
細胞病理学講座

【研究プロジェクト名および概要】

I. 免疫微小環境などを標的とした新規がん治療の開発

1. 諸臓器悪性腫瘍の進展における腫瘍関連マクロファージ（TAM）の役割解明
2. 悪性腫瘍におけるがん免疫誘導とリンパ節マクロファージの役割解明

II. ミエロイド細胞制御によりがん免疫を賦活化する化合物の探索

1. マクロファージの分化・活性化を制御する化合物の探索・合成と抗腫瘍効果の検討

III. 非腫瘍性疾患におけるマクロファージの分化・活性化に関する研究

1. マクロファージ活性化と感染症、肥満、動脈硬化、脂肪肝との関与

IV. 生検・外科切除標本、病理解剖症例を用いた外科病理学的症例解析

V. 工学部・薬学部との共同研究（医薬工連携）

【教職員および大学院学生】

細胞病理学講座

		大学院
教授	菰原 義弘	D4 山田 倫 (病理診断科)
准教授	藤原 章雄	D4 Ahmad Adawy (小児外科・移植外科学)
助教	吉井 大貴	D4 金光 純介 (消化器外科)
特任助教	潘 程	D4 山田 純之 (呼吸器・乳腺外科)
学術研究員	趙 樹康	D3 山下 真柚子 (歯科口腔外科)
事務補佐員	佐土原 仁美	D3 井邊 有紀 (泌尿器科)
事務補佐員	村山 道子	D3 山元 真由子 (産科婦人科)
		D2 近藤 嘉彦 (細胞病理学)
		D2 尾崎 陽二郎 (泌尿器科)
		D2 耕 佳徹 (消化器外科)
		D2 境田 奈津子 (社会人、熊本県立大学)
		D1 酒匂 照生 (消化器外科)
		D1 上川 彩乃 (泌尿器科)
		D1 大塚 郁弥 (消化器内科)
		M1 蘇捷 (細胞病理学)
		M1 城谷 怜
		M1 高橋 朋花

