

Editorial comments to the articles published in Volume 8

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In Issues 1-4 of Volume 8, two original Research Articles and five Reviews, in addition to five Case Reports and one Commentary, have been published.

A subgroup of breast cancer lacking the expression of estrogen and progesterone receptors as well as HER2 [*i.e.* triple-negative breast cancer (TNBC)] is usually aggressive in clinical course and is often resistant to pharmacotherapy with not only anti-hormones but also chemotherapeutic agents. Li et al. [1] assessed the impact of compound cantharis, a Chinese herb, on the efficacy of docetaxel in TNBC and its underlying mechanisms. In docetaxel-resistant TNBC sublines established, compound cantharis restored the cytotoxic effect of docetaxel. The induction of anti-tumor activity of docetaxel by compound cantharis was then confirmed in a mouse xenograft model. In addition, compound cantharis was found to inhibit autophagy and down-regulate the expression of related proteins including LC3 and Beclin-1. These findings suggest that compound cantharis could enhance sensitivity to docetaxel treatment in TNBC.

Group B Streptococcus (GBS) has been the main cause of bacterial infection in newborns, while its colonization in the genitourinary and gastrointestinal tracts is generally asymptomatic in pregnant women. Aboutorabi et al. [2] characterized GBS isolated from vaginal swabs, midstream urines, and rectal swabs in 90 participants at 35-37 weeks of gestation at a single institution in Iran. Overall, GBS was detected in 17.6% of the patients. Of 10 serotypes, Ia (25%; from rectum), Ib (50%; from urine and vagina), and II (25%; from vagina) were identified, using PCR-based methods. Importantly, these isolates were found to be often resistant to all the antibiotics examined, including penicillin (75%), ampicillin (43.75%), chloramphenicol (75%), clindamycin (75%), cefepime (75%), ceftriaxone (56.25%), erythromycin (75%), vancomycin (50%), tetracycline (75%), and cefotaxime (100%). Moreover, detection of virulence factors, such as CyIE, bca, and lmb, implied the usefulness of GBS vaccines against these.

It has been documented that viruses play a critical role in the development of a variety of human malignancies. Tenório et al. [3] reviewed the impact of such oncogenic viruses, including human T-cell lymphotropic virus, human papillomavirus (HPV), mouse/human mammary tumor virus, human endogenous retrovirus (HERV), and hepatitis C virus. Interestingly, serological survey, using PCR-based assays, revealed that some of their patients with head and neck cancer were positive for HPV (1 of 38) and HERV-K (31 of 35).

Other review articles (*i.e.* Mini-Reviews) summarized: 1) the role of probiotics and prebiotics in preventing colorectal carcinogenesis [4]; 2) the potential application of phytotherapy against cancer [5]; 3) the efficacy of evinacumab, an anti-ANGPTL3 monoclonal antibody, against homozygous familial hypercholesterolemia [6]; and 4) the potential role of exosomes, particularly as a therapeutic target, in human malignancies [7].

References

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5. Sannia A (2021) Phytotherapy and oncology. A short review. *Integr Cancer Sci Ther* 8: 1000353.
6. Surma S, Romańczyk M, Filipiak KJ (2021) Evinacumab – A new drug in the treatment of homozygous familial hypercholesterolaemia. *Integr Cancer Sci Ther* 8: 1000355.
7. Retamales-Ortega R, Oróstica ML (2021) Exosomes as therapy for cancer. *Integr Cancer Sci Ther* 8: 1000357.

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