



Patienter med ubehandlet pancreascancer, hvor mange og hvorfor?

ØVRE GASTROINTESTINAL CANCER – SEMINAR 2012

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Kræftens Bekæmpelse

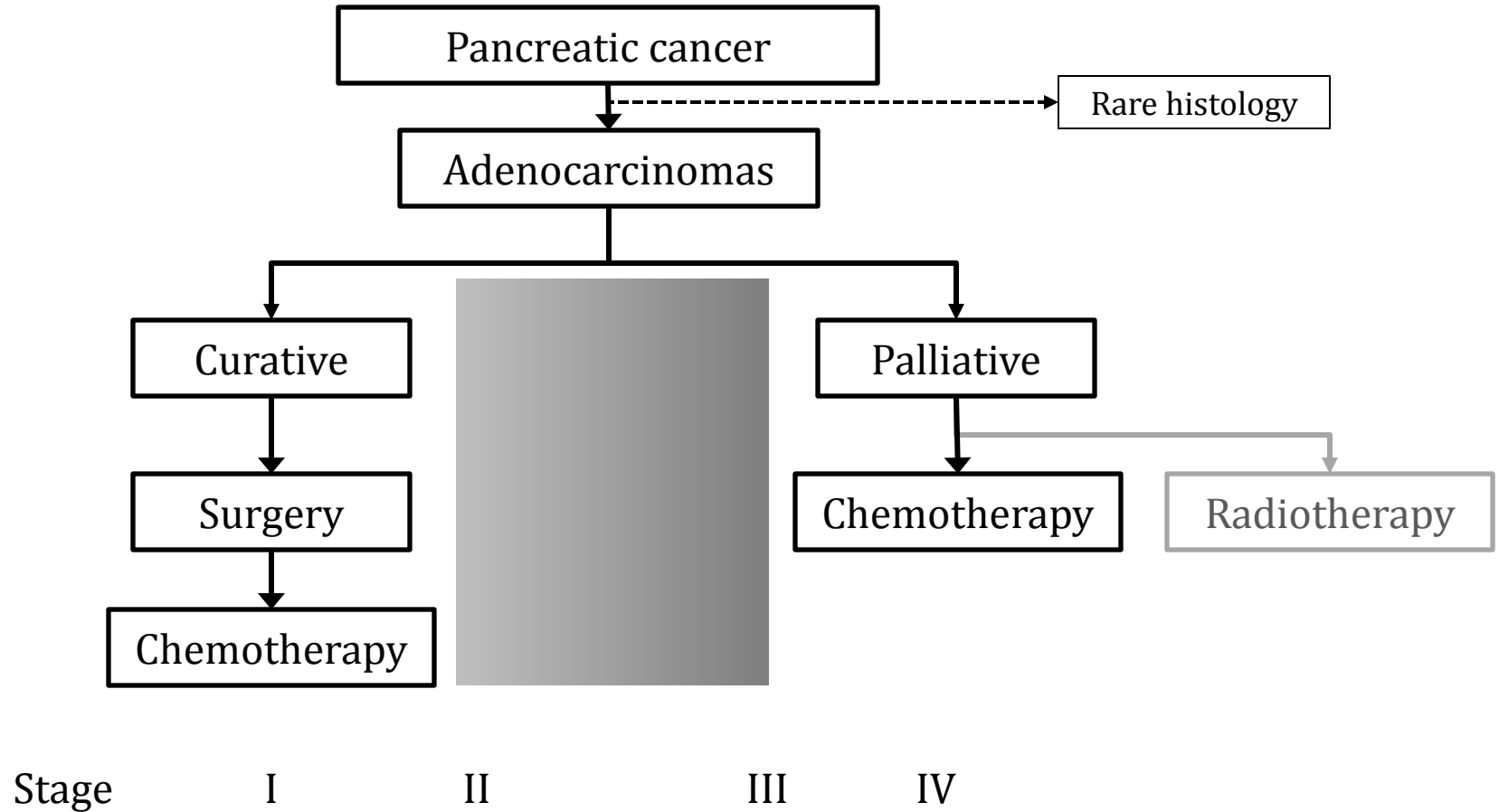


Program

- Short overview of therapy
- Microscopically non-verified Pancreatic Cancer cases (MNV)
 - How many & who are they?
- Untreated patients with Pancreatic Adenocarcinomas
 - How many & who are they?
- How to proceed? (debate)
 - How to improve the outcome of these patients?
 - Role of DPCG?

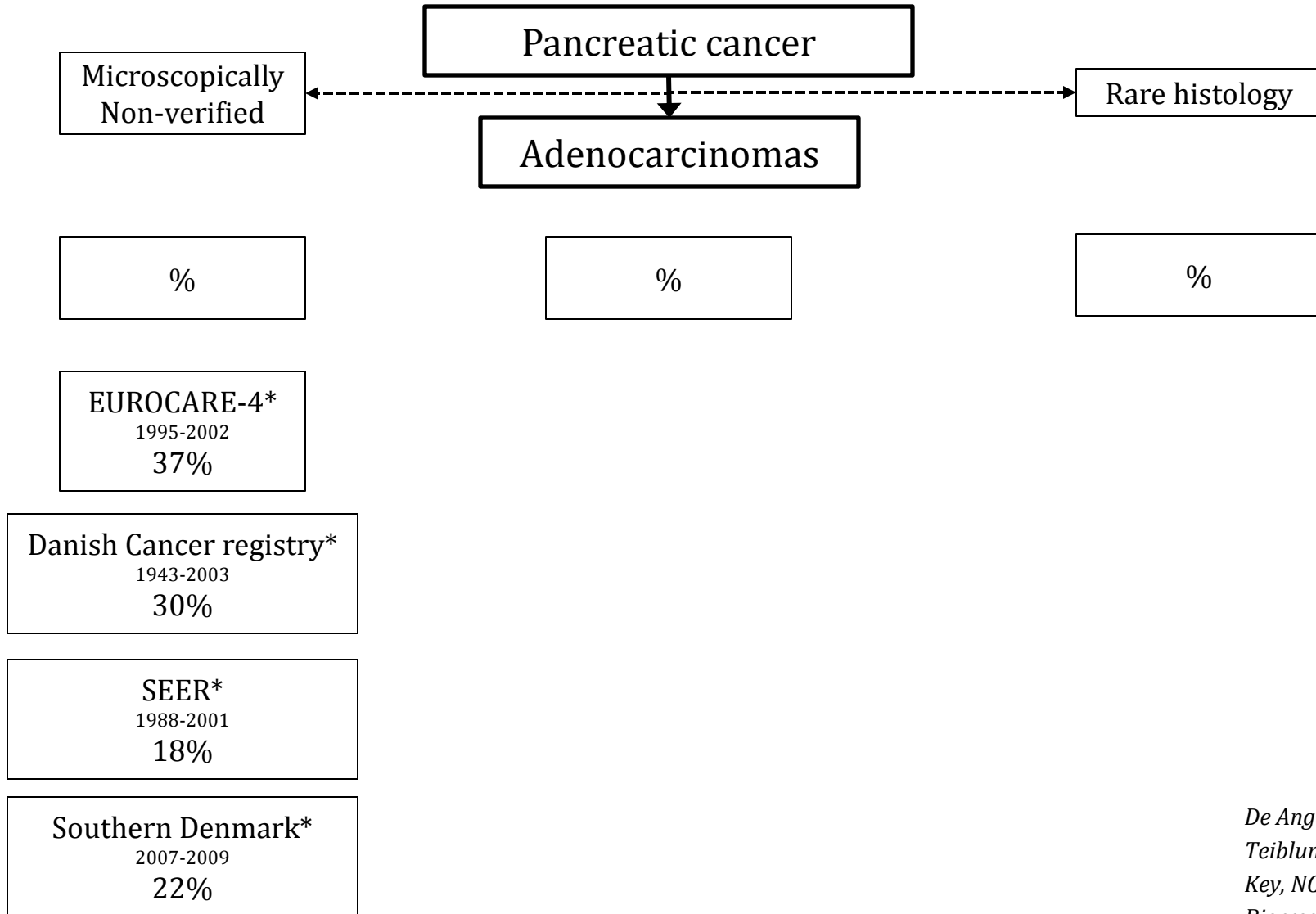
Pancreatic cancer

Therapy



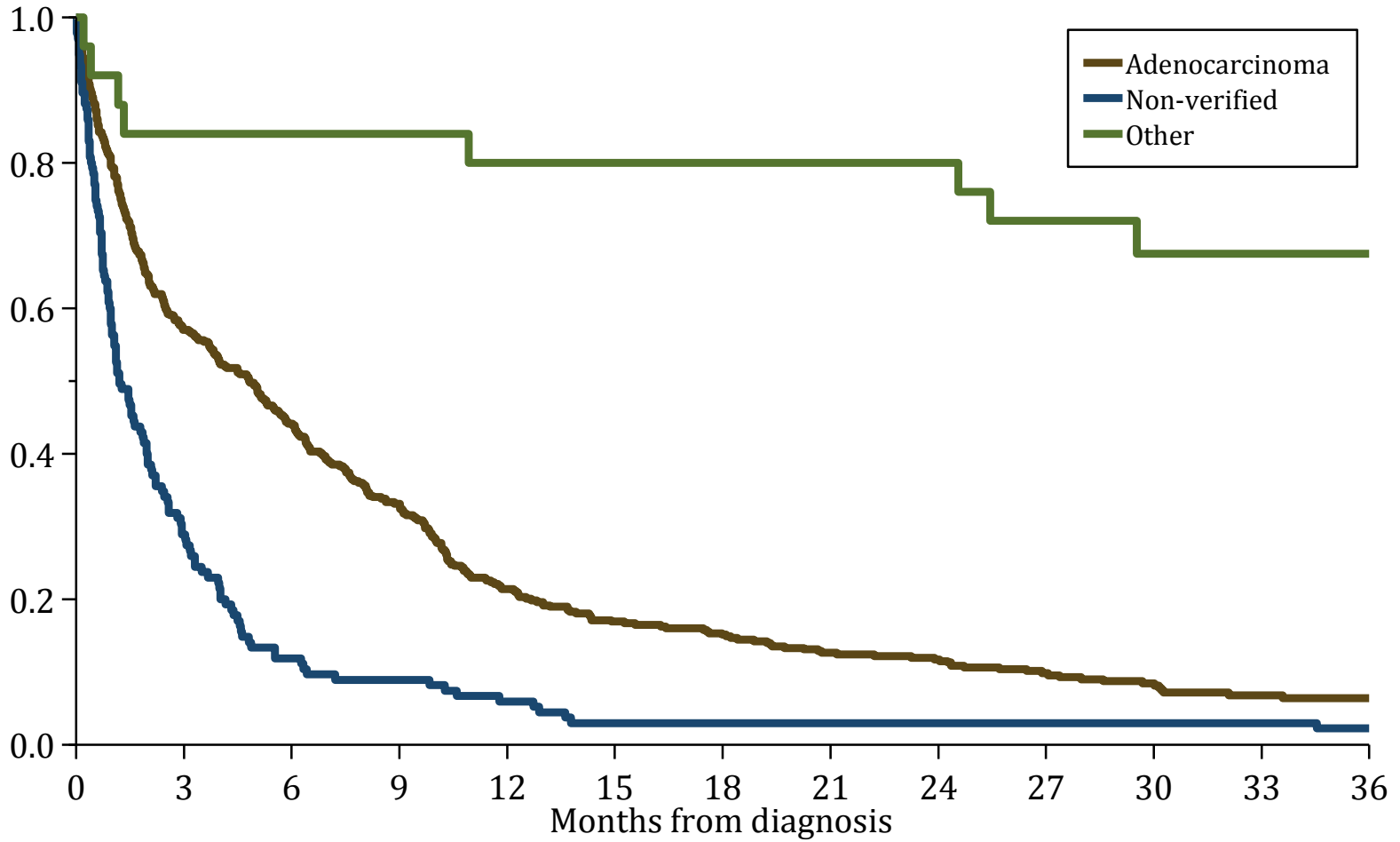
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Division



