Two cases of pancreatic cancer treated with FOLFIRINOX regimen and G-CSF prophylaxis for the standard therapeutic dose

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Recently newer agents such as regimens such as FOLFIRINOX have been shown to have promising activity being superior to gemcitabine as a single agent in the un-resectable pancreatic cancer patients with good performance status. In this report, we report two cases of pancreatic cancer treated with FOLFIRINOX regimen and G-CSF prophylaxis for the standard therapeutic dose, who have failed gemcitabine and S1 chemotherapy. It was reported that grade 3–4 neutropenia occurred in many patients frequently for FOLFIRINOX regimen. Granulocyte colony-stimulating factor (G-CSF) has not recommended for helping with the neutropenia in the pancreatic patients treated with FOLFIRINOX. However, prophylactic use of G-CSF is recommended for cancer patients who are at high risk of neutropenic events. On the other hand, modified FOLFIRINOX (no bolus 5-FU) has an improved safety profile with maintained efficacy. Further investigations are needed to conduct the randomized study to compare the overall survival between the two arms: modified FOLFIRINOX versus FOLFIRINOX regimen and G-CSF prophylaxis.