoietic stem cell transplantation: a single-center experience.</p>	<p>Shiratori S, Wakasa K, Okada K, Sugita J, Akizawa K, Shigematsu A, Hashimoto D, Fujimoto K, Endo T, Kondo T, Shimizu C, Hashino S, <u>Teshima T.</u></p>	<p>Clinical Transplants</p>	<p>2014. 6; 28(6):656-61</p>	<p>国外</p>
<p>High level of serum soluble interleukin-2 Receptor at Transplantation Predicts Poor Outcome of Allogeneic Stem Cell Transplantation for Adult T Cell Leukemia.</p>	<p>Shigematsu A, Kobayashi N, Yasui H, Shindo M, Kakinoki Y, Koda K, Iyama S, Kuroda H, Tsutsumi Y, Imamura M, <u>Teshima T.</u></p>	<p>Biology of Blood and Marrow Transplant</p>	<p>2014; Vol. 20, Issue 6:801-805</p>	<p>国外</p>
<p>FIP1L1 presence in FIP1L1-RARA or FIP1L1-PDGFRα differentially contributes to the pathogenesis of distinct types of leukemia.</p>	<p>Iwasaki J, Kondo T, Darmanin S, Iyata M, Onozawa M, Hashimoto D, Sakamoto N, <u>Teshima T.</u></p>	<p>Annals of Hematology</p>	<p>2014. 9; 93(9):1473-81</p>	<p>国外</p>
<p>The use of oral beclomethasone dipropionate in the treatment of gastrointestinal graft-versus-host disease: the experience of the Fukuoka blood and marrow transplantation (BMT) group.</p>	<p>Takashima S, Eto T, Shiratsuchi M, Hidaka M, Mori Y, Kato K, Kamezaki K, Oku S, Henzan H, Takase K, Matsushima T, Takenaka K, Iwasaki H, Miyamoto T, Akashi K, <u>Teshima T.</u></p>	<p>Internal Medicine</p>	<p>2014. 6; 53(12):1315-20</p>	<p>国外</p>
<p>Hepatitis B virus (HBV) reverse seroconversion (RS) can be prevented even in non-responders to hepatitis B vaccine after allogeneic stem cell transplantation: long-term analysis of intervention in RS with vaccine for patients with previous HBV infection.</p>	<p>Takahata M, Hashino S, Onozawa M, Shigematsu A, Sugita J, Fujimoto K, Endo T, Kondo T, Tanaka J, Imamura M, <u>Teshima T.</u></p>	<p>Transpl Infect Dis</p>	<p>2014; (5):797-801</p>	<p>国外</p>

<p>Graft-vs-Host Disease Working Committee of the CIBMTR : Increasing incidence of chronic graft-versus-host disease in allogeneic transplantation - A Report from CIBMTR.</p>	<p>Arai S, Arora M, Wang T, Spellman SR, He W, Couriel DR, Urbano-Ispizua A, Cutler CS, Bacigalupo AA, Battiwalla M, Flowers ME, Juckett MB, Lee SJ, Loren AW, Klumpp TR, Prockup SE, Ringden OT, Savani BN, Socié G, Schultz KR, Spitzer T, <u>Teshima T</u>, Bredeson CN, Jacobsohn DA, Hayashi RJ, Drobyski WR, Frangoul HA, Akpek G, Ho VT, Lewis VA, Gale RP, Koreth J, Chao NJ, Aljurf MD, Cooper BW, Laughlin MJ, Hsu JW, Hematti P, Verdonck LF, Solh MM, Norkin M, Reddy V, Martino R, Gadalla S, Goldberg JD, McCarthy PL, Pérez-Simón JA, Khera N, Lewis ID, Atsuta Y, Olsson RF, Saber W, Waller EK, Blaise D, Pidala JA, Martin PJ, Satwani P, Bornhäuser M, Inamoto Y, Weisdorf DJ, Horowitz MM, Pavletic SZ.</p>	<p>Biology of Blood and Marrow Transplant</p>	<p>2014. 10 [Epub ahead of print]</p>	<p>国外</p>
<p>Epstein-barr virus-associated smooth muscle tumors after bone marrow transplantation.</p>	<p>Hayase E, Fujimoto K, Mitsuhashi T, Hatanaka Y, Yoshida M, Takemura R, Iwasaki J, Shiratori S, Sugita J, Kondo T, Tanaka J, Imamura M, Matsuno Y, <u>Teshima T</u>.</p>	<p>Transplantation</p>	<p>2014. 1</p>	<p>国外</p>
<p>JAK inhibitors: a home run for GVHD patients?</p>	<p><u>Teshima T</u>.</p>	<p>Blood</p>	<p>2014. 6; 123 (24) :3691-3</p>	<p>国外</p>
<p>Graft-versus-host disease制御</p>	<p>杉田純一、<u>豊嶋崇徳</u></p>	<p>臨床血液</p>	<p>2014; Vol. 55, No. 2:170-176</p>	<p>国内</p>
<p>移植後シクロホスファミドを用いたHLA半合致移植の現状と課題.</p>	<p>杉田純一、小杉瑞葉、<u>豊嶋崇徳</u></p>	<p>日本造血細胞移植学会雑誌</p>	<p>2015. 1; 4(1): 9-22</p>	<p>国内</p>

