

Addicted to secrete - novel concepts and targets in cancer therapy

Dejeans, Nicolas

Manié, Serge

Hetz, Claudio

Bard, Frédéric

Hupp, Ted

Agostinis, Patrizia

Samali, Afshin

Chevet, Eric

The unfolded protein response (UPR) mediates the adaptation of the secretory pathway (SP) to fluctuations in cellular protein demand or to environmental variations. Recently, drug screenings have confirmed the therapeutic potential of targeting the UPR in cancer models. However, the UPR may not be the only druggable target of the SP. Moreover, recent studies have revealed other contributions of the SP to cancer development. This article does not intend to describe the well-established implication of UPR signaling pathways in cancer cell life and cell decision, but rather aims at defining the concept of 'tumor cell secretory addiction', from molecular, cellular, and therapeutic perspectives. Furthermore, the implication of UPR modulations in this context will be discussed. © 2013 Elsevier Ltd.