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NCCN Guidelines Panel: Pancreatic Adenocarcinoma

On behalf of The Society of Interventional Oncology, we respectfully request that the NCCN Pancreatic Adenocarcinoma panel consider including an interventional radiologist (IR) on the panel. IR procedures are not referenced current guidelines. However, there are many interventions offered by IRs to treat pancreatic cancer and its complications, including transarterial chemoembolization (TACE), microwave ablation (MWA), irreversible electroporation (IRE), and selective internal radiation therapy (SIRT) or transarterial radioembolization (TARE) therapies.

Not only is it imperative than an IR with expertise in pancreatic cancer care be included on the NCCN guideline panel, we also request the following changes in the current guideline:

Specific Change 1: Include LRT therapies for patients with locally advanced pancreatic cancer

Multiple locoregional therapies (LRT) are available for treatment and management of patients with pancreatic cancer. These options can be beneficial in selective patients and specific clinical scenarios as outlined below:

1. **Locally advance disease.**

Irreversible electroporation or IRE technique (percutaneous or open) alone or in combination with systemic therapy. This ablation technique has been proven to be safe and improve progression free survival (PFS) and overall survival (OS) in pancreatic cancer patients. Current literature supports utilizing IRE as a neoadjuvant treatment to chemoradiation. Additionally, the literature has demonstrated that IRE is able to successfully convert locally advanced patients to surgically resectable patients. We propose to include IRE as one of the treatment options for patients with locally advanced pancreatic cancer. The following articles are relevant to this proposed change:

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Author	Year	Study design	# of pts	Stage of Dx	Primary endpoint
Narayanan G *et al*	2012	Retrospective	14	Locally advanced	Safety
Martin RC *et al*	2013	Prospective	54	Locally advanced	Safety
Martin RC *et al*	2015	Prospective	200	Locally advanced	90-day outcome, OS*
Belfiore MP *et al*	2015	Prospective	29	Locally advanced	OS
Scheffer HJ *et al*	2016	Phase I/II PANFIRE study	25	Locally advanced	Local progression, event-free survival and OS
Mansson C et al	2016	Prospective	24	Locally advanced	Local progression, OS
Narayanan G *et al*	2017	Retrospective	50	Locally advanced	Safety. 2ndary endpoint = OS
Sugimoto K et al	2018	Prospective	5	Locally advanced	Safety. 2ndary endpoint = OS
Leen E *et al*	2018	Prospective	75	Locally advanced	30 day mortality, PFS and OS
Holland MM *et al*	2019	Prospective	152	Locally advanced	PFS**, OS, TTP***
Ruarus AH *et al*	2020	Phase II MCT+	50	Locally advanced	Local recurrence, OS
Yang PC *et al*	2020	Prospective	74	Locally advanced	PFS, OS
Narayanan G *et al*	2021	RCT- On going	528	Locally advanced	PFS, OS

*OS = Overall survival
**PFS = Progression free survival
*** TTP = Time to progression
+ MCT = Multicenter clinical trial

Specific Change 2: Include LRT therapies for patients with metastatic pancreatic cancer

2. Metastatic liver disease:

It is well established that metastatic pancreatic cancer is a systemic disease and systemic therapy is the essential part of the management. However, locoregional treatments seem to benefit a highly selected group of oligo-metastatic pancreatic cancer patients. Surgical literature has demonstrated improved overall survival following resection of liver metastasis in selected patients. Similar to surgical resection, targeted locoregional therapies have demonstrated a benefit to a selected group of pancreatic cancer patient with liver metastasis. Locoregional options include ablation techniques i.e. microwave ablation (MWA), transarterial chemoembolization (TACE), and selective internal radiation therapy (SIRT) or transarterial radioembolization (TARE). Review of the literature demonstrates that the following characteristics are associated with survival benefits after ablation or TARE: younger age, patient with performance status of 0-1, lower tumor stage, liver-only metastasis, liver metastasis in patients with the primary tumor resected, lower tumor marker CA19-9 levels pre or post-treatment and smaller size tumor. We propose including these locoregional options for this group of patients. The following articles support this proposal:

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Thank you for considering our comments.

Sincerely,

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