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# Connexin 43 and Ewing Sarcoma: Stay Tuned

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*Introduction-* To the editor: In our study1 published in Sarcoma in 2011, we found that Connexin 43 (Cx43) was frequently (78%) expressed in the 36-Ewing sarcoma (ES) patient tissue microarray specimens. Most interestingly, a higher level of Cx43 overexpression was correlated with adverse clinical outcome and shorter survival regardless of tumor stage, location, tumor size and clinical management. Positive score of Cx43 was significantly correlated with reduced overall survival ($p=0.02$). The average positive Cx43 scores for patients alive and dead at 3 years was 46.08 and 96.98 ($p=0.004$) at 5 years was 46.06 and 96.43 ($p=0.02$) respectively. Recently, a study published in Biochimicaet Biophysica Acta2demonstrated that expression level of Cx43 was repressed by EWS-FLI1, Cx43 gene expression was associated with the gap junction intercellular communication changes and Cx43 inhibits ES growth via modulation of cell proliferation via p27. Surprisingly, ES overexpression of Cx43 reduced tumor growth and was associated with better survival. Although these two studies show different prognostic values regarding to Cx43 and ES, both confirm that Cx43 has a potential role in ES tumorogensis and prognosis.

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## I. Introduction

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