*De Angelis, EJC 2009
Teiblum, Pancreas 2009
Key, NCI SEER monography
Bjerregaard, EJC 2009*

Microscopically non-verified (MNV) Survival



Number at risk

	0	3	6	9	12	15	18	21	24	27	30	33	36
Adenocarcinoma	444	253	196	147	95	75	67	56	52	36	27	19	15
Non-verified	135	39	16	12	8	4	4	4	4	4	4	4	3
Other	25	21	21	21	20	20	20	20	20	17	13	10	10

Microscopically non-verified

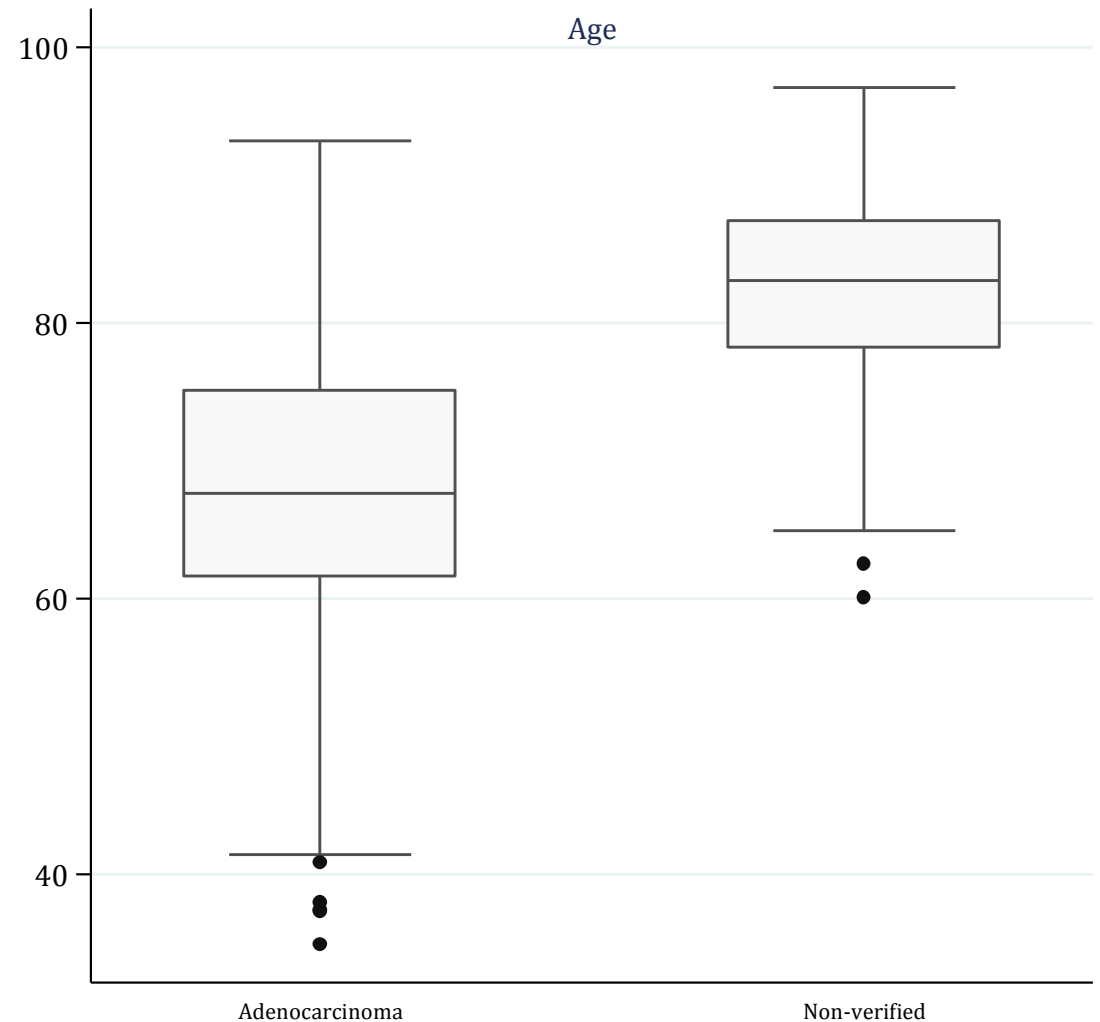
- Age

- Adenocarcinoma

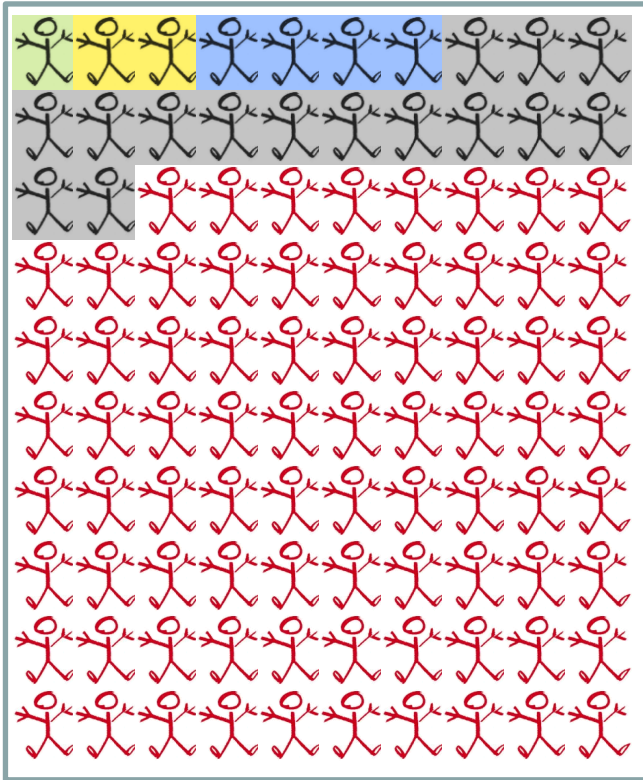
- Median 67 years
 - IQR 61-75





