

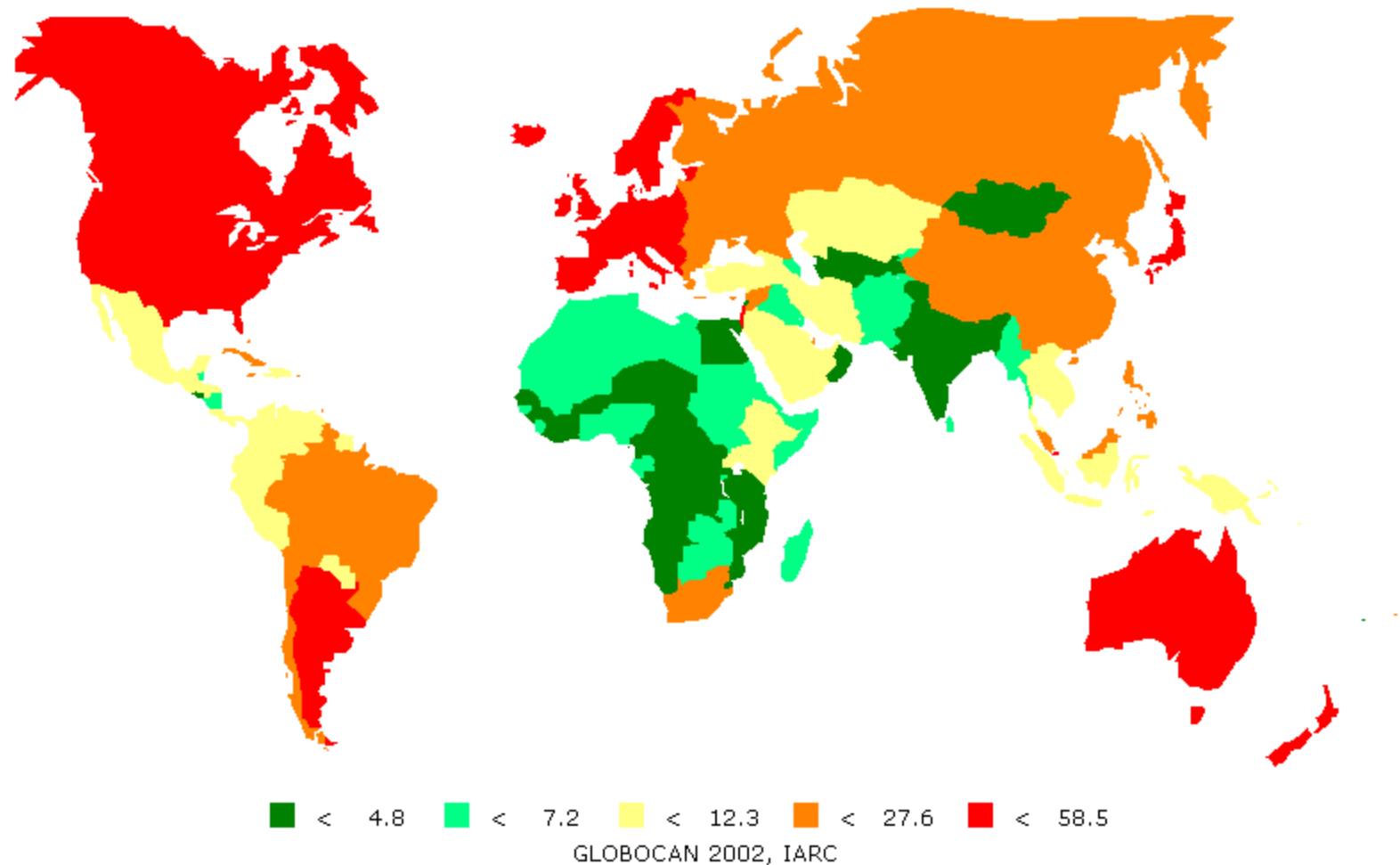
Käär- ja pärasoolevähk meestel - diagnostika ja ravi võimalused

Tiit Suuroja

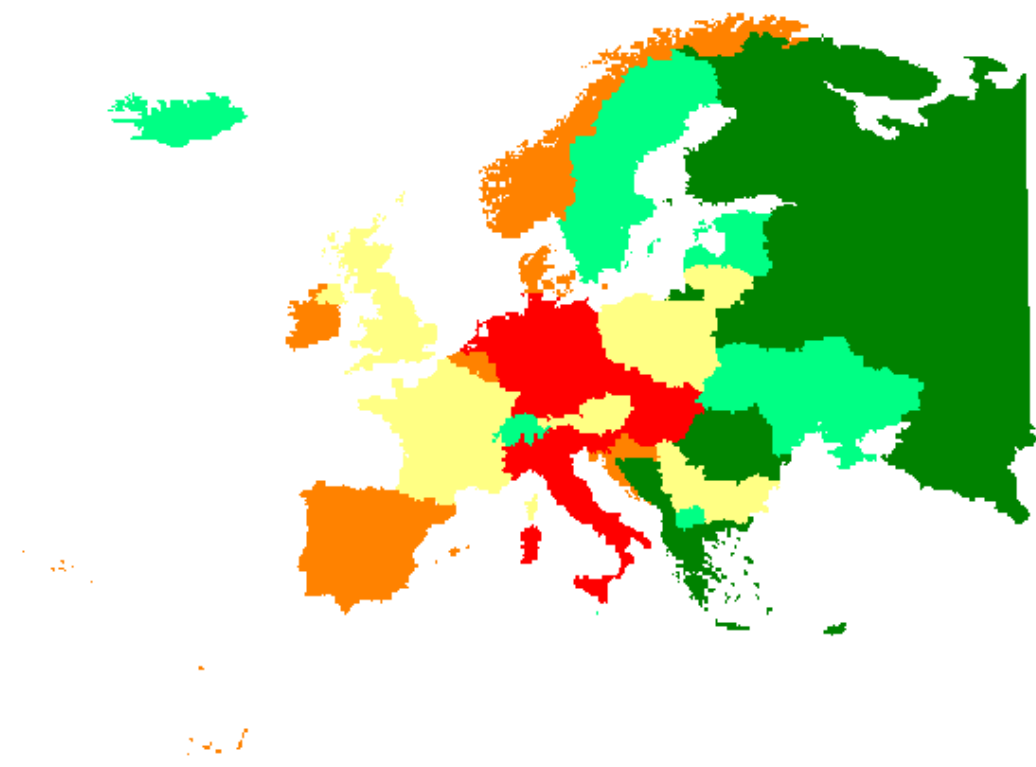
PERH

Epidemiologia

Colon and rectum, Males
Age-Standardized incidence rate per 100,000



Estimated age-standardised incidence rate per 100,000
Colorectum: male, all ages



■ < 29.6 ■ < 31.9 ■ < 38.4 ■ < 44.5 ■ < 60.6

GLOBOCAN 2008 (IARC) - 2.10.2011

Sagedasemad vähipaikmed

PAIGE

JUHUD

Eesnääre

816

Nahk

786

Jämesool

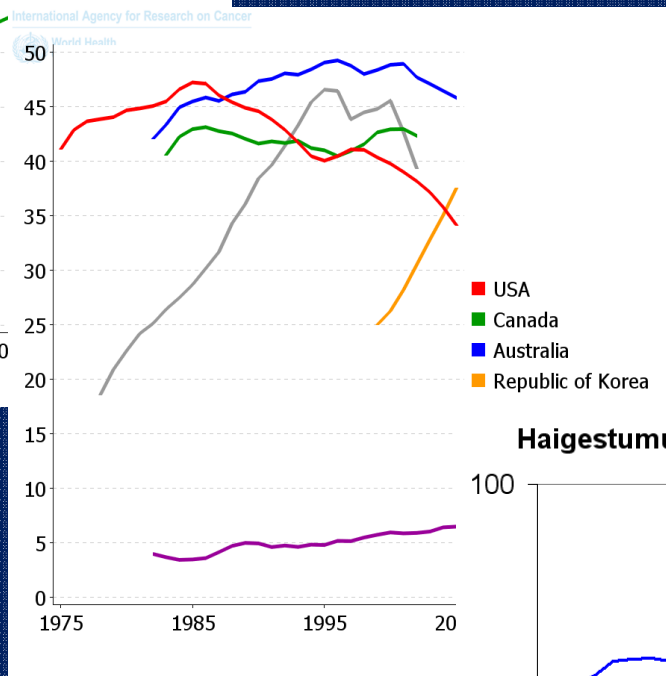
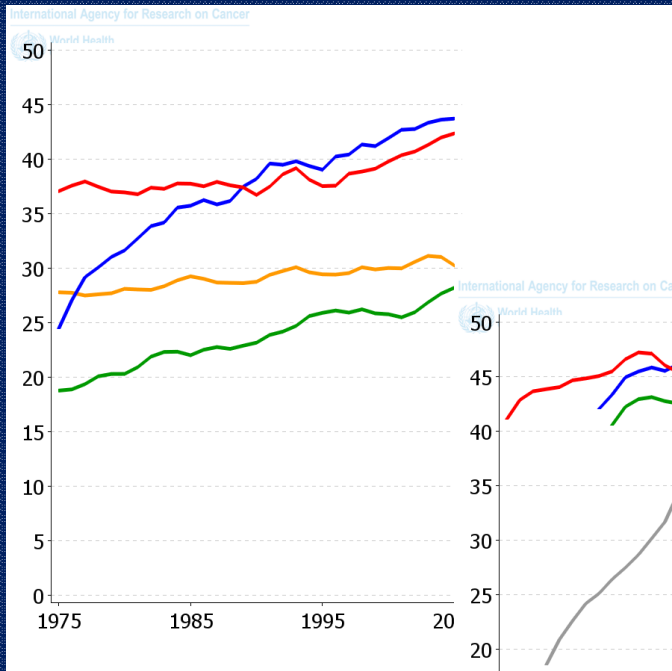
726

Kops

663

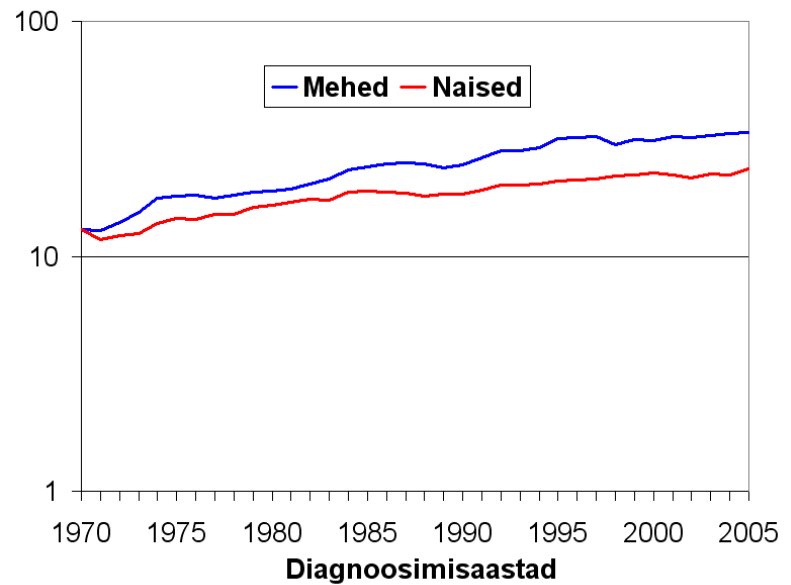
Rind

598



- USA
- Canada
- Australia
- Republic of Korea

Haigestumuskindaja* 100 000 in.k.

