

Category	Element	Published authors and institutions	Literature (Click to go to the original literature page)	Journal
Immunity	Olifuco	Szu-Yuan Wu Professor, College of Medicine and Health, Asia University Attending Physician, Department of Radiation Oncology, Lotung Poh-ai Hospital Director of Big Data Center, Lotung Poh-ai Hospital	Fucoidan Inhibits Radiation-Induced Pneumonitis and Lung Fibrosis by Reducing Inflammatory Cytokine Expression in Lung Tissues	Marine Drugs Published country: (Switzerland)
	Olifuco	Chiou-Hwa Yuh Institute of Molecular and Genomic Medicine, National Health Research Institutes	Transcriptomically Revealed Oligo-Fucoidan Enhances the Immune System and Protects Hepatocytes via the ASGPR/STAT3/HNF4A Axis	Biomolecules Published country: (Switzerland)
Tumor	Olifuco	Hsien-Yeh Hsu Department of Biotechnology and Laboratory Science in Medicine , National Yang-Ming University	Fucoidan induces changes in the epithelial to mesenchymal transition and decreases metastasis by enhancing ubiquitin-dependent TGFβ receptor degradation in breast cancer	CarcinoGenesis Published country: (UK)
	Olifuco	Hsien-Yeh Hsu Department of Biotechnology and Laboratory Science in Medicine , National Yang-Ming University	Fucoidan inhibition of lung cancer in vivo and in vitro: role of the Smurf2-dependent ubiquitin proteasome pathway in TGFβ receptor degradation	Oncotarget Published country: (USA)
	Olifuco	1. Gi-Ming Lai Cancer Center, Wan Fang Hospital, Taipei Medical University 2. Ming-De Yan Department and Graduate institute of Microbiology and Immunology	Fucoidan Elevates MicroRNA-29b to Regulate DNMT3B-MTSS1 Axis and Inhibit EMT in Human Hepatocellular Carcinoma Cells	Marine Drugs Published country: (Switzerland)
	Olifuco	Tz-Chong Chou Graduate Institute of Medical Sciences, National Defense Medical Center	Low Molecular Weight Fucoidan Inhibits Tumor Angiogenesis through Downregulation of HIF-1/VEGF Signaling under Hypoxia	Marine Drugs Published country: (Switzerland)
	Olifuco	Tz-Chong Chou Graduate Institute of Medical Sciences, National Defense Medical Center	Combined administration of fucoidan ameliorates tumor and chemotherapy-induced skeletal muscle atrophy in bladder cancer-bearing mice	Oncotarget Published country: (USA)
	Olifuco	Szu-Yuan Wu Professor, College of Medicine and Health, Asia University Attending Physician, Department of Radiation Oncology, Lotung Poh-ai Hospital Director of Big Data Center, Lotung Poh-ai Hospital	Brown Seaweed Fucoidan Inhibits Cancer Progression by Dual Regulation of mir-29c/ADAM12 and miR-17-5p/PTEN Axes in Human Breast Cancer Cells	Journal of Cancer Published country: (USA)
	Olifuco	Hsien-Yeh Hsu Department of Biotechnology and Laboratory Science in Medicine , National Yang-Ming University	Fucoidan induces Toll-like receptor 4-regulated reactive oxygen species and promotes endoplasmic reticulum stress-mediated apoptosis in lung cancer	Scientific Reports Published country: (UK)
	Olifuco	Hsin-Ling Hsu Institute of Molecular and Genomic Medicine, National Health Research Institutes	Oligo-Fucoidan prevents IL-6 and CCL2 production and cooperates with p53 to suppress ATM signaling and tumor progression	Scientific Reports Published country: (UK)
	Olifuco	Hsien-Yeh Hsu Department of Biotechnology and Laboratory Science in Medicine , National Yang-Ming University	Fucoidan upregulates TLR4/CHOP-mediated caspase-3 and PARP activation to enhance cisplatin-induced cytotoxicity in human lung cancer cells	Cancer Letters Published country: (Netherlands)
	Olifuco	Shih-Min Hsia School of Nutrition and Health Sciences, College of Nutrition, Taipei Medical University	Fucoidan inhibits the proliferation of leiomyoma cells and decreases extracellular matrix-associated protein expression	Cellular Physiology and Biochemistry Published country: (Switzerland)
	Olifuco	Ming-De Yan Department and Graduate institute of Microbiology and Immunology	The anti-tumor activity of brown seaweed oligo-fucoidan via lncRNA expression modulation in HepG2 cells	Cytotechnology Published country: (Netherlands)
