■ ♣Sat-387 ■

Inflammation-based scores in patients with metastatic pancreatic cancer treated by nab-P/Gemcitabine

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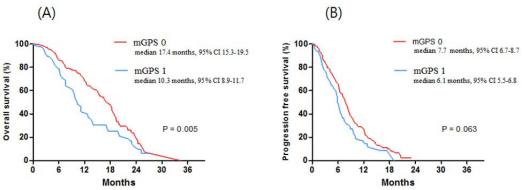
Background/Aims: AG is standard first-line Chemotherapy for patients with mPC. However, prognostic factors for patients with mPC treated with AG are largely unknown. This retrospective analysis was performed to identify the prognostic factors including inflammation-based prognostic scores in mPC patients treated with AG as first-line treatment. **Methods:** A total of 203 patients with histologically confirmed recurrent (n=55) or metastatic (n=148) pancreatic cancer who were treated with first-line AG in Asan Medical Center, Seoul, Korea, between January 2013 and January 2018 were included in this analysis. As inflammation-based scores, baseline Neutrophil-lymphocyte ratio (NLR), Platelet-lymphocyte ratio (PLR) and modified Glasgow prognostic score (mGPS) were tested. **Results:** Median age was 62 years (range 32-82 years) and 116 patients(57%) were male. With median follow-up duration of 21.5 months (range 0.5-34.3 months), median progression-free survival (PFS) and overall survival (OS) in overall patients population were 7.1 (95% CI 6.20-7.99) and 15.1 (95% CI 12.59-17.61) months, respectively. In the multivariate analysis, PFS were significantly associated with High ECOG status (ECOG≥1 vs.0: HR 2.09, *p*=0.048), Liver metastasis (HR 1.43, *p*=0.032), Distant lymph node metastasis (HR 1.48, *p*=0.019), elevated CA19-9 (HR 1.07, *p*=0.020). In multivariate analysis for OS, elevated CA19-9 (HR 1.75, *p*=0.008), Liver metastasis (HR 1.76, *p*=0.001), distant lymph node metastasis (HR 1.41, *p*=0.044), high mGPS (mGPS≥1 vs.0: HR 1.64, *p*=0.005) were independent prognostic factors. NLR and PLR were not significantly associated with PFS and OS. **Conclusions:** Among the inflammation based prognostic scores, mGPS might be the reliable prognostic indicator that could lead to stratification of survival outcomes in patients with recurrent or metastatic pancreatic cancer who received AG as the first-line chemotherapy.

Characteristics		No.(%)(n=203)
Age, median(range)		62 (36 – 82)
Age	≤65	126 (62.1%)
	>65	77 (37.9%)
Sex	Male	116 (57.1%)
Disease status at presentation	Initially metastatic	148 (72.9%)
	Recurrent	55 (27.1%)
Eastern Cooperative Oncology Group (ECOG)	0 or 1	195 (96.1%)
	≥2	8 (3.9%)
Number of metastatic sites	0 or 1	122 (60.1%)
	≥2	81 (39.9%)
Site of metastases	Liver	113 (55.7%)
	Peritoneum	70 (34.5%)
	Lung	38 (18.7%)
	Bone	9 (4.4%)
	Lymph node	73 (36.0%)
Modified glasgow prognostic score	0	137 (67.5%)
	1	19 (9.3%)
	2	47 (23.2%)
Neutrophil to lymphocyte ratio	<median (2.26)	106 (52.2%)
	≥median (2.26)	97 (47.8%)
Platelet to lymphocyte ratio	< median (140.1)	97 (47.8%)
	≥ median (140.1)	106 (52.2%)
Baseline CA 19-9 level WNL	WNL	55 (27.1%)
	>WNL	148 (72.9%)
Primary pancreatic tumor site	Head	83 (40.9%)
	Body	36 (17.7%)
	Tail	51 (25.1%)
	Multi-centric	33 (16.3%)



