Foreword

A new journal for 21st century cancer research

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Welcome to the Journal of Cancer Metastasis and Treatment (ISSN 2394-4722), a multidisciplinary journal devoted to basic, translational and clinical research on cancer, with special emphasis on metastatic disease.

The treatment of localized malignancies has dramatically improved over the past few decades, with remarkable progress in early diagnosis, surgery, radiation oncology and pharmacological treatment. As a result, many early stage or localized cancers today can be considered curable.

Unfortunately, the same cannot be said of metastatic disease. In most cases, the prognosis of metastatic cancers remains grim, despite heroic interventions. Metastatic cancers often become resistant to most or all the therapeutic tools in our arsenal, and while it is often possible to significantly prolong survival, eradication of metastatic disease is rarely possible and side effects of treatment are significant.

Cancer biology research has shown that the “magic bullet” approach, i.e., the search for a single agent capable of eradicating advanced malignancies, is clearly inadequate. Cancers arising from the same tissue in different patients are genetically heterogeneous, even when their histologic features are similar. Even within an individual tumor there can exist distinct cellular populations with different biological characteristics.

Stem-like “tumor-initiating cells” have been described in hematologic and solid tumors. Although their origins remain unclear, and there may be different ways of acquiring “stemness”, these cells are generally more treatment-resistant than non-stem-like cancer cells, and are thought to be a major cause of treatment failure and recurrence.

Clonal selection occurring during disease progression, producing genetically distinct cellular clones within the same tumor, is another possible cause of treatment failure. Clonal heterogeneity had been hypothesized for a long time but is now supported by experimental
evidence. Fortunately, thanks to the tremendous progress of biomedical science, we have unprecedentedly sophisticated tools to study the causes, mechanisms and treatments of cancer metastasis. Genomics and bio-informatics are dissecting the mutational landscape, epigenetics and transcriptome of individual tumors and even of single tumor cells. Cancer immunotherapy, after decades of experimental successes in rodent models followed by disappointing results in the clinic, is now beginning to produce clinically effective agents for previously incurable malignancies.

The time is ripe for a new journal devoted specifically to the study of cancer metastasis and experimental therapeutics. The volume of high-quality research produced worldwide in this field and the need to rapidly disseminate it among the global scientific and clinical community are such that we hope our journal will fill an important niche in the cancer research literature. The Editorial Board and I hope you enjoy reading it as much as we enjoy crafting it.