

## Special Issue

# Tumor Metabolism and Signaling

### Message from the Guest Editor

Cancer cells are known to possess extraordinary capability to expand and survive in the harsh environment. In order to do so, they use a number of metabolic reprogramming to ensure both fuel and building block supplies are sufficient. In fact, most tumor cells utilize “aerobic glycolysis”, the so called “Warburg effect” to generate sufficient ATP and nucleotides. In addition, they also require amino acids to sustain their proliferation. The key amino acids which are essential for tumor cells to multiply and invade are glutamine, arginine, leucine and serine. Tumor cells are also surrounded by immune cells, macrophages, leukocytes and fibroblasts which also require nutrients to survive and eliminate tumor cells. Thus, the dynamic between tumor cells and stromal cells/immune cells is important to determine the growth and survival of tumor cells. Tumor and immune cells /stromal cells metabolism play an important role in this process. In this issue, we plan to discuss the key aspects in tumor metabolism and signaling and how to exploit them for treatment.

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### Guest Editor

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## International Journal of Molecular Sciences

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