学会等発表実績

委託業務題目「厚生労働省科学研究委託費（革新的がん医療実用化研究事業）成人T細胞白血病に対する標準治療としての同種造血幹細胞移植法の確立およびゲノム解析に基づく治療法の最適化に関する研究」

機関名 長崎大学 田口 潤

1. 学会等における口頭・ポスター発表

発表した成果（発表題目、口頭・ポスター発表の別）	発表者氏名	発表した場所（学会等名）	発表した時期	国内・外の別
Peripheral T cell lymphoma, not otherwise specified における TSLC1 発現の検討（口頭）	加藤丈晴、三好寛明、今泉芳孝、安東恒史、澤山 靖、新野大介、今西大介、田口 潤、波多智子、内丸 薫、大島孝一、宮崎泰司	第54回日本リンパ網内系学会総会（山形）	2014. 6. 20	国内
末梢血と肝臓の病変で発症し indolentな経過をたどった成人T細胞白血病リンパ腫（ポスター）	谷口広明、今泉芳孝、北之園英明、加藤丈晴、牧山純也、安東恒史、澤山 靖、今西大介、田口 潤、波多智子、長谷川寛雄、新野大介、大島孝一、宮崎泰司	第54回日本リンパ網内系学会総会（山形）	2014. 6. 20	国内
成人T細胞白血病・リンパ腫症例における同種造血幹細胞移植後再発時の浸潤臓器の後方視的検討（口頭）	糸永英弘、田口 潤、谷口広明、牧山純也、澤山 靖、今泉芳孝、吉田真一郎、福島卓也、森内幸美、宮崎泰司	第36回日本造血細胞移植学会総会（沖縄）	2014. 3. 7	国内
肺接合菌症を合併した同種骨髄移植後成人T細胞白血病リンパ腫の一例（ポスター）	澤山 靖、田口 潤、今西大介、今泉芳孝、波多智子、高園貴弘、宮崎泰司	第36回日本造血細胞移植学会総会（沖縄）	2014. 3. 7	国内
Maintenance therapy in elderly patients with adult T-cell leukemia-lymphoma. (Poster)	Kato T, Imaizumi Y, Taniguchi H, Makiyama J, kamijyo R, kitanosono H, kobayashi Y, Taguchi M, Matsuo M, Ando K, Sawayama Y, Niino D, Taguchi J, Imanishi D, Hata T, Ohshima K, Miyazaki Y.	第76回日本血液学会学術集会（大阪）	2014. 10. 31-11. 2	国内

2. 学会誌・雑誌等における論文掲載

掲載した論文（発表題目）	発表者氏名	発表した場所(学会誌・雑誌等名)	発表した時期	国内・外の別
Characteristic patterns of relapse after allogeneic hematopoietic SCT for adult T-cell leukemia-lymphoma: a comparative study of recurrent lesions after transplantation and chemotherapy by the Nagasaki Transplant Group.	Itonaga H, Sawayama Y, <u>Taguchi J</u> , Honda S, Taniguchi H, Makiyama J, Matsuo E, Sato S, Ando K, Imanishi D, Imaizumi Y, Yoshida S, Hata T, Moriuchi Y, Fukushima T, Miyazaki Y.	Bone Marrow Transplant	2015. 1. 26[Epub ahead of print]	国外
Heat shock protein 90 inhibitor NVP-AUY922 exerts potent activity against adult T-cell leukemia-lymphoma cells.	Taniguchi H, Hasegawa H, Sasaki D, Ando K, Sawayama Y, Imanishi D, <u>Taguchi J</u> , Imaizumi Y, Hata T, Tsukasaki K, Uno N, Morinaga Y, Yanagihara K, Miyazaki Y.	Cancer Science	2014. 12: Vol. 105: Issue 12: 1601-1608	国外
Treatment outcome of elderly patients with aggressive adult T cell leukemia-lymphoma: Nagasaki University Hospital experience.	Makiyama J, Imaizumi Y, Tsushima H, Taniguchi H, Moriwaki Y, Sawayama Y, Imanishi D, <u>Taguchi J</u> , Hata T, Tsukasaki K, Miyazaki Y.	International Journal of Hematology	2014. 11; 100 (5) : 464-72	国外

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学 会 等 発 表 実 績

委託業務題目「厚生労働省科学研究委託費（革新的がん医療実用化研究事業） 成人T細胞白血病に対する標準治療としての同種造血幹細胞移植法の確立およびゲノム解析に基づく治療法の最適化に関する研究」

機関名 熊本大学医学部附属病院 野坂 生郷

1. 学会等における口頭・ポスター発表

発表した成果（発表題目、口頭・ポスター発表の別）	発表者氏名	発表した場所（学会等名）	発表した時期	国内・外の別
A nationwide survey of patients with adult T cell leukemia-lymphoma (ATL) in Japan: 2010-2011. (Oral)	Nosaka K, Iwanaga M, Ishizawa K, Ishida Y, Uchimaru K, Ishitsuka K, Amano M, Ishida T, Imaizumi Y, Uike N, Utsunomia A, Ohshima K, Kawai K, Tanaka J, Tokura Y, Tobinai K, Watanabe T, Tsukasaki K.	第76回日本血液学会学術集会(大阪)	2014. 10. 31-11. 2	国内