- Non-verified

- Median 83 years
 - IQR 78-87



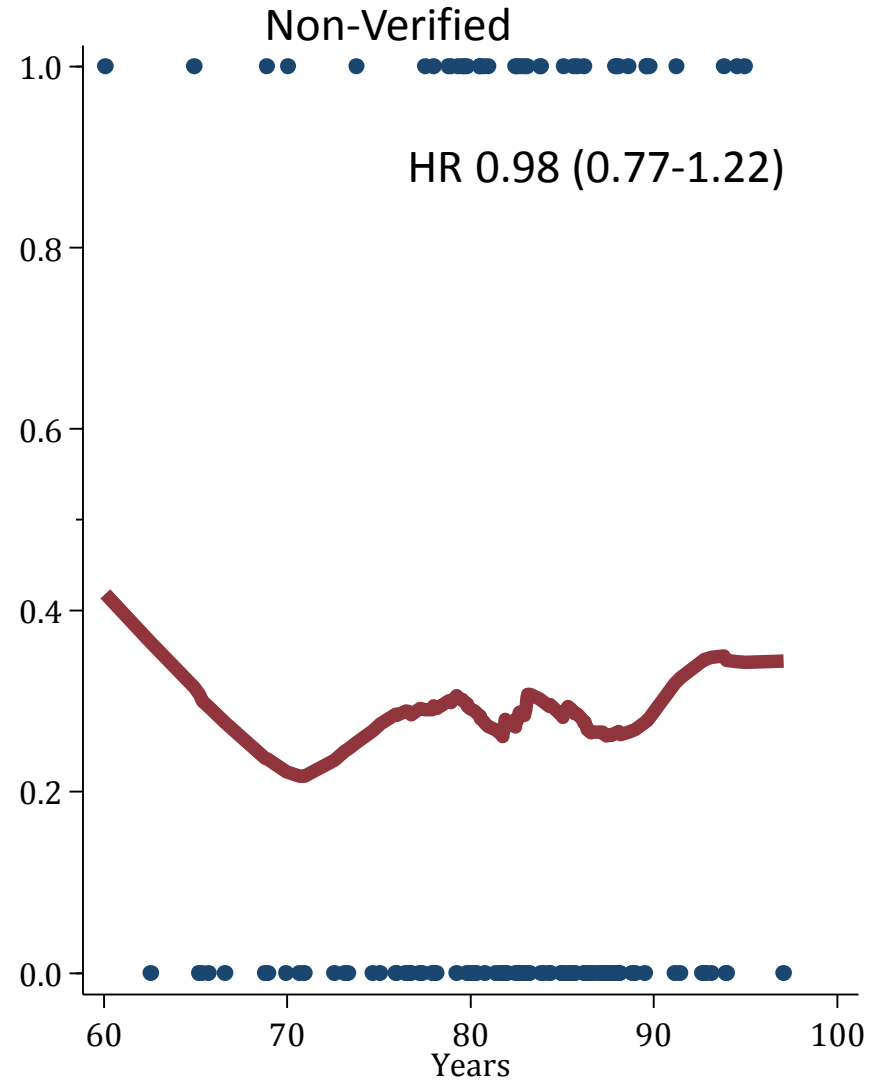
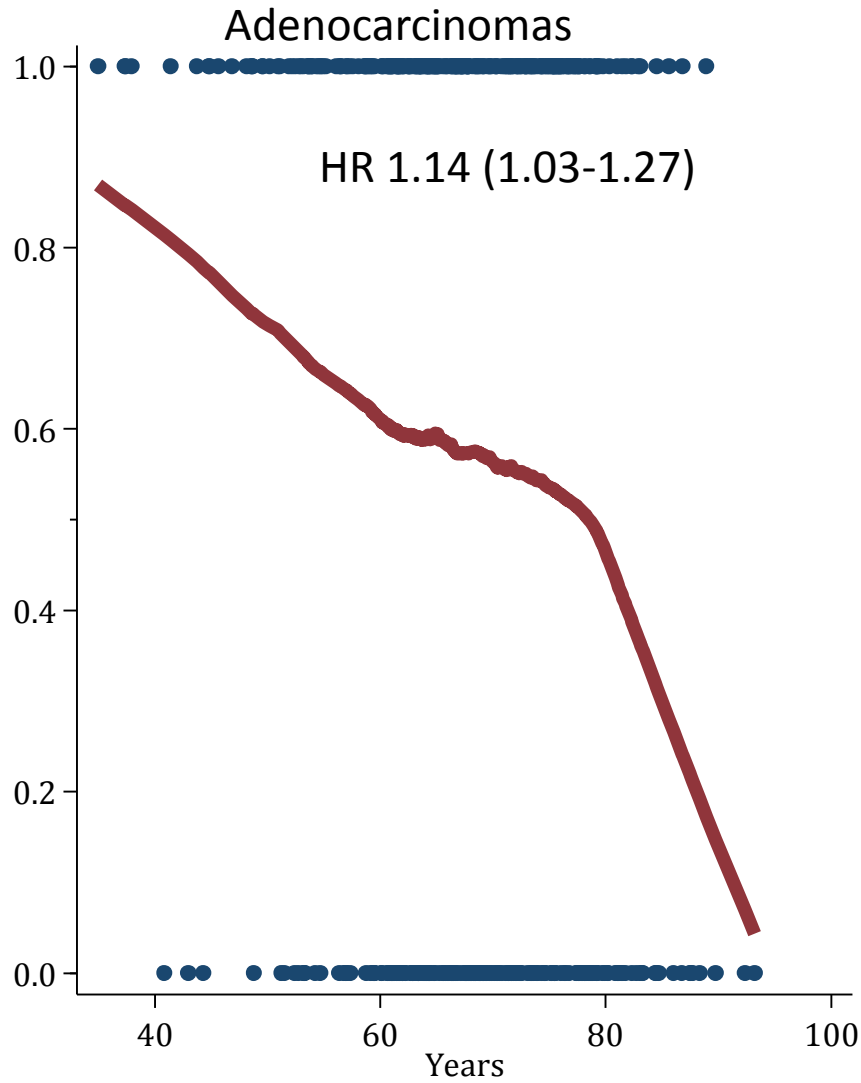
Distribution of NMV in age quartiles



		in Q		of Total
Q1	34-63 yrs	1%		0.3%
Q2	63-70 yrs	7%		2%
Q3	70-79 yrs	16%		4%
Q4	80+ yrs	64%		16%

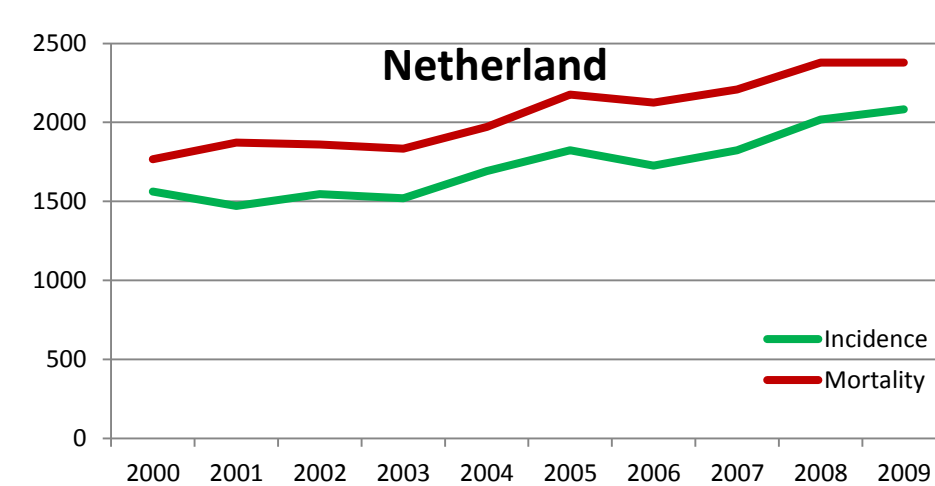
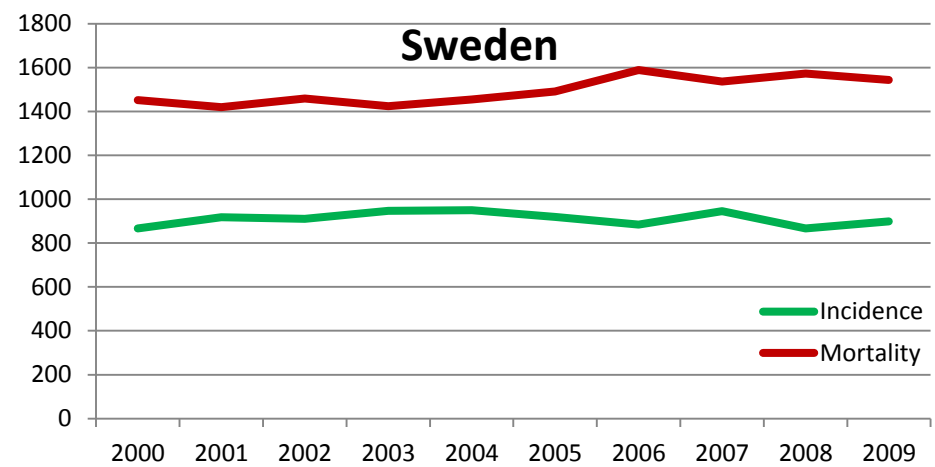
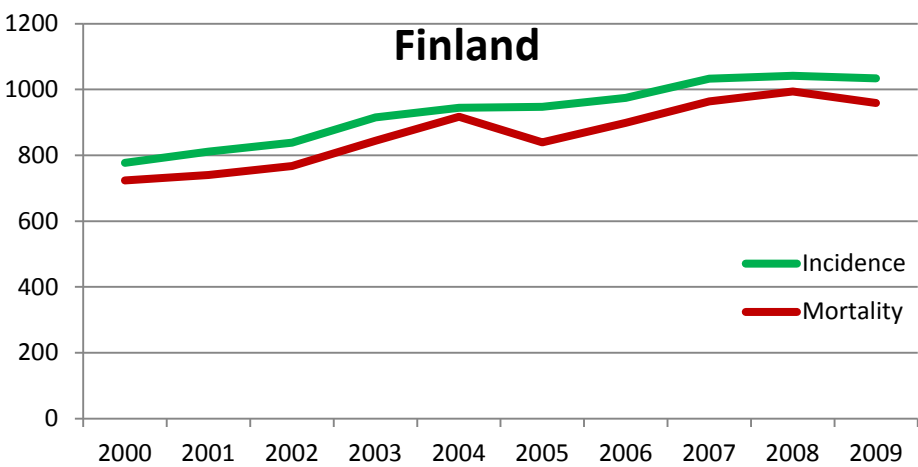
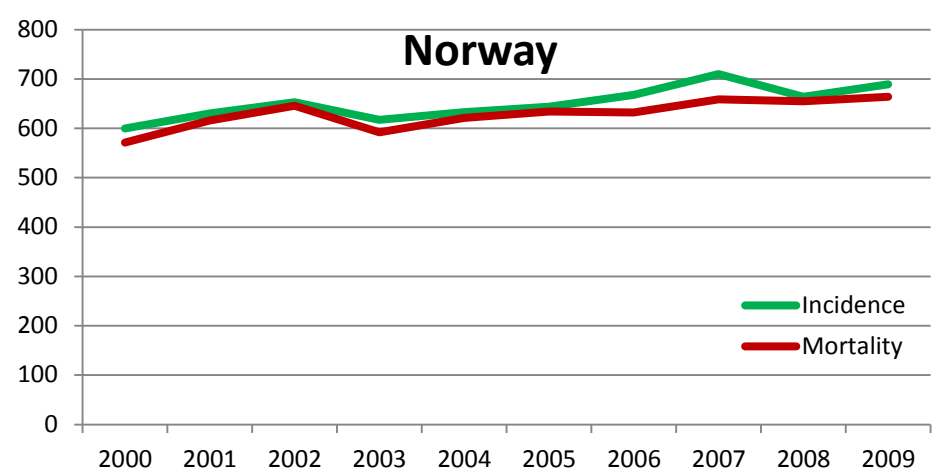
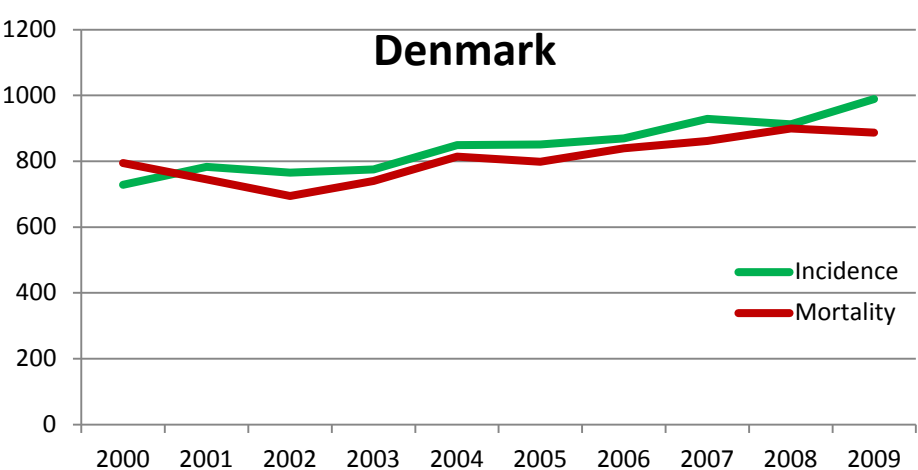
Prognostic value of age

