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研究成果は、国内外の学会などに報告し、あるいは原著論文として論文発表を行った。学会発表などは省略し、英文原著論文のみを記載する。

研究1 腫瘍細胞社会の解析と阻害剤スクリーニング

1. Moyret-Lalle C, Prodhomme MK, Burlet D, Kashiwagi A, Petrilli V, Puisieux A, Seimiya H, Tissier A. Role of EMT in the DNA damage response, double-strand break repair pathway choice and its implications in cancer treatment. **Cancer Sci.**, 113(7):2214-2223, 2022.

研究2 治療薬耐性と微小環境適応に関わる腫瘍細胞社会ネットワークの解明

1. Sakashita T, Yanagitani N, Koike S, Low SK, Takagi S, Baba S, Takeuchi K, Nishio M, Fujita N, Katayama R. Fibroblast growth factor receptor 3 overexpression mediates ALK inhibitor resistance in ALK-rearranged non-small cell lung cancer. **Cancer Sci.**, 113(11):3888-3900, 2022.
2. Shimizu Y, Maruyama K, Suzuki M, Kawachi H, Low SK, Oh-Hara T, Takeuchi K, Fujita N, Nagayama S, Katayama R. Acquired resistance to BRAF inhibitors is mediated by BRAF splicing variants in BRAF V600E mutation-positive colorectal neuroendocrine carcinoma. **Cancer Lett.**, 543:215799, 2022.
3. Shimizu Y, Okada K, Adachi J, Abe Y, Narumi R, Uchibori K, Yanagitani N, Koike S, Takagi S, Nishio M, Fujita N, Katayama R. GSK3 inhibition circumvents and overcomes acquired lorlatinib resistance in ALK-rearranged non-small-cell lung cancer. **NPJ Precis. Onc.**, 6(1):16, 2022.
4. Sagawa R, Sakata S, Gong B, Seto Y, Takemoto A, Takagi S, Ninomiya H, Yanagitani N, Nakao M, Mun M, Uchibori K, Nishio M, Miyazaki Y, Shiraishi Y, Ogawa S, Kataoka K, Fujita N, Takeuchi K, Katayama R. Soluble PD-L1 through alternative polyadenylation works as a decoy in lung cancer immunotherapy. **JCI Insight**, 7(1):e153323, 2022.
5. Kunimasa K, Ikeda-Ishikawa C, Tani Y, Tsukahara S, Sakurai J, Okamoto Y, Koido M, Dan S, Tomida A. Spautin-1 inhibits mitochondrial complex I and leads to suppression of the unfolded protein response and cell survival during glucose

starvation.

Sci. Rep., 12(1):11533, 2022.

研究3 腫瘍組織内におけるがん転移形質の獲得機構の解明と転移阻害薬の開発

1. Takemoto A, Takagi S, Ukaji T, Gyobu N, Kakino M, Takami M, Kobayashi A, Lebel M, Kawaguchi T, Sugawara M, Tsuji-Takayama K, Ichihara K, Funauuchi Y, Ae K, Matsumoto S, Sugiura Y, Takeuchi K, Noda T, Katayama R, Fujita N. Targeting podoplanin for the treatment of osteosarcoma.

Clin. Cancer Res., 28(12):2633-2645, 2022.

研究4 腫瘍細胞社会ネットワークを標的にした抗がんリード化合物評価系の開発と整備

1. Isoyama S, Tamaki N, Noguchi Y, Okamura M, Yoshimatsu Y, Kondo T, Suzuki T, Yaguchi SI, Dan S. Subtype-selective induction of apoptosis in translocation-related sarcoma cells induced by PUMA and BIM upon treatment with pan-PI3K inhibitors.

Cell Death Dis., 14(2):169, 2023.

2. Ohta K, Fushimi T, Okamura M, Akatsuka A, Dan S, Iwasaki H, Yamashita M, Kojima N. Structure-antitumor activity relationship of hybrid acetogenins focusing on connecting groups between heterocycles and the linker moiety.

RSC Adv., 12(25):15728-15739, 2022.

3. Hosomi H, Akatsuka A, Dan S, Iwasaki H, Nambu H, Kojima N. Synthesis of acetogenin analogs comprising pyrimidine moieties linked by amine bonds and their inhibitory activity against human cancer cell lines.

Chem. Pharm. Bull. (Tokyo), 70(11):823-826, 2022.