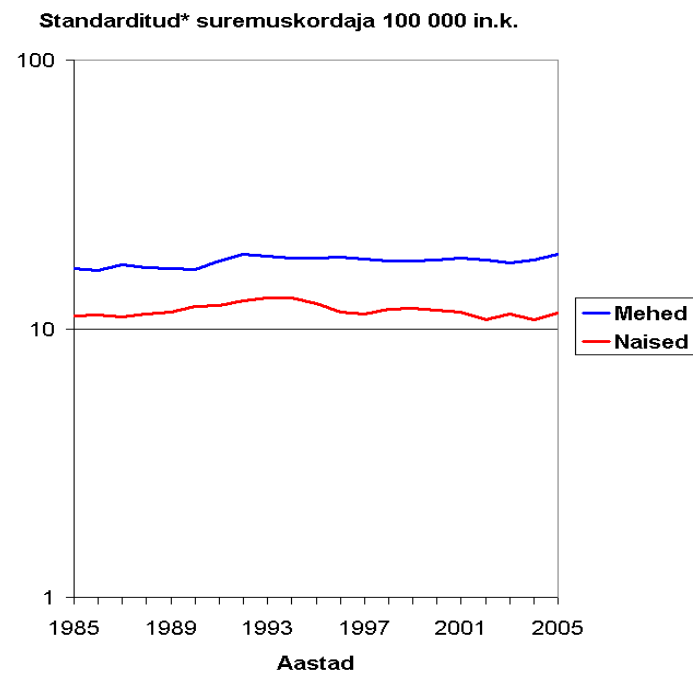
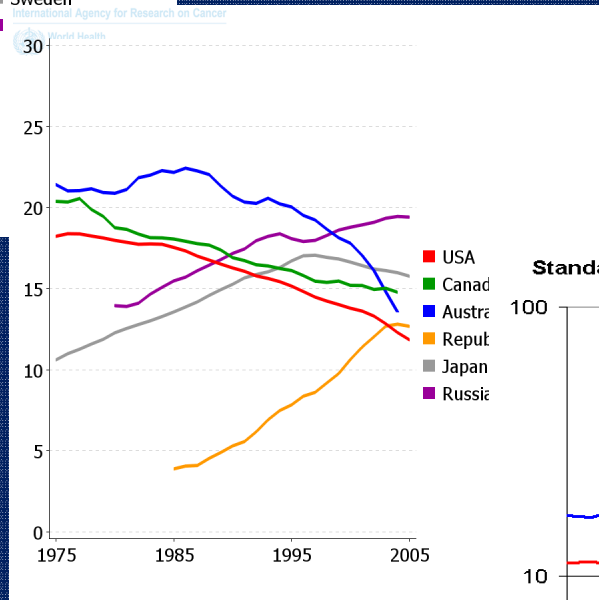
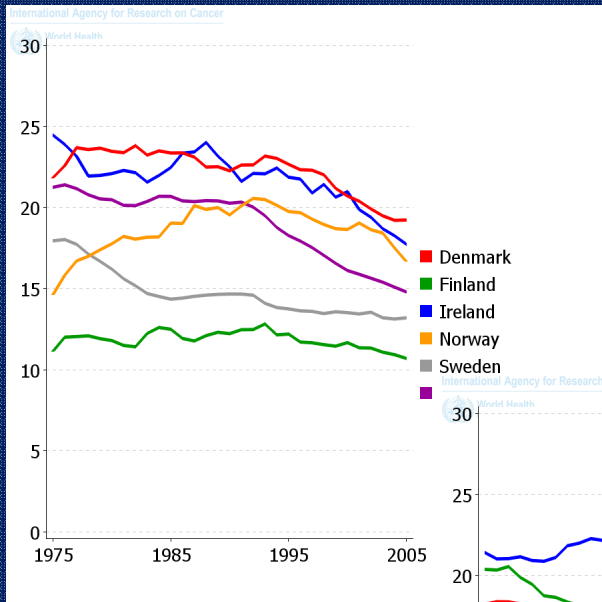


WHO Suremuse Andmebaas
Eesti Vähiregister

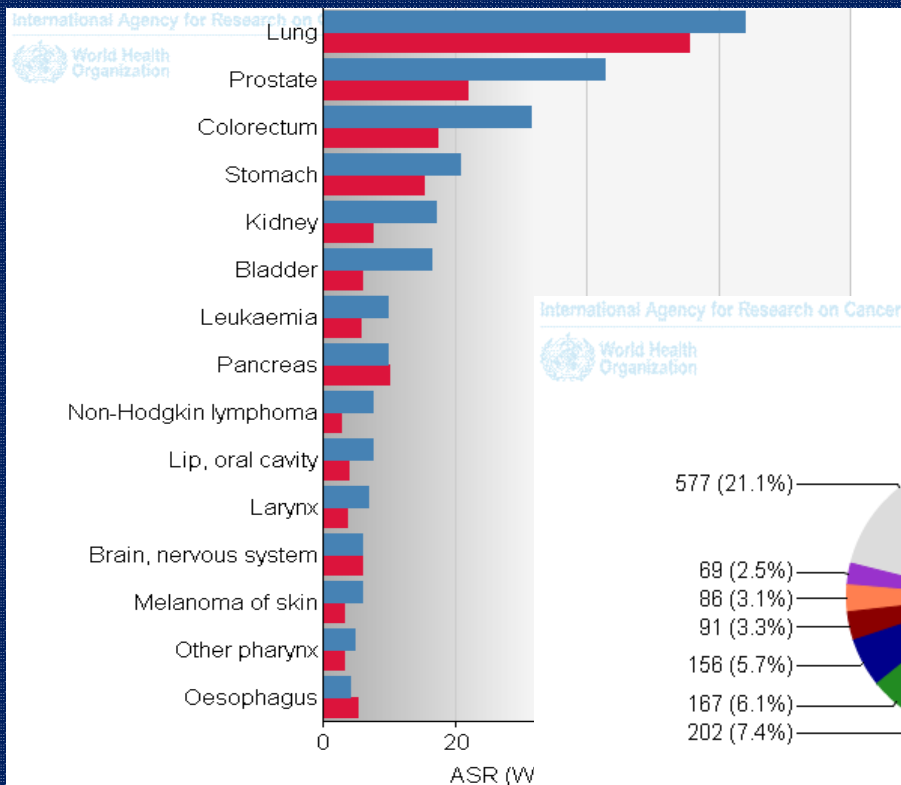
Sagedamad vähisurmad Eestis, 2005

- *Mehed*

- *Kopsuvähk* 26 %(500)
- *Eesnäärmevähk* 12 %(225)
- *Käär- ja pärasoolevähk* 11 %(203)

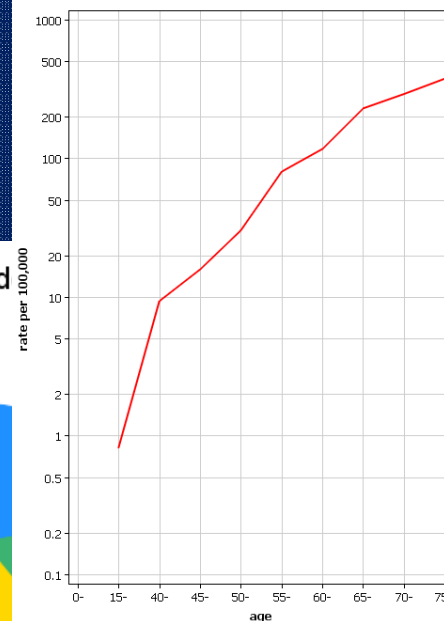


Jämesoolevähk meestel



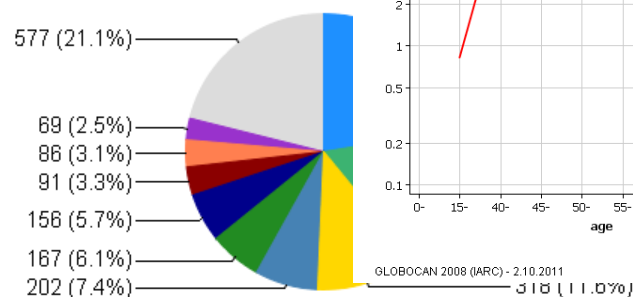
International Agency for Research on Cancer

