

F. Steimer, A. T. Carmona, A. J. Moreno-Vargas, I. Caffa, M. Cea, F. Montecucco, A. Nencioni, P. Vogel, and I. Robina (2014). Synthesis of Pyrrolidine 3,4-Diol Derivatives with Anticancer Activity on Pancreatic Tumor Cells. *Heterocycles*, 88, 1445-1464.

Novel pyrrolidine 3,4-diol derivatives of the type (2*R* and 2*S*,3*R*,4*S*)-{[(*1R*)-1-methoxycarbonyl and hydroxymethyl)-1-arylmethyl]amino]ethyl}-pyrrolidine-3,4-diol have been prepared and evaluated as  $\alpha$ -mannosidase inhibitors and assayed for their anticancer activity in vitro. They all exhibit specific but moderate activity as inhibitors towards  $\alpha$ -mannosidase from Jack beans. Compounds **7** and **8b** bearing hydroxymethyl and trifluoromethylbiphenyl groups show the best antiproliferative effect in two pancreatic cancer cell lines.