- Probability of being alive after 3 months

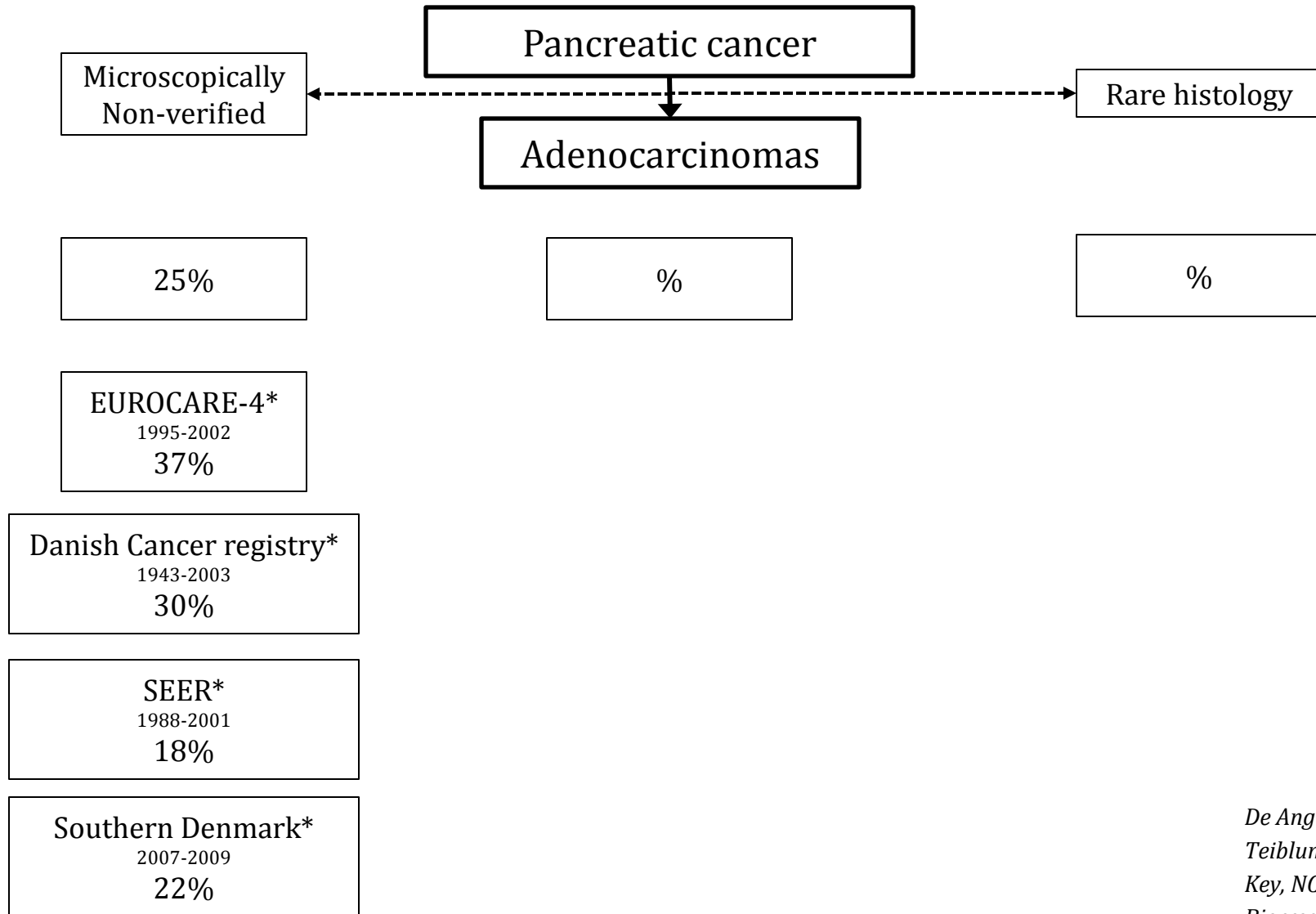


Comparisons

- Differences in registration due to MNV cases?
 - Crude number of cases from cancer registries
 - Denmark
 - Norway
 - Finland
 - Sweden
 - Netherlands



Pancreatic cancer



*De Angelis, EJC 2009
Teiblum, Pancreas 2009
Key, NCI SEER monography
Bjerregaard, EJC 2009*

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Conclusion

- Microscopically non-verified cases
 - Dismal prognosis
 - Not a “Danish” problem –
 - A Pancreatic Cancer problem
 - Creates difficulties in comparing national registries
 - Regional?
 - Proportion varies between registries

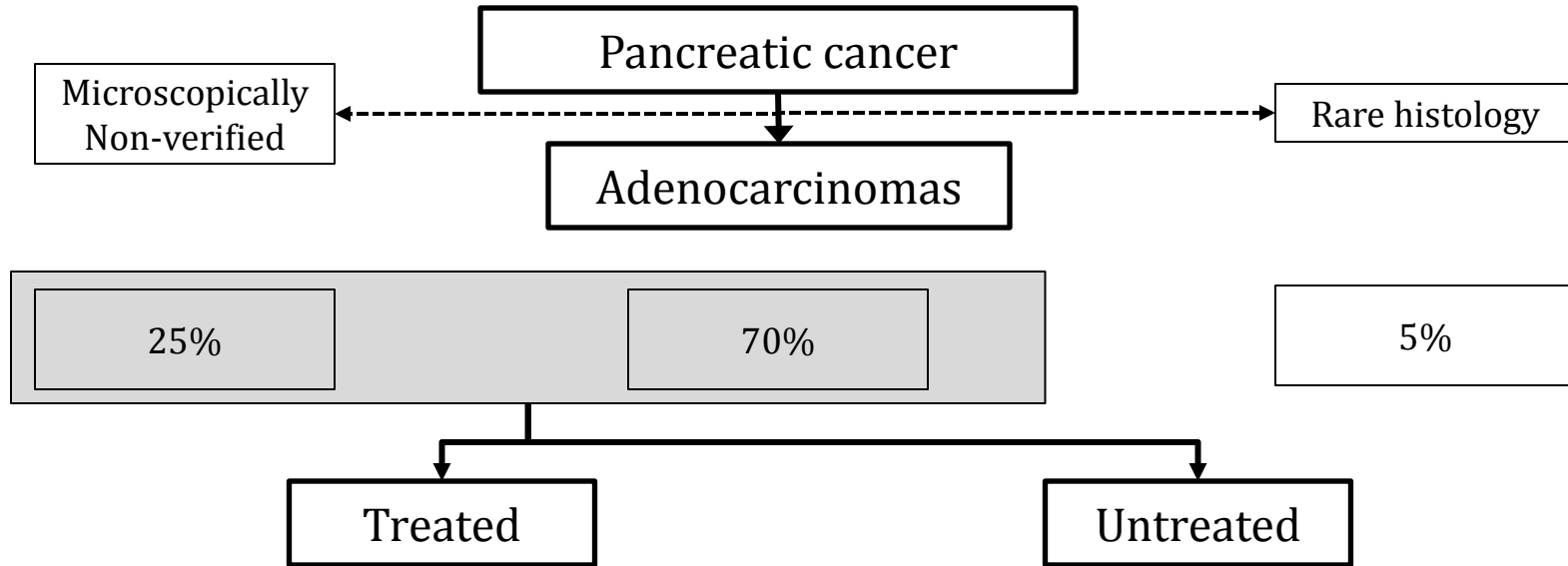
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Microscopically non-verified - Debate

- How to proceed?
- Should we aim for a proportion?
 - Proportion of MNV cases <20%?
- Do we want to include these patients in our reports?
 - How to compare with other countries?
 - How shall we present data reports?
 - Do we have treatment options for a group where 75% is 78+?

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Registry



Therapy-Registry reports

Study	Period	n	Resection	Oncology	BSC	Non-verified
W. Midlands ¹	57-86	13,560	3%	97%		Incl.? [*]
Burgundy ¹¹	76-05	2,968	4%⇒11%	2%⇒50%	39%	47% - Incl.?
Malmoe ³	77-91	740	4%	96%		5% - Excl.*
Sweden ⁴	80-00	16,758	11% 7⇒14	89%		Incl.? [*]
SEER, USA ^{5,6,7}	87-02	38,073	11%	89%		Excl.*
Ireland ²	94-03	3,173	7% 8⇒7	13% 5⇒22	80%	58% - Incl.
Alabama, US ⁸	96-00	2,230	18%	~25%	~57%	26% - Incl.
Netherlands, EEC ⁹	95-00	1,130	11%	89%		Excl.*
NCDB, US ¹⁰	95-03	121,713	~12%	88%		Excl.*
Netherlands ¹²	89-08	30,025	8%⇒12%	5%⇒13%	87%⇒76%	Incl.? [*]
Southern DK ¹³	07-09	579	11%	33%	56%	23% - Incl.*

