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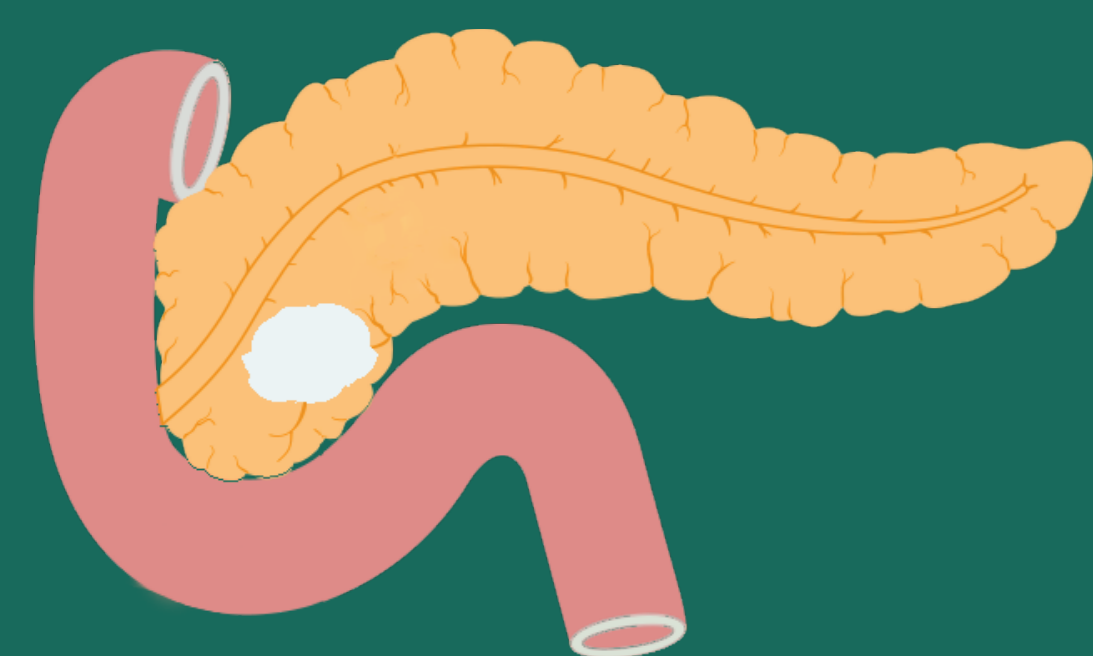
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# Initial treatment and survival in a national unselected Danish cohort of 4163 patients with pancreatic cancer



