

Bisht S, Feldmann G, Brossart P (2013). Pharmacokinetics and pharmacodynamics of sunitinib for the treatment of advanced pancreatic neuroendocrine tumors. *Expert Opin Drug Metab Toxicol*. Apr 16. [Epub ahead of print]

**Introduction:** Despite being the second most common malignancy of the pancreas, pancreatic neuroendocrine tumors (PNET) have long been understudied due to their low incidence and heterogeneous clinical presentation. Emerging data from a Phase III trial demonstrates improved progression-free survival of patients with advanced PNET on treatment with sunitinib.

**Areas covered:** This article reviews the role of sunitinib, a multitargeted tyrosine kinase inhibitor with potent antiangiogenic and antitumor effects, in the clinical management of PNET. Furthermore, the authors also discuss the pharmacokinetics and pharmacodynamics as well as other clinically relevant aspects regarding sunitinib.

**Expert opinion:** A recent Phase III clinical trial of sunitinib demonstrated significant improvement of progression-free survival in patients with advanced or metastatic well-differentiated PNET that led to its approval in several countries, including Europe and United States. This marks a significant step forward in the clinical management of this disease and spurs hopes to further improve overall survival in this once difficult-to-treat set of patients in the coming years. Fields of future interest will include evaluation of combinatorial regimens, including conventional cytotoxic agents as well as additional targeted drugs in order to overcome resistance to sunitinib.