1 Bramhall et al. BJS 1995

2 Sharp et al. EJC 2009

3 Hedberg et al. BJS 1998

4 Linder et al. EJSO 2007

5 Baxter et al. ASO 2007

6 Shaib et al. AJG 2007

7 Riall et al. JGS 2006

8 Eloubeidi et al. AJS 2006

9 Van Oost et al. EJSO 2006

10 Bilimoiira et al. Cancer 2007

11 David et al. BJC 2009

12 Nienhuijs et al. Pancreas 2012

13 Bjerregaard et al. EJC 2012

* Excluded rare histologies

Therapy-Registry reports

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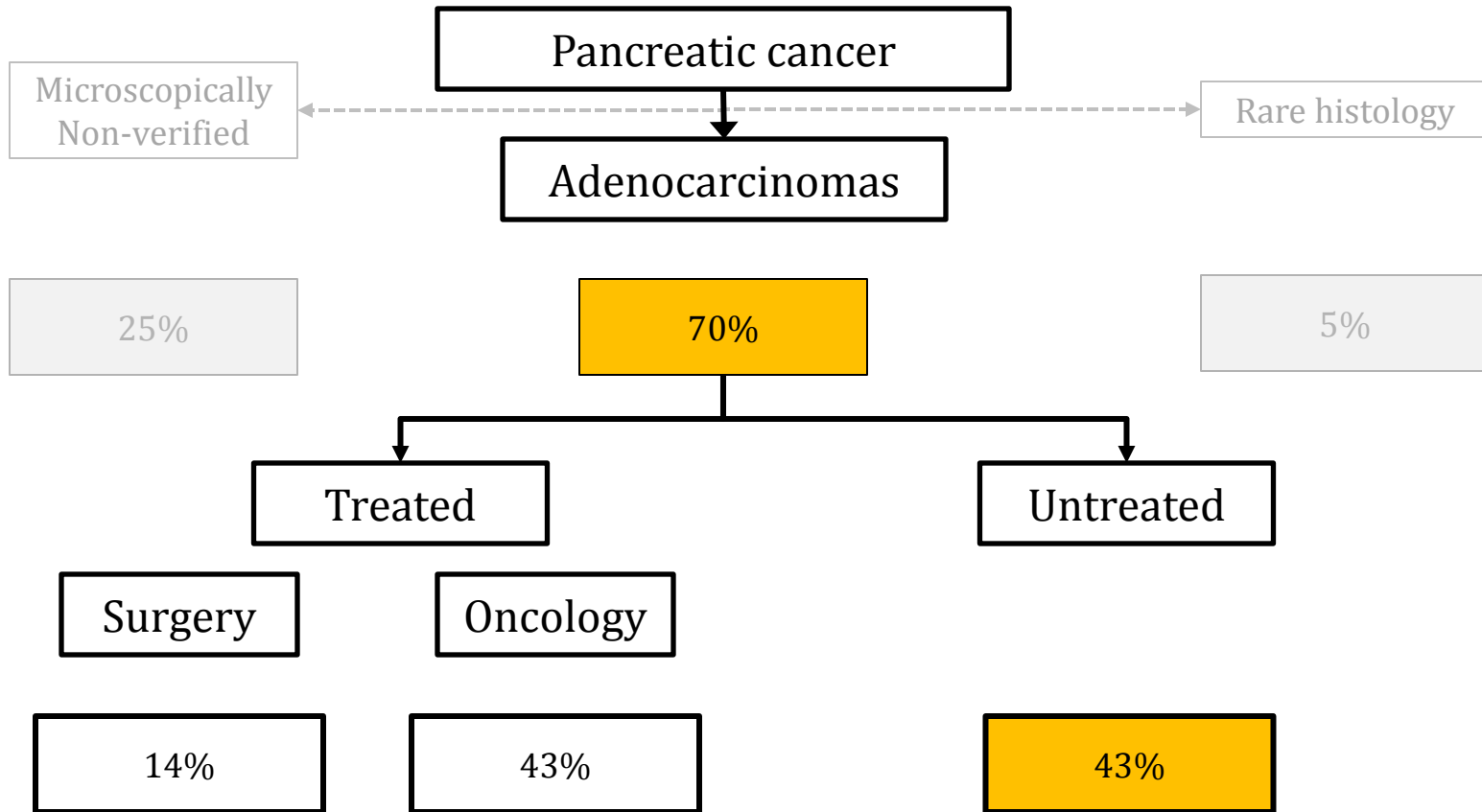
11 David et al. BJC 2009

12 Nienhuijs et al. Pancreas 2012

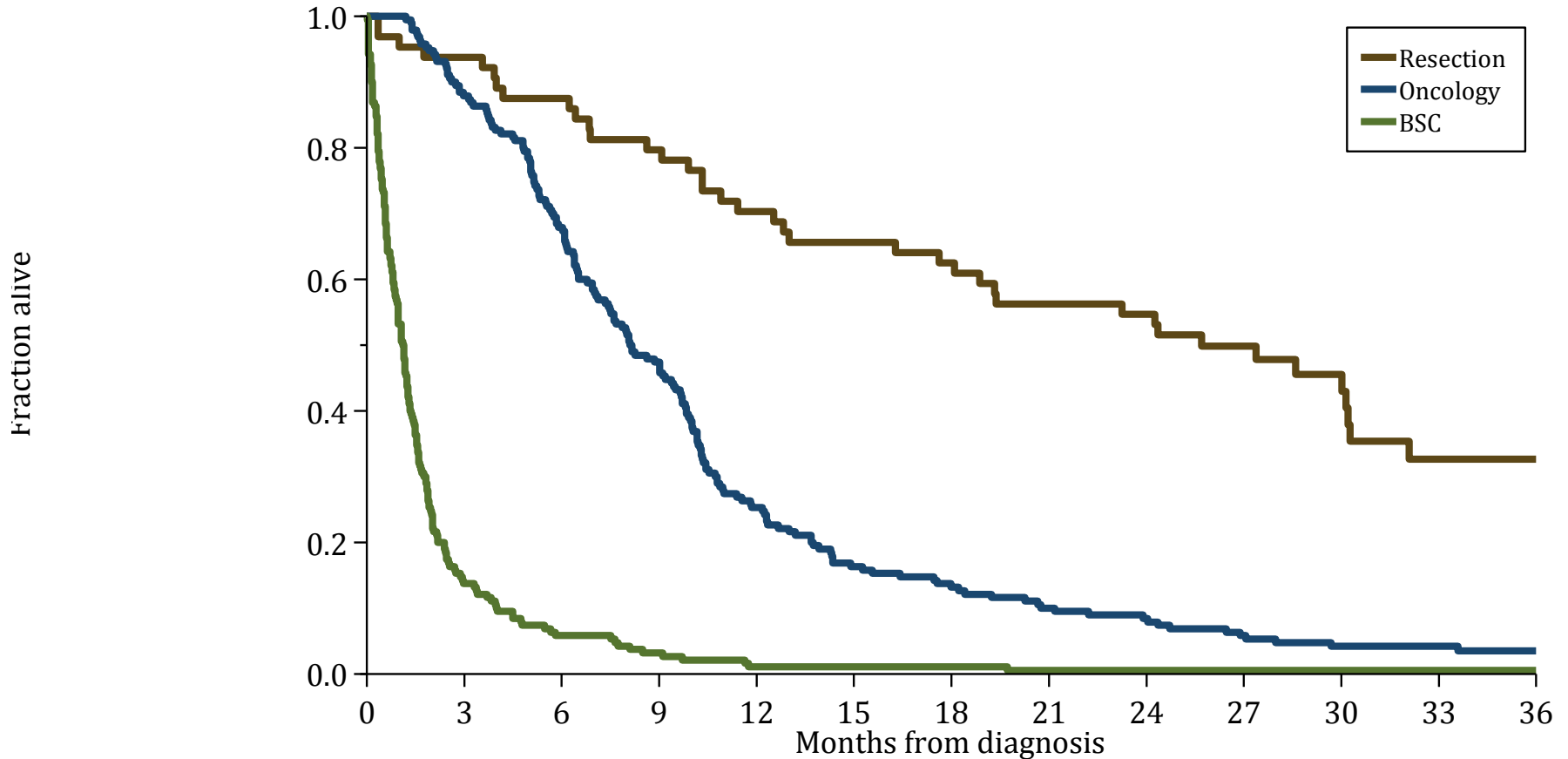
13 Bjerregaard et al. EJC 2012

* Excluded rare histology

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Survival



Number at risk

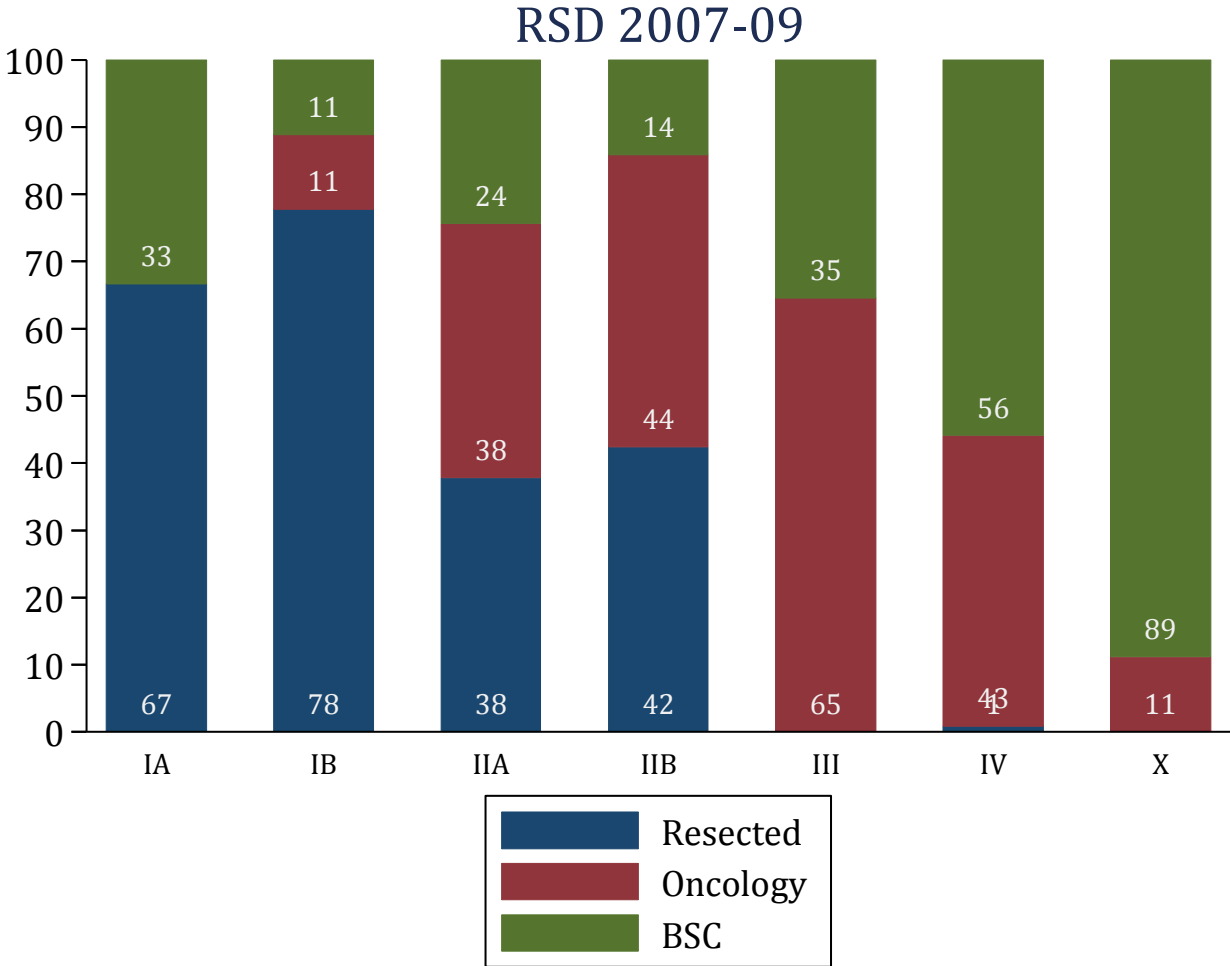
	0	3	6	9	12	15	18	21	24	27	30	33	36
Resection	64	60	56	51	45	42	40	36	35	24	18	12	9
Oncology	190	167	129	90	48	31	25	19	16	11	8	6	5
BSC	190	26	11	6	2	2	2	1	1	1	1	1	1

