EUROCANPLATFORM WORKPACKAGE 11 CLINICAL EPIDEMIOLOGY

Masoud Babaei, MD dkfz



DEUTSCHES KREBSFORSCHUNGSZENTRUM IN DER HELMHOLTZ-GEMEINSCHAFT

50 Jahre – Forschen für ein Leben ohne Krebs

EurocanPlatform work package 11 projects,

is a consortium of major European cancer centers aimed at enhanced translation of progress in oncological research into clinical practice

2011 2012 2013 2014 2015



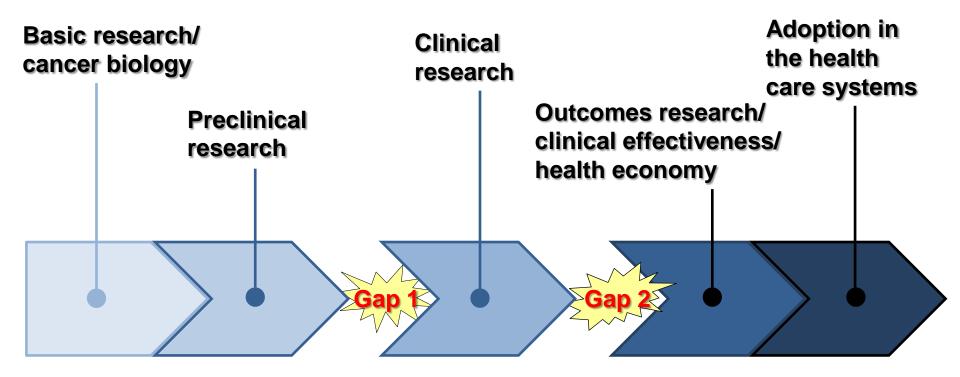
Work Package 11



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Translational cancer research – a coherent research continuum





EurocanPlatform WP11 5th Annual meeting Frankfurt airport, December 2015

Participating centers

Clinical cancer registries from 5 European countries

- Population-based registries:
 - Netherlands National Cancer Registry (NNCR), Netherlands
 - Swedish Colorectal Cancer Registry (SCRCR), Sweden
 - Norwegian Cancer Registry (NCR), Norway

• Institute-based registries:

- Institute Jules Bordet (IJB) in Brussels, Belgium
- Netherlands Cancer Institute (NKI) in Amsterdam, Netherland
- Portuguese Institute of Oncology in Porto (IPO-Porto), Portugal

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Eurocan collaborative projects:

- Cancer registry build-up efforts in Europe, for colorectal and breast cancers.
- Application of laparoscopic surgery in colorectal cancer patients is is
- 1. Minimally invasive <u>colon cancer</u> surgery in Europe: Implementation and Jutcomes (coming soon).
- 2. Minimally invasive <u>rectal cancer</u> surgery in Europe Surgery and outcomes (coming soon).
- Administration of adjuvant chemotherapy in stage II/III colon cancer in Europe.
- Administration of neoadjuvant therapy in rectal cancer patients in Europe.
- A comparison of patient populations, surgical resection rates, and le C short term outcomes among patients with pancreatic propries study among EUROCAN Platform members

Five-Year RS of Pancreatic Cancer According to Stage, Morphology, and Anatomic Sub site for Patients Aged 15 to 74 Years, Diagnosed in 2002 to 2010 in Germany and the United States, Period of Estimation 2007 to 2010

	Gern	iany	United States		
Variable	n (%)	5-y RS (SE)	n (%)	5-y RS (SE)	
Stage*					
Localized	470 (3.9) [†]	43.7 (3.7)	1718 (7.2) [†]	41.5 (1.9)	
Regional	4011 (33.3) [†]	16.7 (1.1)	7336 (31.9) [†]	14.4 (0.7)	
Distant	7567 (62.8) [†]	4.3 (0.4)	13581 (60.8) [†]	3.7 (0.3)	
Unknown	10,380	11.2 (0.6)	1269	11.6 (1.6)	
Morphology*					
Endocrine (all)	862 [‡]	50.7 (2.7)	1347	49.0 (2.4)	
Male	464 (53.8)	47.7 (3.7)	748 (55.5)	47.4 (3.2)	
Female	398 (46.2)	53.7 (4.1)	599 (44.5)	51.6 (3.7)	
Exocrine (all)	21,523	8.4 (0.4)	22,441	7.2 (0.3)	
Male	12,369 (57.5)	7.8 (0.5)	12,356 (55.1)	6.3 (0.4)	
Female	9154 (42.5)	9.2 (0.6)	10,085 (44.9)	8.3 (0.5)	
Subsite (ICD-10)*					
Head (C25.0)	11,551 (51.5)	11.1 (0.6)	11,532 (48.2)	9.8 (0.5)	
Body (C25.1)	1788 (8.0)	11.5 (1.4)	2608 (10.9)	6.7 (0.9)	
Tail (C25.2)	2499 (10.9)	13.8 (1.3)	3080 (12.9)	14.2 (1.0)	
Islets of Langerhans (C25.4)	133 (0.6)	68.1 (6.2)	322 (1.4)	62.0 (4.8)	
Overlapping lesions (C25.8)	721 (3.2)	8.9 (2.0)	1791 (7.5)	7.9 (1.1)	
Pancreas, NOS (C25.9)	5679 (25.3)	6.7 (0.6)	4148 (17.4)	6.3 (0.7)	

