

分子標的医薬探索寄付講座

1. L. Wang, Y. Lin, K. Sidthipong, J. Tang, M. Li, T. Koyano, T. Kowithayakorn, K. Sumiyoshi, T. Ukaji, and K. Umezawa: Inhibition of NF- κ B and cellular invasion by novel flavonoid desmal in ovarian carcinoma cells. *Heterocycles* ,92, 353-360, 2016.
2. M. El-Salhy and K. Umezawa: Treatment with novel AP-1 and NF- κ B inhibitors restores the colonic endocrine cells to normal levels in rats with DSS-induced colitis. *International J. Molecular Medicine* ,37(3),556-64,2016.
3. N. Ichikawa, K. Yamashita, T. Funakoshi, S. Ichihara, M. Fukai, M. Ogura, N. Kobayashi, M. Zaito, T. Yoshida, S. Shibasaki, Y. Koshizuka, Y. Tsunetoshi, M. Sato, T. Einama, M. Ozaki, K. Umezawa, T. Suzuki and S. Todo: Novel anti-inflammatory agent 3-[(dodecylthiocarbonyl)-methyl]-glutarimide ameliorates murine models of inflammatory bowel disease, *Inflammation Research*,65(3),245-60,2016.
4. W. Seubwai, K. Vaeteewoottacharn, R. Kraiklang, K. Umezawa, S. Okada and S. Wongkham: Inhibition of NF- κ B activity enhances sensitivity to anticancer drugs in cholangiocarcinoma cells. *Oncology Research* ,23, 21-28, 2016.
5. T. Okamoto, Y. Ozawa, M. Kamoshita, H. Osada, E. Toda, T. Kurihara, N. Nagai, K. Umezawa and K. Tsubota: The neuroprotective effect of rapamycin as a modulator of the mTOR-NF- κ B axis during retinal inflammation. *PLOS One* published 15 Jan 2016 10.1371/journal.pone.0146517.
6. T. Toda, M. Watanabe, J. Kawato, M. Higashihara, T. Kunisada, K. Umezawa and R. Horie: Brefeldin A exerts differential effects on anaplastic lymphoma kinase positive anaplastic large cell lymphoma and Hodgkin lymphoma cell lines. *British J. Haematology* ,170: 837-846, 2015.
7. Ali TFS, Iwamura K, Ciftci H. I, Koga R, Matsumoto M, Oba Y, Kurosaki H, Fujita M, Okamoto Y, Umezawa K, Nakao M, Hide T, Makino K, Kuratsu J, Abdel-Aiziz M, El-Din, Abuo-Rahma AAM. Beshr EA, Otsuka M: Novel metal chelating molecules with anticancer activity. Striking effect of the imidazole substitution of the histidine-pyridine-histidine system. *Bioorg Med Chem*, 23, 5476-5482, 2015.

8. Ukaji T, Lin Y, Banno K, Okada S, Umezawa K: Inhibition of IGF-1-mediated cellular migration and invasion by migracin A in ovarian clear cell carcinoma cells. *PLOS ONE*,10(9), e0137663, 2015.
9. Inokawa S, Watanabe T, Keino H, Sato Y, Hirakata A, Okada A. A, Fukuda K, Fukushima A, Umezawa K: Dehydroxymethylepoxyquinomicin, a novel nuclear factor- κ B inhibitor, reduces chemokines and adhesion molecule expression induced by IL-1 β in human corneal fibroblasts. *Graefes Arch Clin Exp Ophthalmol*, 253, 557-563, 2015.
10. Kuboki M, Ito A, Simizu S, Umezawa K: Activation of apoptosis by caspase-3-dependent specific RelB cleavage in anticancer agent-treated cancer cells: Involvement of positive feedback mechanism. *Biochem Biophys Res Commun*, 456, 810-814, 2015.
11. Koide N, Kaneda A, Yokochi T, Umezawa K: Inhibition of RANKL- and LPS-induced osteoclast differentiations by novel NF- κ B inhibitor DTCM-glutarimide. *International Immunopharmacology*, 25, 162-168, 2015.
12. Horie K, Ma J, Umezawa K: Inhibition of canonical NF- κ B nuclear localization by (-)-DHMEQ via impairment of DNA binding. *Oncology Res*, 22, 105-115, 2015.
13. Noma N, Asagiri M, Takeiri M, Ohmae S, Takemoto K, Iwaisako K, Simizu S, Umezawa K: Inhibition of MMP-2-mediated mast cell invasion by NF- κ B inhibitor DHMEQ in mast cells. *International Archives of Allergy and Immunology*, 166, 84-90, 2015.
14. Mbongue J. C, Nicholas D, Zhang K, Hamilton B. N, Larios M, Zhang G, Umezawa K, Firek A, Langridge WHR: Induction of indoleamine 2, 3 dioxygenase in human dendritic cells by a cholera toxin B subunit - Proinsulin vaccine. *PLOS ONE* DOI:10.1371/journal.pone.0118562, 2015.
15. Sasazawa Y, Sato N, Umezawa K, Simizu S: Conophylline protects cells in cellular models of neurodegenerative diseases by inducing mTOR-independent autophagy. *J Biol Chem*, 290, 6168-6178, 2015.
16. Ito Y, Kikuchi E, Tanaka N, Kosaki T, Suzuki E, Mizuno R, Shinojima T, Miyajima A, Umezawa K, Oya M: Down-regulation of NF- κ B activation is an ef

fective therapeutic modality in acquired platinum-resistant bladder cancer. *BMC Cancer* (2015)15:324 DOI 10.1186/s12885-015-1315-9.

17. Yamanouchi S, Adachi Y, Shimo T, Umezawa K, Okigaki M, Tsuji S, Li M, Takaya J, Kuge T, Ikehara S, Kaneko K: A nuclear factor- κ B inhibitor, dehydroxymethyl ethylepoxyquinomicin, ameliorates GVHD in allogeneic bone marrow transplantation. *Immunobiology*, 220, 1059-1066, 2015.

18. Zaitseva M, Yamashita K, Shibasaki S, Tsunetoshi Y, Fukai M, Ogura M, Yoshida T, Igarashi R, Kobayashi N, Umezawa K, Todo S: 3-[(dodecylthiocarbonyl)methyl]-glutarimide attenuates graft arterial disease by suppressing alloimmune responses and vascular smooth muscle cell proliferation. *Transplantation*, 99, 948-956, 2015.

19. Ukaji T, Sasazawa Y, Umezawa K, Simizu S: Involvement of conserved tryptophan residues for secretion of TIMP-2. *Oncology Letters*, 7, 631-634, 2014.

20. Togano T, Watanabe M, Itoh K, Umezawa K, Masuda N, Higashihara M, Horie R: Activation of Akt involves resistance to NF- κ B inhibition and abrogation of both triggers synergistic apoptosis in lung adenocarcinoma cells. *Lung Cancer*, 83, 139-145, 2014.

21. Watanabe M, Umezawa K, Higashihara M, Horie R: Combined inhibition of NF- κ B and Bcl-2 triggers synergistic reduction of viability and induces apoptosis in melanoma cells. *Oncology Res*, 21, 173-180, 2014.

22. Goto Y, Niwa Y, Suzuki T, Dohmae N, Umezawa K, Simizu S: C-mannosylation of human hyaluronidase 1: Possible roles for secretion and enzymatic activity. *International J Oncology*, 45, 344-350, 2014.

23. El-Salhy M, Umezawa K, Gilja O.-H, Hatlebakk JG, Gundersen D, Hausken T: Amelioration of severe TNBS induced colitis by novel AP-1 and NF- κ B inhibitors in rats. *The Scientific World*, Volume 2014 Article ID 813804 (8 pages).

24. Celegato M, Borghese C, Umezawa K, Casagrande N, Colombatti A, Carbone A, Aldinucci D: The NF- κ B inhibitor DHMEQ decreases survival factors, overcomes the protective activity of microenvironment and synergizes with chemotherapy agents in classical Hodgkin lymphoma. *Cancer Letters*, 349, 26-34, 2014.

