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Perioperative or only adjuvant nab-paclitaxel plus gemcitabine for resectable pancreatic cancer: Results of the NEONAX trial, a randomized phase II AIO study

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Background

Data on perioperative chemotherapy (CTX) in resectable pancreatic cancer (rPDAC) are limited. The NEONAX trial examined perioperative or adjuvant CTX with gemcitabine plus nab-paclitaxel in rPDAC (NCCN criteria).

Methods

This is a prospective, randomized phase II study against a fixed survival probability. 127 patients with rPDAC were randomized 1:1 to perioperative (2 pre- and 4 postoperative cycles, arm A, A) or adjuvant (6 cycles, arm B, B) gemcitabine/nab-paclitaxel by 22 German centers from 7/2015 to 10/2019. Primary objective was an improvement of disease free survival (DFS-R) 18mo after randomization from historical 38% to 55% in the mITT population comprising patients who fulfilled the inclusion criteria (ITT, n=59 both arms), were R0/R1 resected and started neoadjuvant (A) or adjuvant CTX (B).

Results

ORR in A was 28.9%, PD rate (RECIST 1.1) during neoadjuvant CTX was 6.7%. Resection rate (RR) was 69.5% in A and 78.0% in B, R0-RR was 87.8% in A and 67.4% in B. In the ITT population (ITT-P) DFS-R at 18mo was 28.7% in A and 19.3% in B, mDFS was 11.4mo in A and 5.9mo in B. Not all patients qualified for the mITT analysis: In A, 66.1% of the ITT-P started neoadjuvant CTX and were R0/R1 resected (mITT). In B only 42.4% of the ITT-P underwent R0/R1 resection and started adjuvant CTX (mITT, see the table). DFS-R at 18mo in mITT (primary endpoint), was 32.2% in A and 41.4% in B not reaching 55% in both arms, the mDFS was 14.1mo and 17.0mo in A and B, respectively. Table: LBA56

	ITT		mITT	
	A (n=59)	Periop. B (n=59)	Adj. A (n=39)	Periop. B (n=25)
DFS-R 18mo (%)	28.7	19.3	32.2	41.4
mDFS (mo)	11.4	5.9	14.1	17.0
Resection rate (%)	69.5	78.0	100	100
R0 (%)	87.8	67.4	92.3	76.0
Not resected (%)	30.5	22.0	0	0
PD	6.7	1.7		
Intraop. Irresect.	5.1	16.9		
Withdrawal of IC (W-IC)	10.1	3.4		
Toxicity	8.5	-		
Any neoadj. CTX (%)	91.5	-	100	-
R0/R1 resected, any adj. CTX (%)	50.8	42.4	76.9	100
R0/R1 resected, no adj. CTX (%)	15.3	32.2	23.1	0

	ITT	mITT
	A (n=59) Periop. B (n=59)	Adj. A (n=39) Periop. B (n=25) Adj.
Early relapse	6.7	16.9
Delayed recovery	3.4	3.4
Death	1.7	5.1
W-IC	0	3.4
Toxicity	3.4	0
Lost to follow-up	0	3.4

Conclusions

Perioperative CTX did not reach a DFS-R at 18mo of 55% in the mITT population. Neoadjuvant CTX showed high R0-RR and long DFS in the ITT-P and could be applied to more patients than adjuvant CTX. Neoadjuvant CTX is proposed to be a new standard for trials also in rPDAC.

Clinical trial identification

AIO-PAK-0313 (NEONAX) EudraCT 2013-005559-34; NCT02047513.

Legal entity responsible for the study

AIO-Studien-gGmbH, Berlin, Germany.

Funding

Bristol Myers Squibb GmbH & Co. KGaA.

