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## Prognostic role of Caveolin in breast cancer

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**Introduction:** Recent studies have shown that caveolin play a potential role as a prognostic biomarker of cancers. The aim of the present study was to clarify whether caveolin could be a prognostic factor for patients with breast cancer.

**Materials and methods:** All eligible studies were identified using Medline and EMBASE system. The patients' clinical characteristics and survival outcome were extracted. The meta-analysis was performed to clarify the prognostic role of caveolin and the correlation between the caveolin expression and clinical characteristics.

**Results:** After full text review, 19 articles were identified as eligible articles. We found that negative stromal Caveolin-1 (Cav-1) expression could predict the poor prognosis of breast cancer. The combined HR (95% CI) for OS was 4.12[2.05, 8.28], while the combined HR (95% CI) for DFS/PFS was 3.69 [2.57, 5.31]. The combined HR (95% CI) of tumor epithelial Cav-1 for OS was 0.78 [0.54, 1.12], and the combined HR (95% CI) for DFS/PFS was 1.32 [0.76, 2.29]. The combined HR (95% CI) of tumor epithelial Cav-2 for CSS was 2.04 [0.91, 4.56]. Odds ratios (ORs) showed that the stromal Cav-1 expression was associated with the AJCC stage, T status, lymph metastasis, distant metastasis, and histological grade (G grade) and many biomarkers. We found ORs of Cav-1 and Cav-2 expression in tumor epithelial cells varied in clinical characteristics and biomarkers.

**Conclusion:** Our results indicated that negative expression of stromal Cav-1 was associated with poor prognosis of breast cancer, while the detection of Cav-1 and Cav-2 in tumor epithelial cells was not.

## Biography

Jing Zhang is an MD candidate in West China School of Medicine, Sichuan University. He got National Encouragement Scholarship and scholarships in university every year. He has published 10 papers, SCI index.

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