Estonia-Incidence
Colorectal cancers: Male



International Agency for Research on Cancer

World Health Organization

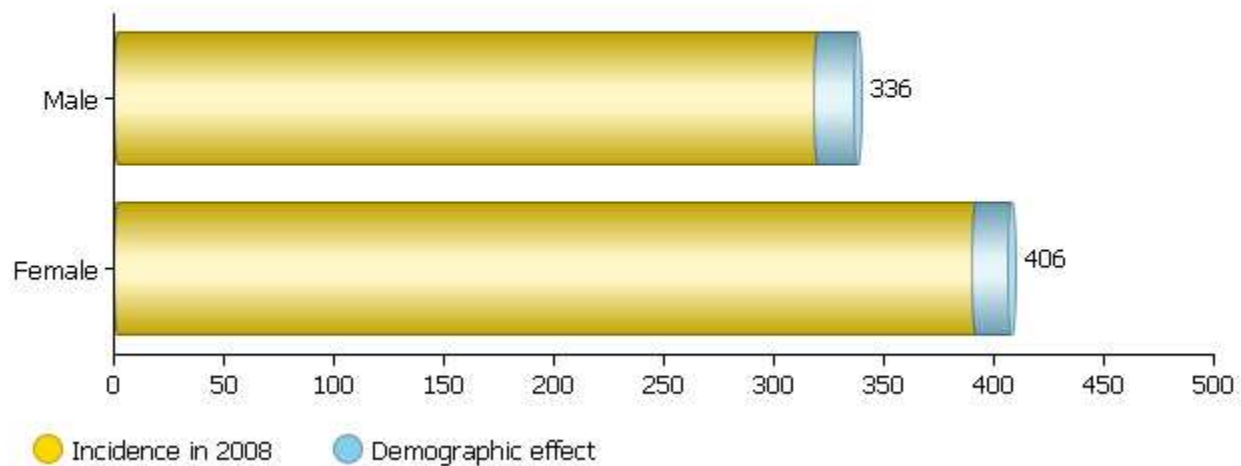


Prognoos aastaks 2015

International Agency for Research on Cancer

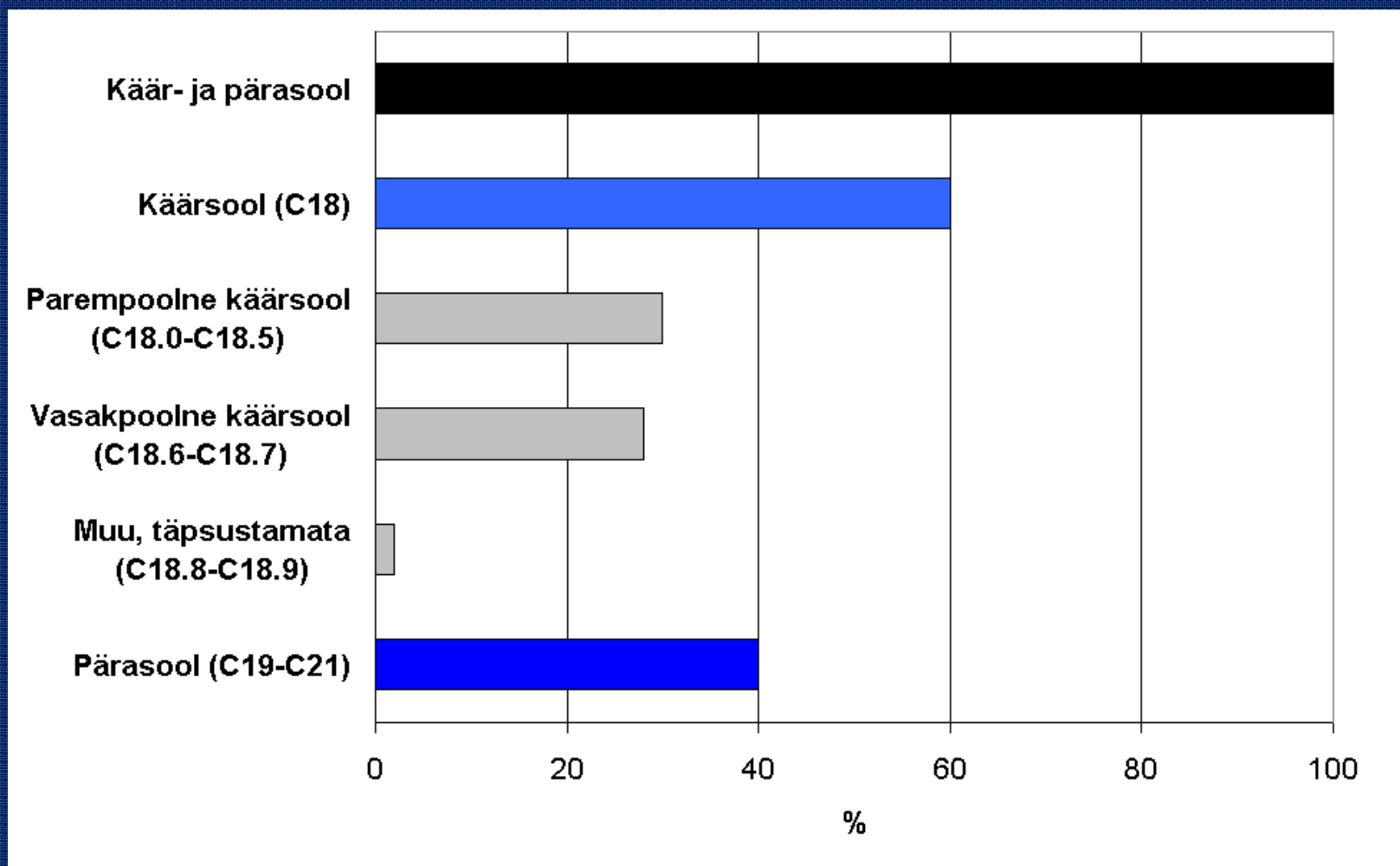


Estonia
Colorectum
Number of new cancers in 2015 (all ages)



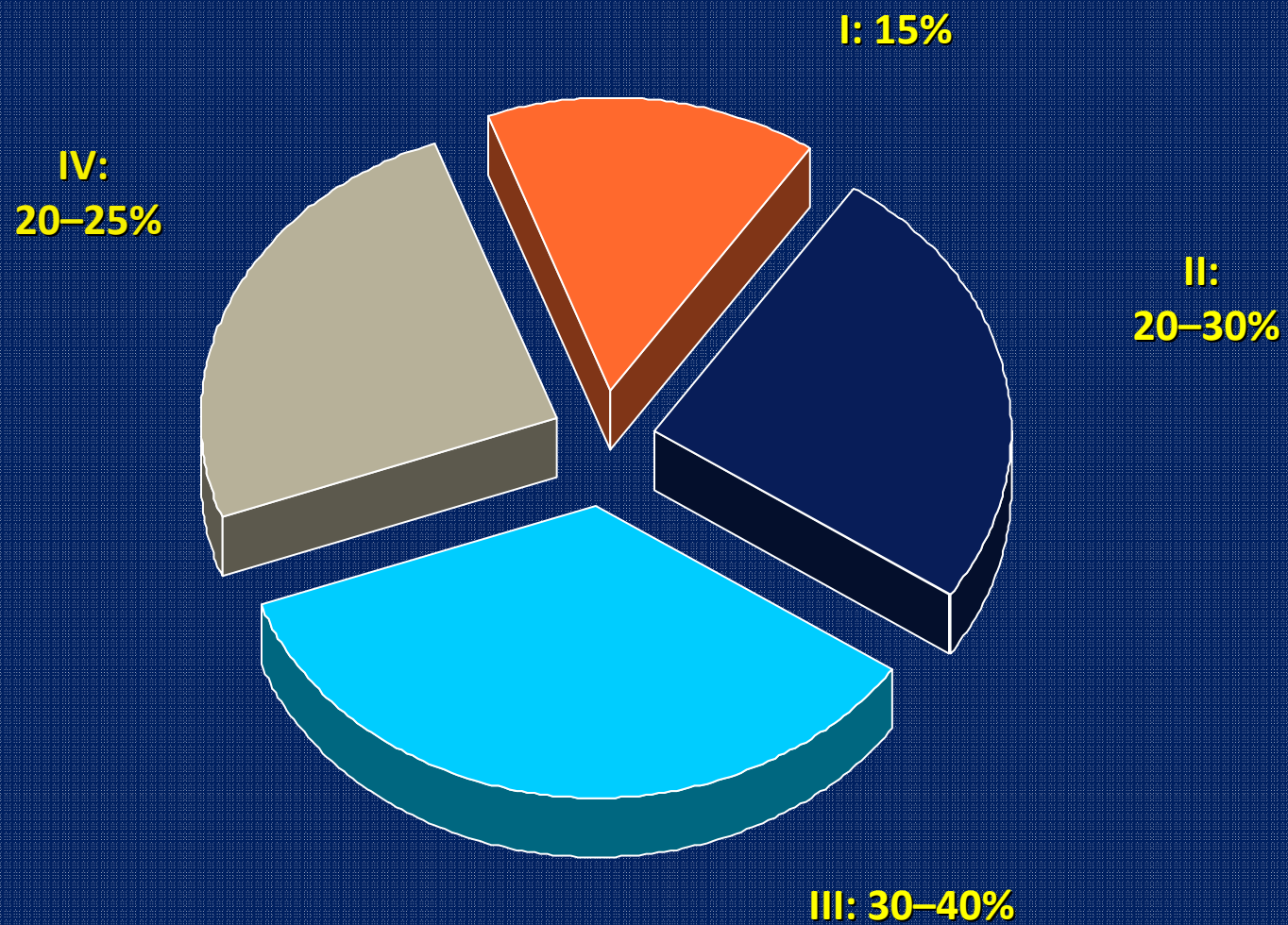
GLOBOCAN 2008 (IARC) (2.10.2011)

Globocan

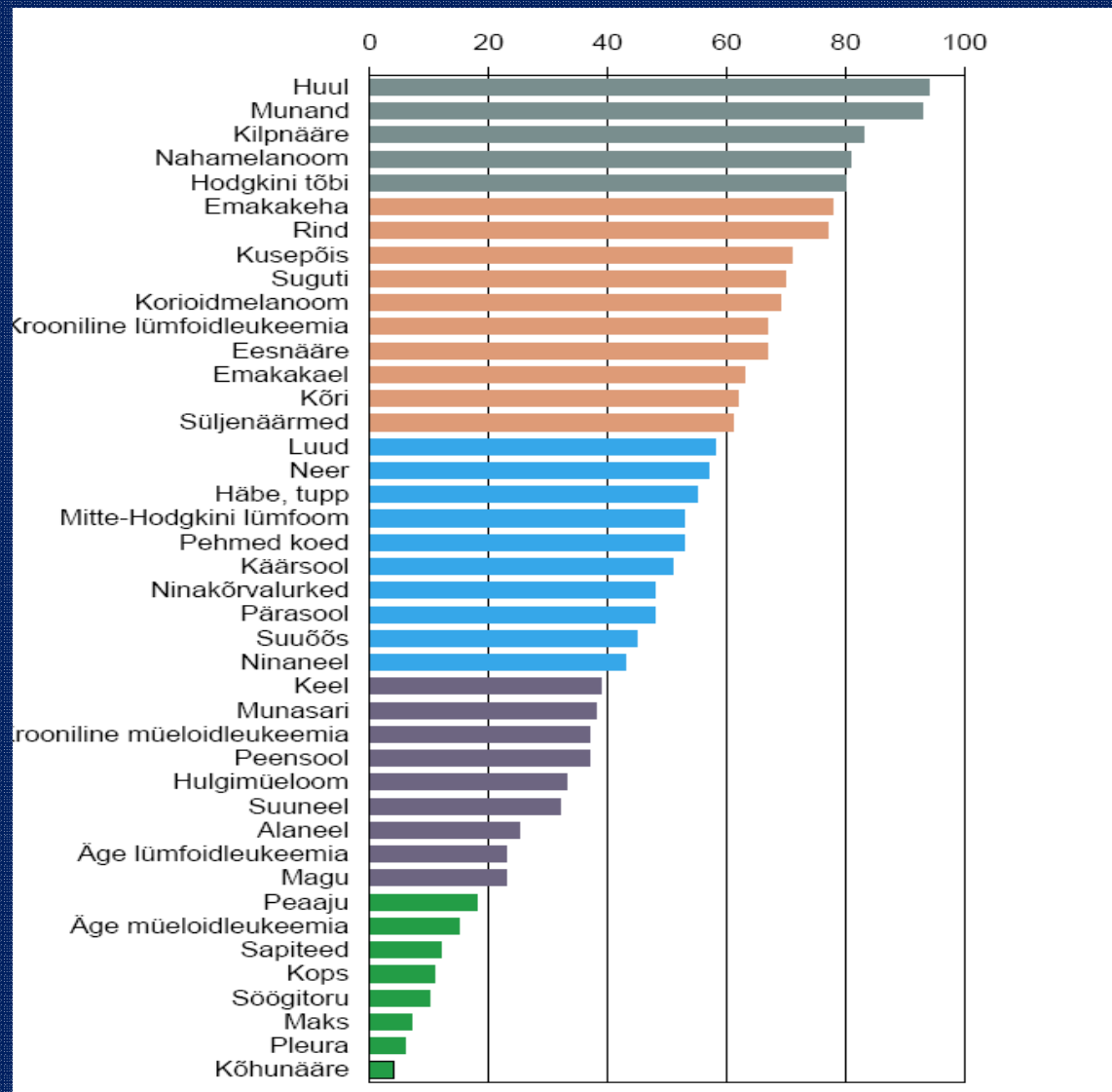


Levikugrupp	%
lokaalne	40
regionaalne	20
naaberorganid	8
kaugmetastaasid	28
kaugelearenenud, täpsustamata	1
teadmata	3

