

# 学位論文審査結果の要旨

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<p>(学位論文審査結果の要旨)</p> <p>Donor-derived M2 macrophages attenuate GVHD after allogeneic hematopoietic stem cell transplantation</p> <p>【主論文審査結果の要旨】</p> <p>著者らは論文において下記の内容を述べている。</p> <p>Introduction: Graft-versus-host disease (GVHD) is frequent and fatal complication following allogeneic hematopoietic stem cell transplantation (HSCT) and characteristically involves skin, gut, and liver. Macrophages promote tissue regeneration and mediate immunomodulation. Macrophages are divided into two different phenotypes, classically activated M1 (pro-inflammatory or immune-reactive macrophages) and alternatively activated M2 (anti-inflammatory or immune-suppressive macrophages). The anti-inflammatory effect of M2 macrophage led us to test its effect in the pathophysiology of GVHD.</p> <p>Methods: GVHD was induced in lethally irradiated BALB/c mice. M2 macrophages derived from donor bone marrow (BM) were administered intravenously, while controls received donor BM-mononuclear cells and splenocytes. Animals were monitored for clinical GVHD and analyzed.</p> <p>Results: We confirmed that administering donor BM-derived M2 macrophages attenuated GVHD severity and prolonged survival after HSCT. Moreover, donor BM-derived M2 macrophages significantly suppressed donor T cell proliferation by cell-to-cell contact in vitro.</p> <p>Conclusions: We showed the protective effects of donor-derived M2 macrophages on GVHD and improved survival in a model of HSCT. Our data suggest that donor-derived M2 macrophages offer the potential for cell-based therapy to treat GVHD.</p>			

本論文は、ドナー由来の M2 マクロファージが T 細胞との接触を介して同種造血細胞移植後の移植片対宿主病を抑制することを明らかにするとともに、M2 マクロファージを利用した移植片対宿主病に対する細胞療法につながる可能性を示した論文であり、学術上極めて有益であり、学位論文として価値あるものと認めた。

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