**Purpose:** Estrogen receptor alpha (ERα) is a well established prognostic marker in breast cancer. The role of estrogen receptor beta (ERβ) in breast cancers is still under investigation. We aimed to investigate the clinicopathological significance and immunohistochemical expression patterns of ERα, total ERβ (ERβ) and its spliced variant ERβcx in normal breast, ductal carcinoma in situ (DCIS) and invasive ductal carcinoma (IDC).

**Methods:** Our study population comprised 10 normal breasts, 26 DCISs and 44 IDCs. Immunohistochemical expression of these markers was investigated in sections of formalin fixed-paraffin embedded blocks by 2 observers.

**Results:** In invasive ductal carcinomas, ERβ expression had a significant positive correlation with ERα expression (p=0.013), while ERβcx expression was significantly associated with the presence of lymphovascular invasion (p=0.046). There was a significant relationship between ERα expression and low histological grade (p<0.0001). Similarly, ERα+/ERβ+ tumors (p=0.004) and ERα+/ERβcx+ tumors (p=0.008) were significantly associated with low histological grade, too. ERα expression (p=0.009), ERβcx expression (p=0.048) and ERα+/ERβ+ coexpression (p=0.002) increased significantly in progression from normal breast to invasive ductal carcinoma.

**Conclusions:** Expression of ERα correlates with less aggressive phenotypic features and ERβ expression is positively correlated with ERα expression in breast cancer. ERβcx is associated with aggressive features and can take part in the progression of invasive carcinoma. Increase in ERα+/ERβ+ coexpression, ERα expression and ERβcx expression in breast cancer progression indicates an enhancement in ER expressions or an alteration in expression patterns of different ER variants during mammary carcinogenesis.