25. Nishio H, Yaguchi T, Sugiyama J, Sumimoto H, Umezawa K, Iwata T, Susumu N, Fujii T, Kawamura N, Kobayashi A, Park J-H, Aoki D, Kawakami Y: Immunosuppression through constitutively activated NF- κ B signaling in human ovarian cancer and its reversal by a NF- κ B inhibitor. *British J Cancer*, 110, 2965-2974, 2014.
26. Sato M, Nakanishi K, Haga S, Fujiyoshi M, Baba M, Mino K, Yimin, Niwa H, Yokoo H, Umezawa K, Ohmiya Y, Kamiyama T, Todo S, Taketomi A, Ozaki M: Anoikis induction and inhibition of peritoneal metastasis of pancreatic cancer cells by a nuclear factor-kappa B inhibitor, (-)-DHMEQ. *Oncology Res*, 21, 333-343, 2014.
27. Ukaji T, Umezawa K: Novel approaches to target NF- κ B and other signaling pathways in cancer stem cells. *Advances in Biological Regulation*, 56, 108-115, 2014.
28. Koide N, Kondo Y, Odkhuu E, Ulziisaikhan J, Ukaji T, Yokochi T, Umezawa K: Inhibition of receptor activator of nuclear factor- κ B ligand (RANKL) or lipopolysaccharide-induced osteoclast formation by conophylline (CNP) through downregulation of CREB. *Immunology Letters*, 161, 31-37, 2014.
29. Matsui C, Ikeda Y, Inuma H, Kushida N, Kunisada T, Simizu S, Umezawa K: Isolation of a novel paxilline analog pyrapaxilline from fungus that inhibits LPS-induced NO production. *J Antibiotics*, 67, 787-790, 2014. 30. Haga S, Ozawa T, Yamada Y, Morita N, Nagashima I, Inoue H, Inaba Y, Noda N, Abe R, Umezawa K, Ozaki M: p62/SQSTM1 plays a protective role in oxidative injury of steatotic liver in a mouse hepatectomy model. *Antioxidants and Redox Signaling*, 18, 2515-2530, 2014.
31. Lampiasi N, Umezawa K, Montalto G, Cervello M: Poly (ADP-Ribose) polymerase inhibition synergizes with the NF- κ B inhibitor DHMEQ to kill hepatocellular carcinoma cells. *BBA-Molecular Cell Research*, 1843, 2662-2673, 2014.
32. Miyagi T, Shiotani B, Miyoshi R, Yamamoto T, Oka T, Umezawa K, Ochiya T, Takano M, Tahara H: DSE-FRET: A new anti-cancer drug screening assay for DNA binding proteins. *Cancer Science*, 105, 870-874, 2014.
33. Seubwai W, Kraiklang R, K. Vaeteewoottacharn K, Umezawa K, Okada S, Wongkham S: Aberrant expression of NF- κ B in liver fluke associated cholangiocarcinoma: implications for targeted therapy. *PLOS ONE*, 9 (8), e106056, 2014.

34. Kamoshita M, Ozawa Y, Kubota S, Miyake S, Tsuda C, Nagai N, Yuki K, Shimamura S, Umezawa K, Tsubota K. AMPK-NF- κ B axis in the photoreceptor disorder during retinal inflammation. *PLOS ONE*, 9 (7), e103013, 2014.
35. Kuroda M, Funasaki S, Saitoh T, Sasazawa Y, Nishiyama S, Umezawa K, Simizu S: Determination of topological structure of ARL6ip1 in cells: Identification of the essential binding region of ARL6ip1 for conophylline. *FEBS Letters*, 587, 3656-3660, 2013.
36. Watanabe M, Yamashita K, Kamachi H, Kuraya D, Koshizuka Y, Shibasaki S, Asahi Y, Ono H, Emoto S, Ogura M, Yoshida T, Ozaki M, Umezawa K, Matsushita M and Todo S: Efficacy of DHMEQ, a NF- κ B inhibitor, in islet transplantation: II. Induction DHMEQ treatment ameliorates subsequent alloimmune responses and permits long-term islet allograft acceptance. *Transplantation*, 96, 454-462, 2013.
37. Kuraya D, Watanabe M, Koshizuka Y, Ogura M, Yoshida T, Asahi Y, Kamachi H, Nakamura T, Harashima H, Ozaki M, Umezawa K, Matsushita M, Yamashita K, Todo S: Efficacy of DHMEQ, a NF- κ B Inhibitor, in islet transplantation: I. HMGB1 suppression by DHMEQ prevents early islet graft damage. *Transplantation*, 96, 445-453, 2013.
38. Kubo N, Saito R, Hamano K, Nagasawa M, Aoki F, Takei I, Umezawa K, Kuwano H, Kojima I: Conophylline suppresses hepatic stellate cells and attenuates thioacetamide-induced liver fibrosis in rats. *Liver International*, 2013, DOI: 10.1111/liv.12328.
39. Brassasco MS, Roberto G, Morales A, de Oliveira J, Delsin LE, Pezuk JA, Valera ET, Carlotti CG Jr, Rego EM, de Oliveira HF, Scrideli CA, Umezawa K, Tone LG: Inhibition of NF- κ B by Dehydroxymethylepoxyquinomicin suppresses invasion and synergistically potentiates Temozolomide and g-radiation cytotoxicity in glioblastoma cells. *Chemother Res Pract*, 2013, Article ID 593020 (16 pages).
40. Shimogaki S, Ito S, Komatsu S, Koike R, Miyasaka N, Umezawa K, Kubota T: Inhibition of the NF- κ B pathway as a candidate therapeutic strategy for cryopyrin-associated periodic syndrome. *Mod Rheumatol*, 24, 517-524, 2013.

41. Kono H, Nakagawa K, Morita S, Shinoda K, Mizuno R, Kikuchi E, Miyajima A, Umezawa K, Oya M: The effect of a novel nuclear factor kappa B activation inhibitor on renal ischemia reperfusion injury. *Transplantation*, 96, 863-870, 2013.
42. Umezawa K: Peritoneal NF- κ B as a Possible molecular target for suppression of various cancers and inflammation. (Review) *For Immunopathol Dis Therap*, 4, 63-77, 2013.
43. Togano T, Nakashima M, Watanabe M, Umezawa K, Watanabe T, Higashihara M, Horie R: Synergistic effect of 5-azacytidine and NF-kappa B inhibitor DHMEQ on apoptosis induction in myeloid leukemia cells. *Oncol Res*, 20, 571-577, 2013.
44. Sidthipong K, Todo S, Takei I, Kojima I, Umezawa K: Screening of new bioactive metabolites for diabetes therapy (Review). *Intern Emerg Med*, 8, 57-59, 2013.
45. Nishimura M, Nii T, Trimova G, Miura S, Umezawa K, Ushiyama A, Kubota T: The NF- κ B specific inhibitor DHMEQ prevents thrombosis formation in a mouse model of antiphospholipid syndrome. *J Nephropathology*, 2, 114-121, 2013.
46. Shimo T, Adachi Y, Yamanouchi S, Tsuji S, Kimata T, Umezawa K, Okigaki M, Takaya J, Ikehara S, Kaneko K: A novel NF- κ B inhibitor DHMEQ ameliorates puromycin aminonucleoside induced nephrosis in mice. *Am J Nephrol*, 37, 302-309, 2013.
47. Ogasawara A, Simizu S, Ito A, Kawai T, Saisho Y, Takei I, Umezawa K: Inhibition of NO-induced b-cell death by novel NF- κ B inhibitor (-)-DHMEQ via activation of Nrf2-ARE pathway. *Biochem Biophys Chem Commun*, 433, 181-187, 2013.
48. Suzuki K, Aiura K, Matsuda S, Itano O, Takeuchi O, Umezawa K, Kitagawa Y: Combined effect of dehydroxymethylepoxyquinomicin and gemcitabine in a mouse model of liver metastasis of pancreatic cancer. *Clin Exp Metastasis*, 30, 381-392, 2013.
49. Kassan M, Choi SK, Galan M, Bishop A, Umezawa K, Trebak M, Matrougui K: NF κ B impairs vascular function through PARP-1, SP-1 and COX2-dependent mechanisms in type 2 diabetes. *Diabetes*, 62, 2078-2087, 2013.