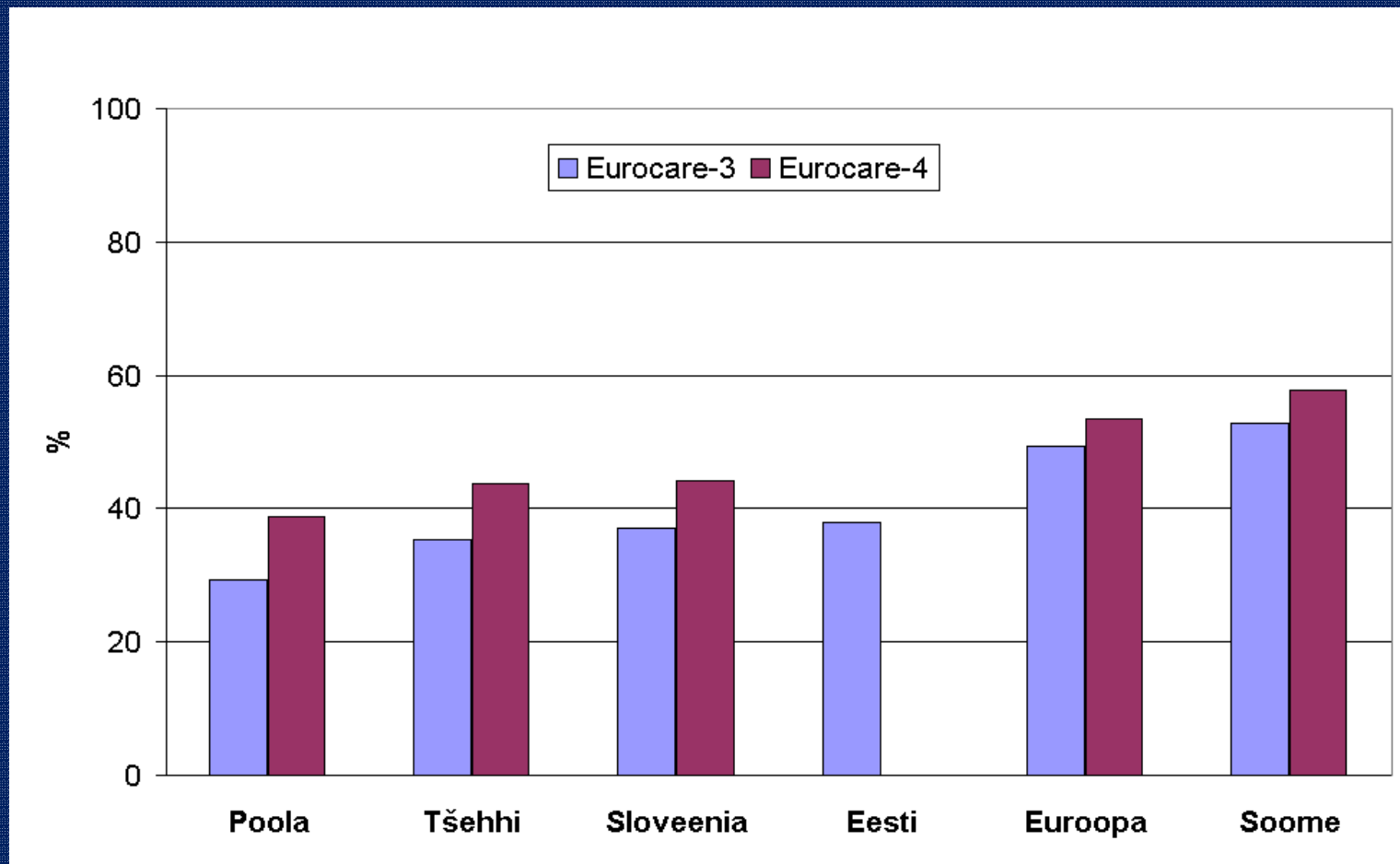
Jämesoolevähk pöördumisel



Elulemus paikmeti



Jämesoolevähi elulemus

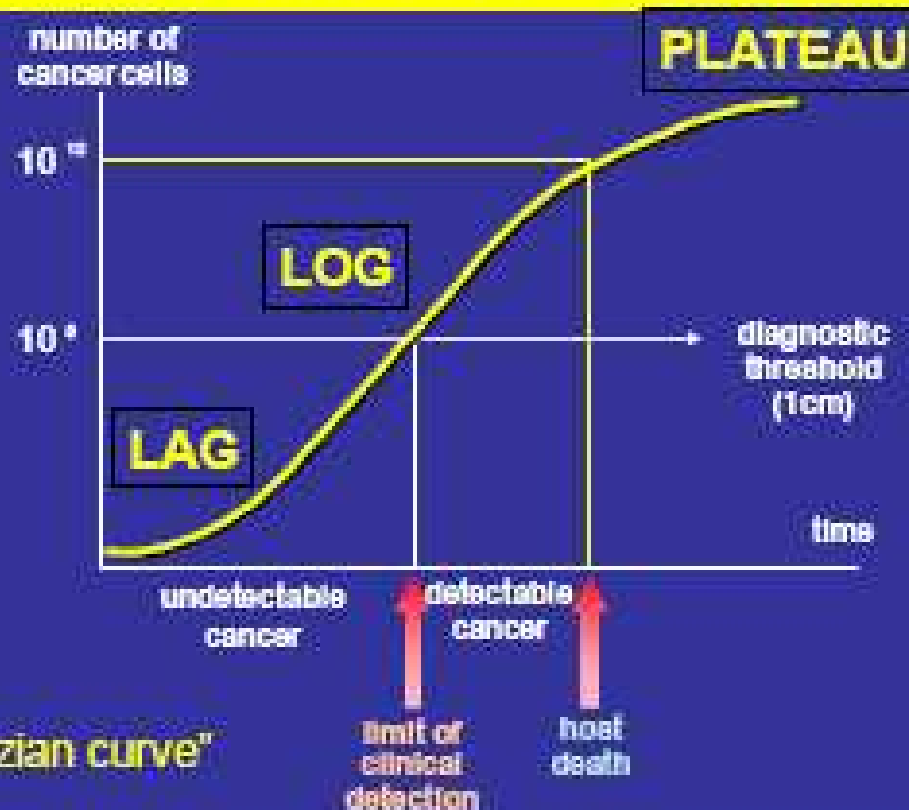


Berrino et al., 2007 (EUROCare-3, 1990-1994 ja EUROCare-4, 1995-1999)

Skriining

Kasvaja elutsükkel

Tumor Growth



Peitvere analüüs

Fecal Occult Blood Test (FOBT)

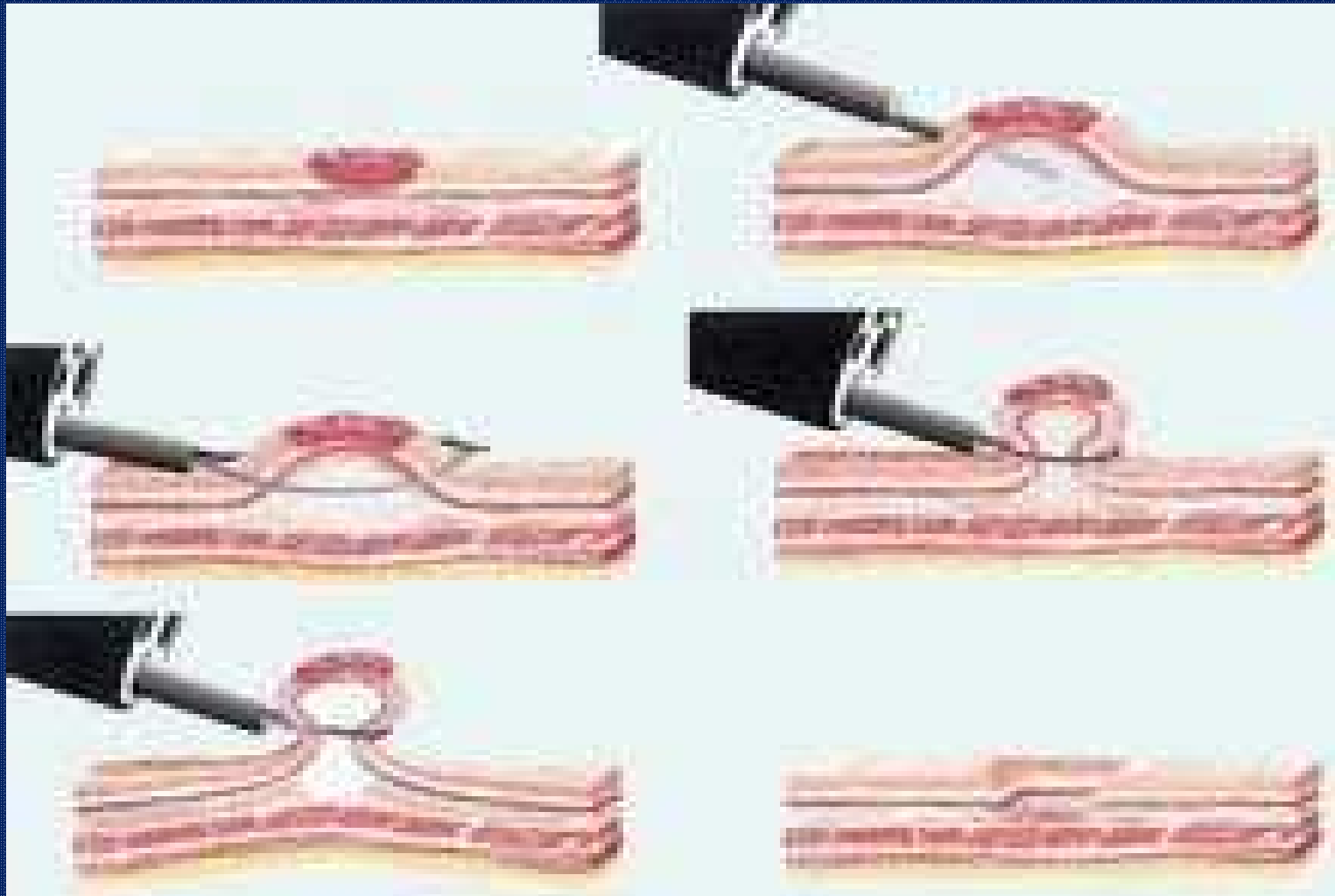


Trial	Frequency	Mortality Reduction	Adherent
• Minnesota:	Annual	33%	
• Nottingham:	Biennial	15%	39%
• Denmark:	Biennial	18%	33%
• France (2004)	Biennial*	16%	33%