2. 学会誌・雑誌等における論文掲載

掲載した論文（発表題目）	発表者氏名	発表した場所(学会誌・雑誌等名)	発表した時期	国内・外の別
Japan Clinical Oncology Group (JCOG) prognostic index and characterization of long-term survivors of aggressive adult T-cell leukaemia-lymphoma (JCOG0902A).	Fukushima T, Nomura S, Shimoyama M, Shibata T, Imaizumi Y, Moriuchi Y, Tomoyose T, Uozumi K, Kobayashi Y, Fukushima N, Utsunomiya A, Tara M, Nosaka K, Hidaka M, Uike N, Yoshida S, Tamura K, Ishitsuka K, Kurosawa M, Nakata M, Fukuda H, Hotta T, Tobinai K, Tsukasaki K.	British Journal of Haematology	2014. 9; 166(5):739-48	国外

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学 会 等 発 表 実 績

委託業務題目「厚生労働省科学研究委託費（革新的がん医療実用化研究事業）成人T細胞白血病に対する標準治療としての同種造血幹細胞移植法の確立およびゲノム解析に基づく治療法の最適化に関する研究」

機関名 虎の門病院 山本久史

1. 学会等における口頭・ポスター発表

発表した成果（発表題目、口頭・ポスター発表の別）	発表者氏名	発表した場所（学会等名）	発表した時期	国内・外の別
Anti-HLA antibodies other than against HLA-A, -B, -DRB1 adversely affect engraftment and non-relapse mortality in HLA-mismatched single cord blood transplantation: possible implications of unrecognized donor-specific antibodies. (Oral)	Yamamoto H, Uchida N, Kageyama K, Wada S, Kaji D, Nishida A, Ishiwata K, Takagi S, Tsuji M, Asano-Mori Y, Yamamoto G, Izutsu K, Wake A, Makino S, Taniguchi S.	19th APBMT2014(中国/杭州)	2014. 10. 16-18	国外

2. 学会誌・雑誌等における論文掲載

掲載した論文（発表題目）	発表者氏名	発表した場所(学会誌・雑誌等名)	発表した時期	国内・外の別
Anti-HLA Antibodies Other than Against HLA-A, -B, -DRB1 Adversely Affect Engraftment and Nonrelapse Mortality in HLA-Mismatched Single Cord Blood Transplantation: Possible Implications of Unrecognized Donor-specific Antibodies.	Yamamoto H, Uchida N, Matsuno N, Ota H, Kageyama K, Wada S, Kaji D, Nishida A, Ishiwata K, Takagi S, Tsuji M, Asano-Mori Y, Yamamoto G, Izutsu K, Masuoka K, Wake A, Yoneyama A, Makino S, Taniguchi S.	Biology of Blood and Marrow Transplant	2014. 10; 20(10):1634-1640	国外
I. v. BU/fludarabine plus melphalan or TBI in unrelated cord blood transplantation for high-risk hematological diseases.	Yamamoto H, Uchida N, Matsuno N, Kon A, Nishida A, Ota H, Ikebe T, Nakano N, Ishiwata K, Araoka H, Takagi S, Tsuji M, Asano-Mori Y, Yamamoto G, Izutsu K, Masuoka K, Wake A, Yoneyama A, Makino S, Taniguchi S.	Biology of Blood and Marrow Transplant	2015. 01. 26[[Epub ahead of print]]	国外

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委託業務題目「厚生労働省科学研究委託費（革新的がん医療実用化研究事業） 成人T細胞白血病に対する標準治療としての同種造血幹細胞移植法の確立およびゲノム解析に基づく治療法の最適化に関する研究」

機関名 久留米大学医学部 内科学講座 血液・腫瘍内科部門 長藤 宏司

1. 学会等における口頭・ポスター発表

発表した成果（発表題目、口頭・ポスター発表の別）	発表者氏名	発表した場所（学会等名）	発表した時期	国内・外の別
シンポジウム： 成人T細胞白血病/リンパ腫（ATLL）に対する造血幹細胞移植の最適化 CBTの最適化	奥英二郎	第36回日本造血細胞移植学会総会（沖縄）	2014. 3. 7-9	国内