50. Ohsugi T, Ishida T, Shimasaki T, Okada S, Umezawa K: p53 dysfunction precedes the activation of nuclear factor- κ B during disease progression in mice expressing Tax, a human T-cell leukemia virus type 1 oncoprotein. *Carcinogenesis*, 34, 2129-2136, 2013.
51. Nakajima S, Kato H, Gu L, Takahashi S, Johno H, Umezawa K, Kitamura M: Pleiotropic potential of dehydroxymethylepoxyquinomicin for NF- κ B suppression via reactive oxygen species and unfolded protein response. *J Immunol*, 190, 6559-6569, 2013.
52. Shibasaki S, Yamashita K, Goto R, Wakayama K, Tsunetoshi Y, Zaito M, Igarashi R, Haga S, Ozaki M, Umezawa K, Todo S: Immunosuppressive effects of DTCM-G, a novel Inhibitor of the mTOR downstream signaling pathway. *Transplantation*, 95, 542-550, 2013.
53. Brassesco MS, Pezuk JA, de Oliveira JC, Valera ET, de Oliveira HF, Scrideli CA, Umezawa K, Tone LG: Activator Protein-1 Inhibition by 3-[(dodecylthiocarbonyl)methyl]-glutamaride impairs invasion and radiosensitizes osteosarcoma cells in vitro. *Cancer Biother Radiopharm*, 28, 351-358, 2013.
54. Sukumwang N, Umezawa K: Earthworm-derived pore-forming toxin Lysenin and screening of its inhibitors. *Toxins*, 5, 1392-1401, 2013.
55. Arai Y, Iinuma H, Ikeda Y, Igarashi M, Hatano K, Kinoshita N, Ukaji T, Simizu S, Umezawa K: Migracins A and B, new inhibitors of cancer cell migration, produced by *Streptomyces* sp. *J. Antibiot*, 66, 225-230, 2013.
56. Saito R, Yamada S, Yamamoto Y, Kodera T, Hara A, Tanaka Y, Kimura F, Takei I, Umezawa K, Kojima I: Conophylline suppresses pancreatic stellate cells and improves islet fibrosis in Goto-Kakizaki rats. *Endocrinology*, 153, 621-630, 2012.
57. Takeiri M, Horie K, Takahashi D, Watanabe M, Horie R, Simizu S, Umezawa K: Involvement of DNA binding domain in the cellular stability and importin affinity of NF- κ B component RelB. *Org Biomol Chem*, 10, 3053-3059, 2012.
58. Noma N, Simizu S, Kambayashi Y, Kabe Y, Suematsu M, Umezawa K: Involvement of NF- κ B-mediated expression of galectin-3-binding protein in tumor necrosis factor- α -induced breast cancer cell adhesion. *Oncology Reports*, 27, 2080-2084, 2012.

59. Hinohara K, Kobayashi S, Simizu S, Tada K, Tsuji E, Nishioka K, Umezawa K, Mori M, Kanauchi H, Ogawa T, Inoue J, Tojo A, Gotoh N: ErbB/NFκB signaling controls self-renewal of breast cancer stem cells. *Proc Natl Acad Sci USA*, 109, 6584-6589, 2012.
60. Kobayashi R, Hanaya K, Shoji M, Umezawa K, Sugai T: A chemo-enzymatic expeditious route to racemic dihexanoyl (2R*,3R*,4R*)-dehydroxymethylepoxyquinomicin (DHMEQ), the precursor for lipase-catalyzed synthesis of the potent NF-κB inhibitor,(2S,3S,4S)-DHMEQ. *Chem Pharm Bull*, 60, 1220-1223, 2012.
61. Fukushima T, Kawaguchi M, Yorita K, Tanaka H, Umezawa K, Kataoka H: Antitumor effect of dehydroxymethylepoxyquinomicin (DHMEQ), a small molecule inhibitor of nuclear factor-κB, on glioblastoma. *Neuro-Oncology*, 14, 19-28, 2012.
62. Funakoshi T, Yamashita K, Ichikawa N, Fukai M, Suzuki T, Goto R, Oura T, Kobayashi N, Katsurada T, Ichihara S, Ozaki M, Umezawa K, Todo S: A novel NF-κB inhibitor, dehydroxymethylepoxyquinomicin, ameliorates inflammatory colonic injury in mice. *J Crohns Colitis*, 6, 215-225, 2012.
63. Kawata M, Koinuma D, Ogami T, Umezawa K, Iwata C, Watabe T, Miyazono K: TGF-β-induced epithelial-mesenchymal transition of A549 lung adenocarcinoma cells is enhanced by proinflammatory cytokines derived from RAW 264.7 macrophage cells. *J Biochem*, 151, 205-216, 2012.
64. Goto R, Yamashita K, Aoyagi T, Ueki S, Uno M, Oura T, Kobayashi N, Igashi R, Shibasaki S, Wakayama K, Hirokata G, Shibata T, Umezawa K, Ozaki M, Todo S: The immunomodulatory effect of nuclear factor-κB inhibition by dehydroxymethylepoxyquinomicin in combination with donor-specific blood transfusion. *Transplantation*, 93, 777-786, 2012.
65. Lampiasi N, Azzolina A, Umezawa K, Montalto G, McCubrey JA, Cervello M: The novel NF-κB inhibitor DHMEQ synergizes with Celecoxib to exert antitumor effects on human liver cancer cells by a ROS-dependent mechanism. *Cancer Lett*, 322, 35-44, 2012.
66. Shimizu K, Konno S, Ozaki M, Umezawa K, Yamashita K, Todo S, Nishimura M: Dehydroxymethylepoxyquinomicin (DHMEQ), a novel NF-κB inhibitor, i

inhibits allergic inflammation and airway remodelling in murine models of asthma. *Clin Exp Allergy*, 42, 1273-1281, 2012.

67. Nakayama M, Niki Y, Kawasaki T, Takeda Y, Horiuchi K, Sasaki A, Okada Y, Umezawa K, Ikegami H, Toyama Y, Miyamoto T: Enhanced susceptibility to lipopolysaccharide-induced arthritis and endotoxin shock in interleukin-32 alpha transgenic mice through induction of tumor necrosis factor alpha. *Arthritis Res Ther*, 14, R120, 2012.

68. Alberti C, Pinciroli P, Valeri B, Ferri R, Ditto A, Umezawa K, Sensi ML, Canavari S, Tomassetti A: Ligand-dependent EGFR activation induces the co-expression of IL-6 and PAI-1 via NF- κ B pathway on advanced-stage epithelial ovarian cancer. *Oncogene*, 31, 4139-4149, 2012.

69. Castro-Gamero AM, Borgesa KS, da Silva Silveira V, Lira RC, de Paula G, Queiroz R, Valera FC, Scrideli CA, Umezawa K, Tone LG: Inhibition of nuclear factor- κ B by dehydroxymethylepoxyquinomicin induces schedule-dependent chemosensitivity to anticancer drugs and enhances chemoinduced apoptosis in osteosarcoma cells. *Anti-Cancer Drugs*, 23, 638-650, 2012.

70. Valera FC, Umezawa K, Brassesco MS, Castro-Gamero AM, Queiroz RG, Scrideli CA, Tone LG, Anselmo-Lima WT: Suppression of inflammatory cytokine secretion by an NF- κ B inhibitor in nasal polyp fibroblasts. *Cell Physiol Biochem*, 30, 13-22, 2012.

71. Kozakai N, Kikuchi E, Hasegawa M, Suzuki E, Ide H, Miyajima A, Horiguchi Y, Nakashima J, Umezawa K, Shigematsu N, Oya M: Enhancement of radiosensitivity by a unique novel NF- κ B inhibitor, DHMEQ, in prostate cancer. *British J Cancer*, 107, 652-657, 2012.

72. Takeiri M, Ota E, Nishiyama S, Kiyota H, Simizu S, Umezawa K: Structure-activity relationship of 9-methylstreptimidone that induces selective apoptosis in adult T-cell leukemia cells. *Oncol Res*, 20, 7-14, 2012.

73. Kaneda A, Gantsev SK, Umezawa K: Inhibition of cellular invasion and induction of anoikis in mouse melanoma cells by an anti-inflammatory agent DTCM-glutarimide. *Creative Surgery and Oncology*, 2012, 4-9, 2012.