【連絡先】 電話: 096-373-5095 Fax: 096-373-5096

【ホームページ】 <https://www.kumamoto-pathology1.jp>

令和6年度（2024年度）

1. Matsuzaki H, Kai K, Komohara Y, Yano H, Pan C, Fujiwara Y, Yamada R, Iwauchi A, Fukasawa N, Tanaka T, Shimoda M, Watanabe H, Maruyama T, Takeo T, Mikami Y, Mukasa A. Abnormal Vessels Potentially Accelerate Glioblastoma Proliferation by Inducing the Protumor Activation of Macrophages. *Cancer Sci.* 2025 in press
2. Ezaki A, Yano H, Pan C, Fujiwara Y, Anami T, Ibe Y, Ozaki Y, Nishizawa H, Motoshima T, Yatsuda J, Watanabe H, Maruyama T, Takeo T, Kamba T, Komohara Y. Immunohistochemical Analysis of α1-Acid Glycoprotein and Tumor Associated Macrophages in Clear Cell Renal Cell Carcinoma. *Cancer Genomics Proteomics.* 22:103-111, 2025 in press
3. Wada T, Senokuchi T, Shi Y, Furusho T, Morita Y, Sarie M, Hanatani S, Fukuda K, Ishii N, Matsumura T, Fujiwara Y, Komohara Y, Araki E, Kubota N. Orally administrated acetate inhibits atherosclerosis progression through AMPK activation via GPR43 in plaque macrophages. *Atherosclerosis.* 2025 in press
4. Kugiyama N, Nagaoka K, Yamada R, Watanabe T, Yamazaki H, Ushijima S, Otsuka F, Uramoto Y, Iwasaki H, Yoshinari M, Hashigo S, Hayashi H, Ishimoto T, Komohara Y, Tanaka Y. Serum Mac2-binding protein glycosylated isomer (M2BPGi) as a prognostic biomarker in pancreatic ductal adenocarcinoma: iCAFs-derived M2BPGi drives tumor invasion. *J Gastroenterol* 2025 in press
5. Pan C, Fujiwara Y, Yano H, Anami T, Ibe Y, Li L, Miura Y, Motoshima T, Esumi S, Yatsuda J, Hibi T, Kamba T, Komohara Y. The contribution of the CRP/CD64 axis to renal cancer progression by inducing protumor activation of tumor-associated macrophages. *Clin Transl Immunology.* 13:e70013, 2024
6. Endo S, Nishimura N, Toyoda K, Komohara Y, Carreras J, Yuki H, Shichijo T, Ueno S, Ueno N, Hirata S, Kawano Y, Nosaka K, Miyaoka M, Nakamura N, Sato A, Ando K, Mitsuya H, Akashi K, Tenen DG, Yasunaga JI, Matsuoka M, Okuno Y, Tatetsu H. Decreased PU.1 expression in mature B cells induces lymphomagenesis. *Cancer Sci.* 115:3890-3901, 2024
7. Ezaki A, Yano H, Pan C, Fujiwara Y, Anami T, Ibe Y, Motoshima T, Yatsuda J, Esumi S, Miura Y, Kamba T, Komohara Y. Potential protumor function of CD74 in clear cell renal cell carcinoma. *Hum Cell.* 37:1535-1543, 2024
8. Nishitsui K, Mito R, Ikezaki M, Yano H, Fujiwara Y, Matsubara E, Nishikawa T, Ihara Y, Uchimura K, Iwashashi N, Sakagami T, Suzuki M, Komohara Y. Impacts of cytoplasmic p53 aggregates on the prognosis and the transcriptome in lung squamous cell carcinoma. *Cancer Sci.* 115:2947-2960, 2024
9. Hara Y, Baba Y, Oda E, Harada K, Yamashita K, Toihata T, Kosumi K, Iwatsuki M, Miyamoto Y, Tsutsuki H, Gan Q, Waters RE, Komohara Y, Sawa T, Ajani JA, Baba H. Presence of Fusobacterium nucleatum in relation to patient survival and an acidic environment in oesophagogastric junction and gastric cancers. *Br J Cancer.* 131:797-807, 2024
10. Tresky R, Miyamoto Y, Nagayoshi Y, Yabuki Y, Araki K, Takahashi Y, Komohara Y, Ge H, Nishiguchi K, Fukuda T, Kaneko H, Maeda N, Matsuura J, Iwasaki S, Sakakida K, Shiota N, Wei FY, Tomizawa K, Chujo T. TRMT10A dysfunction perturbs codon translation of initiator methionine and glutamine and impairs brain functions in mice. *Nucleic Acids Res.* 52:9230-9246, 2024
11. Sonokawa T, Fujiwara Y, Pan C, Komohara Y, Usuda J. Enhanced systemic antitumor efficacy of PD-1/PD-L1 blockade with immunological response induced by photodynamic therapy. *Thorac Cancer.* 215:1429-1436, 2024.
12. Kanemitsu K, Yamada R, Pan C, Tsukamoto H, Yano H, Shiota T, Fujiwara Y, Miyamoto Y, Mikami Y, Baba H, Komohara Y. Age-Associated Reduction of Sinus Macrophages in Human Mesenteric Lymph Nodes. *J Clin Exp Hematop.* 64:79-85, 2024
13. Harada M, Kotani H, Iida Y, Tanino R, Minami T, Komohara Y, Yoshikawa K, Uemura H. Hypoxia-related carbonic anhydrase 9 induces serpinB9 expression in cancer cells and apoptosis in T cells via acidosis. *Cancer Sci.* 115:1405-1416, 2024