2. 学会誌・雑誌等における論文掲載

掲載した論文（発表題目）	発表者氏名	発表した場所（学会誌・雑誌等名）	発表した時期	国内・外の別
Characteristics of Patients With Development of Large Granular Lymphocyte Expansion Among Dasatinib-Treated Patients With Relapsed Philadelphia Chromosome-Positive Acute Lymphoblastic Leukemia After Allogeneic Stem Cell Transplantation.	Ito Y, Miyamoto T, Kamimura T, Aoki K, Henzan H, Aoki T, Shiratsuchi M, Kato K, <u>Nagafuji K</u> , Ogawa R, Eto T, Iwasaki H, Akashi K.	Clinical Lymphoma Myeloma and Leukemia	2014. 9; Vol.15, Issue 3:e47-e54	国外
Association between Thromboembolic Events and the JAK2 V617F Mutation in Myeloproliferative Neoplasms Cancer.	Takata Y, Seki R, Kanajii T, Nohara M, Koteda S, Kawaguchi K, Nomura K, Nakamura T, Morishige S, Oku E, Osaki K, Hashiguchi M, Mouri F, Yoshimoto K, <u>Nagafuji K</u> , Okamura T.	Kurume Medical Journal	2014. 5. 26; 60(3-4):89-979[Epub ahead of print]	国内
Expansion of donor-reactive host T cells in primary graft failure after allogeneic hematopoietic SCT following reduced-intensity conditioning.	Koyama M, Hashimoto D, <u>Nagafuji K</u> , Eto T, Ohno Y, Aoyama K, Iwasaki H, Miyamoto T, Hill GR, Akashi K, Teshima T.	Bone Marrow Transplantation	2014; 49:110-115	国外

<p>PBSC collection from family donors in Japan: a prospective survey.</p>	<p>Kodera Y, Yamamoto K, Harada M, Morishima Y, Dohy H, Asano S, Ikeda Y, Nakahata T, Imamura M, Kawa K, Kato S, Tanimoto M, Kanda Y, Tanosaki R, Shiobara S, Kim SW, <u>Nagafuji K</u>, Hino M, Miyamura K, Suzuki R, Hamajima N, Fukushima M, Tamakoshi A, Halter J, Schmitz N, Niederwieser D, Gratwohl A.</p>	<p>Bone Marrow Transplantation</p>	<p>201; 49:195-200</p>	<p>国外</p>
<p>Treatment of patients with adult T cell leukemia/lymphoma with cord blood transplantation: a Japanese nationwide retrospective survey.</p>	<p>Kato K, Choi I, Wake A, Uike N, Taniguchi S, Moriuchi Y, Miyazaki Y, Nakamae H, Oku E, Murata M, Eto T, Akashi K, Sakamaki H, Kato K, Suzuki R, Yamanaka T, Utsunomiya A.</p>	<p>Biology of Blood and Marrow Transplantation</p>	<p>2014. 12; 20(12):1968-74</p>	<p>国外</p>

様式第19

学会等発表実績

委託業務題目「厚生労働省科学研究委託費（革新的がん医療実用化研究事業）成人T細胞白血病に対する標準治療としての同種造血幹細胞移植法の確立およびゲノム解析に基づく治療法の最適化に関する研究」

機関名：独立行政法人国立病院機構九州がんセンター 血液内科 崔 日承

1. 学会等における口頭・ポスター発表

発表した成果（発表題目、口頭・ポスター発表の別）	発表者氏名	発表した場所（学会等名）	発表した時期	国内・外の別
ATLLに対する骨髄移植・末梢血幹細胞移植の最適化（シンポジウム「成人T細胞白血病/リンパ腫(ATLL)に対する造血幹細胞移植の最適化」)	崔日承	第36回日本造血細胞移植学会総会(沖縄)	2015. 3. 7-9	国内
Unrelated bone marrow transplantation with reduced intensity conditioning regimen for elderly patients with adult T-cell leukemia/lymphoma, feasibility study with two year follow up data. (Poster)	Choi I, Eto T, Tanosaki R, Shimokawa M, Takatsuka Y, Utsunomiya A, Takemoto S, Taguchi J, Fukushima T, Kato K, Teshima T, Nakamae H, Suehiro Y, Yamanaka T, Okamura J, Uike N.	19th Congress of European Hematology Association (Milan, Italy)	2014. 6. 12-15	国外
Allogeneic hematopoietic cell transplantation for adult T cell leukemia/lymphoma. (Workshop)	Choi I, Uike N.	第12回日本臨床腫瘍学会学術集会(福岡)	2014. 7. 17-19	国内
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2. 学会誌・雑誌等における論文掲載

掲載した論文（発表題目）	発表者氏名	発表した場所(学会誌・雑誌等名)	発表した時期	国内・外の別
Treatment of patients with adult T cell leukemia/lymphoma with cord blood transplantation: a Japanese nationwide retrospective survey.	Kato K, <u>Choi I</u> , Wake A, Uike N, Taniguchi S, Moriuchi Y, Miyazaki Y, Nakamae H, Oku E, Murata M, Eto T, Akashi K, Sakamaki H, Kato K, Suzuki R, Yamanaka T, Utsunomiya A.	Biol Blood Marrow Transplant	2014. 12; 20(12):1968-74	国外
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学会等発表実績

委託業務題目「厚生労働省科学研究委託費（革新的がん医療実用化研究事業）成人T細胞白血病に対する標準治療としての同種造血幹細胞移植法の確立およびゲノム解析に基づく治療法の最適化に関する研究」