74. Brassesco MS, Pezuk JA, Morales AG, de Oliveira JC, Valera ET, da Silva G N, de Oliveira HF, Scrideli CA, Umezawa K, Tone LG: Cytostatic in vitro effects of DTCM-glutarimide on bladder carcinoma cells. *Asian Pac J Cancer Prev*, 13, 1 957-1962,2012.
75. Ota E, Takeiri M, Tachibana M, Ishikawa Y, Umezawa K, Nishiyama S: Synthesis and biological evaluation of molecular probes based on the 9-methylstreptimidone derivative DTCM-glutarimide. *Bioorg Med Chem Lett*, 22, 164-167, 2012.
76. Yasukagawa T, Niwa Y, Simizu S, Umezawa K: Suppression of cellular invasion by glybenclamide through inhibited secretion of platelet-derived growth factor in ovarian clear cell carcinoma ES-2 cells. *FEBS Lett*, 1504-1509, 2012.
77. Niwa Y, Matsui C, Sukumwang N, Iinuma H, Ikeda Y, Koyano T, Kovitayakorn T, Simizu S, Umezawa K: Inhibition of lysenin-induced hemolysis by all-E-lutein derived from the plant *Dalbergia latifolia*. *Planta Medica*, 78, 957-961, 2012.
78. Hosoi H, Kawai N, Hagiwara H, Suzuki T, Nakazaki A, Takao K, Umezawa K, Kobayashi S: Determination of the absolute structure of (+)-akaterpin. *Chem Pharm Bull*, 60, 137-143, 2012.
79. Shimo T, Adachi Y, Umezawa K, Okigaki M, Takaya J, Taniuchi S, Ikehara S, Kaneko K: Dehydroxymethylepoxyquinomicin (DHMEQ) can suppress tumour necrosis factor- α production in lipopolysaccharide-injected mice, resulting in rescuing mice from death in vivo. *Clin Exp Immunol*, 166, 299-306, 2011.
80. Levati L, Ruffini F, Muzi A, Umezawa K, Graziani G, D'Atri S, Licalo PM: Platelet-derived growth factor induces melanoma resistance to temozolomide through a mechanism that involves the activation of the transcription factor NF- κ B. *International J Oncol*, 38, 241-247, 2011.
81. Mino K, Ozaki M, Nakanishi K, Haga S, Sato M, Kina M, Takahashi M, Takahashi N, Kataoka A, Yanagihara, Ochiya T, Kamiyama T, Umezawa K, Todo S: Inhibition of nuclear factor- κ B suppresses peritoneal dissemination of gastric cancer by blocking cancer cell adhesion. *Cancer Science*, 102, 1052-1058, 2011.

82. Kobayashi K, Umezawa K, Yasui M: Apoptosis in mouse amniotic epithelium is induced by activated macrophages through the TNF receptor type 1/TNF pathway. *Biology of Reproduction*, 84, 248-254, 2011.
83. Niitsu Y, Hakamata M, Goto Y, Higashi T, Shoji M, Sugai T, Umezawa K: Chemoenzymatic synthesis of (2R,3R,4R)-dehydroxymethylepoxyquinomicin (DHMEQ), a new activator of antioxidant transcription factor Nrf2. *Org Biomol Chem*, 9, 4635-4641, 2011
84. Umezawa K: Possible role of peritoneal NF- κ B in peripheral inflammation and cancer: Lessons from the inhibitor DHMEQ. *Biomedicine & Pharmacotherapy*, 65, 252-259, 2011.
85. Hosoi H, Kawai N, Hagiwara H, Suzuki T, Nakazaki A, Takao K, Umezawa K, Kobayashi S: Synthesis and determination of the relative structure of akaterpin, a potent inhibitor of PI-PLC. *Tetrahedron Lett*, 52, 4961-4964, 2011.
86. Rapozzi V, Umezawa K, Xodo LE: Role of NF- κ B/Snail/RKIP loop in the response of tumor cells to photodynamic therapy. *Lasers in Surgery and Medicine*, 43, 575-585, 2011.
87. Isshiki M, Umezawa K and Tamura H: Coffee induces breast cancer resistance protein expression in Caco-2 cells. *Biol Pharm Bull*, 34: 1624-1627, 2011.
88. Saitoh T, Takeiri M, Gotoh Y, Ishikawa Y, Umezawa K, Nishiyama S: Design and synthesis of biotinylated DHMEQ for direct identification of its target NF- κ B components. *Bioorganic & Medicinal Chemistry Letters*, 21, 6293-6296, 2011.
89. Tsumura K, Suzuki A, Tsuzuki T, Kaneko H, Matsumura S, Imoto M, Umezawa K, Takahashi D, Toshima K: Molecular design, chemical synthesis, and biological evaluation of agents that selectively photo-degrade the transcription factor estrogen receptor. *Org Biomol Chem*, 9, 6357-6366, 2011.
90. Takeiri M, Tachibana M, Kaneda A, Ito A, Ishikawa Y, Nishiyama S, Goto R, Yamashita K, Shibasaki S, Hirokata G, Ozaki M, Todo S, Umezawa K: Inhibition of macrophage activation and suppression of graft rejection by DTCM-glutarimide, a novel piperidine derived from the antibiotic 9-methylstreptimidone. *Inflammation Res*, 60, 879-888, 2011.

感染免疫学講座

91. Ando T, Komatsu T, Naiki Y, Yokochi T, Watanabe D, Koide N: Pretreatment of LPS inhibits IFN- β -induced STAT1 phosphorylation through SACS3 induced by LPS. *Biomed Pharmacother*, 76, 1-5, 2015.
92. Naiki Y, Komatsu T, Koide N, Dagvadorji J, Yoshida T, Arditi M, Yokochi T: TGF β 1 inhibits the production of IFN in response to CpG DNA via ubiquitination of TNF receptor-associated factor (TRAF)6. *Innate Immun*, 21, 770-7, 2015.
93. Koide N, Kaneda A, Yokochi T, Umezawa K: Inhibition of RANKL- and LPS-induced osteoclast differentiations by novel NF- κ B inhibitor DTCM-glutarimide. *Int Immunopharmacol*, 25,162-8, 2015.
94. Mori D, Koide N, Tsolmongyn B, Nagata H, Sano T, Nonami T, Yokochi T: Poly I:C enhances production of nitric oxide in response to interferon- γ via upregulation of interferon regulatory factor 7 in vascular endothelial cells. *Microvasc Res*, 98C, 68-73,2015.
95. Odkhuu E, Koide N, Tsolmongyn B, Jambalganiin U, Naiki Y, Komatsu T, Yoshida T, Yokochi T: Involvement of redox balance in in vitro osteoclast formation of RAW 264.7 macrophage cells in response to LPS. *Innate Immun*,21,194-202,2015.
96. Odkhuu E, Mendjargal A, Koide N, Naiki Y, Komatsu T, Yokochi T: Lipopolysaccharide downregulates the expression of p53 through activation of MDM2 and enhances activation of nuclear factor- κ B. *Immunobiology*. 220, 136-41, 2015.
97. Koide N, Kondo Y, Odkhuu E, Ulziisaikhan J, Ukaji T, Yokochi T, Umezawa K: Inhibition of receptor activator of nuclear factor- κ B ligand- or lipopolysaccharide-induced osteoclast formation by conophylline through downregulation of CREB. *Immunol Lett*,161, 31-37, 2014.
98. Haque A, Koide N, Odkhuu E, Tsolmongyn B, Naiki Y, Komatsu T, Yoshida T, Yokochi T: Mouse pyrin and HIN domain family member 1 (pyhin1) protein positively regulates LPS-induced IFN- β and NO production in macrophages. *Innate Immun*, 20, 40-8, 2014.

99. Tanigawa T, Odkhuu E, Morikawa A, Hayashi K, Sato T, Shibata R, Goto F, Ueda H, Yokochi T: Immunological role of prostaglandin E2 production in mouse auditory cells in response to LPS. *Innate Immun*, 20, 647-658, 2014.
100. Koide N, Odkhuu E, Naiki Y, Tsolmongyn B, Ito K, Komatsu T, Yoshida T, Yokochi T: Augmentation of LPS-induced vascular endothelial cell growth factor production in macrophages by transforming growth factor- β 1. *Innate Immun*, 20, 816-25, 2014.
101. Wakayama S, Haque A, Koide N, Kato Y, Odkhuu E, Bilegtsaikhan T, Naiki Y, Komatsu T, Yoshida T, Yokochi T: Lipopolysaccharide impairs insulin sensitivity via activation of phosphoinositide 3-kinase in adipocytes. *Immunopharmacol Immunotoxicol*, 36, 145-9, 2014.
102. Jambalganiin U, Tsolmongyn B, Koide N, Odkhuu E, Naiki Y, Komatsu T, Yoshida T, Yokochi T: A novel mechanism for inhibition of lipopolysaccharide-induced proinflammatory cytokine production by valproic acid. *Int Immunopharmacol*, 20, 181-187, 2014.
103. Kato Y, Kamiya H, Koide N, Odkhuu E, Komatsu T, Dagvadorj J, Watarai A, Kondo M, Kato K, Nakamura J, Yokochi T: Spironolactone inhibits production of proinflammatory mediators in response to lipopolysaccharide via inactivation of nuclear factor- κ B. *Immunopharmacol Immunotoxicol*, 36, 237-41, 2014.
104. Odkhuu E, Komatsu T, Naiki Y, Koide N, Yokochi T: Sendai virus C protein inhibits lipopolysaccharide-induced nitric oxide production through impairing interferon- β signaling. *Int Immunopharmacol*, 23, 267-272, 2014.
105. Koide N, Naiki Y, Odkhuu E, Tsolmongyn B, Komatsu T, Ito K, Yoshida T, Yokochi T. Involvement of oncogenic protein β -catenin in LPS-induced cytotoxicity in mouse mononuclear leukemia RAW 264.7 cells. *Oncol Res*, 21, 59-65, 2013.
106. Tsolmongyn B, Koide N, Odkhuu E, Haque A, Naiki Y, Komatsu T, Yoshida T, Yokochi T: Lipopolysaccharide prevents valproic acid-induced apoptosis via activation of nuclear factor- κ B and inhibition of p53 activation. *Cell Immunol*, 282, 100-5, 2013.

