

Report from the pancreatic ductal adenocarcinoma disease focused panel

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Listing of all panel members

Avinash Kambadakone (Co-Chair)

Eric Tamm (Co-Chair)

Members

Hina Arif

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Jason Fleming

Ajit Goenka

Alexander Guimaraes

Elizabeth Hecht

David Hough

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Ott Le

Lorenzo Mannelli

Michael Rosenthal

Guillermo Sangster

Zarine Shah

Erik Soloff

Parag Tolat

Zhen Jane Wang

Atif Zaheer

Marc Zins

Look back (most significant science/advances in field in past year)

The following are some of the more major advances in pancreatic cancer in 2018–2019.

Increasingly widespread use of testing for germline genetic changes, such as BRCA2. Patients with BRCA2 have a higher risk for developing cancers of the pancreas, prostate, breast, and ovaries, but are also notably more responsive to drugs such as PARP inhibitors and platinum-based therapies. Patients with a combination of mismatch repair deficiencies and microsatellite instability-high may respond to pembrolizumab. Current NCCN guidelines now

recommend routine genetic testing for germline mutations in all patients with pancreatic cancer and molecular tumor analysis for patients with metastatic disease [1, 2].

Immunotherapy has been heralded as a potential breakthrough for many cancers but had not shown till recently efficacy for pancreatic cancer. However, a small study utilizing a CD40 agonistic monoclonal antibody in combination with gemcitabine and nab-paclitaxel in patients with metastatic pancreatic cancer showed shrinkage of tumor in 20 of 24 patients [3].

FOLFIRINOX has become a first-line neoadjuvant treatment recommendation for patients with borderline resectable pancreatic cancer [4]. A recent single arm phase 2 clinical trial of 49 patients using a combination of FOLFIRINOX and losartan with tumor considered to be locally advanced per NCCN guidelines achieved R0 resection (no evidence of tumor at the resection margin on assessment with microscopy) in 61% of patients [5]. Among those in this study who underwent resection, the median progression-free survival was 21.3 months and the median overall survival was 33.0 months. This may lead to a reinterpretation of the meaning of “unresectable” disease.

While not technically a treatment advance, the development of comprehensive guidelines such as the NCCN 2019 guidelines for pancreatic cancer could lead to a more consistent management approach and help ensure compatibility with the requirements of clinical trials [4]. The NCCN 2019 comprehensive guidelines (available online) includes recommendations for imaging, and management algorithms for a variety of scenarios.

Look ahead (panel priorities/projects in the coming year)

Interdisciplinary discussion and interaction: growing our expertise

Regular webinars since the inception of our panel between the panel members and pancreatic cancer professionals from

other fields such as surgery, radiation oncology, and medical oncology, have fostered enthusiastic interdisciplinary discussions and interactions. Our goal is to conduct up to four or more webinars for the upcoming year for our panel members focused on education and research in pancreatic cancer.

We have also been very fortunate to have as our lead consultant, surgeon Jason Fleming, Chair, Gastrointestinal Oncology, Moffitt Cancer Center who has provided invaluable input. We will continue to closely work with him over the course of the next year.

Sharing knowledge with the society and the wider radiology community

Our panel members, including our lead consultant, Jason Fleming, have regularly submitted multiple workshops for the annual meeting of the SAR and will continue to do so over the next year.

Our panel has been very active in publications. In 2018, we published a guest edition on pancreatic cancer in *Abdominal Radiology*. We have just submitted two review articles this year covering updates with regard to AJCC and the NCCN guidelines and emerging imaging technologies and information on screening and surveillance for pancreatic cancer. Our objective is to contribute a cutting edge review article to *Abdominal Radiology* next year focusing on biomarkers of pancreatic cancer, and the imaging follow-up of pancreatic cancer following treatment.

We will also be working towards creating a database of relevant articles and to develop resources on our website for reference for the general pancreatic radiology community.

Developing a mentoring program

Our panel recognizes the importance of developing the next generation of pancreatic cancer imaging experts. We have just received approval from the Disease Focused Panel Oversight Committee for developing a mentoring program and are currently working on the details of such a program to be implemented this year.

References

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