Variable	2002-2004		2005-2007		2008-2010			
	5-y RS	SE	5-y RS	SE	5-y RS	SE	Diff.	P^{\dagger}
Overall*	9.6	0.3	10.8	0.3	12.1	0.3	2.5	<0.0001
Age group, y								
15-44	22.5	2.5	24.0	1.7	25.5	2.5	3.0	0.4
45-54	12.7	1.0	12.9	0.7	13.0	0.9	0.2	0.9
55-64	8.2	0.5	9.8	0.4	11.7	0.6	3.5	< 0.0001
65-74	6.8	0.4	7.8	0.3	8.9	0.4	2.1	< 0.0001
Sex*								
Male	9.0	0.4	10.0	0.3	11.1	0.4	2.1	0.0001
Female	10.6	0.5	12.0	0.4	13.6	0.6	3.0	< 0.0001
Stage*								
Localized	40.6	3.9	42.3	2.5	44.1	3.8	3.5	0.6
Regional	12.0	0.9	15.4	0.7	19.3	1.0	7.3	< 0.0001
Distant	4.8	0.4	5.2	0.3	5.7	0.4	0.9	0.1
Unknown	11.1	0.5	11.6	0.4	12.2	0.5	1.1	0.1
Morphology*								
Endocrine (all)	53.1	3.3	51.3	1.8	49.4	2.9	-3.6	0.5
Exocrine (all)	7.8	0.3	8.7	0.2	9.8	0.3	2.0	< 0.0001
Subsite (ICD-10)*								
Head (C25.0)	9.2	0.4	10.8	0.3	12.6	0.5	3.5	< 0.0001
Body (C25.1)	7.7	1.0	10.1	0.9	13.0	1.2	5.3	0.0005
Tail (C25.2)	12.1	1.1	13.3	0.9	14.4	1.1	2.3	0.1
Overlapping lesions (C25.8)	7.5	1.5	9.6	1.3	12.0	1.9	4.5	0.04
Pancreas, NOS (C25.9)	8.8	0.6	8.4	0.4	8.1	0.5	-0.7	0.3



Comparison of patient population, surgical resection, and outcome in pancreatic cancer patients among European coutries

Masoud Babaei Lei HUANG

Department of Clinical Epidemiology and Aging Research (C070), DKFZ, Heidelberg, Germany



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Aims

- To examine surgical <u>resection rates</u> & <u>outcomes</u> (3 months, 1-year, 2-year & longer term)
- To study diagnostic **verification** methods
- To compare patterns and effects of neoadjuvant and adjuvant therapies
- To identify *modifiable areas* for improved outcomes





Data inclusion

- Excel sheet lists demanded variables
- Different data structures among partners adopted accordingly
- Collected from the earliest year to 2016 / latest year with available data
- Major: pancreatic ductal adenocarcinoma (PDAC)





Vital status information

- Important & necessary for valid results
- Desirable: national /regional death registration information, official population registers
- Defined index date (end of the last study year with data)
- Partners: description of data source required





Expected participants

National & regional cancer databases from partners + High volume hospital with available data



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Current data sources

- Netherlands
- Norway
- NCT-Heidelberg
- Italy
- Portugal
- PanGenEU
- More to come.....
- Your further support will be highly appreciated!!