107. Tsolmongyn B, Koide N, Jambalganiin U, Odkhuu E, Naiki Y, Komatsu T, Yoshida T, Yokochi T: A toll-like receptor 2 ligand, Pam3CSK4, augments interferon- γ -induced nitric oxide production via a physical association between MyD88 and I FN- γ receptor in vascular endothelial cells. *Immunology*, 140, 352-61, 2013.
108. Tanigawa T, Odkhuu E, Morikawa A, Hayashi K, Sato T, Shibata R, Goto F, Ueda H, Yokochi T: Immunological role of prostaglandin E2 production in mouse auditory cells in response to lipopolysaccharide. *Innate Immun*, 20, 639-646, 2013.
109. Komatsu T, Kido N, Sugiyama T, Yokochi T: Antiviral activity of acidic polysaccharides from *Coccomyxa gloeobotrydiformis*, a green alga, against an in vitro human influenza A virus infection. *Immunopharmacol Immunotoxicol*, 35, 1-7, 2013.
110. Tanigawa T, Morikawa A, Hayashi K, Dan K, Tsuchihashi N, Goto F, Ueda H, Yokochi T: Auditory cells produce nitric oxide in response to bacterial lipopolysaccharide. *Innate Immun*, 19, 115-120, 2013.
111. Tsolmongyn B, Koide N, Odkhuu E, Haque A, Naiki Y, Komatsu T, Yoshida T, Yokochi T: Lipopolysaccharide prevents valproic acid-induced apoptosis via activation of NF- κ B and inhibition of p53 activation. *Cell Immunol*, 282, 100-105, 2013.
112. Mendjargal A, Odkhuu E, Koide N, Nagata H, Kurokawa T, Nonami T, Yokochi T: Pifithrin- α , a pharmacological inhibitor of p53, downregulates lipopolysaccharide-induced nitric oxide production via impairment of the MyD88-independent pathway. *Int Immunopharmacol*, 15, 671-678, 2013.
113. Odkhuu E, Koide N, Haque A, Tsolmongyn B, Naiki Y, Hashimoto S, Komatsu T, Yoshida T, Yokochi T: Inhibition of receptor activator of nuclear factor- κ B ligand (RANKL)-induced osteoclast formation by pyrroloquinoline quinine (PQQ). *Immunol Lett*, 142, 34-40, 2012.
114. Terashima T, Haque A, Kajita Y, Takeuchi A, Nakagawa T, Yokochi T: Flavopiridol inhibits interferon- γ -induced nitric oxide production in mouse vascular endothelial cells. *Immunol Lett*, 148, 91-96, 2012.

薬理学講座

115. Huang L, Kondo F, Gosho M, Feng GG, Harato M, Xia ZY, Ishikawa N, Fujiwara Y, Okada S: Enhanced expression of WD repeat-containing protein 35 via C aMKK/AMPK activation in bupivacaine-treated Neuro2a cells. *PLoS ONE*, 9, e98185, 2014.
116. Huang L, Kondo F, Harato M, Feng GG, Ishikawa N, Fujiwara Y, Okada S. Enhanced expression of WD repeat-containing protein 35 via nuclear factor-kappa B activation in bupivacaine-treated Neuro2a cells. *PLoS ONE*, 9, e86336, 2014.
117. Tsunekawa K, Kondo F, Huang L, Feng GG, Ishikawa N, Okada S: Enhanced expression of WD repeat-containing protein 35 (WDR35) stimulated by domoic acid in rat hippocampus: involvement of reactive oxygen species generation and p38 mitogen-activated protein kinase activation. *BMC Neurosci*, 14, 4, 2013.
118. Harato M, Huang L, Kondo F, Tsunekawa K, Feng GG, Fan JH, Ishikawa N, Fujiwara Y, Okada S: Bupivacaine-induced apoptosis independently of WDR35 expression in mouse neuroblastoma Neuro2a cells. *BMC Neurosci*, 13, 149, 2012.
119. Fan JH, Feng GG, Huang L, Tsunekawa K, Honda T, Katano Y, Hirooka Y, Goto H, Kandatsu N, Ando K, Fujiwara Y, Koide T, Okada S, Ishikawa N: Role of naofen in apoptosis of hepatocytes induced by lipopolysaccharide through mitochondrial signaling in rats. *Hepatol Res*, 42, 696-705, 2012.
120. Wongsawatkul O, Feng GG, Li C, Huang L, Kondo F, Kurokawa S, Fujiwara Y, Ishikawa N: Effects of Naofen on Enzyme Activities of Serine Proteases and Matrix Metallo-proteases. *International Journal of Pharmacology*, 7, 388-393, 2011.

内科学講座（消化器内科）

121. Yamamoto T, Nakade Y, Yamauchi T, Kobayashi Y, Ishii N, Ohashi T, Ito K, Sato K, Fukuzawa Y, Yoneda M: Glucagon-like peptide-1 analogue prevents nonalcoholic steatohepatitis in non-obese mice. *World J Gastroenterol*, 22, 2512-23, 2016.

122. Ito K, Yotsuyanagi H, Sugiyama M, Yatsushashi H, Karino Y, Takikawa Y, Saito T, Arase Y, Imazeki F, Kurosaki M, Umemura T, Ichida T, Toyoda H, Yoneda M, Tanaka Y, Mita E, Yamamoto K, Michitaka K, Maeshiro T, Tanuma J, Korenaga M, Murata K, Masaki N, Koike K, Mizokami M: Japanese AHB and CHB Study Group: Geographic distribution and characteristics of genotype A hepatitis B virus infection in acute and chronic hepatitis B patients in Japan. *J Gastroenterol Hepatol*, 31, 180-189, 2016.

123. Watanabe S, Hashimoto E, Ikejima K, Uto H, Ono M, Sumida Y, Seike M, Takei Y, Takehara T, Tokushige K, Nakajima A, Yoneda M, Saibara T, Shiota G, Sakaida I, Nakamuta M, Mizuta T, Tsubouchi H, Sugano K, Shimosegawa T: Evidence-based clinical practice guidelines for nonalcoholic fatty liver disease/nonalcoholic steatohepatitis. *Hepatol Res*, 45, 363-377, 2015.

124. Sato K, Gosho M, Yamamoto T, Kobayashi Y, Ishii N, Ohashi T, Nakade Y, Ito K, Fukuzawa Y, Yoneda M: Vitamin E has a beneficial efficacy on nonalcoholic fatty liver disease: a meta-analysis of randomized controlled trials. *Nutrition*, 3, 923-930, 2015.

125. Watanabe S, Hashimoto E, Ikejima K, Uto H, Ono M, Sumida Y, Seike M, Takei Y, Takehara T, Tokushige K, Nakajima A, Yoneda M, Saibara T, Shiota G, Sakaida I, Nakamuta M, Mizuta T, Tsubouchi H, Sugano K, Shimosegawa T: Evidence-based clinical practice guidelines for nonalcoholic fatty liver disease/nonalcoholic steatohepatitis. *J Gastroenterol*, 50, 364-377, 2015.

126. Yoneda M, Hasegawa T, Sato K: Vitamin E therapy on NAFLD/NASH. *Nutrition*, 31, 898-899, 2015.

127. Kobayashi K, Nakao H, Nishiyama T, Lin Y, Kikuchi S, Kobayashi Y, Yamamoto T, Ishii N, Ohashi T, Satoh K, Nakade Y, Ito K, Yoneda M: Diagnostic accuracy of real-time tissue elastography for the staging of liver fibrosis: a meta-analysis. *Eur Radiol*, 25, 230-238, 2015.