機関名 大分大学医学部 緒方 正男

1. 学会等における口頭・ポスター発表

発表した成果（発表題目、口頭・ポスター発表の別）	発表者氏名	発表した場所（学会等名）	発表した時期	国内・外の別
「移植医療と感染症」/ 同種造血細胞移植と感染症（口頭）	緒方正男	第88回日本感染症学会学術集会(福岡)	2014. 6. 20	国内
Hypofibrinogenemia associated with steroid therapy in patients who developed GVHD after HSCT. (Poster)	Moroga Y, <u>Ogata M</u> , Yoshida N, Takata H, Nagamatsu K, Nashimoto Y, Takano K, Saburi Y, Kohoo K, Ikebe T, Shirao K.	第76回日本血液学会学術集会(大阪)	2014. 10. 31-11. 2	国内

2. 学会誌・雑誌等における論文掲載

掲載した論文（発表題目）	発表者氏名	発表した場所(学会誌・雑誌等名)	発表した時期	国内・外の別
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同種造血細胞移植後のHHV-6再活性化と脳炎	緒方正男	血液内科	2014. 5	国内
HHV-6A and HHV-6B in recipients of hematopoietic cell transplantation.	Zerr DM, <u>Ogata M</u> .	Human Herpesviruses HHV-6A, HHV-6B & HHV-7, Diagnosis and Clinical Management, third edition	2014. 1; third edition:Chapter 13:217-234	国外

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学会等発表実績

委託業務題目「厚生労働省科学研究委託費（革新的がん医療実用化研究事業）成人T細胞白血病に対する標準治療としての同種造血幹細胞移植法の確立およびゲノム解析に基づく治療法の最適化に関する研究」

機関名 東北大学大学院医学系研究科／医学統計学分野 教授 山口 拓洋

1. 学会等における口頭・ポスター発表

発表した成果（発表題目、口頭・ポスター発表の別）	発表者氏名	発表した場所（学会等名）	発表した時期	国内・外の別
Decision Analysis of Allogeneic Hematopoietic Stem Cell Transplantation Versus Chemotherapy in Cytogenetically Standard-Risk Acute Myeloid Leukemia in First Complete Remission: The Impact of FLT3-ITD Profile. (Poster)	Kurosawa S, Yamaguchi H, <u>Yamaguchi T</u> , Fukunaga K, Yui S, Kanamori H, Usuki K, Uoshima N, Yanada M, Shono K, Ueki T, Mizuno I, Yano S, Takeuchi J, Kanda J, Okamura H, Tajima K, Inamoto Y, Inokuchi K, Fukuda T.	56th American Society of Hematology Annual Meeting(San Francisco, CA.)	2014.12.6-9	国外

2. 学会誌・雑誌等における論文掲載

掲載した論文（発表題目）	発表者氏名	発表した場所(学会誌・雑誌等名)	発表した時期	国内・外の別
同種造血幹細胞移植後の長期フォローアップシステム:単施設の実現可能性調査	黒澤彩子、森 文子、塚越真由美、 <u>山口拓洋</u> 、金 成元、藤 重夫、山下卓也、田野崎隆二、福田隆浩	日本造血細胞移植学会雑誌	2014; 3(2):49-58	国内

IV. 研究成果の刊行物 (論文別冊)

ORIGINAL ARTICLE

Impact of pretransplant body mass index on the clinical outcome after allogeneic hematopoietic SCT

S Fuji¹, K Takano¹, T Mori², T Eto³, S Taniguchi⁴, K Ohashi⁵, H Sakamaki⁵, Y Morishima⁶, K Kato⁷, K Miyamura⁸, R Suzuki⁹ and T Fukuda¹

To elucidate the impact of pretransplant body mass index (BMI) on the clinical outcome, we performed a retrospective study with registry data including a total of 12 050 patients (age ≥ 18 years) who received allogeneic hematopoietic SCT (HSCT) between 2000 and 2010. Patients were stratified as follows: BMI < 18.5 kg/m², Underweight, $n = 1791$; $18.5 \leq$ BMI < 25 , Normal, $n = 8444$; $25 \leq$ BMI < 30 , Overweight, $n = 1591$; BMI ≥ 30 , Obese, $n = 224$. The median age was 45 years (range, 18–77). A multivariate analysis showed that the risk of relapse was significantly higher in the underweight group and lower in the overweight and obese groups compared with the normal group (hazard ratio (HR), 1.16, 0.86, and 0.74, respectively). The risk of GVHD was significantly higher in the overweight group compared with the normal group. The risk of non-relapse mortality (NRM) was significantly higher in the overweight and obese group compared with the normal group (HR 1.19 and HR 1.43, respectively). The probability of OS was lower in the underweight group compared with the normal group (HR 1.10, $P = 0.018$). In conclusion, pretransplant BMI affected the risk of relapse and NRM after allogeneic HSCT. Underweight was a risk factor for poor OS because of an increased risk of relapse. Obesity was a risk factor for NRM.