Stage distribution

Adenocarcinomas

Stage	Treated		Untreated	
	%	95% CI	%	95% CI
IA/IB/IIA (n=57)	77.2	[65-86]	22.8	[14-35]
IIB (n=83)	85.5	[76-92]	14.5	[8-24]
III (n=50)	66.0	[52-78]	34.0	[22-48]
IV (n=236)	44.1	[38-50]	55.9	[50-62]
X (n=18)	11.1	[3-35]	88.9	[65-97]
Total (n=444)	57.2	[53-63]	42.8	[38-47]

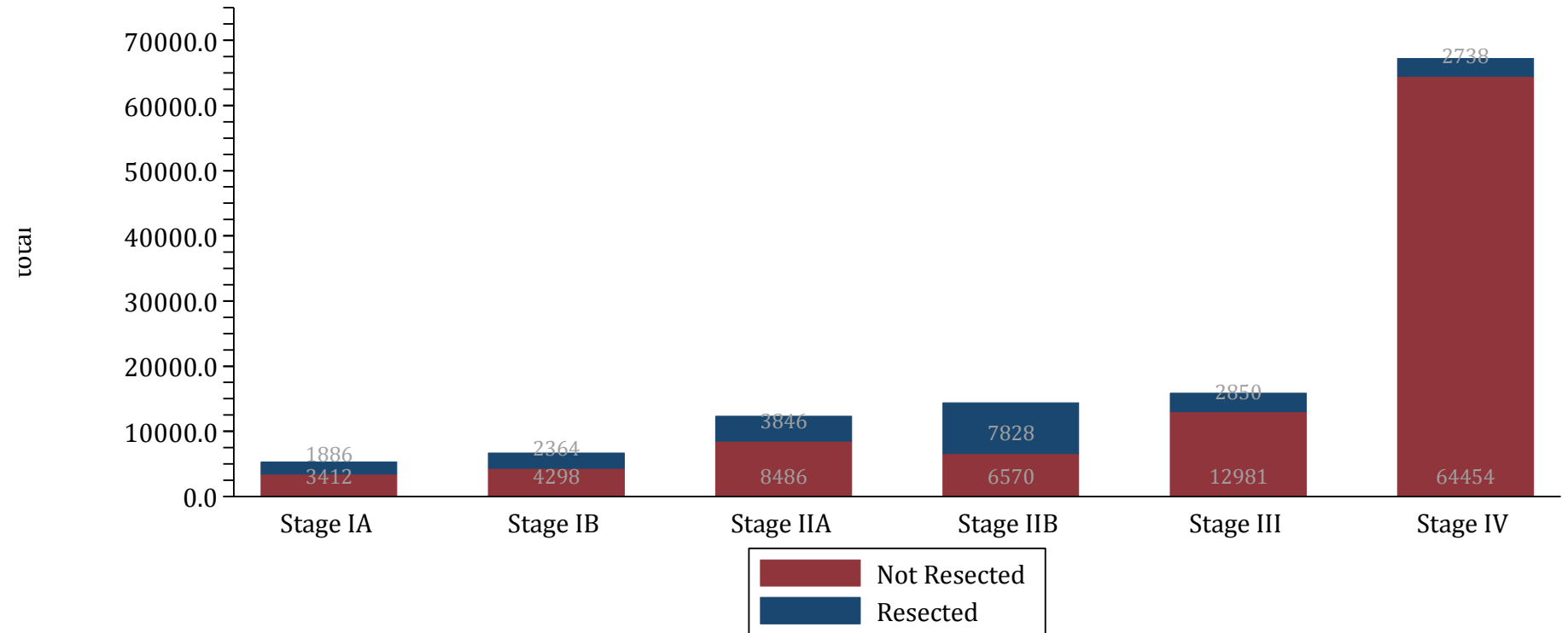
Therapy according to stage Adenocarcinomas