128. Kanamori H, Nakade Y, Yamamoto T, Kobayashi Y, Sato K, Ito K, Ohashi T, Nakao N, Ishii N, Takahashi E, Yokoi T, Nakao H, Kurokawa T, Yamaguchi C, Yoneda M: Case of cholangiocellular carcinoma in a patient with glycogen storage disease type Ia. *Hepatol Res*, 45, 494-499, 2015.

129. Masaki N, Sugiyama M, Shimada N, Tanaka Y, Nakamuta M, Izumi N, Watanabe S, Tsubota A, Komatsu M, Masaki T, Enomoto N, Yoneda M, Murata K, Ito K, Koike K, Mizokami M: Pretreatment prediction of the outcome of response-guided peginterferon- α and ribavirin therapy for chronic hepatitis C. *J Gastro Hepatol*, 29, 1996-2005, 2014.
130. Nakade Y, Yoneda M: Prognostic factors for regression from impaired glucose tolerance to normal glucose regulation in Japanese patients with nonalcoholic fatty liver disease. *Intern Med*, 53, 1399-1400, 2014.
131. Yoneda M: Is the measurement of serum cytokeratin-18 useful for diagnosis or screening nonalcoholic steatohepatitis? *Hepatol Res*, 44, 827-828, 2014.
132. Tamaki Y, Nakade Y, Yamauchi T, Makino Y, Yokohama S, Okada M, Aso K, Kanamori H, Ohashi T, Sato K, Nakao H, Haneda M, Yoneda M: Angiotensin II type 1 receptor antagonist prevents hepatic carcinoma in rats with nonalcoholic steatohepatitis. *J Gastroenterol*, 48, 491-503, 2013.
133. Kono T, Asama T, Chisato N, Ebisawa Y, Okayama T, Imai K, Karasaki H, Furukawa H, Yoneda M: Polaprezinc prevents ongoing thioacetamide-induced liver fibrosis in rats. *Life Sci*, 16, 90, 122-130, 2012.
134. Tamano M, Kojima K, Akima T, Murohisa T, Hashimoto T, Uetake C, Sugaya T, Nakano M, Hiraishi H, Yoneda M: The usefulness of measuring liver stiffness by transient elastography for assessing hepatic fibrosis in patients with various chronic liver diseases. *Hepatogastroenterology*, 59, 826-830, 2012
135. Matsunaga M, Isowa T, Yamakawa K, Tsuboi H, Kawanishi Y, Kaneko H, Kasugai K, Yoneda M, Ohira H: Association between perceived happiness levels and peripheral circulating pro-inflammatory cytokine levels in middle-aged adults in Japan. *Neuro Endocrinol Lett*, 32, 458-463, 2011.
136. Iida A, Konagaya T, Kaneko H, Funaki Y, Kanazawa T, Tokudome K, Hijikata Y, Masui R, Ogasawara N, Sasaki M, Yoneda M, Kasugai K: Usefulness of a low nutrient drinking test for evaluating gastric perception and accommodation. *Digestion*, 84, 253-260, 2011.

137. Kono T, Kashiwade Y, Asama T, Chisato N, Ebisawa Y, Yoneda M, Kasai S: Preventive effect of urinary trypsin inhibitor on the development of liver fibrosis in mice. *Exp Biol Med* (Maywood), 236, 1314-1321, 2011.

内科学講座（呼吸器・アレルギー内科）

138. Akasaka K, Tanaka T, Kitamura N, Ohkouchi S, Tazawa R, Takada T, Ichiwata T, Yamaguchi E, Hirose M, Arai T, Nakano K, Nei T, Ishii H, Handa T, Inoue Y, Nakata K. Outcome of corticosteroid administration in autoimmune pulmonary alveolar proteinosis: a retrospective cohort study. *BMC Pulm Med*, 15, 88, 2015.

139. Akasaka K, Tanaka T, Maruyama T, Kitamura N, Hashimoto A, Ito Y, Watanabe H, Wakayama T, Arai T, Hayashi M, Moriyama H, Uchida K, Ohkouchi S, Tazawa R, Takada T, Yamaguchi E, Ichiwata T, Hirose M, Arai T, Inoue Y, Kobayashi H, Nakata K: A mathematical model to predict protein wash out kinetics during whole-lung lavage in autoimmune pulmonary alveolar proteinosis. *Am J Physiol Lung Cell Mol Physiol*, 15, 308, L105-117, 2015.

140. Yokoe N, Yamaguchi E, Nishimura M, Tanaka H, Takahashi A, Baba K, Gocho M, Okada S. UGT1A1*28 is associated with greater decrease in serum K⁺ levels following oral intake of procaterol. *J Asthma*, 10, 1-6, 2014.

141. Tazawa R, Inoue Y, Arai T, Takada T, Kasahara Y, Hojo M, Ohkouchi S, Tsuchihashi Y, Yokoba M, Eda R, Nakayama H, Ishii H, Nei T, Morimoto K, Nasuhara Y, Ebina M, Akira M, Ichiwata T, Tatsumi K, Yamaguchi E, Nakata K: Duration of benefit in patients with autoimmune pulmonary alveolar proteinosis after inhaled GM-CSF therapy. *Chest*, 145, 729-737, 2014.

142. Tanaka H, Yamaguchi E, Fukuoka T, Ohbayashi Y, Sato M, Yokoi T: A case of disseminated nontuberculous mycobacteriosis and cerebellar toxoplasmosis with autoantibody to interferon- γ . *Sarcoidosis Vasc Diffuse Lung Dis*, 30, 312-316, 2013.

143. Shigemura M, Nasuhara Y, Konno S, Shimizu C, Matsuno K, Yamaguchi E, Nishimura M: Effects of molecular structural variants on serum Krebs von den Lungen-6 levels in sarcoidosis. *J Transl Med*, 10, 111, 2012.

144. Yamada H, Yoneda M, Gosho M, Kato T, Zako M. Bimatoprost, latanoprost, and tafluprost induce differential expression of matrix metalloproteinases and tissue inhibitor of metalloproteinases. *BMC Ophthalmol*, 16, 26, 2016.
145. Takeyama M, Yoneda M, Gosho M, Iwaki M, Zako M: Decreased VEGF-A and sustained PEDF expression in a human retinal pigment epithelium cell line cultured under hypothermia. *Biol Res*, 48, 42, 2015.
146. Sugita K, Mizumoto K, Kato N, Zako M: Early resolution of subretinal fluid without high-dose corticosteroids in a pregnant patient with Vogt-Koyanagi-Harada disease: a case report. *J Ophthalmic Inflamm Infect*, 5, 20, 2015.
147. Uchida K, Takeyama M, Zako M: Valsalva-like retinopathy spontaneously occurred after ocular massage. *Case Rep Ophthalmol*, 6, 88-92, 2015.
148. Miyake G, Ota I, Miyake K, Zako M, Iwaki M, Shibuya A: Late-onset toxic anterior segment syndrome. *J Cataract Refract Surg*, 41, 666-669, 2015.
149. Mizutani K, Yoneda M, Matsuura K, Naruse K, Takeyama M, Yamada H, Iwaki M, Zako M: Effect of low concentrations of hyaluronan and chondroitin sulfate on flow rates. *J Aichi Med Univ Assoc*, 43, 1-7, 2015.
150. Tamaki R, Zako M: Interference of Descemet's Membrane with Aqueous Humor Drainage via an ExPRESS Mini Shunt. *Case Rep Ophthalmol*, 5, 343-346, 2014.
151. Zako M, Murata K, Inukai T, Yasuda M, Iwaki M: Long-term progressive deterioration of visual function after papilledema improved by embolization of a dural arteriovenous fistula in the sigmoid sinus: a case report. *J Med Case Rep*, 8:392, 2014.
152. Jee D, Zako M, La TY. Serum D-dimer levels to evaluate the risk for arterial thromboembolism after intravitreal injection of bevacizumab and ranibizumab. *J Ocul Pharmacol Ther*, 31, 32-36, 2015.

