

## 2<sup>nd</sup> International Conference on

# STEM CELLS AND REGENERATIVE MEDICINE

May 20-21, 2019 | Rome, Italy

Yohei Kawasaki et al., Adv Cell Sci Mut. 2019, Volume 3

### CD98HC IS A CANDIDATE OF CANCER STEM CELL MARKERS IN HNSCC

### Yohei Kawasaki<sup>1</sup> and Yasufumi Omori<sup>2</sup>

<sup>1</sup>Department of Otorhinolaryngology and Head-and-Neck Surgery, Akita University Graduate School of Medicine, Japan

<sup>2</sup>Department of Molecular and Tumor Pathology, Akita University Graduate School of Medicine, Japan

When head and neck squamous cell carcinomas (HNSCC) are treated with radiation therapy, chemotherapy and surgical therapy, author often encounter their recurrence and distant metastases. Cancer stem cells (CSCs) tend to be resistant to radiation therapy and are therefore, profoundly involved in tumor recurrence and metastasis. Identification of reliable markers of CSCs should lead to the development of a new therapy and contribute to improvement of the survival rate. Recently, Sanne *et al.* have reported that CD98 is one of CSC markers in HNSCC. Moreover, the overexpression of CD98hc is highly associated with different cancers including the colon cancer and renal cancer. CD98 is a heterodimeric protein that comprises a heavy chain and a light chain. The CD98 heavy chain is type II linkage to one of six amino acid transporters. Hence, they investigated the characters of CD98hc-positive and CD98hc-negative cells in HNSCC cell lines and found that CD98hc-positive cells had the potential of CSCs. It is strongly suggested that the therapy targeting to CD98hc should contribute to eradication of HNSCC.

## **BIOGRAPHY**

Yohei Kawasaki is currently working as a Lecturer at the Department of Otorhinolaryngology, Head and Neck Surgery, Akita University Graduate School of Medicine, Japan.

kawa0807@med.akita-u.ac.jp