Bone Marrow Transplantation (2014) 49, 1505–1512; doi:10.1038/bmt.2014.178; published online 11 August 2014

INTRODUCTION

Obesity has become an important health issue worldwide.¹ On the other hand, malnutrition is an important problem in cancer patients.² The impact of pretransplant obesity (high body mass index (BMI)) and malnutrition (low BMI) on the clinical outcome after allogeneic hematopoietic SCT (HSCT) is still controversial. Sorror *et al.*³ reported that obesity (BMI > 35 kg/m²) as a factor in the hematopoietic cell transplant-specific comorbidity index was associated with an increased risk of non-relapse mortality (NRM). A large retrospective study from the Center for International Blood and Marrow Transplant Research (CIBMTR) showed that the probability of OS in patients with low BMI (BMI < 18.5 kg/m²) was inferior to that in patients with a normal BMI in patients who received stem cells from either related or unrelated donors, mainly because of the increased risk of relapse.⁴ A limitation of this CIBMTR study was the limited number of patients with low BMI (32 of 2041 patients (1.6%) who received related HSCT and 33 of 1801 patients (1.8%) who received unrelated HSCT). We previously reported that there was a trend toward an increased risk of acute GVHD and NRM in patients with high BMI, and the risk of relapse was higher in patients with low BMI using registry data from the Japanese Marrow Donor Program.⁵ However, this study was limited by the small number of patients with high BMI (BMI ≥ 30 kg/m²) in this population (61 of 3935 patients (1.6%)). A larger database is needed to increase the statistical power, so that it would be sufficient to clarify the impact of both low BMI and high BMI simultaneously using a single database. In addition, a previous study did not reveal the characteristics of post transplant

morbidity and mortality in patients with each risk factor.³ If we can clarify the details regarding the cause of failure in patients with low or high BMI, we may be able to improve the overall outcome after allogeneic HSCT. For this purpose, we assessed the impact of pretransplant BMI using a database from the Japan Society for Hematopoietic Cell Transplantation (JSHCT).⁶

PATIENTS AND METHODS

This study was approved by the Institutional Review Board of National Cancer Center, Tokyo, Japan. The patients in this analysis were aged 18 years or older, had received a first allogeneic HSCT between 2000 and 2010, and had data regarding pretransplant BMI. The patients' clinical data were obtained from the JSHCT database.⁶ Excluding patients without data regarding OS ($n = 30$) as well as patients who received cord blood transplant ($n = 3621$), 12 050 patients met the inclusion criteria and were included in the analysis. Patients were classified into four groups based on pretransplant BMI values according to consensus weight designations from the World Health Organization⁷ and the National Heart Lung and Blood Institute Expert Panel,⁸ as follows: underweight (BMI < 18.5 kg/m², $n = 1791$), normal ($18.5 \leq$ BMI < 25 kg/m², $n = 8444$), overweight ($25 \leq$ BMI < 30 kg/m², $n = 1591$) and obese (BMI ≥ 30 kg/m²; $n = 224$).

The study endpoints included GVHD, NRM, OS and relapse. Incidences of grade II–IV or III–IV acute and chronic or extensive chronic GVHD were based on classical criteria.^{9,10} OS was defined as time to death from any cause. NRM was defined as death from any cause in continuous CR or no progression. Relapse was defined as the time to onset of hematologic recurrence or disease progression.

A descriptive statistical analysis was performed to assess the patients' characteristics. Medians and ranges are provided for continuous variables and percentages are shown for categorical variables. The patients'

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characteristics were compared using the Chi-squared test for categorical variables. The probability of OS was calculated by the Kaplan–Meier method. A Cox proportional hazards regression model was used to analyze

OS. The cumulative incidences of NRM and GVHD were evaluated using the Fine and Gray model for univariate and multivariate analyses. In the competing risk models for GVHD, relapse and death before these events