153. Miyake G, Ota I, Miyake K, Zako M, Iwaki M. Effects of topical diquafosol pretreatment on intraoperative corneal wetting. *J Cataract Refract Surg*, 40, 1682-1688, 2014.
154. Mizumoto K, Goshō M, Zako M. Correlation between optic nerve head structural parameters and glaucomatous visual field indices. *Clin Ophthalmol*, 8, 1203-1208, 2014.
155. Takeyama M, Iwaki M, Zako M: Recurrent vitreous hemorrhage associated with regressed retinopathy of prematurity in a 47-year-old patient: a case report. *J Med Case Rep*, 8, 183,2014.
156. Takeyama M, Iwaki M, Zako M. Macroaneurysm on the optic disc in a patient with aortic dissection. *Case Rep Ophthalmol*, 4, 234-237, 2013.
157. Kawamura M, Zako M. Long-term stability of uveitis with faint anterior chamber flare treated with once-daily topical ophthalmic betamethasone. *Inflammation*, 37, 417-425,2014.
158. Murasawa Y, Watanabe K, Yoneda M, Zako M, Kimata K, Sakai LY, Isogai Z. Homotypic versican G1 domain interactions enhance hyaluronan incorporation into fibrillin microfibrils. *J Biol Chem*, 288, 29170-181, 2013.
159. Yamada H, Yoneda M, Inaguma S, Watanabe D, Banno S, Yoshikawa K, Mizutani K, Iwaki M, Zako M: Infliximab counteracts tumor necrosis factor- α -enhanced induction of matrix metalloproteinases that degrade claudin and occludin in non-pigmented ciliary epithelium. *Biochem Pharmacol*, 85, 1770-1782, 2013.
160. Kawamura M, Zako M: Successful trabeculotomy in a patient with corticosteroid-induced glaucoma with an anti-aquaporin 4 antibody-positive neuromyelitis optica: a case report. *J Med Case Rep*, 7, 101, 2013.
161. Takeyama M, Iwaki M, Zako M. Intravitreal Injection of Bevacizumab to Treat a Macular Edema Caused by Leber's Miliary Aneurysm. *Case Rep Ophthalmol*, 3, 392-395, 2012.

162. Sugita I, Yoneda M, Iwaki M, Zako M: Comparative analysis of hyaluronan's affinity for antivascular endothelial growth factor agents. *Ophthalmic Res*, 49, 43-48, 2013.

163. Koike A, Handa T, Zako M. Trabeculectomy in a Behcet's Disease Patient One Week after Infliximab Administration. *Case Rep Ophthalmol*, 3, 151-155, 2012.

164. Zako M, Takeyama M, Naito E, Mizumoto K, Iwaki M. Choroidal and optic disc metastases from breast cancer and their response to combination chemotherapy with tamoxifen, cyclophosphamide hydrate, letrozole, and bevacizumab. *J Ocul Pharmacol Ther*, 28, 89-93, 2012

生化学講座

165. Kitamoto K, Miura Y, Karnan S, Ota A, Konishi H, Hosokawa Y, Sato K: Inhibition of NADPH oxidase 2 induces apoptosis in osteosarcoma: role of reactive oxygen species in cell proliferation. *Oncology Letters*, 2016

166. Karnan S, Ota A, Konishi Y, Wahiduzzaman M, Hosokawa Y, Konishi H: Improved methods of AAV-mediated gene targeting for human cell lines using ribosome-skipping 2A peptide. *Nucleic Acids Res*, 2016, Advanced Online Publication.

167. Mizuno S, Hanamura I, Ota A, Karnan S, Narita T, Ri M, Mizutani M, Gotou M, Gotou M, Tsunekawa N, Shikami M, Iida S, Hosokawa Y, Miwa H, Ueda R, Nitta M, Takami A: Overexpression of salivary-type amylase reduces the sensitivity to bortezomib in multiple myeloma cells. *Int J Hematol*, 102(5),569-578,2015.

168. Tanaka M, Miura Y, Numanami H, Karnan S, Ota A, Konishi H, Hosokawa Y, Hanyuda M: Inhibition of NADPH oxidase 4 induces apoptosis in malignant mesothelioma: Role of reactive oxygen species. *Oncol Rep*, 34(4), 1726-1732, 2015.

169. Ono T, Ota A, Ito K, Nakaoka T, Karnan S, Konishi H, Furuhashi A, Hayashi T, Yamada Y, Hosokawa Y, Kazaoka Y: Plumbagin suppresses tumor cell growth in oral squamous cell carcinoma cell lines. *Oral Dis*, 21, 501-511, 2015.

170. Asai A, Karnan S, Ota A, Takahashi M, Damdindorj L, Konishi Y, Hossain E, Konishi H, Nagata A, Yokoo K, Hosokawa Y: High-resolution 400K oligonucleot

ide array comparative genomic hybridization analysis of neurofibromatosis type 1-associated cutaneous neurofibromas. *Gene*, 558, 220-226, 2015.

171. Hossain E, Ota A, Karnan S, Takahashi M, Shanewaj BM, Konishi H, Hosokawa Y: Lipopolysaccharide augments the uptake of oxidized LDL by up-regulating lectin-like oxidized LDL receptor-1 in macrophages. *Mol Cell Biochem*, 400(1-2), 29-40, 2015.

172. Damdindorj L, Karnan S, Ota A, Hossain E, Konishi Y, Hosokawa Y, Konishi H: A comparative analysis of constitutive promoters located in adeno-associated viral vectors., *PLoS ONE*, 9, e106472, 2014.

173. Nakaoka T, Ota A, Ono T, Karnan S, Konishi H, Huruhashi A, Ohmura Y, Yamada Y, Hosokawa Y, Kazaoka Y: Combined arsenic trioxide-cisplatin treatment enhances apoptosis in oral squamous cell carcinoma cells. *Cellular Oncol*, 37, 119-29, 2014.

174. Guo Y, Takeuchi I, Karnan S, Miyata T, Ohshima K, Seto M: Array-comparative genomic hybridization profiling of immunohistochemical subgroups of diffuse large B-cell lymphoma shows distinct genomic alterations. *Cancer Sci*, 105, 481-489, 2014.

175. Suguro M, Yoshida N, Umino A, Kato H, Tagawa H, Nakagawa M, Fukuhara N, Karnan S, Takeuchi I, Hocking TD, Arita K, Karube K, Tsuzuki S, Nakamura S, Kinoshita T, Seto M: Clonal heterogeneity of lymphoid malignancies correlates with poor prognosis. *Cancer Sci*, 105, 897-904, 2014.

176. Hossain E, Ota A, Karnan S, Damdindorj L, Takahashi M, Konishi Y, Konishi H, Hosokawa Y: Arsenic augments the uptake of oxidized LDL by upregulating the expression of lectin-like oxidized LDL receptor in mouse aortic endothelial cells. *Toxicol Appl Pharmacol*, 273, 651-658, 2013.

177. Wang GM, Wong HY, Konishi H, Blair BG, Abukhdeir AM, Gustin JP, Rosen DM, Denmeade S, Rasheed Z, Matsui W, Garay JP, Mohseni M, Higgins MJ, Ciudado J, Jelovac D, Croessmann S, Cochran R, Karnan S, Konishi Y, Ota A, Hosokawa Y, Argani P, Lauring J, Park BH: Single copies of mutant KRAS and mutant PIK3CA cooperate in immortalized human epithelial cells to induce tumor formation. *Cancer Res*, 73, 3248-3261, 2013.

178. Hossain E, Ota A, Takahashi M, Karnan S, Damdindorj L, Konishi Y, Konishi H, Hosokawa Y: Arsenic upregulates the expression of angiotensin II Type I receptor in mouse aortic endothelial cells. *Toxicol Lett*, 220, 70-75, 2013.
179. Takahashi M, Ota A, Karnan S, Ekhtear H, Konishi Y, Damdindorj L, Konishi H, Yokochi T, Nitta M, Hosokawa Y: Arsenic trioxide prevents nitric oxide production in LPS-stimulated RAW 264.7 by inhibiting a TRIF-dependent pathway. *Cancer Sci*, 104,165-170, 2013.
180. Karnan S, Konishi Y, Ota A, Takahashi M, Damdindorj L, Hosokawa Y, Konishi H: Simple monitoring of gene targeting efficiency in human somatic cell lines using the PIGA gene. *PLoS ONE*, 7, e47389, 2012.
181. Konishi Y, Karnan S, Takahashi M, Ota A, Damdindorj L, Hosokawa Y, Konishi H: A system for the measurement of gene targeting efficiency in human cell lines using an antibiotic resistance?GFP fusion gene. *BioTechniques*, 53, 141-152, 2012.
182. Damdindorj L, Karnan S, Ota A, Takahashi M, Konishi Y, Hossain E, Hosokawa Y, Konishi H: Assessment of the long-term transcriptional activity of a 550-bp-long human β -actin promoter region. *Plasmid*, 68, 195-200, 2012.
183. Garay JP, Karakas B, Abukhdeir AM, Cosgrove DP, Gustin JP, Higgins MJ, Konishi H, Konishi Y, Lauring J, Mohseni M, Wang GM, Jelovac D, Weeraratna A, Sherman Baust CA, Morin PJ, Toubaji A, Meeker A, De Marzo AM, Lewis G, Subhawong A, Argani P, Park BH: The growth response to androgen receptor signaling in ER α -negative human breast cells is dependent on p21 and mediated by MAPK activation. *Breast Cancer Res*, 14, R27, 2012.
184. Konishi H, Mohseni M, Tamaki A, Garay JP, Croessmann S, Karnan S, Ota A, Wong HY, Konishi Y, Karakas B, Tahir K, Abukhdeir AM, Gustin JP, Cidado J, Wang GM, Cosgrove D, Cochran R, Jelovac D, Higgins MJ, Arena S, Hawkins L, Lauring J, Gross AL, Heaphy CM, Hosokawa Y, Gabrielson E, Meeker AK, Visvanathan K, Argani P, Bachman KE, Park BH*: Mutation of a single allele of the cancer susceptibility gene BRCA1 leads to genomic instability in human breast epithelial cells. *Proc Natl Acad Sci U S A*, 108, 17773-17778, 2011.