14. Zhao S, Li L, Komohara Y, Matsubara E, Shinchi Y, Adawy A, Yano H, Pan C, Fujiwara Y, Ikeda K, Suu S, Hibi T, Suzuki M. IL-32 production from lung adenocarcinoma cells is potentially involved in immunosuppressive microenvironment. *Med Mol Morphol.* 57:91-100, 2024
15. Watanabe H, Xu W, Uno H, Uraya Y, Kugita M, Komohara Y, Niidome T, Sasaki M, Shimizu I, Fujita N, Kawano Y. Fluoride-treated rare earth-free magnesium alloy ZK30: An inert and bioresorbable material for bone fracture treatment devices. *J Biomed Mater Res A.* 112:963-972, 2024
16. Hirao H, Adawy A, Li L, Yoshii D, Yano H, Fujiwara Y, Honda M, Harada M, Yamamoto M, Komohara Y, Hibi T. The expression analysis of SerpinB9 in hepatoblastoma microenvironment. *Pediatr Surg Int.* 40:55, 2024.
17. Tatsuno R, Ichikawa J, Komohara Y, Pan C, Kawasaki T, Enomoto A, Aoki K, Hayakawa K, Iwata S, Jubashi T, Haro H. Pivotal role of IL-8 derived from the interaction between osteosarcoma and tumor-associated macrophages in osteosarcoma growth and metastasis via the FAK pathway. *Cell Death Dis.* 15:108, 2024.
18. Li L, Kanemitsu K, Ohnishi K, Yamada R, Yano H, Fujiwara Y, Miyamoto Y, Mikami Y, Hibi T, Baba H, Komohara Y. CXCL10 Expression in Human Colorectal Cancer Tissue and its Correlation With Serum Levels of CXCL10. *Cancer Genomics Proteomics.* 21, 54-64, 2024.
19. Fujiwara Y, Yano H, Pan C, Shiota T, Komohara Y. Anticancer immune reaction and lymph node sinus macrophages: a review from human and animal studies. *J Clin Exp Hematop.* 64: 71-78, 2024
20. Adawy A, Komohara Y, Hibi T. Tumor-associated macrophages: The key player in hepatoblastoma microenvironment and the promising therapeutic target. *Microbiol Immunol.* 68: 249-253, 2024
21. Matsuzaki H, Pan C, Komohara Y, Yamada R, Yano H, Fujiwara Y, Kai K, Mukasa A. The roles of glioma-associated macrophages/microglia and potential targets for anti-glioma therapy. *Immunol Med.* 1-9, 2024
22. Adawy A, Komohara Y (**), Hibi T. Tumor-associated macrophages: The key player in hepatoblastoma microenvironment and the promising therapeutic target. *Microbiol Immunol.* 2024
23. Histiocytic neoplasms: a brief review and differential diagnosis. Yamada R, Komohara Y. *J Clin Exp Hematop.* 64: 156-165, 2024
24. Tatsuno R, Komohara Y, Pan C, Kawasaki T, Enomoto A, Jubashi T, Kono H, Wako M, Ashizawa T, Haro H, Ichikawa J. Surface Markers and Chemokines/Cytokines of Tumor-Associated Macrophages in Osteosarcoma and Other Carcinoma Microenvironments-Contradictions and Comparisons. *Cancers (Basel).* 16:2801, 2024
25. Fujiwara Y, Yano H, Pan C, Shiota T, Komohara Y. Anticancer immune reaction and lymph node sinus macrophages: a review from human and animal studies. *J Clin Exp Hematop.* 64:71-78, 2024.
26. Nakagaki T, Masuda T, Nagayama Y, Komohara Y, Takeno H, Miyamoto H, Motohara T, Adachi Y, Oda E, Karashima R, Ishiko T, Beppu T. Gallbladder Follicular Lymphoma Mimicking Gallbladder Cancer. *Anticancer Res.* 44:5577-5583, 2024
27. Hosokawa A, Tamura H, Ichihara A, Imamura N, Kai K, Fukushima T, Nanashima A, Komohara Y. Pathological Complete Response to Liver Metastasis With Pembrolizumab in a Previously Treated Patient With Microsatellite Instability-high Colorectal Cancer. *Anticancer Res.* 44:4119-4125, 2024
28. Karashima R, Yamamura K, Oda E, Ozaki N, Ishiko T, Nagayama Y, Yamada R, Komohara Y, Koba I, Beppu T. Hepatic hemangioma in a simple liver cyst mimicking biliary cystic neoplasm. *Surg Case Rep.* 13;10:119, 2024.
29. Nakashima M, Naoe H, Komohara Y, Waki K, Miyamoto H, Sakai Y, Kojima T, Kanemitsu T, Yao K, Tanaka Y. Proton Pump Inhibitor Associated Multiple Gastric Hyperplastic Polyps With Uncontrollable Bleeding: A Case Report. *In Vivo.* 38:1465-1469, 2024.
30. Yamada R, Umemoto S, Yonetomi K, Komohara Y, Hosaka S. Gastric Small Cell Neuroendocrine Carcinoma With Loss of Epithelial Markers Expression. *Cancer Diagn Progn.* 4:189-192, 2024.
31. Yamada H, Yamada R, Komohara Y, Mito R, Nishitsui K, Yano H, Fujiwara Y, Ikeda K, Suzuki M. A Case of Aggressive Lung Squamous Cell Carcinoma With Aberrant Cytoplasmic p53 Aggregation. *Cancer Diagn Progn.* 4:204-208, 2024.