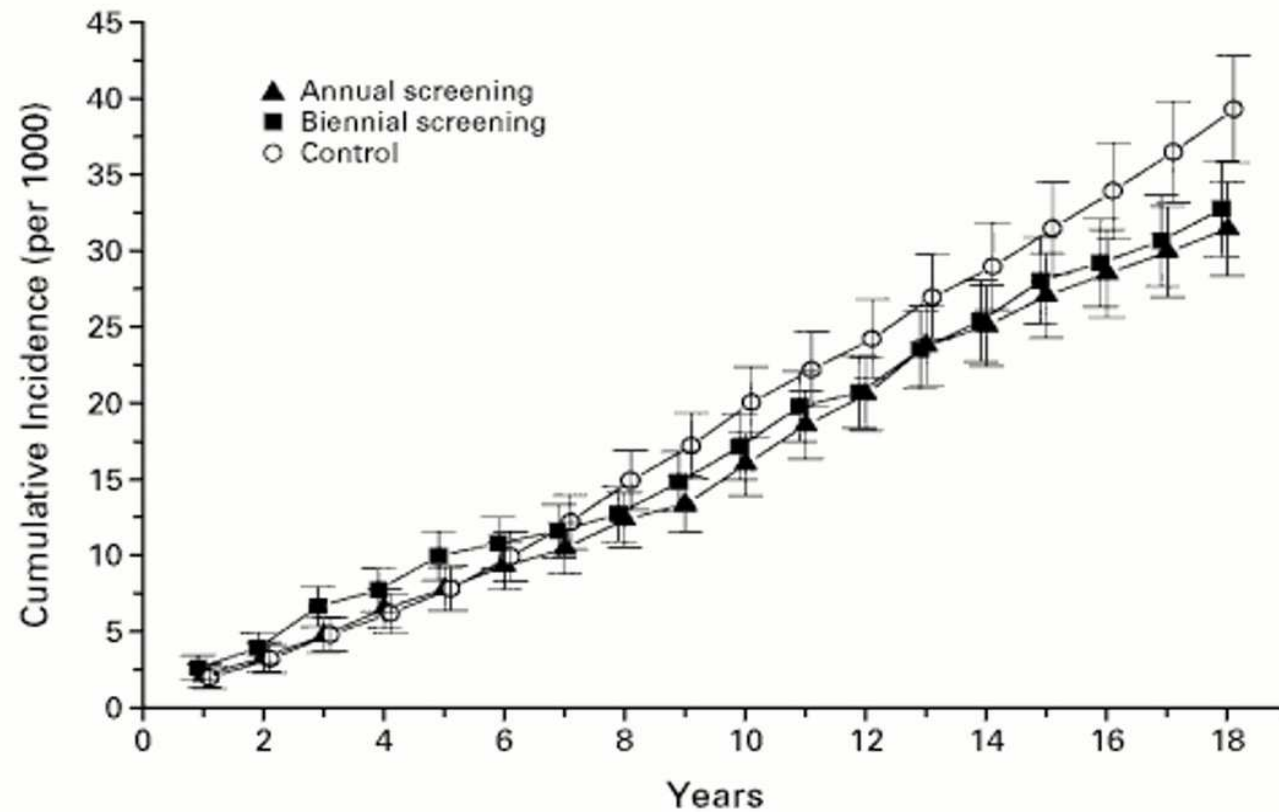
Reduction in incidence: 17-20%

NEJM 2000; 343:1603-7

Astmeline vähitekkeprotsess



Sõeluurimise efektiivsus



No. of SUBJECTS

Annual screening	15,532	15,364	14,991	14,538	14,022	13,451	12,763	11,983	11,157	9494
Biennial screening	15,550	15,386	14,984	14,507	13,989	13,407	12,716	11,988	11,155	9554
Control	15,363	15,202	14,835	14,382	13,851	13,218	12,598	11,827	11,021	9342

Endoskoopiline skriining

National CRC screening using colonoscopy in Poland

- **>50,000** screenees from 40 sites
- **Cecum reached in >90%**
- **Normal colonoscopy - 47%**
- **Non-neoplastic lesions - 29%**
- **Adenomas - 24%**
- **Advanced Adenoma - 5%**
- **Cancer <0.8%**
- **Complications 0.1%**
- **Perforations 0.01%**

Regula NEJM, 2006

Skriining(1)

- *Keskmine risk*
 - peitevere analüüs(guajakimeetod,immuunmeetod)*
 - sigmoidoskoopia(kord 5 a.järel,kord elus)*
 - kolonoskoopia(kord 10 a.järel)*
 - irrigodkoopia,kompuuterkolograafia*

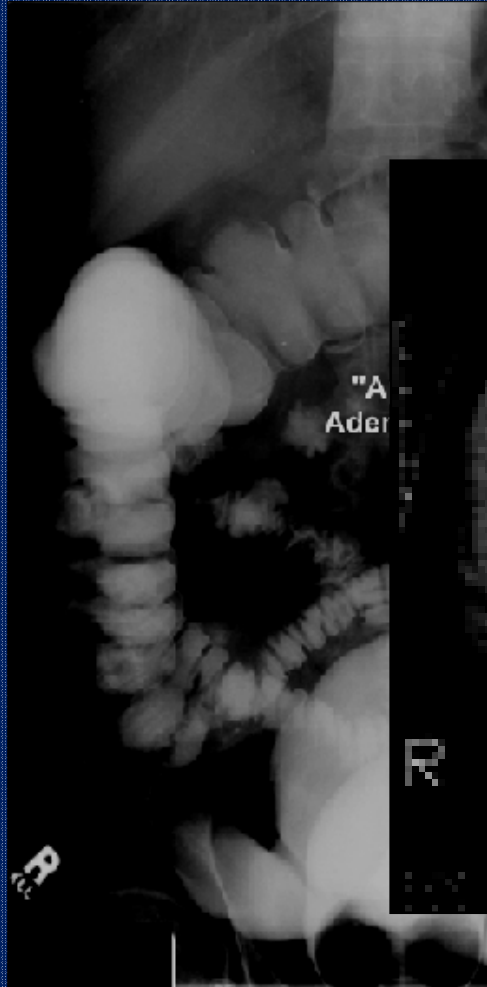
Skriining(2)

- *Kõrge risk*
 - ca või adenomatoosne polüüp lähisugulasel alla 60 aasta*
 - ca kahel lähisugulasel igas eas*
 - FAP*
 - HNPCC*
 - isiklik polüüpide või KRV anamnees*
 - põletikuline soolehaigus*

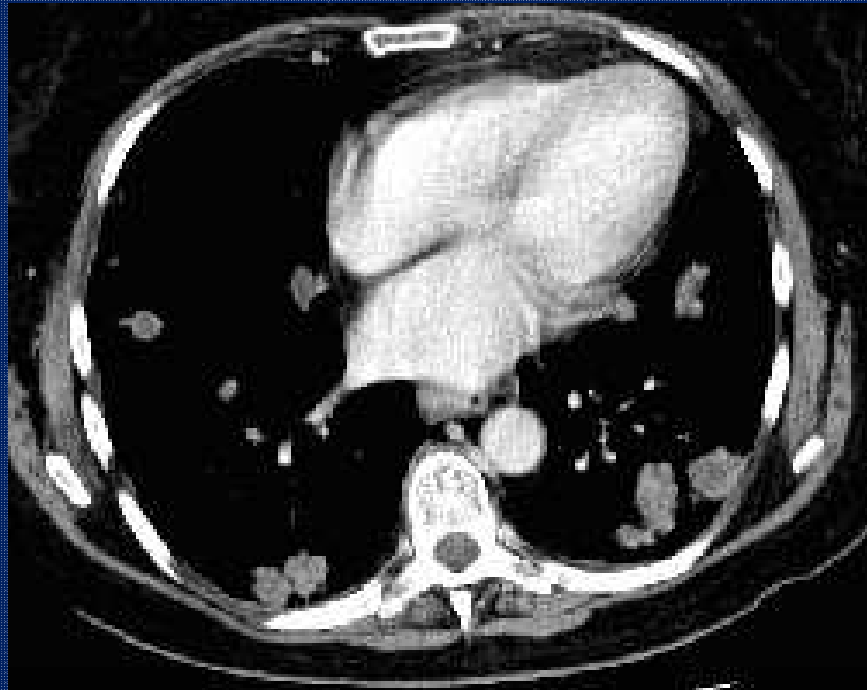
Jämesoolevähi diagnoosimine

Kliiniline pilt, laboratoorne diagnostika

- *parempoolne jämesool*
- *vasakpoolne jämesool*
- *pärasool*



Metastaatile jämesoolevähk



Endoskoopiline skriining

National CRC screening using colonoscopy in Poland

- **>50,000** screenees from 40 sites
- **Cecum reached in >90%**
- **Normal colonoscopy - 47%**
- **Non-neoplastic lesions - 29%**
- **Adenomas - 24%**
- **Advanced Adenoma - 5%**
- **Cancer <0.8%**
- **Complications 0.1%**
- **Perforations 0.01%**

Regula NEJM, 2006



N staatusse määramise täpsus

Lymph Node Status

Pooled results

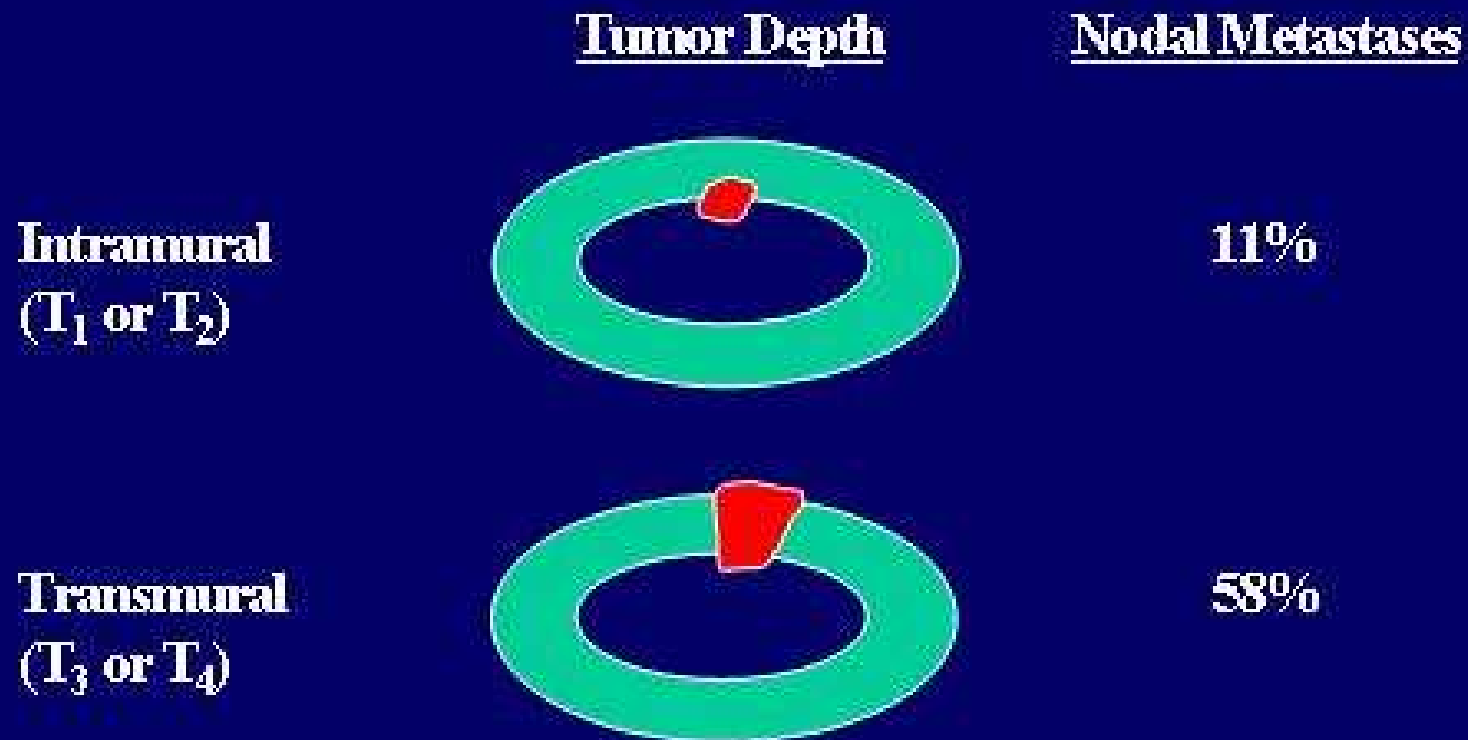
	n	Acc	Sens	Spec	PPV	NPV
CT	945	66%	52%	78%	68%	64%
MRI	436	74%	65%	80%	72%	75%
MRI+coil	181	82%	82%	83%	76%	87%
ERUS	2032	74%	71%	76%	69%	78%

Instrumentaalse diagnostika põhipostulaadid

- *endoskoopia täpne 95%(cave!viga võimalik)*
- *KT-metastaatiline levik,T4,rektumi ülemine-keskmine kolmandik(cave!allergi,neerupuudulikkus,kiirguskoormus)*
- *UH-vaatajast sõltuv,kontrastaine+,algkole*
- *EUH-T1,2+T3?(cave!kogemus,stenoos,kõrge tuumor)*
- *MRI-rektumi lokaalne staatus(T,CRM,maks)*
- *PET-kauglevik+/-,retsidiiv(cave!põletik,väike kolle,ravi)*