185. Shioiri T, Tsuchimoto J, Watanabe H, Sugiura N: Sequence determination of synthesized chondroitin sulfate dodecasaccharides. *Glycobiology*, 26, 592-606, 2016.
186. Iohara K, Fujita M, Aiji Y, Yoshikawa M, Watanabe H, Takashima A, Nakashima M: Assessment of pulp regeneration induced by stem cell therapy by magnetic resonance imaging. *J Endod*, 42, 397-401, 2016.
187. Fanhchaksai K, Okada F, Nagai N, Pothacharoen P, Kongtawelert P, Hatano S, Makino S, Nakamura T, Watanabe H: Host stromal versican is essential for cancer-associated fibroblast function to inhibit cancer growth. *Int J Cancer*, 138, 630-641, 2016.
188. Yamahara M, Sugimura K, Kumagai A, Fuchino H, Kuroi A, Kitagawa M, Itoh Y, Kawahara H, Nagaoka Y, Iida O, Kawahara N, Takemori H, Watanabe H: Callicarpa longissima extract, carnosol-rich, potently inhibits melanogenesis in B16 F10 melanoma cells. *J Nat Med*, 70, 28-35, 2016.
189. Kawaguchi Y, Sugiura N, Kimata K, Kimura M, Kakuta Y: The crystal structure of novel chondroitin lyase ODV-E66, a baculovirus envelope protein. *FEBS Lett*, 587, 3943-8, 2013.
190. Sugiura N, Ikeda M, Shioiri T, Yoshimura M, Kobayashi M, Watanabe H: Chondroitinase from baculovirus Bombyx mori nucleopolyhedrovirus and chondroitin sulfate from silkworm Bombyx mori. *Glycobiology*, in press, 2013.
191. Nagai N, Habuchi H, Sugaya N, Nakamura M, Imamura T, Watanabe H, Kimata K: Involvement of heparan sulfate 6-O-sulfation in regulation of energy metabolism and alteration of thyroid hormone levels in male mice. *Glycobiology*, 23, 980-992, 2013.
192. Lord MS, Day AJ, Youssef P, Zhuo L, Watanabe H, Caterson B, Whitelock JM: Sulfation of the bikunin chondroitin sulfate chain determines heavy chain-hyaluronan complex formation. *J Biol Chem*, 288, 22930-22941, 2013.

193. Sato Y, Shimono C, Li S, Nakano I, Norioka N, Sugiura N, Kimata K, Yamada M, Sekiguchi K: Nephronectin binds to heparan sulfate proteoglycans via its MAM domain. *Matrix Biol.* 32, 188-195, 2013.
194. Jinno-Oue J, Tanaka A, Shimizu N, Mori T, Sugiura N, Kimata K, Isomura H, Hoshino H: Inhibitory effect of chondroitin sulfate type E on the binding step of human T-cell leukemia virus type 1. *AIDS Res. Human Retrovirus.* 29, 621-629, 2013.
195. Ichijo H, Sugiura N, Kimata K: Application of chondroitin sulfate derivatives for understanding axonal guidance in the nervous system during development. *Polymers*, 5, 254-268, 2013.
196. Shimbo M, Ando S, Sugiura N, Kimata K, and Ichijo H. (2013) Moderate repulsive effects of E-unit-containing chondroitin sulfate (CSE) on behavior of retinal growth cones. *Brain Res*, 1491, 34-43, 2013.
197. Kono A, Oguri A, Yokoo K, Watanabe H: YAG laser treatment causes rapid degeneration and regeneration of collagen fibers in pig skin and facilitates fibroblast growth. *J Plast Surg Hand Surg*, 46, 308-312, 2012.
198. Hatano S, Kimata K, Hiraiwa N, Kusakabe M, Isogai Z, Adachi E, Shinomura T, Watanabe H: Versican/PDGF-M is essential for ventricular septal formation subsequent to atrioventricular cushion development. *Glycobiology*, 22, 1268-1277, 2012.
199. Ogawa H, Hatano S, Sugiura N, Nagai N, Sato T, Shimizu K, Narimatsu H, Kimata K, Watanabe H: Chondroitin sulfate synthase-2 is necessary for chain extension of chondroitin sulfate but not critical for skeletal development. *PLoS ONE*, 7, e43806, 2012.
200. Sugiura N, Shioiri T, Chiba M, Sato T, Narimatsu H, Kimata K, Watanabe H: Construction of a chondroitin sulfate library with defined structures and analysis of molecular interactions. *J Biol Chem*, 287, 43390-43400, 2012.
201. Imagama S, Sakamoto K, Tauchi R, Shinjo R, Ohgomori T, Ito Z, Zhang H, Nishida Y, Asami N, Takeshita S, Sugiura N, Watanabe H, Yamashita T, Ishiguro N, Matsuyama Y, Kadomatsu K: Keratan Sulfate Restricts Neural Plasticity after Spinal Cord Injury. *J Neurosci*, 31, 17091-17102, 2011.

202. Shimokawa K, Kimura-Yoshida C, Nagai N, Mukai K, Matsubara K, Watana be H, Matsuda Y, Mochida K, Matsuo I: Cell surface heparan sulfate chains regulate local reception of FGF signaling in the mouse embryo. *Dev Cell*, 21, 257-272, 2011.

内科学講座（血液内科）

203. Goto M, Miwa H, Shikami M, Tsunekawa-Imai N, Suganuma K, Mizuno S, Takahashi M, Mizutani M, Hanamura I, Nitta M: Importance of glutamine metabolism in leukemia cells by energy production through TCA cycle and by redox homeostasis. *Cancer Investigation*, 32, 241-247, 2014.

204. Goto M, Miwa H, Suganuma K, Tsunekawa-Imai N, Shikami M, Mizutani M, Mizuno S, Hanamura I, Nitta M: Adaptation of leukemia cells to hypoxic condition through switching the energy metabolism or avoiding the oxidative stress. *BMJ Cancer*, 14, 76, 2014.

205. Tsunekawa-Imai N, Miwa H, Shikami M, Suganuma K, Goto M, Mizuno S, Takahashi M, Mizutani M, Horio T, Komatsubara H, Gotou M, Yamamoto H, Wakabayashi M, Watarai M, Hanamura I, Imamura A, Mihara H, Nitta M: Growth of xenotransplanted leukemia cells is influenced by diet nutrients and is attenuated with 2-deoxyglucose. *Leukemia Research*, 37, 1132-1136, 2013.

206. Miwa H, Shikami M, Goto M, Mizuno S, Takahashi M, Tsunekawa-Imai N, Ishikawa T, Mizutani M, Horio T, Gotou M, Yamamoto H, Wakabayashi M, Watarai M, Hanamura I, Imamura A, Mihara H, Nitta M: Leukemia cells demonstrate a different metabolic perturbation provoked by 2-deoxyglucose. *Oncology Reports*, 29, 2053-2057, 2013

207. Gotou M, Hanamura I, Nagoshi H, Wakabayashi M, Sakamoto N, Tsunekawa N, Horio T, Goto M, Mizuno S, Takahashi M, Suganuma K, Yamamoto H, Hiramatsu A, Watarai M, Shikami M, Imamura A, Mihara H, Taki T, Miwa H, Tanigaki M, Nitta M: Establishment of a novel human myeloid leukemia cell line, AMU-AML1, carrying t(12;22)(p13;q11) without chimeric MN1-TEL and with high expression of MN1. *Genes Chromosomes Cancer*, 51, 42-53, 2012.