	Olifuco	Hsien-Yeh Hsu Department of Biotechnology and Laboratory Science in Medicine , National Yang-Ming University	Clinical applications of fucoidan in translational medicine for adjuvant cancer therapy	Clinical and Translational Medicine Published country: (UK)
	Olifuco	Chien-Huang Liao Cancer Center, Wan Fang Hospital, Taipei Medical University,	Epigenetic Modification and Differentiation Induction of Malignant Glioma Cells by Oligo-Fucoidan	Marine Drugs Published country: (Switzerland)
	Olifuco	Hsin-Ling Hsu Institute of Molecular and Genomic Medicine, National Health Research Institutes	Oligo-Fucoidan Prevents M2 Macrophage Differentiation and HCT116 Tumor Progression.	Cancers Published country: (Switzerland)
	Olifuco	Szu-Yuan Wu Professor, College of Medicine and Health, Asia University Attending Physician, Department of Radiation Oncology, Lotung Poh-ai Hospital Director of Big Data Center, Lotung Poh-ai Hospital	Protective Effect of Low - Molecular - Weight Fucoidan on Radiation - Induced Fibrosis Through TGF - β1/Smad Pathway - Mediated Inhibition of Collagen I Accumulation	Marine Drugs Published country: (Switzerland)
	Olifuco	Chiou-Hwa Yuh Institute of Molecular and Genomic Medicine, National Health Research Institutes	Low Molecular Weight Fucoidan Prevents Radiation-Induced Fibrosis and Secondary Tumors in a Zebrafish Model	Cancers Published country: (Switzerland)
	Olifuco	Chiou-Hwa Yuh Institute of Molecular and Genomic Medicine, National Health Research Institutes	Low molecular weight fucoidan inhibits hepatocarcinogenesis and nonalcoholic fatty liver disease in zebrafish via ASGR/STAT3/HNF4A signaling	Clinical and Translational Medicine Published country: (German)
	Olifuco	Qunyan Yao Hospital, Fudan University Shanghai, China	Fucoidan Inhibits the Progression of Hepatocellular Carcinoma via Causing lncRNA LINC00261 Overexpression	Frontiers in Oncology Published country: (Switzerland)
	Olifuco	Gerald S. Post The Veterinary Cancer Center, Norwalk, CT, USA	The Use of Oligo Fucoidan in Cancer Bearing Dogs Undergoing Chemotherapy: A Double-Blinded Study	Topics in Companion Animal Medicine Published country: (Netherlands)
	Olifuco	Hsien-Yeh Hsu Department of Biotechnology and Laboratory Science in Medicine , National Yang-Ming University	Fucoidan increased the sensitivity to gefitinib in lung cancer cells correlates with reduction of TGFβ-mediated Slug expression	International Journal of Biological Macromolecules Published country: (Netherlands)
	Olifuco	Hsin-Ling Hsu Institute of Molecular and Genomic Medicine, National Health Research Institutes	Oligo-Fucoidan supplementation enhances the effect of Olaparib on preventing metastasis and recurrence of triple-negative breast cancer in mice	Journal of Biomedical Science Published country: (UK)

	Olifuco	Chiou-Hwa Yuh Institute of Molecular and Genomic Medicine, National Health Research Institutes	WNK1–OSR1 Signaling Regulates Angiogenesis-Mediated Metastasis towards Developing a Combinatorial Anti-Cancer Strategy	International Journal of Molecular Sciences Published country: (Switzerland)
	Olifuco	Hsien-Yeh Hsu Department of Biotechnology and Laboratory Science in Medicine , National Yang-Ming University	Biochemical characterization and anti-cancer activity of tangential flow filtration system assisted purification of fucoglucan from Laminaria japonica	International Journal of Biological Macromolecules Published country: (Netherlands)
	Olifuco	Verónica A. Trivillin Comisión Nacional de Energía Atómica (CNEA)	Therapeutic Efficacy, Radiotoxicity and Abscopal Effect of BNCT at the RA-3 Nuclear Reactor Employing Oligo-Fucoidan and Glutamine as Adjuvants in an Ectopic Colon Cancer Model in Rats	Life Journal from MDPI
Heart	Fucobalan	1. Chih-Hung Tsai Kang Animal Hospital, New Taipei City,Taiwan. 2. Yen -Chang Lin Institute of Biotechnology, Chinese Culture University	Yu-Graduate Fucoidan and Fucoxanthin Ameliorate Cardiac Function of Aging Canine	Asian Journal of Animal and Veterinary Advances Published country: (USA)