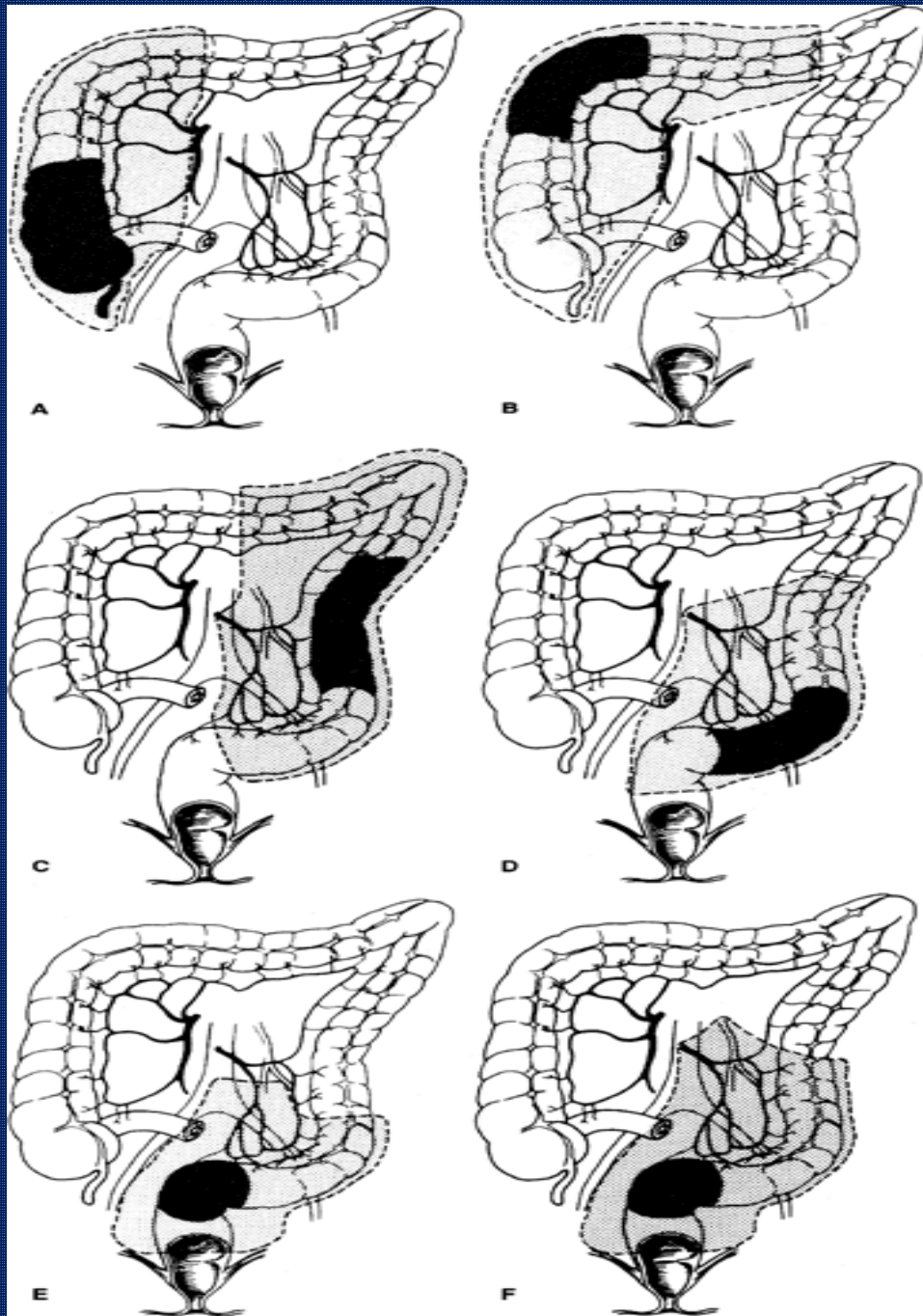
Kirurgiline ravi

Regional Spread of Rectal Cancer



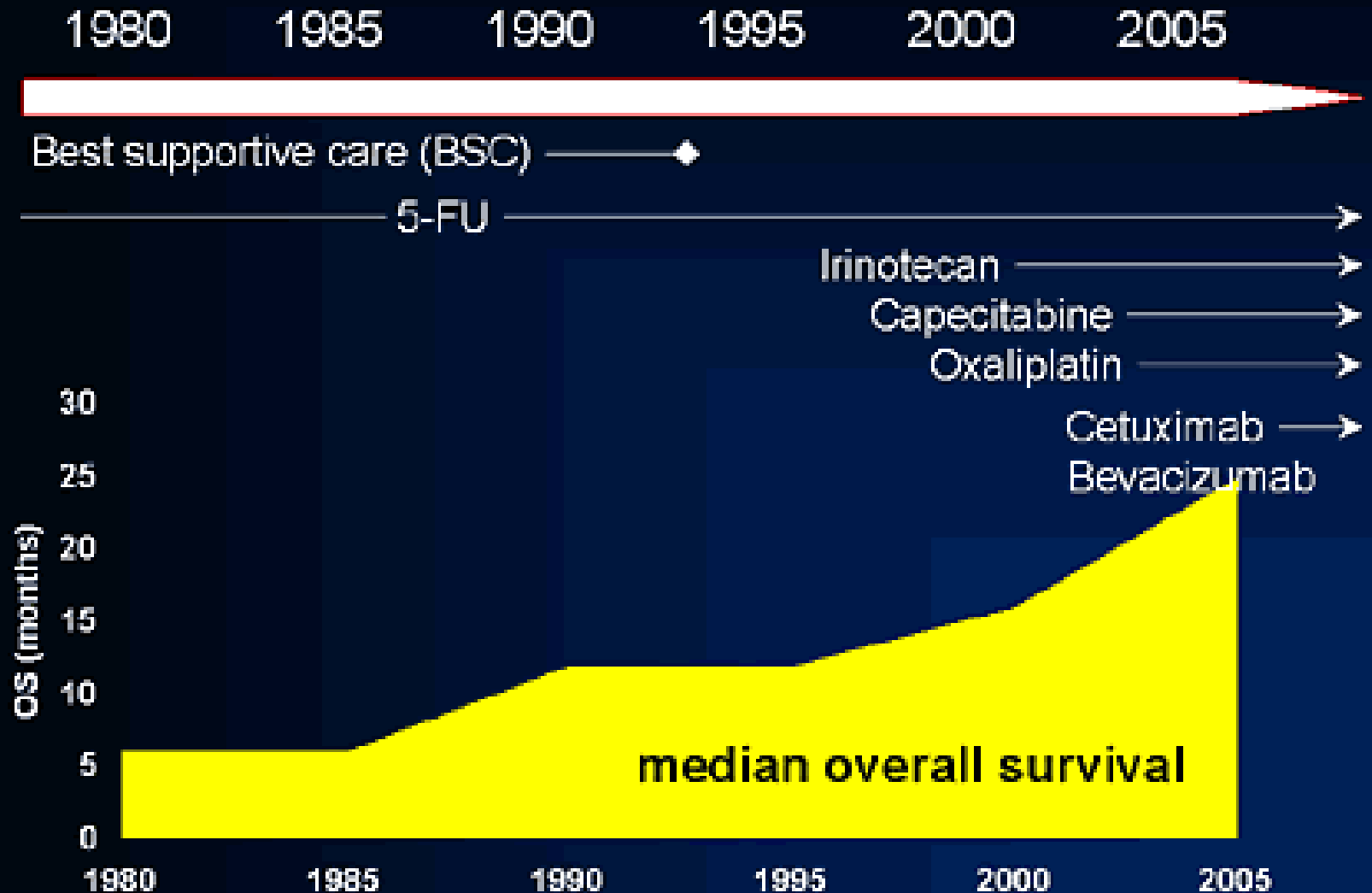
Kirurgiline ravi

- *ainuke reaalselt kuratiivne ravimodaalsus*
- *lokaalne eemaldamine võimalik(cave!)*
- *oluline on R0 resektsioon ja regionaalsete lümfisõlmede eemaldamine*
- *avatud vs laparoskoopiline lähenemine võrdsed onkoloogiliste tulemusnäitajate osas*
- *erakorraline operatsioon seotud oluliselt suurema operatsiooniriski ja halvenenud onkoloogilise elulemusega*

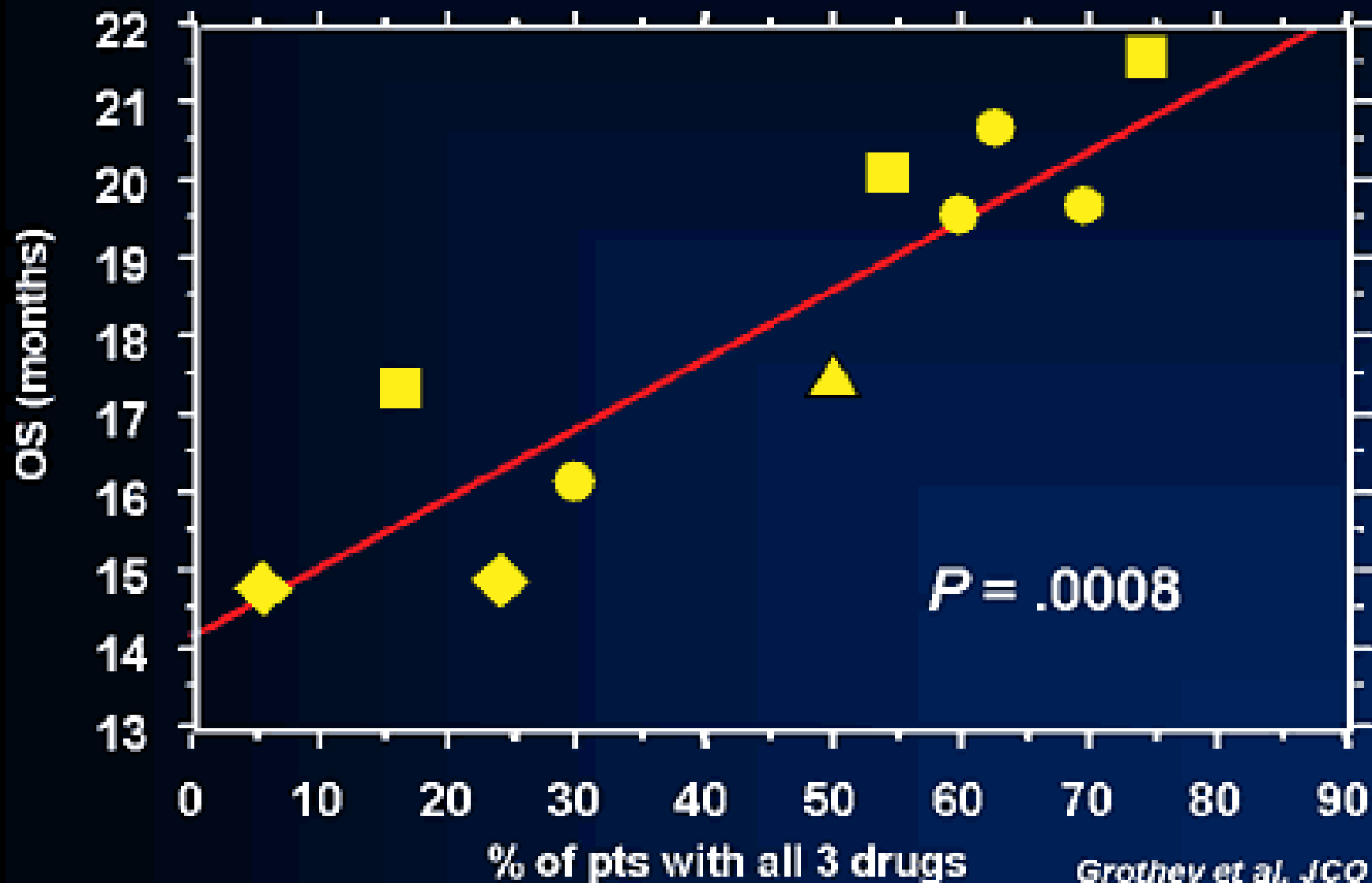


Jämesoolevähi palliatiivne süsteemravi

Advances in the Treatment of CRC



All 3 Drugs



Palliatiivne süsteemravi

- *5-FU “selgroog”, eelistatud püsiv manustamine*
- *leukovoriin, oksaliplatiin, irinotekaan*
- *bioloogiline ravi*
- *oluline raviridade vahetamine*
- *lubatud intermitteeruv ravi*
- *kirurgia?!*

Jämesoolevähi ravi maksumus

Can we afford this?

