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Nota di contenuto	<p>About the Special Issue Editors -- Preface to "Marine Glycosides" -- Kevin Calabro, Elaheh Lotfi Kalahroodi, Daniel Rodrigues, Caridad D'iaz, Mercedes de la Cruz, Bastien Cautain, R'emi Laville, Fernando Reyes, Thierry P'erez, Bassam Soussi and Olivier P. Thomas</p> <p>Poecillastrosides, Steroidal Saponins from the Mediterranean Deep-Sea Sponge Poecillastra compressa (Bowerbank, 1866) Reprinted from: Mar. Drugs 2017, 15, 199, doi:10.3390/md15070199 -- Alexandra S. Silchenko, Anatoly I. Kalinovsky, Sergey A. Avilov, Vladimir I. Kalinin, Pelageya V. Andrijaschenko, Pavel S. Dmitrenok, Ekaterina A. Chingizova, Svetlana P. Ermakova, Olesya S. Malyarenko and Tatyana N. Dautova</p> <p>Nine New Triterpene Glycosides, Magnumosides A1-A4, B1, B2, C1, C2 and C4, from the Vietnamese Sea Cucumber Neothyonidium (=Massinium) magnum: Structures and Activities against Tumor Cells Independently and in Synergy with Radioactive Irradiation Reprinted from: Mar. Drugs 2017, 15, 256, doi:10.3390/md15080256 -- Roman S. Popov, Natalia V. Ivanchina, Alexandra S. Silchenko, Sergey A. Avilov, Vladimir I. Kalinin, Igor Yu. Dolmatov, Valentin A. Stonik and Pavel S. Dmitrenok</p> <p>Metabolite Profiling of Triterpene Glycosides of the Far Eastern Sea Cucumber Eupentacta fraudatrix and Their Distribution in Various Body Components Using LC-ESI QTOF-MS Reprinted from: Mar. Drugs 2017, 15, 302, doi:10.3390/md15100302 -- Muhammad Abdul Mojid Mondol, Hee Jae Shin, M. Aminur Rahman and Mohamad Tofazzal Islam</p> <p>Sea Cucumber Glycosides: Chemical Structures, Producing</p>

Species and Important Biological Properties Reprinted from: Mar. Drugs 2017, 15, 317, doi:10.3390/md15100317 -- Yeon-Ju Lee, Saem Han, Su Hyun Kim, Hyi-Seung Lee, Hee Jae Shin, Jong Seok Lee and Jihoon Lee Three New Cytotoxic Steroidal Glycosides Isolated from *Conus pulicarius* Collected in Kosrae, Micronesia Reprinted from: Mar. Drugs 2017, 15, 379, doi:10.3390/md15120379 -- Thomas E. Adrian and Peter Collin The Anti-Cancer Effects of Frondoside A Reprinted from: Mar. Drugs 2018, 16, 64, doi:10.3390/md16020064 -- Yunyang Lu, Hu Li, Minchang Wang, Yang Liu, Yingda Feng, Ke Liu and Haifeng Tang Cytotoxic Polyhydroxysteroidal Glycosides from Starfish *Culcita novaeguineae* Reprinted from: Mar. Drugs 2018, 16, 92, doi:10.3390/md16030092 -- Chun Gui, Yena Liu, Zhenbin Zhou, Shanwen Zhang, Yunfeng Hu, Yu-Cheng Gu, Hongbo Huang and Jianhua Ju Angucycline Glycosides from Mangrove-Derived *Streptomyces diastaticus* subsp. SCSIO GJ056 Reprinted from: Mar. Drugs 2018, 16, 185, doi:10.3390/md16060185 -- Ariana A. Vasconcelos and Vitor H. Pomin Marine Carbohydrate-Based Compounds with Medicinal Properties Reprinted from: Mar. Drugs 2018, 16, 233, doi:10.3390/md16070233 -- Iván Cheng-Sánchez and Francisco Sarabia Chemistry and Biology of Bioactive Glycolipids of Marine Origin Reprinted from: Mar. Drugs 2018, 16, 294, doi:10.3390/md16090294 -- Yadollah Bahrami, Wei Zhang and Christopher M. M. Franco Distribution of Saponins in the Sea Cucumber *Holothuria lessona*; the Body Wall Versus the Viscera, and Their Biological Activities Reprinted from: Mar. Drugs 2018, 16, 423, doi:10.3390/md16110423 -- Aihong Peng, Xinying Qu, Fangyuan Liu, Xia Li, Erwei Li and Weidong Xie Angucycline Glycosides from an Intertidal Sediments Strain *Streptomyces* sp. and Their Cytotoxic Activity against Hepatoma Carcinoma Cells Reprinted from: Mar. Drugs 2018, 16, 470, doi:10.3390/md16120470.

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## Sommario/riassunto

In recent years, there has been a steady increase in the publication of papers on the chemistry, biology, and potential clinical uses of marine glycosides. Indeed, more than half of the papers published in this field are less than a decade old. Glycosides have been isolated from species as diverse as algae, fungi, anthozoans, and echinoderms. Even fish of the genus *Pardachirus* produce glycosides, which they use as shark repellents. The major interest in these compounds as potential drugs stems from their broad spectrum of biological effects. They have been shown to have antimicrobial, antifungal, anti-inflammatory, immune modulatory, and anticancer effects. The anticancer effects of marine glycosides include cell cycle suppression, the induction of apoptosis, and the inhibition of migration, invasion, and metastasis, as well as antiangiogenesis. Marine glycosides influence membrane permeability and have been shown to influence membrane transport at the molecular level through effects on transport carriers and pumps, as well as effects on ligand-gated and voltage-gated channels. Various marine glycosides have been shown to activate sphingomyelinase and ceramide synthesis, to inhibit topoisomerase activity, receptor tyrosine kinase activity, and multidrug resistance protein activity, and to antagonize eicosanoid receptors. This Special Issue covers the entire scope of marine organism-derived glycosides that are of potential value as pharmaceutical agents or leads. These include, but are not limited to, tetracyclic triterpene glycosides, other triterpene glycosides, steroid glycosides, and glycosides of non-isoprenoid aglycones.

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