Autophagy in Complex Diseases. The role of VMP1, a novel autophagy-related protein

Maria I. Vaccaro
Institute of Biochemistry and Molecular Medicine - CONICET, Department of Pathophysiology, School of Pharmacy and Biochemistry, University of Buenos Aires. Buenos Aires, Argentina.

Autophagy becomes a role in pancreatic diseases. While normal pancreatic cells have no detectable levels of autophagy, pathological processes such as pancreatitis and diabetes mellitus as well as tumor cells and cancer chemotherapy, are able to activate the autophagic process. In addition, selective autophagy of pancreatic zymogen granules has been discovered and characterized as a protective cellular process triggered by the disease. In this lecture we will describe the process and mechanisms of autophagy and discuss current concepts about the possible role of autophagy in diabetes mellitus and pancreatitis. In addition, we are interested in pancreatic cancer and the response of tumor cells to chemotherapy. Understanding the cellular events of disease response, will allow designing more effective diagnosis and novel therapeutic