Regimen	Cost per cycle	Cost/6 months
5-FU/LV weekly x 6, every 8 weeks	\$66	\$214
Capecitabine x 14 days every 3 weeks	\$1512	\$13,104
Irinotecan weekly x 4, every 6 weeks	\$6520	\$28,253
mFOLFOX6 (oxaliplatin, leucovorin, infusional 5-FU x 48 hours) every 2 weeks	\$2942	\$38,246
FOLFIRI (oxaliplatin, leucovorin, infusional 5-FU x 48 hours) every 2 weeks	\$2570	\$33,410
Cetuximab monotherapy weekly	\$4080 loading dose wk 1, then \$2550/wk	\$67,830
Bevacizumab (alone) every 2 weeks	\$2406	\$31,278

Only drug costs included. Average wholesale price based upon 70 kg weight, body surface area = 1.7 square meters

Jämesoolevähi adjuvantravi

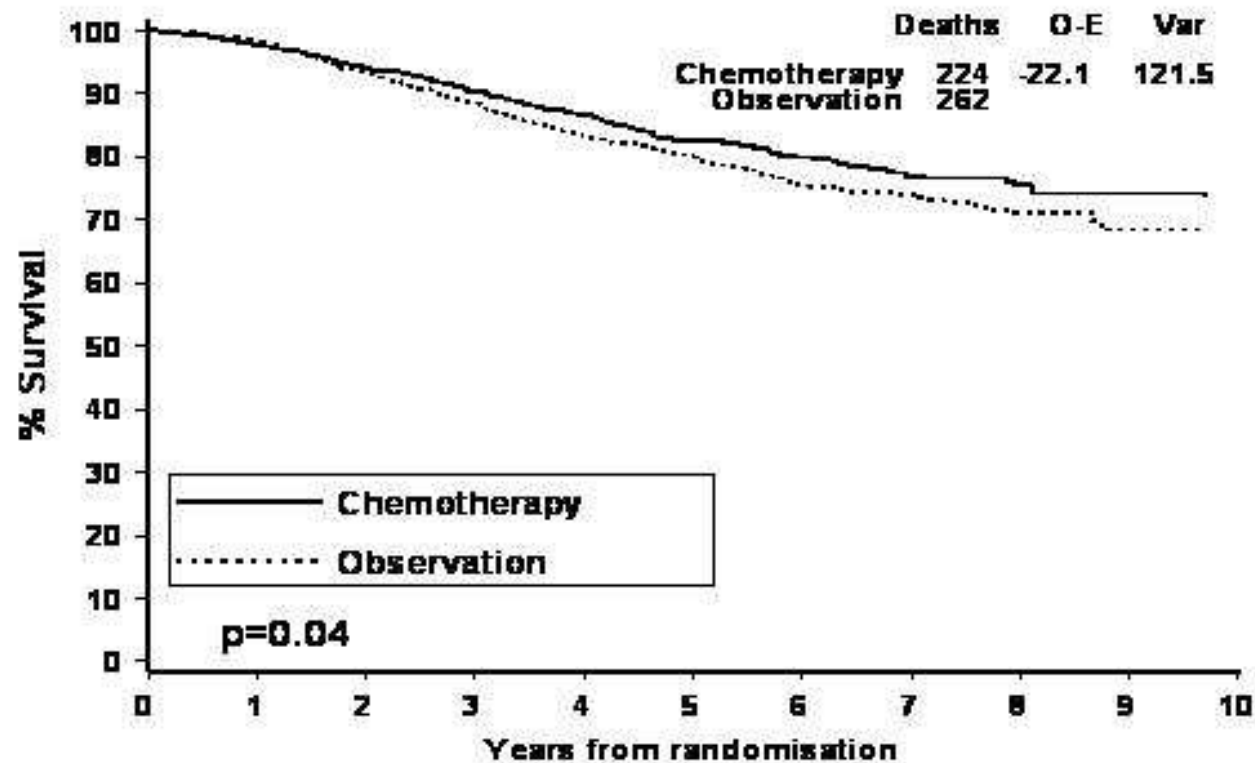
Jämesoole adjuvantravi ajaline areng

Adjuvant chemotherapy of colon cancer: steps ahead

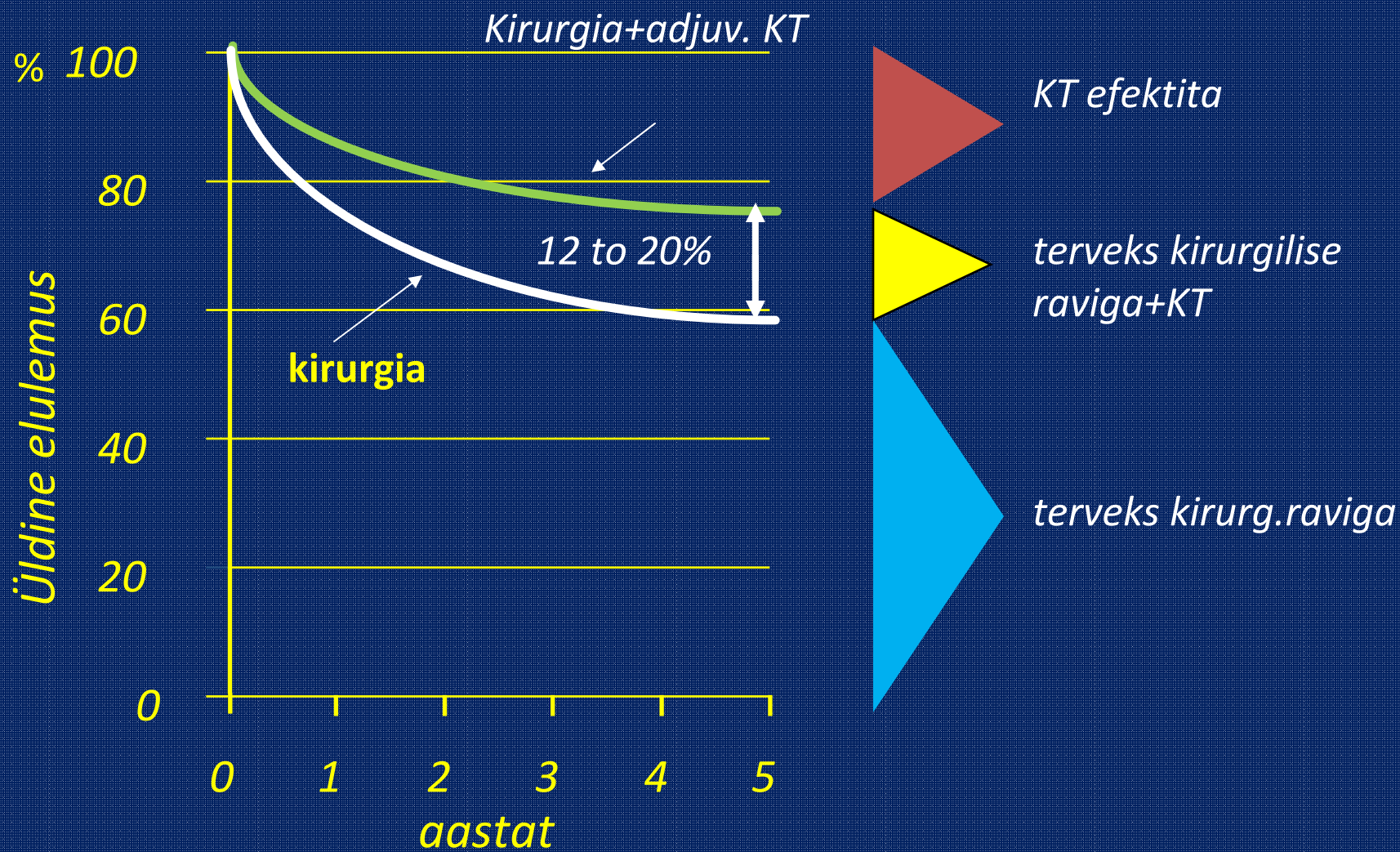


2.stadiumi adjuvantravi

Survival – Dukes stage B



3.staadiumi jämesoolevähi adjuvantravi



100% eksponeeritud toksilisusele

Dutch rectal cancer study

- Randomized to surgery or preoperative radiation 5x5 Gy three or four beam approach
- Standardized TME

2-year f/u	RT + surgery	surgery	
Local recurrence	2.4%	8.2%	P<0.001
Overall survival	82%	81.8%	P=0.84

