Extent of invasion (Core and Non-core)

The anatomical extent of tumour invasion, assessed by a combination of macroscopic and microscopic assessment, formed the basis for pT-staging according to the Union for International Cancer Control (UICC)[1]/American Joint Committee on Cancer (AJCC)[2] TNM 7th editions. In pancreatic ductal adenocarcinoma, tumour extension beyond the pancreas is present in up to 90% of cases.[3] Following controversy as to whether infiltration of the intrapancreatic common bile duct should be regarded as extrapancreatic extension and difficulties related to the identification of infiltration into the peripancreatic soft tissue, UICC/AJCC TNM 8th editions have introduced tumour size as the exclusive criterion for stages pT1-3.[4,5] T4 tumours remain defined by invasion of the common hepatic artery, superior mesenteric artery and/or coeliac axis, which may be considered resectable in highly selected cases with favourable response to neoadjuvant treatment.[6]

Tumours that infiltrate named blood vessels or other organs, for example the adrenal gland, stomach or colon, may be resected by an extended surgical procedure.[7] The presence or absence of tumour infiltration into these additionally resected structures should be recorded, because it allows correlation with preoperative imaging and intraoperative surgical assessment. According to some, but not all studies, tumour invasion of named vessels is associated with worse patient outcome,[8-11] and the depth of invasion into the vessel wall (tunica adventitia, media, intima, or vascular lumen) is prognostically relevant.[12,13]

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