Title of the contribution: Expression and significance of FXYD-3 protein in gastric adenocarcinoma.

Abstract: FXYD-3, also known as Mat-8, is a member of the FXYD protein family. It was reported that this protein can associate with and modify the transport properties of Na, K-ATPase, and may play an important role in a variety of physiological and pathological states. This protein is up-regulated in certain types of cancers (such as breast, prostate and pancreatic cancer), but down-regulated in other types of cancers (such as colon and kidney cancer). No study has been performed in gastric cancer; therefore, the aim of this project was to investigate FXYD-3 expression and its clinicopathological significance in gastric adenocarcinoma. FXYD-3 protein was examined by immunohistochemistry in normal gastric mucosa (n= 29) and gastric adenocarcinoma (n=51), obtained from surgical resection of gastric cancer patients. FXYD-3 protein was present in the cytoplasm of normal gastric epithelial cells or gastric cancer cells. The rate of FXYD-3 strong expression was significantly higher in cancer (51% of 51) than in normal mucosa (10% of 29): \( X^2 = 13.210, p = 0.016 \). However, FXYD-3 expression was not correlated with patient's gender, age, tumor size, lymph node status and histological grade (p> 0.05).

Conclusion: Up-regulated expression of FXYD-3 protein may be involved in tumourgenesis and invasion of gastric adenocarcinoma.