Disclosure

T. Seufferlein: Financial Interests, Personal, Advisory Board: Amgen; Financial Interests, Personal, Advisory Board: AstraZeneca; Financial Interests, Personal, Advisory Board: BMS; Financial Interests, Personal, Advisory Board: Celgene; Financial Interests, Personal, Advisory Board: MSD; Financial Interests, Personal, Advisory Board: Roche; Financial Interests, Personal, Advisory Board: Servier; Financial Interests, Personal, Advisory Board: Lilly; Financial Interests, Personal, Advisory Board: Merck Serono; Financial Interests, Personal, Advisory Board: Sanofi-Aventis; Financial Interests, Personal, Advisory Board: Celgene; Financial Interests, Personal, Advisory Board: Bayer; Financial Interests, Personal, Invited Speaker: Amgen; Financial Interests, Personal, Invited Speaker: AstraZeneca; Financial Interests, Personal, Invited Speaker: BMS; Financial Interests, Personal, Invited Speaker: Celgene; Financial Interests, Personal, Invited Speaker: MSD; Financial Interests, Personal, Invited Speaker: Roche; Financial Interests, Personal, Invited Speaker: Servier; Financial Interests, Personal, Invited Speaker: Merck Serono; Financial Interests, Personal, Invited Speaker: Sanofi-Aventis; Financial Interests, Personal, Research Grant: Celgene; Financial Interests, Personal, Research Grant: Sanofi-Aventis. H. Algül: Financial Interests, Personal, Advisory Board: AstraZeneca; Financial Interests, Personal, Advisory Board: Roche; Financial Interests, Institutional, Research Grant: Chugai; Financial Interests, Personal, Invited Speaker: MSD. V. Kunzmann: Financial Interests, Personal, Advisory Board: AstraZeneca; Financial Interests, Personal, Advisory Board: MSD; Financial Interests, Personal, Advisory Board: BMS; Financial Interests, Personal, Invited Speaker: BMS; Financial Interests, Personal, Invited Speaker: MSD; Financial Interests, Institutional, Research Grant: BMS. A. Tannapfel: Financial Interests, Personal, Advisory Board: Falk Foundation; Financial Interests, Personal, Advisory Board: Merck; Financial Interests, Personal, Advisory Board: Amgen; Financial Interests, Personal, Advisory Board: Pfizer; Financial Interests, Personal, Advisory Board: Roche; Financial Interests, Personal, Advisory Board: BMS. A. Reinacher-Schick: Financial Interests, Personal, Advisory Board: Amgen; Financial Interests, Personal, Advisory Board: AstraZeneca; Financial Interests, Personal, Advisory Board: BMS; Financial Interests, Personal, Advisory Board: Merck Serono; Financial Interests, Personal, Advisory Board: Celgene; Financial Interests, Personal, Advisory Board: MSD; Financial Interests, Personal, Advisory Board: Pierre Fabre; Financial Interests, Personal, Advisory Board: Pfizer; Financial Interests, Personal, Advisory Board: Roche; Financial Interests, Personal, Advisory Board: Servier; Financial Interests, Personal, Invited Speaker: Amgen; Financial Interests, Personal, Invited Speaker: AstraZeneca; Financial Interests, Personal, Invited Speaker: BMS; Financial Interests, Personal, Invited Speaker: Celgene; Financial Interests, Personal, Invited Speaker: Lilly; Financial Interests, Personal, Invited Speaker: Merck Serono; Financial Interests, Personal, Invited Speaker: MSD; Financial Interests, Personal, Invited Speaker: Pfizer; Financial Interests, Personal, Invited Speaker: Roche; Financial Interests, Personal, Invited Speaker: Sanofi-Aventis; Financial Interests, Personal, Invited Speaker: Servier; Financial Interests, Institutional, Research Grant: Roche; Financial Interests, Institutional, Research Grant: Ipsen; Financial Interests, Institutional, Research Grant: Amgen; Financial Interests, Institutional, Research Grant: AstraZeneca; Financial Interests, Institutional, Research Grant: Ipsen; Financial Interests, Institutional, Research Grant: Lilly; Financial Interests, Institutional, Research Grant: Servier; Financial Interests, Institutional, Research Grant: RafaelPharmaceutics. T.J. Ettrich: Financial Interests, Personal, Advisory Board: AstraZeneca; Financial Interests, Personal, Advisory Board: Roche; Financial Interests, Personal, Advisory Board: Bayer; Financial Interests, Personal, Advisory Board: Amgen; Financial Interests, Personal, Advisory Board: MSD; Financial Interests, Personal, Invited Speaker: MSD; Financial Interests, Personal, Advisory Board: Merck; Financial Interests, Personal, Advisory Board: Ipsen; Financial Interests, Personal, Invited Speaker: Ipsen; Financial Interests, Personal, Advisory Board: Sanofi Aventis; Financial Interests, Personal, Invited Speaker: Eisai; Financial Interests, Personal, Advisory Board: Pierre-Fabre Pharma; Financial

Interests, Personal, Advisory Board: Incyte; Financial Interests, Personal, Advisory Board: Lilly; Financial Interests, Personal, Advisory Board: Bristol Myers Squibb; Financial Interests, Institutional, Research Grant: Servier; Financial Interests, Institutional, Research Grant: Sanofi Aventis; Financial Interests, Institutional, Research Grant: Celgene. All other authors have declared no conflicts of interest.

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