■ Sat-388 ■

Prognostic impact of TTF-1 in non-squamous non-small-cell lung cancer

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Background/Aims: Thyroid transcription factor-1 (TTF-1) is overexpressed in up to 90% of primary lung adenocarcinoma while negative for almost all squamous cell carcinomas. TTF-1 expression has been investigated as a prognostic factor in non-small-cell lung cancer (NSCLC) with conflicting results. **Methods:** We conducted this meta-analysis to gain a better insight into the prognostic role of TTF-1 in patients only with non-squamous (non-SQ) NSCLC. A systematic computerized search of the electronic databases including PubMed, EMBASE, Google scholar, and Cochrane Library (up to March 2018) was performed. **Results:** From 18 studies, 3,505 patients were included in the combined analysis of hazard ratios (HRs) with 95% confidence intervals (CIs) for overall survival. Compared with patients with non-SQ NSCLC showing negative TTF-1 expression, those with tumors harboring TTF-1 overexpression showed significantly better survival (HR=0.51, 95% CI: 0.45-0.57, *p*<0.00001). Subgroup analyses revealed that TTF-1 expression significantly correlated with a better prognosis in stage I (HR=0.65, 95% CI: 0.48-0.87, *p*=0.004) as well as stage III-IV non-SQ NSCLC (HR=0.42, 95% CI: 0.36-0.50, *p*<0.00001). **Conclusions:** In conclusion, our meta-analysis demonstrates that TTF-1 overexpression is a favorable prognostic factor in patients with non-SQ NSCLC. The subgroup analysis indicates that TTF-1 is a good prognostic marker for survival not only in early-stage but also in advanced non-SQ NSCLC.