Table 1. Patients' characteristics

Variable	Underweight	Normal	Overweight	Obesity	P-value
	BMI < 18.5	18.5 ≤ BMI < 25	25 ≤ BMI < 30	30 ≤ BMI	
	N (%)	N (%)	N (%)	N (%)	
Number of patients	1791	8444	1591	224	
Median age, years (range)	42 (18–73)	46 (18–77)	44 (18–72)	37 (18–70)	< 0.001
Sex					
Female	1057 (59.0)	3400 (40.3)	434 (27.3)	87 (38.8)	< 0.001
Male	734 (41.0)	5043 (59.7)	1157 (72.7)	137 (61.2)	
Missing	0 (0.0)	1 (0.0)	0 (0.0)	0 (0.0)	
Performance status					
0–1	1410 (78.7)	6970 (82.5)	1355 (85.2)	197 (87.9)	< 0.001
2–4	263 (14.7)	771 (9.1)	105 (6.6)	15 (6.7)	
Missing	118 (6.6)	703 (8.3)	131 (8.2)	12 (5.4)	
Stem cell source					
Related BM	350 (19.5)	1409 (16.7)	258 (16.2)	31 (13.8)	< 0.001
Related PBSC	496 (27.7)	2037 (24.1)	317 (19.9)	58 (25.9)	
Unrelated BM	945 (52.8)	4998 (59.2)	1016 (63.9)	135 (60.3)	
HLA mismatch					
Match	1395 (77.9)	6685 (79.2)	1267 (79.6)	177 (79.0)	0.56
Mismatch	368 (20.5)	1632 (19.3)	309 (19.4)	43 (19.2)	
Missing	28 (1.6)	127 (1.5)	15 (0.9)	4 (1.8)	
Donor/recipient sex combination					
Female to male	277 (15.5)	1799 (21.3)	358 (22.5)	37 (16.5)	< 0.001
Others	1484 (82.9)	6519 (77.2)	1217 (76.5)	187 (83.5)	
Missing	30 (1.7)	126 (1.5)	16 (1.0)	0 (0)	
Underlying disease					
AML	660 (36.9)	3395 (40.2)	659 (41.4)	86 (38.4)	< 0.001
ALL	370 (20.7)	1450 (17.2)	260 (16.3)	48 (21.4)	
MDS	163 (9.1)	927 (11.0)	232 (14.6)	23 (10.3)	
Lymphoma	323 (18.0)	1446 (17.1)	230 (14.5)	27 (12.1)	
Non-malignant	132 (7.4)	388 (4.6)	53 (3.3)	13 (5.8)	
MPD including CML	116 (6.5)	708 (8.4)	137 (8.6)	24 (10.7)	
Others	27 (1.5)	130 (1.5)	20 (1.3)	3 (1.3)	
Disease risk					
Standard	836 (46.7)	4082 (48.3)	842 (52.9)	125 (55.8)	< 0.001
High	906 (50.6)	4106 (48.6)	712 (44.8)	94 (42.0)	
Missing	49 (2.7)	256 (3.0)	37 (2.3)	5 (2.2)	
Time from diagnosis to transplant					
Median, day	256	278	317	362	< 0.001
Conditioning regimen					
Myeloablative	1139 (63.6)	5396 (63.9)	1080 (67.9)	166 (68.0)	< 0.001
TBI-Cy-based	824 (46.4)	3968 (47.2)	796 (50.2)	123 (55.2)	
Bu-Cy-based	188 (10.6)	1014 (12.1)	212 (13.4)	26 (11.7)	
Reduced-intensity	617 (34.5)	2824 (33.4)	466 (29.3)	55 (24.6)	
Missing	35 (2.0)	224 (2.7)	45 (2.8)	3 (1.3)	
GVHD prophylaxis					
CSP-based	887 (49.5)	3959 (46.9)	737 (46.3)	97 (43.3)	0.12
TAC-based	868 (48.5)	4315 (51.1)	833 (52.4)	123 (54.9)	
Missing	36 (2.0)	170 (2.0)	21 (1.3)	4 (1.8)	
Year of transplant					
< 2007	884 (49.4)	4402 (52.1)	847 (53.2)	109 (48.7)	0.077
≥ 2007	907 (50.6)	4042 (47.9)	744 (46.8)	115 (51.3)	

Abbreviations: BMI = body mass index; MDS = myelodysplastic syndrome; MPD = myeloproliferative disorder; TAC = tacrolimus.