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## Background

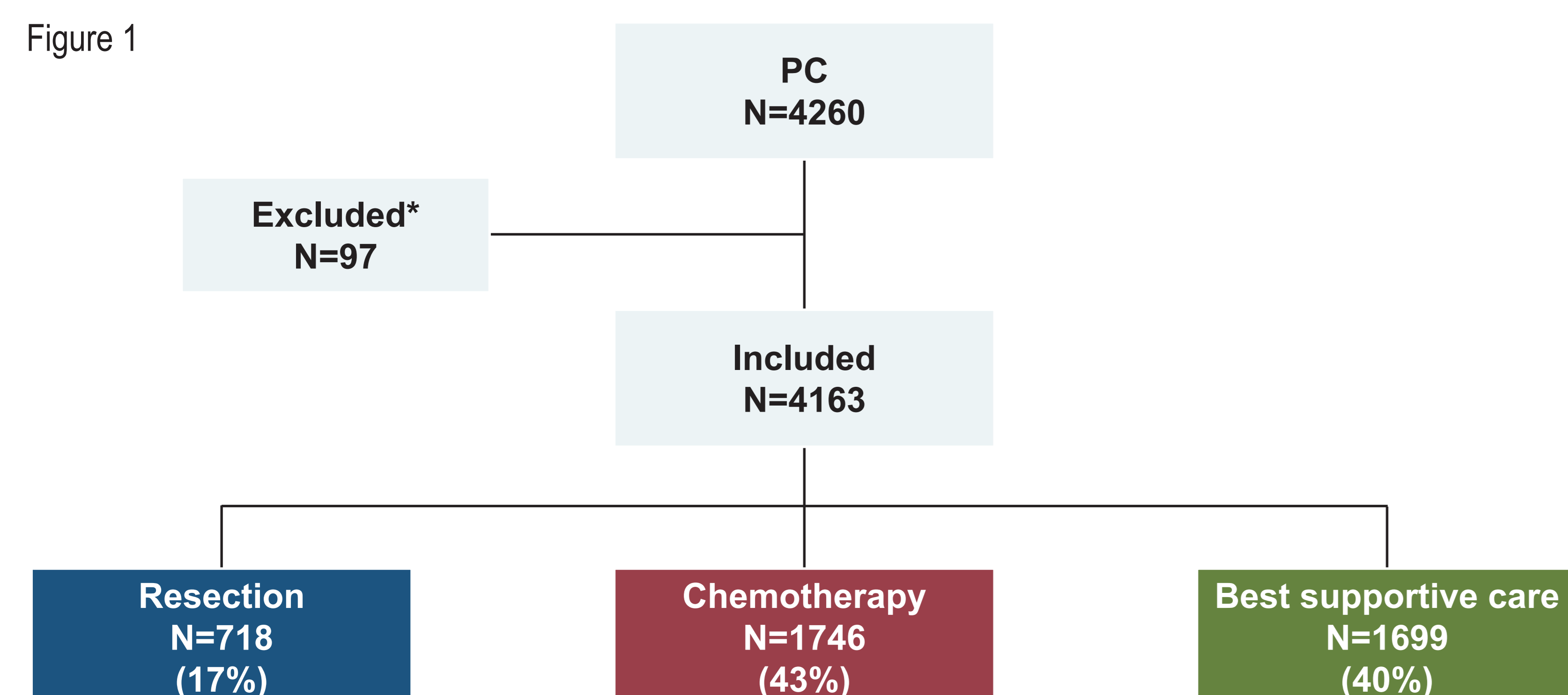
Nationwide data on the efficacy of primary treatment on **overall survival (OS)** in an entirely unselected population of patients with pancreatic cancer (PC) have not been reported before.

## Aim

To investigate the effect of initial treatment on OS in all patients with PC in Denmark diagnosed in a recent five-year period.

## Material and Methods

- From 1 May 2011 to 30 April 2016, 4260 patients were identified in the national Danish Pancreatic Cancer Database (DPCD), Figure 1.
- Patients' characteristics are presented in Table 1.
- OS was analysed from the date of the initial treatment, either resection or chemotherapy or from the date of diagnosis in case of best supportive care (BSC). Last clinical follow-up was 10 September 2017.
- Treatment and clinical outcome are presented in Figure 2, Table 2 and Figure 3.