Comparison

Verified pancreatic cancers

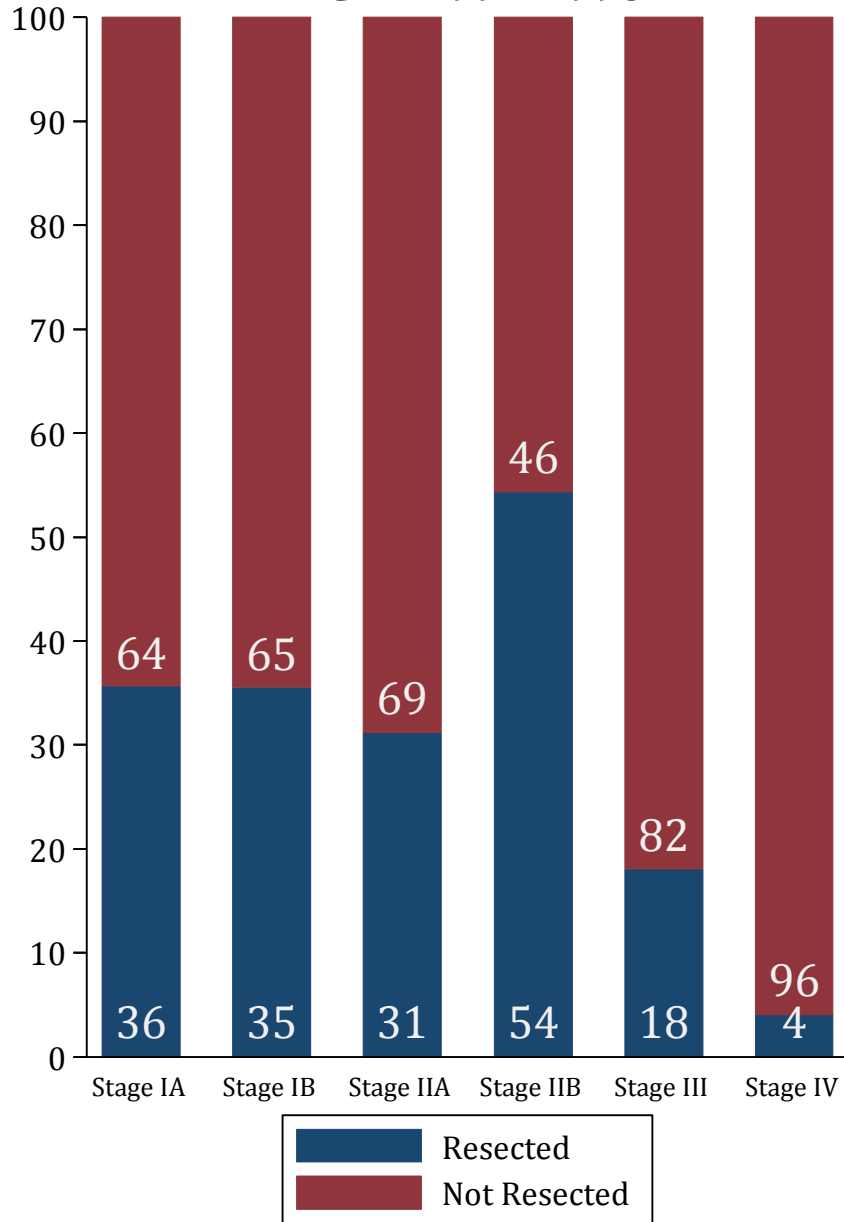
NCDB 1992-1998



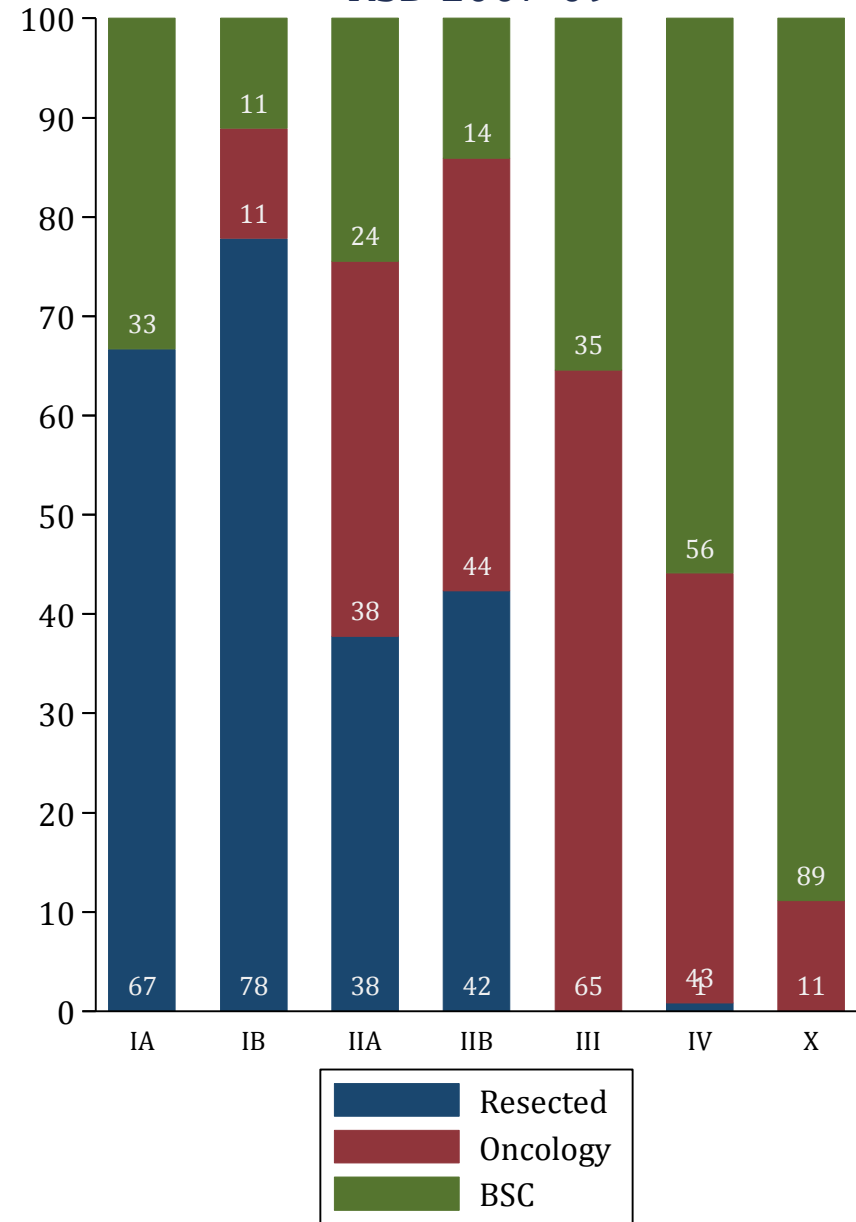
Bilimora et al. CANCER 2007

Comparison

NCDB 1992-1998



RSD 2007-09

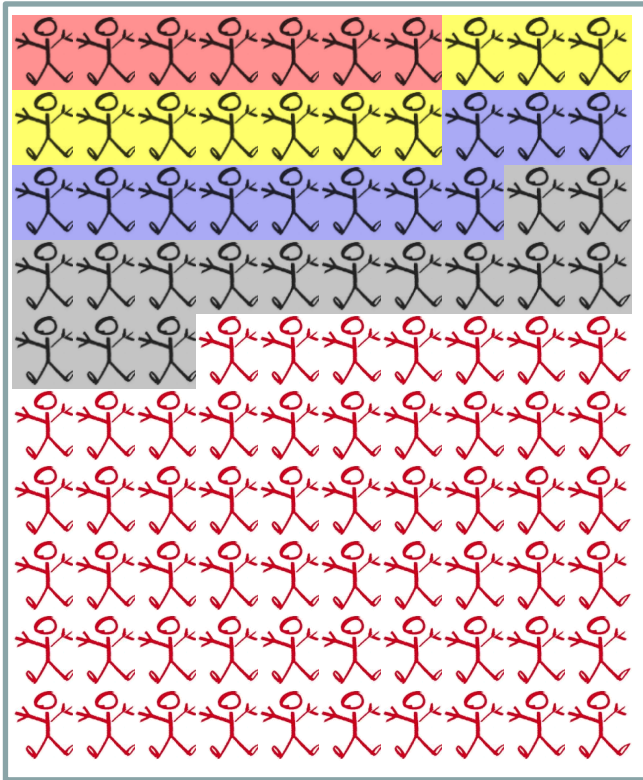






Baseline characteristics

Adenocarcinomas

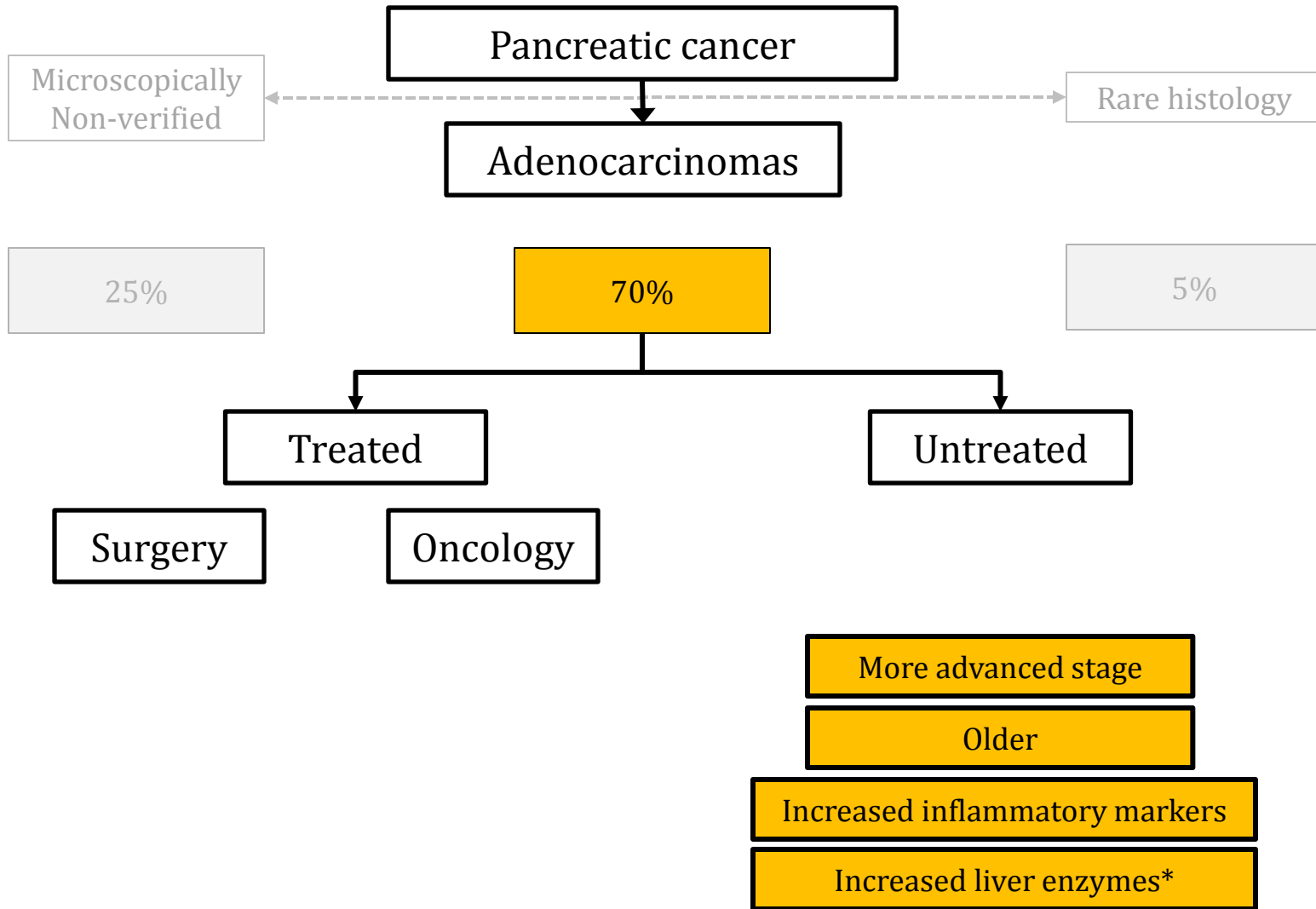
	Treated		Untreated	
	Median	IQR	Median	IQR
Age*	65.7	61-73	69.3	64-78
Hemoglobin*	7.8	7.0-8.5	7.1	6.5-7.8
Leucocytes*	8.1	6.8-10	11.6	8.3-17.7
Platelets	279	227-354	302	229-396
ALT	40	21-91	62.5	28-103
ALP*	146	86-290	386	173-676
LDH*	164	137-186	204	162-282
Bilirubin*	14	9-25	30	12-117
CRP*	6	5-18	55	25-140

Distribution of untreated in age quartiles Adenocarcinomas



		Within		of Total
Q1	34-62 yrs	29%		7%
Q2	63-68 yrs	40%		10%
Q3	68-75 yrs	45%		11%
Q4	76+ yrs	58%		15%

