

## REPLY

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# Reply to ‘Novel Drug Targets Based on Association between Inflammation and Pancreatic Ductal Adenocarcinoma’

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Dear Sir,

We greatly appreciated the interest of Dr. Saif to our review [1]. The integration with additional experimental evidence pointed out by Dr. Saif strongly underscores the importance of the relationship between inflammation and pancreatic ductal adenocarcinoma together with the opportunity of developing drug molecules against these “new” targets. In this scenario, we also have to consider the role of the protease/antiprotease balance in metastatic pathways of pancreatic adenocarcinoma. The existence of a strong desmoplastic reaction within and around pancreatic cancer cells renders the proteolytic degradation of extracellular matrix components a basic process for

tumor growth and metastasis. Various classes of proteases released during acute and chronic inflammatory pancreatic diseases may be involved in the proteolytic events which occur during both the early and late phases of tumor invasion (i.e. matrix metalloproteinase, such as urokinase-type plasminogen activator, tumor-associated trypsinogen and membrane type metalloproteinase). Due to the fact that pancreatic cancer is relatively resistant to chemotherapy, we absolutely need novel therapeutic strategies aimed at improving the current dismal prognosis of the disease. We agree with Dr. Saif that pathways linking pancreatic inflammation and cancer may represent new fields for future research.

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**Key words** Inflammation; Pancreatic Neoplasms; Peptide Hydrolases; Protease Inhibitors

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**Conflict of interest** The authors have no potential conflict of interest

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### References

1. Saif MW. Novel drug targets based on association between inflammation and pancreatic ductal adenocarcinoma. JOP. J Pancreas (Online) 2010; 11:403-4.