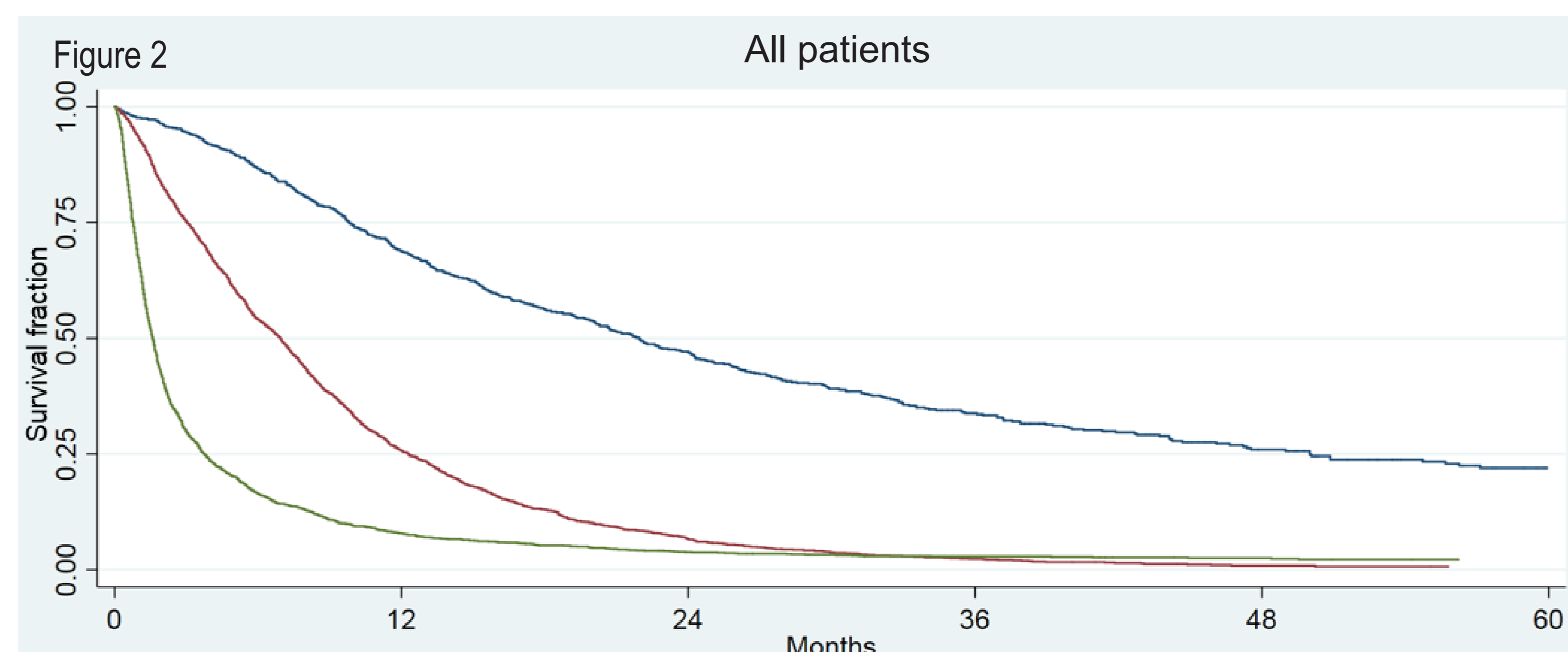
\*Excluded: Preoperative/neoadjuvant chemotherapy followed by resection: 56, other malignancies: 26, incorrect registration of treatment: 13, lost to follow-up: 2.

## Results

Table 1

	Resection (n=718)	Chemotherapy (n=1746)	BSC (n=1699)	All (n=4163)
<b>Age; years</b> (median and range)	67 (13-86)	68 (34-90)	74 (24-100)	70 (13-100)
<b>Gender</b>				
Female	338 (47%)	813 (47%)	843 (50%)	1994 (48%)
Male	380 (53%)	933 (53%)	856 (50%)	2164 (52%)
<b>Charlson comorbidity index</b>				
0-2	561 (78%)	1301 (75%)	1024 (60%)	2886 (69%)
>3	157 (22%)	445 (25%)	675 (40%)	1277 (31%)
<b>M-status*</b>				
0	718 (100%)	905 (52%)	847 (50%)	1752 (51%)
1	0 (0%)	841 (48%)	852 (50%)	1693 (49%)
<b>Diagnosis</b>				
Pathology	718 (100%)	1642 (94%)	1288 (76%)	3648 (88%)
Clinical	0 (0%)	104 (6%)	411 (24%)	515 (12%)

Abbreviation: BSC: Best supportive care.  
\* M-status; M1: patients coded with metastatic disease in DPCD within 60 days from diagnosis.