	Fucobalan	Yen -Chang Lin Institute of Biotechnology, Chinese Culture University	Graduate Fucoidan–Fucoxanthin Ameliorated Cardiac Function via IRS1/GRB2/ SOS1, GSK3B/CREB Pathways and Metabolic Pathways in Senescent Mice	Marine Drugs Published country: (Switzerland)
	Fucobalan	Shih-Min Hsia Nutrition and Health Sciences, College of Nutrition, Taipei Medical University	School of Protective Effects of Fucoxanthin on Hydrogen Peroxide-Induced Calcification of Heart Valve Interstitial Cells	Marine Drugs Published country: (Switzerland)
	Fucobalan	1. Shih-Min Hsia of Nutrition and Health Sciences, College of Nutrition, Taipei Medical University 2. Chih-Hung Tsai Kang Animal Hospital, New Taipei City,Taiwan.	School of Yu- Four case reports Effects of fucoidan and fucoxanthin on the treatment of degenerative heart valve disease in dogs	Journal of Animal Science and Veterinary Medicine
Kidney	Olifuco	Tso-Hsiao Chen Division of Nephrology, Department of Internal Medicine, Wan Fang Hospital, Taipei Medical University Department of Internal Medicine, School of Medicine, College of Medicine, Taipei Medical University	Oligo-fucoidan prevents renal tubulointerstitial fibrosis by inhibiting the CD44 signal pathway	Scientific Reports Published country: (UK)
	Fucobalan	Tso-Hsiao Chen Division of Nephrology, Department of Internal Medicine, Wan Fang Hospital, Taipei Medical University Department of Internal Medicine, School of Medicine, College of Medicine, Taipei Medical University	Alleviative effect of fucoxanthin-containing extract from brown seaweed Laminaria japonica on renal tubular cell apoptosis through upregulating Na+/H+ exchanger NHE1 in chronic kidney disease mice.	Journal of Ethnopharmacology Published country: (Netherlands)
	Fucobalan	Shih-Min Hsia Nutrition and Health Sciences, College of Nutrition, Taipei Medical University	School of Preventive Effects of Fucoidan and Fucoxanthin on Hyperuricemic Rats Induced by Potassium Oxonate	Marine Drugs Published country: (Switzerland)
	Fucobalan & 左旋肉碱L-carnitine	Tso-Hsiao Chen Division of Nephrology, Department of Internal Medicine, Wan Fang Hospital, Taipei Medical University Department of Internal Medicine, School of Medicine, College of Medicine, Taipei Medical University	Combined protective effects of oligo-fucoidan, fucoxanthin, and L-carnitine on the kidneys of chronic kidney disease mice	European Journal of Pharmacology Published country: (Netherlands)
	Olifuco	Tz-Chong Chou Graduate Institute of Medical Sciences, National Defense Medical Center	Oligo-Fucoidan Improves Diabetes-Induced Renal Fibrosis via Activation of Sirt-1, GLP-1R, and Nrf2/HO-1: An In Vitro and In Vivo Study	Nutrients Published country: (Switzerland)
	Olifuco	Tso-Hsiao Chen Division of Nephrology, Department of Internal Medicine, Wan Fang Hospital, Taipei Medical University Department of Internal Medicine, School of Medicine, College of Medicine, Taipei Medical University	Oligosaccharides Ameliorate Acute Kidney Injury by Alleviating Cluster of Differentiation 44-Mediated Immune Responses in Renal Tubular Cells	Nutrients Published country: (Switzerland)
Bones and joints	Olifuco	Tz-Chong Chou Graduate Institute of Medical Sciences, National Defense Medical Center	Fucoidan Prevents RANKL-Stimulated Osteoclastogenesis and LPS-Induced Inflammatory Bone Loss via Regulation of Akt/GSK3B/PTEN/NFATc1 Signaling Pathway and Calcineurin Activity	Marine Drugs Published country: (Switzerland)
	UC II	Lane NE. Rheumatology and Aging Research, University of California at Davis School of Medicine, USA.	Oral administration of undenatured native chicken type II collagen (UC-II) diminished deterioration of articular cartilage in a rat model of osteoarthritis (OA).	National Library of Medicine
Urology	N-acetyl-d-glucosamine	Panchaphanpong J. Department of Veterinary Medicine, Faculty of Veterinary Science, Chulalongkorn University, Bangkok	Effects of oral administration of N-acetyl-d-glucosamine on plasma and urine concentrations of glycosaminoglycans in cats with idiopathic cystitis	National Library of Medicine