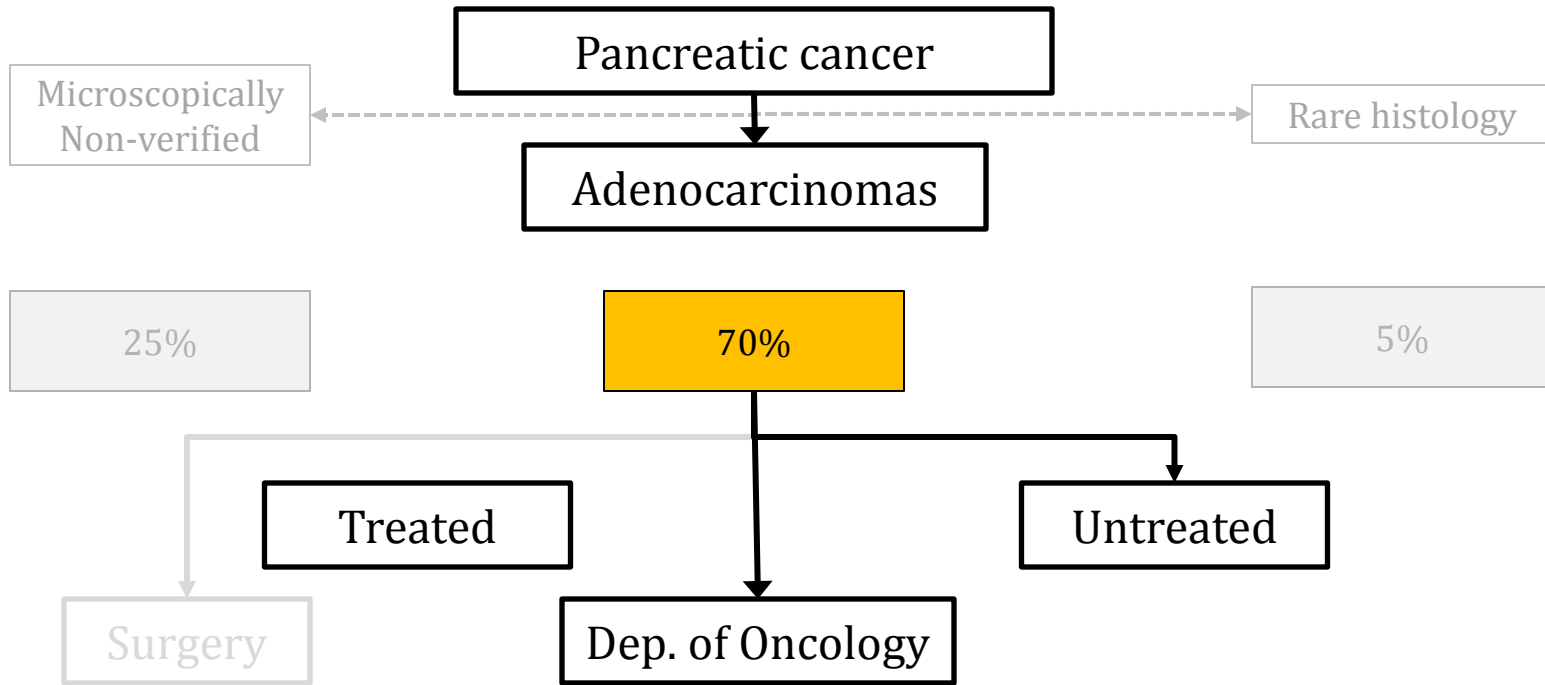
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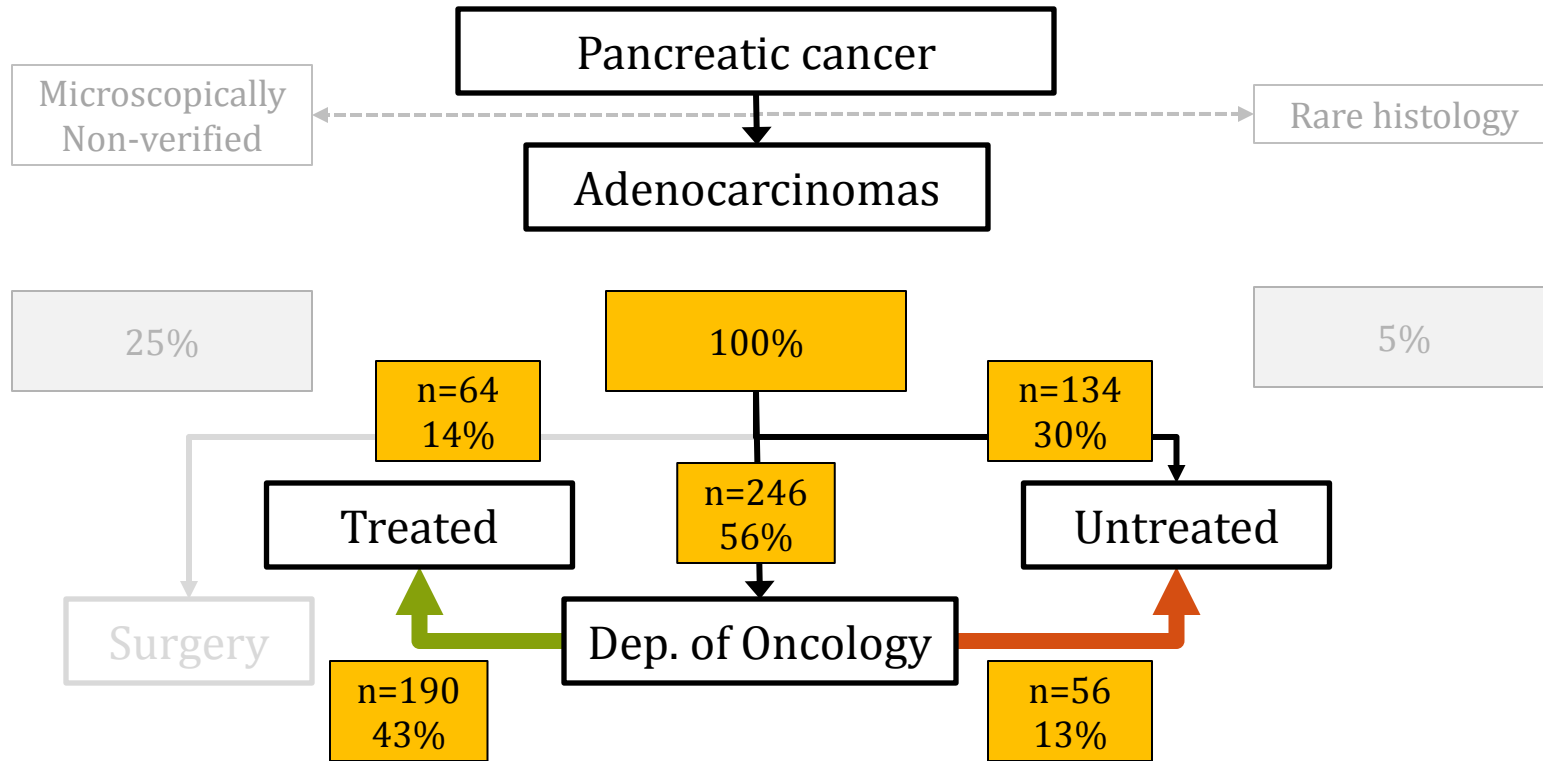
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- Is there a way to improve outcome?
 - Include more patients?

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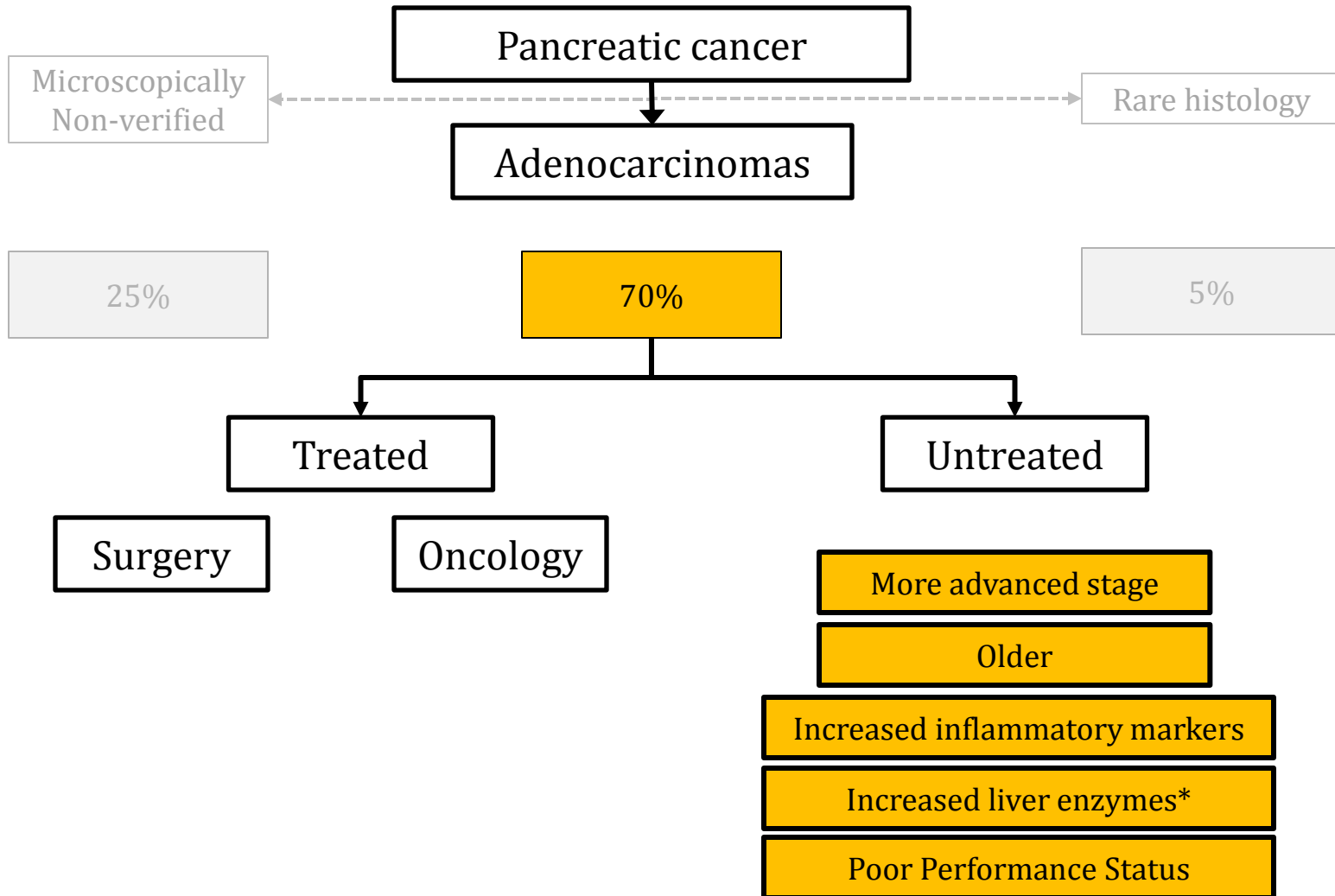


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	Treated (n=190)		Evaluated (n=56)		Not Evaluated (n=134)	
	Median	IQR	Median	IQR	Median	IQR
Age	65.7	59-73	67.0	62-74	71.3	65-79
Hemoglobin	7.7	6.9-8.3	7.2	6.6-7.8	7.1	6.5-7.8
Leucocytes	8.1	6.8-10.3	12.6	8.5-16.5	11.4	8.2-18.2
Platelets	279	223-381	331	248-397	296	221-395
ALT	34	20-78	57	24-84	65	30-116
ALP	144	86-270	272	145-711	420	200-617
LDH	164	137-186	200	159-246	210	164-304
Bilirubin	13	8-20	29	12-66	31	13-143
CRP	8	5-41	48	24-115	59	25-142
	%	CI	%	CI	%	CI
PS 0	33%	26-40	5%	2-15	-	
PS 1	40%	33-47	11%	5-22	-	
PS 2	22%	17-29	20%	11-32	-	
PS 3-4	1%	0-4	54%	41-66	-	
PS X	5%	2-9	11%	5-22	-	
M0	46%	39-53	19%	13-26	35%	30-40
M1	54%	47-61	71%	63-78	62%	57-66
Mx	0%	-	10%	6-17	4%	2-6

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Pancreatic cancer

Conclusion

- Untreated patients with Histology
 - Dismal prognosis
 - Not only a “Danish” problem –
 - A Pancreatic Cancer problem
 - Is age the only explanation?
 - Biologically different entities?
 - Is the increased in stage only due to progression during diagnostics?

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Untreated patients - Debate

- How to proceed?
- Microscopically non-verified cases
 - Should we define goals for a proportion?
- How to improve the outcome of these patients?
- Registration
 - Reports
 - Differentiate patients in therapeutic groups?

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Microscopically non-verified - Debate

- How to proceed?
- Should we aim for a proportion?
 - Proportion of MNV cases <20%?
- Do we want to include these patients in our reports?
 - How to compare with other countries?
 - How shall we present data reports?
 - Do we have treatment options for a group where 75% is 78+?