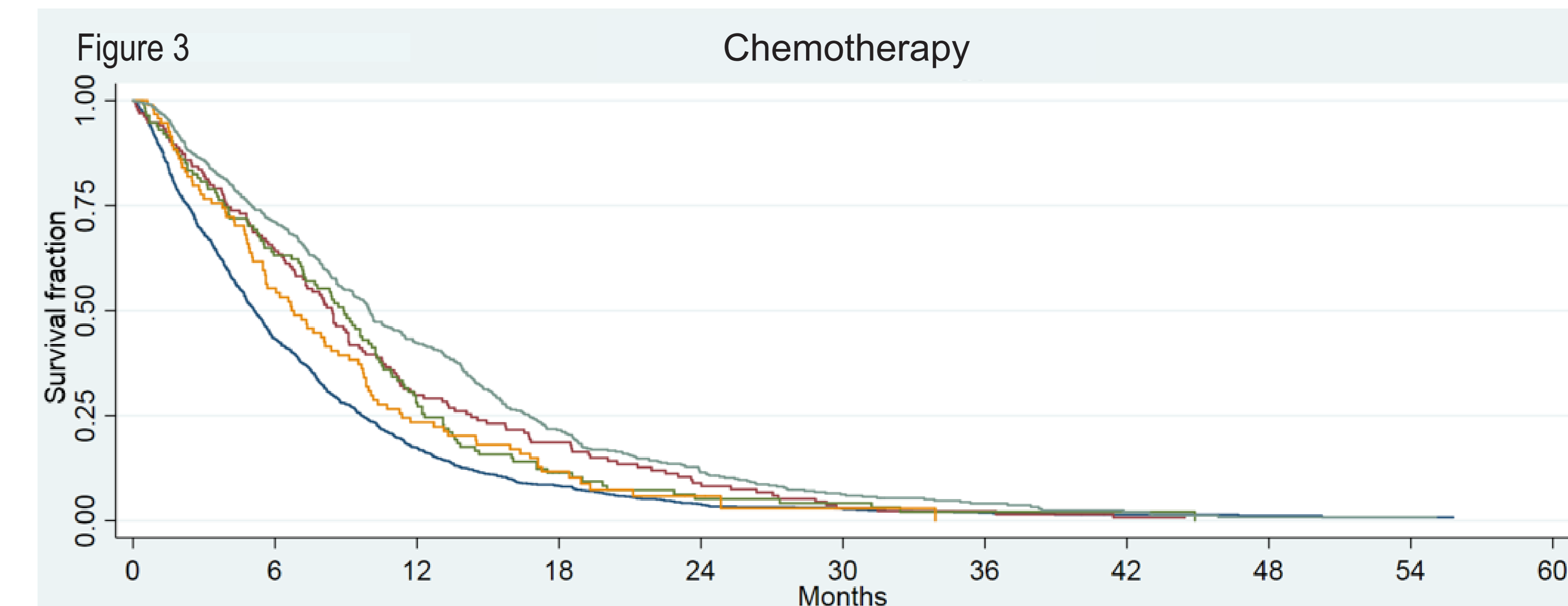
Treatment	Patients No.	Median overall survival, months (95% confidence interval)
Resection	718	21.9 (20.0-24.2)
Chemotherapy	1746	6.9 (6.4-7.3)
BSC*	1697	1.6 (1.5-1.7)

Abbreviation: BSC: Best supportive care.  
\*Two patients were excluded from the survival analyses due to diagnosis date = date of death.

Table 2 Resection

Lymph node metastases*	Patients No.	Median overall survival, months (95% confidence interval)
N-	215	36.9 (28.6-44.7)
N+	465	17.5 (15.4-20.1)

Abbreviations: N-: Without lymph node metastases, N+: With lymph node metastases.  
\*38 patients without histopathological reports on lymph node status were excluded.



Regimen*	Patients No.	Median overall survival, months (95% confidence interval)
Gem monotherapy	938	5.1 (4.8-5.6)
FOLFIRINOX	435	10.0 (9.2-11.0)
GemCap	134	8.4 (6.9-9.1)
GemS1	114	8.9 (7.2-10.3)
GemPac	94	6.7 (5.5-8.7)

Abbreviations: Gem: gemcitabine, FOLFIRINOX: 5-fluorouracil, leucovorin, irinotecan and oxaliplatin, Cap: capecitabine, S1: tegafur/gimeracil/oteracil, Pac: nab-paclitaxel.  
\*31 patients with other regimens as initial treatment than those listed were excluded.

## Conclusion

- Resected lymph node negative patients had the longest survival.
- Patients initially treated with chemotherapy (mono or combination) had slightly shorter median OS than found in randomised controlled trials.
- The outcome of gemcitabine monotherapy was poor, possibly reflecting less treatment effect and selection of less fit patients.
- To reduce the group of BSC patients, new diagnostic methods are required.