Preliminary results:

Parameter	Norway	Portugal
Data type	Population-based	Institution-based
Total #	9123	212
Gender		
Female	4777 (52)	95 (45)
Male	4346 (48)	117 (55)
Age (median, range [year])	73.0 ± 11.8	70 ± 12.1
Age group (year)		
<i>≤</i> 59	1316 (14)	36 (18)
60-69	2127 (23)	60 (31)
70-79	2775 (30)	72 (37)
≥80	2905 (32)	27 (14)
Missing	0 (0)	17 (8)
Method of diagnosis		
Pathology	6476 (71)	14 (7)
Computed tomography	2110 (23)	103 (49)
DCO	536 (6)	0 (0)
Unknown/Others	1 (0)	95 (44)
Differentiation grade		
Well differentiated	240 (8.2)	6 (12)
Intermediately differentiated	1363 (47)	28 (57)
Poorly differentiated	1239 (42)	14 (29)
Undifferentiated	79 (3)	1 (2)
Missing	6202 (68)	163 (76)



Parameter	Norway	Portugal	
Clinical T stage			
1	376 (13)	2 (3)	
2	720 (24)	13 (11)	
3	905 (31)	27 (24)	
4	952 (32)	72 (63)	
Missing	6170 (68)	98 (36)	
Clinical N stage			
0	860 (44)	23 (28)	
1	1115 (56)	59 (72)	
Missing	7148 (78)	130 (61)	
Clinical M stage			
0	1088 (40)	36 (25)	
1	1638 (60)	106 (75)	
Missing	6397 (70)	70 (33)	
Clinical TNM stage			
1	319 (12)	2 (1)	
11	193 (7)	4 (3)	
<i>III</i>	461 (18)	39 (26)	
IV	1638 (63)	106 (70)	
Missing	6512 (71)	61 (29)	
Surgery			
Yes	1053 (11)	51 (24)	
No	8070 (89)	161 (76)	



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Primary analysis-Resected only



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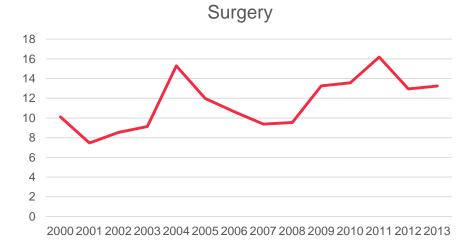
Parameter	Norway	Parameter	Norway	Parameter	Norway
n	1053	Clinical T stage		Interval between diagnosis and surgery (month)	0.2 ± 0.9 (8070)
Gender		1	61 (11.9)	Surgery	
Female	503 (47.8)	2	193 (37.6)	Yes	1053 (11.5)
Male	550 (52.2)	3	220 (42.9)	No/Missing	8070 (88.5)
Age (median, range [year])	$73.0 \pm 11.8(0)$	4	39 (7.6)	Postsurgical survival (month)	19.4 ± 17.8 (8276)
Age group (year)		Missing	540 (52)	Overall survival (month)	7.4 ± 10.6 (1814)
≤ 5 9	276 (26.2)	Clinical N stage		Vital status	
60-69	374 (35.5)	0	258 (54.2)	Deceased	859 (81.6)
70-79	342 (32.5)	1	218 (45.8)	Alive	194 (18.4)
≥ 80	61 (5.8)	Missing	577 (55)	Moved	0
Method of diagnosis		Clinical M stage		Cause of death	
Pathology	1053 (100.0)	0	398 (93.4)	Cancer	748 (94.6)
Computed tomography	0	1	28 (6.6)	Non-cancer	43 (5.4)
DCO	0	Missing	627 (64)	Missing	262 (25)
Unknown	0	Clinical TNM stage			
Differentiation grade		1	142 (49.5)		
Well differentiated	57 (6.6)	2	85 (29.6)		
Intermediately	542 (62.5)	3	32 (11.2)		
Poorly differentiated	260 (30.0)	4	28 (9.8)		
Undifferentiated	8 (0.9)	Missing	766 (73)		
Missing	186 (18)				

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Norway

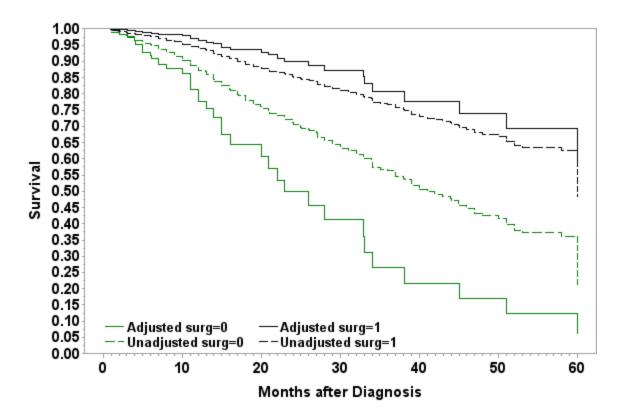




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Survival of pancreatic cancer patients who underwent surgery compared with those without surgery



More survival analyses to come: Surgery vs. non-surgery according to TNM stage, location, age group, histology types.....





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- All partners



Thanks for attention



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