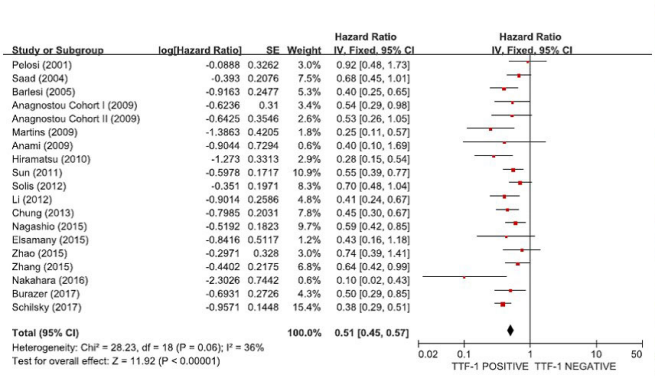

Table 1. Summary of the 18 included studies

First author (year) [ref]	County	Study design	No. of pts	Inclusion period	Histology	Stage	IHC criteria for TTF-1 (+): nuclear staining	No. of pts with TTF-1 (+) (%)	HR for OS (95% CI)	Adjusted variables
Pelosi (2001) [18]	Italy	Retro	97	1987-1995	ADC	I	More intense to the internal control	70 (72.2%)	0.92 (0.48-1.73) p = 0.654	Univariate
Saad (2004) [19]	USA	Retro	50	1996-2000	ADC	I	Percentage x intensity ≥ 50 positive tumor cells	30 (60%)	0.68 (0.45-1.01) p = 0.0183	Univariate
Barlesi (2005) [20]	France	Pro	106	2002-2004	ADC	III-IV	Sole nuclear staining	70 (66%)	0.40 (0.25-0.65) p = 0.0002	Univariate
Anagnostou, Cohort I (2009) [21]	USA	Pro	89 (43)	1995-2003	ADC	I-IV (I)	Nuclear AQUA score > 8.8	56 (62.9%) (30)	0.54 (0.29-0.98) p = 0.041 0.39 (0.14-1.11) p = 0.079	Age, sex, stage
Anagnostou Cohort II (2009) [21]	USA	Pro	98 (87)	1995-2003	ADC	I-IV (I)	Nuclear AQUA score > 8.8	72 (73.5%) (65)	0.53 (0.26-1.05) 0.48 (0.24-0.98) p = 0.043	Age, sex, stage
Martins (2009) [22]	Brazil	Pro	51	1997-1999	ADC	IIIB-IV	> 40% of tumor cells	20 (39.2%)	0.25 (0.11-0.57) p = 0.001	PS, MMP-9
Anami (2009) [23]	Japan	Retro	139	1993-2000	Small ADC (< 2 cm)	I-III	≥ 50% of tumor cells	17 (12.2%)	0.405 (0.10-1.69) p = 0.215	Univariate
Hiramatsu (2010) [24]	Japan	Pro	193	1998-2001	ADC	I-IV	Stronger than xenograft staining	154 (79.8%)	0.28 (0.15-0.54) p < 0.001	Sex, stage, pAkt, pFKHR
Sun (2011) [25]	Korea	Retro	284	2007-2010	Non-SQCC	IIIB-IV	Percentage (0-100%) x intensity (0-2) ≥ 10	194 (68.3%)	0.35 (0.24-0.77) p = 0.0003	Age, sex, smoking, PS, histology
Solis (2012) [26]	USA	Retro	135	1997-2005	ADC with non-solid	I-IV	Percentage (0-100%) x intensity (0-4) > 160	59 (43.7%)	0.70 (0.48-1.04) p = 0.0749	Univariate
Li (2012) [27]	China	Pro	175	2000-2006	ADC	I-IV	≥ 30% of tumor cells with weak staining intensity	57 (32.6%)	0.41 (0.24-0.67) p < 0.001	Univariate
Chung (2013) [28]	China	Pro	496	2004-2009	ADC	IIIB-IV	Any definite nuclear staining	443 (89.3%)	0.45 (0.30-0.67)	Age, PS, stage, metastases, EGFR mutation, TKI treatment
Nagashio (2015) [29]	Japan	Retro	198	2003-2005	ADC	I-III	Moderate intensity in ≥ 10% of tumor cells	161 (81.3%)	0.60 (0.42-0.85) p = 0.0044	Univariate
Elsamany (2015) [30]	Egypt	Retro	120	2011-2012	Non-SQCC	IIIB-IV	NA	100 (83.3%)	0.43 (0.16-1.18) p = 0.10	Sex, chemotherapy, EGFR mutations
Zhao (2015) [31]	Taiwan	Retro	200	2008-2013	ADC	I-IV	≥ 10% of tumor cells	163 (81.5%)	0.74 (0.39-1.41) 0.51 (0.31-0.95) p = 0.032	EGFR mutations
Zhang (2015) [32]	China	Pro	451	2008-2013	ADC	I-III	Any positive nuclear staining	332 (73.6%)	0.64 (0.42-0.99) P = 0.043	Sex, smoking, subtypes, stage, LN status, EGFR mutation
Nakahara (2016) [33]	Japan	Retro	26	2008-2013	Non-SQCC EGFR WT	IV	Evident nuclear staining	20 (76.9%)	0.10 (0.02-0.43) p = 0.002	Univariate
Plitz Burazer (2017) [34]	Croatia	Retro	118	2013-2014	ADC	I-IV	Homogeneous nuclear staining in any cell	96 (81.3%)	0.50 (0.29-0.85) p = 0.013	Univariate
Schilsky (2017) [35]	USA	Retro	479	2009-2011	ADC	IV	Any nuclear reactivity	383 (79.9%)	0.38 (0.29-0.51) p < 0.0001	Age, sex, smoking, PS, histology subgroups, treatment

NSCLC, non-small-cell lung cancer; Pro, prospective; Retro, retrospective; ADC, adenocarcinoma, SQCC, squamous cell carcinoma; AQUA, automated quantitative analysis; MMP-9, matrix metalloproteinase-9; pAkt, phosphorylated Akt; pFKHR, phosphorylated forkhead transcription factor; EGFR, epidermal growth factor receptor; WT, wild type; PS, performance status; HR, hazard ratio; CI, confidence interval; OS, overall survival; IHC, immunohistochemistry; LN, lymph node; NA, not available;