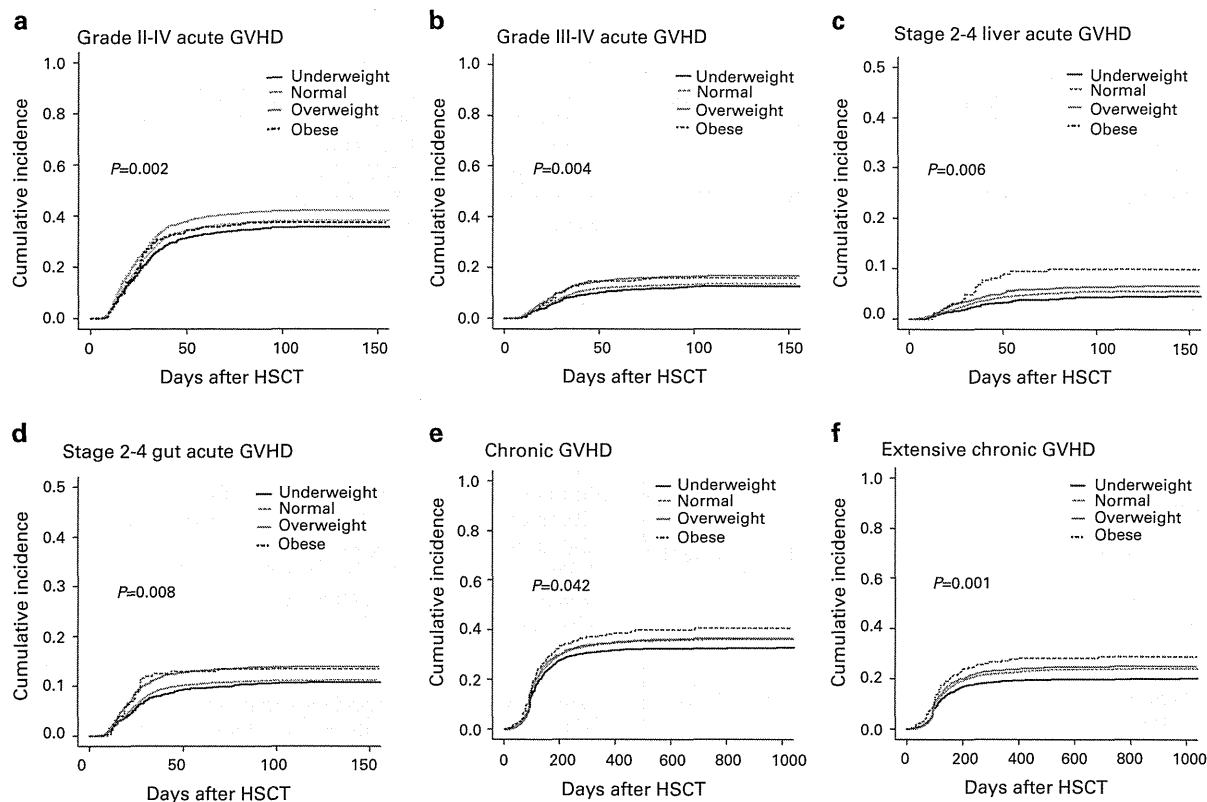


Figure 1. Cumulative incidence of GVHD grouped according to pretransplant BMI. (a) grade II-IV acute, (b) grade III-IV acute, (c) stage 2-4 liver acute, (d) stage 2-4 gut acute, (e) chronic, (f) extensive chronic.

were defined as competing risks. In the competing risk models for NRM, relapse was defined as a competing risk. For each cause-specific NRM, relapse and NRM with other causes were defined as competing risks. Factors that were associated with a two-sided P value of less than 0.10 in the univariate analysis were included in a multivariate analysis. We used a backward-stepwise selection algorithm and retained only the statistically significant variables in the final model. A two-sided P value of less than 0.05 was considered statistically significant. The variables evaluated in these analyses were as follows: sex mismatch (female to male vs other), patient's age at the time of HSCT (age ≥ 50 years vs age < 50), disease risk (standard risk vs high risk), performance status (0-1 vs 2-4), stem cell source (related BM vs related PBSC vs unrelated BM), year of transplant (≥ 2007 vs < 2007) and HLA disparity as assessed by serological typing of HLA A, B and DRB1. In the analysis including the hematopoietic cell transplant-specific comorbidity index, we grouped patients into three groups (0 points vs 1-2 points vs ≥ 3 points).³ Standard risk was defined as the first or second CR of acute leukemia, the first or second chronic phase of CML, myelodysplastic syndrome refractory anemia or refractory cytopenia with multilineage dysplasia, or nonmalignant disease. High risk was defined as other malignancies. Performance status was defined following ECOG criteria.¹¹ We considered that the data are missing completely at random, and therefore, all analyses in this study were performed as available-case analyses. All statistical analyses were performed with EZR (Saitama Medical Center, Jichi Medical University, Tochigi, Japan), which is a graphical user interface for R (The R Foundation for Statistical Computing, version 3.0.2).¹²

RESULTS

The patient characteristics are shown in Table 1. The median age was 45 years (range, 18-77). The median follow-up of surviving patients was 1183 days after allogeneic HSCT. The underweight group included more patients with a poor performance status (14.7%) and female patients (59.0%) compared with the normal group. The obese group included younger patients and more

patients with a myeloablative conditioning regimen (68.0%) and standard-risk disease (55.8%) compared with the normal group. Female patients had significantly higher BMI (mean, female 22.3 kg/m², male 21.1 kg/m², $P < 0.001$). Gender-adjusted outcomes were less significant, and therefore gender was not included in the analysis.

The cumulative incidence of grade II-IV acute GVHD at 150 days was 35.7% in the underweight, 38.3% in normal, 42.2% in overweight and 37.6% in obese groups ($P = 0.002$, Figure 1a). A multivariate analysis showed that overweight was associated with an increased risk of grade II-IV acute GVHD (hazard ratio (HR) 1.13, 95% confidence interval (CI) 1.03-1.24, $P = 0.011$, Table 2). The cumulative incidence of grade III-IV acute GVHD was 12.7% in the underweight, 13.5% in normal, 16.8% in overweight and 15.9% in obese groups ($P = 0.004$, Figure 1b). A multivariate analysis showed that being overweight was associated with an increased risk of grade III-IV acute GVHD (HR 1.27, 95%CI 1.10-1.48, $P = 0.002$, Table 2). With regard to the target organ of acute GVHD, the incidence of skin GVHD was not significantly different among the four groups. On the other hand, the incidences of stage 2-4 liver and stage 2-4 gut acute GVHD were higher in patients who were overweight and obese. The cumulative incidence of stage 2-4 acute GVHD in the liver was 4.6% in the underweight, 5.5% in normal, 6.5% in overweight and 9.9% in obese groups ($P = 0.006$, Figure 1c). A multivariate analysis showed that obesity was associated with an increased risk of stage 2-4 acute GVHD in the liver (HR 2.00, 95%CI 1.26-3.17, $P = 0.003$, Supplementary Table 1). The cumulative incidence of stage 2-4 acute GVHD in the gut was 10.7% in the underweight, 11.2% in normal, 14.0% in overweight and 13.5% in obese groups ($P = 0.008$, Figure 1d). A multivariate analysis showed that being overweight was associated with an increased risk of stage 2-4 acute GVHD in the gut (HR 1.30, 95%CI 1.10-1.53, $P = 0.002$,