Kapeteijn E NEJM 2001;345:638

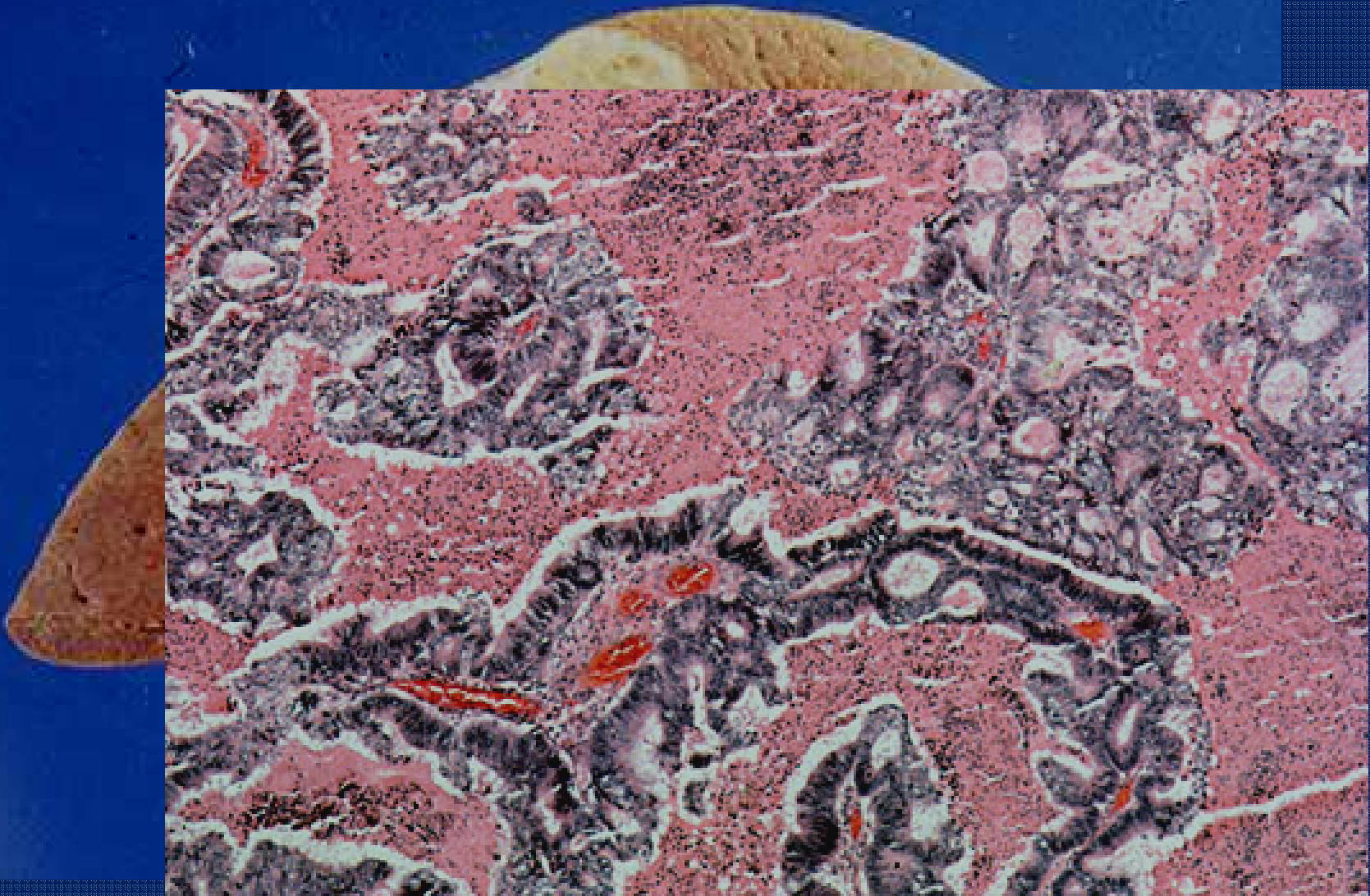
Käärsoole adjuvantravi põhipostulaadid

- *parandab haigusvaba ja üldist elulemust*
- *efektiivsed fluoropürimidiin ja oksaliplatiin, efektita irinotekaan, bioloogiline ravi*
- *6 kuud*
- *mida varem seda parem*
- *elulemuse efekt on püsiv*

Pärasoole adjuvantravi põhipostulaadid

- *efektiivne nii radio-kui kemoteraapia*
- *eelistatud preoperatiivne radioteraapia*
- *lühike = pikk*
- *fluoropürimidiin+, oxa-*
- *parandab lokaalset kontrolli, elulemus?*
- *Cave! funktsionaalsed tulemused*

Metastaaside käsitus



Maksametastaasid

COLO-RECTAL CANCER

LIVER METASTASES

Resectable 10-20%

Non resectable 80-90%

Surgery

Chemotherapy

Results of Hepatic Resection for Metastatic Colorectal Cancer

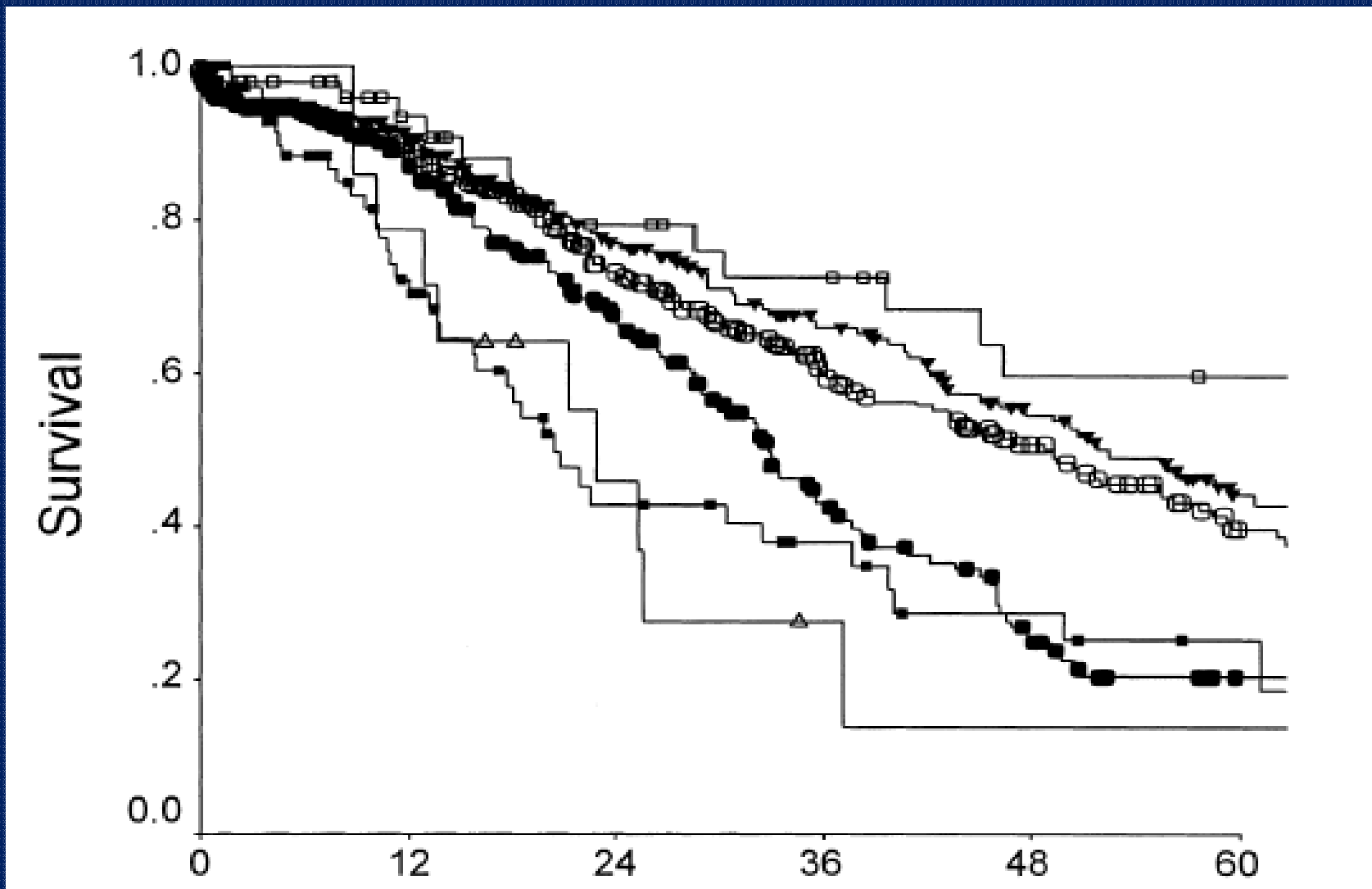
Author (year)	No. Pts	Mortality (%)	Med Surv	Survival (%)	
				1-year	5-year
Hughes et al (86)	607	--	--	--	33
Gayowski et al (94)	204	0	33 mo	91	32
Scheele et al (95)	489	4	40 mo	83	39
Fong et al (95)	577	4	40 mo	85	35
Jenkins et al (97)	131	4	33 mo	81	25
Jamison et al (97)	280	4	33 mo	84	27
Fong et al (99)	1001	3	42 mo	--	36
Scheele et al (01)	516	3	--	--	38
Choti et al (02)	226	1	46 mo	96	40

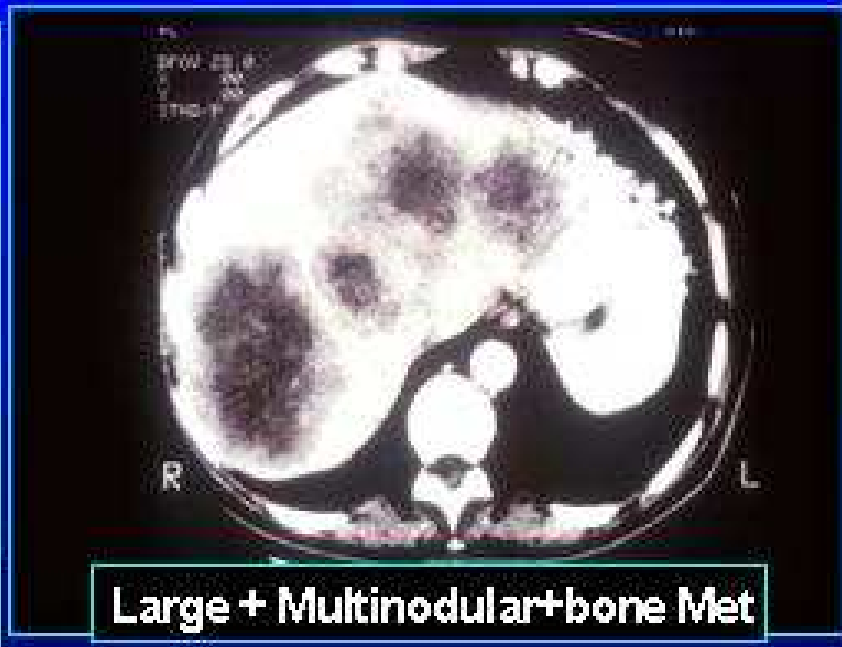
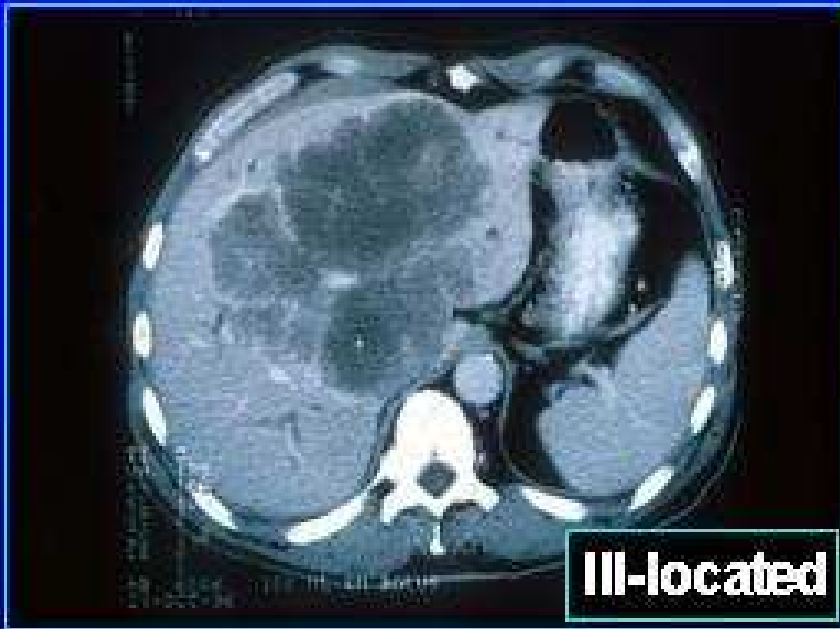


Table 5. CLINICAL RISK SCORE FOR TUMOR RECURRENCE

Score	Survival (%)					Median (mo)
	1-yr	2-yr	3-yr	4-yr	5-yr	
0	93	79	72	60	60	74
1	91	76	66	54	44	51
2	89	73	60	51	40	47
3	86	67	42	25	20	33
4	70	45	38	29	25	20
5	71	45	27	14	14	22

Each risk factor is one point: node-positive primary, disease-free interval <12 months, >1 tumor, Size >5 cm, CEA >200 ng/ml.





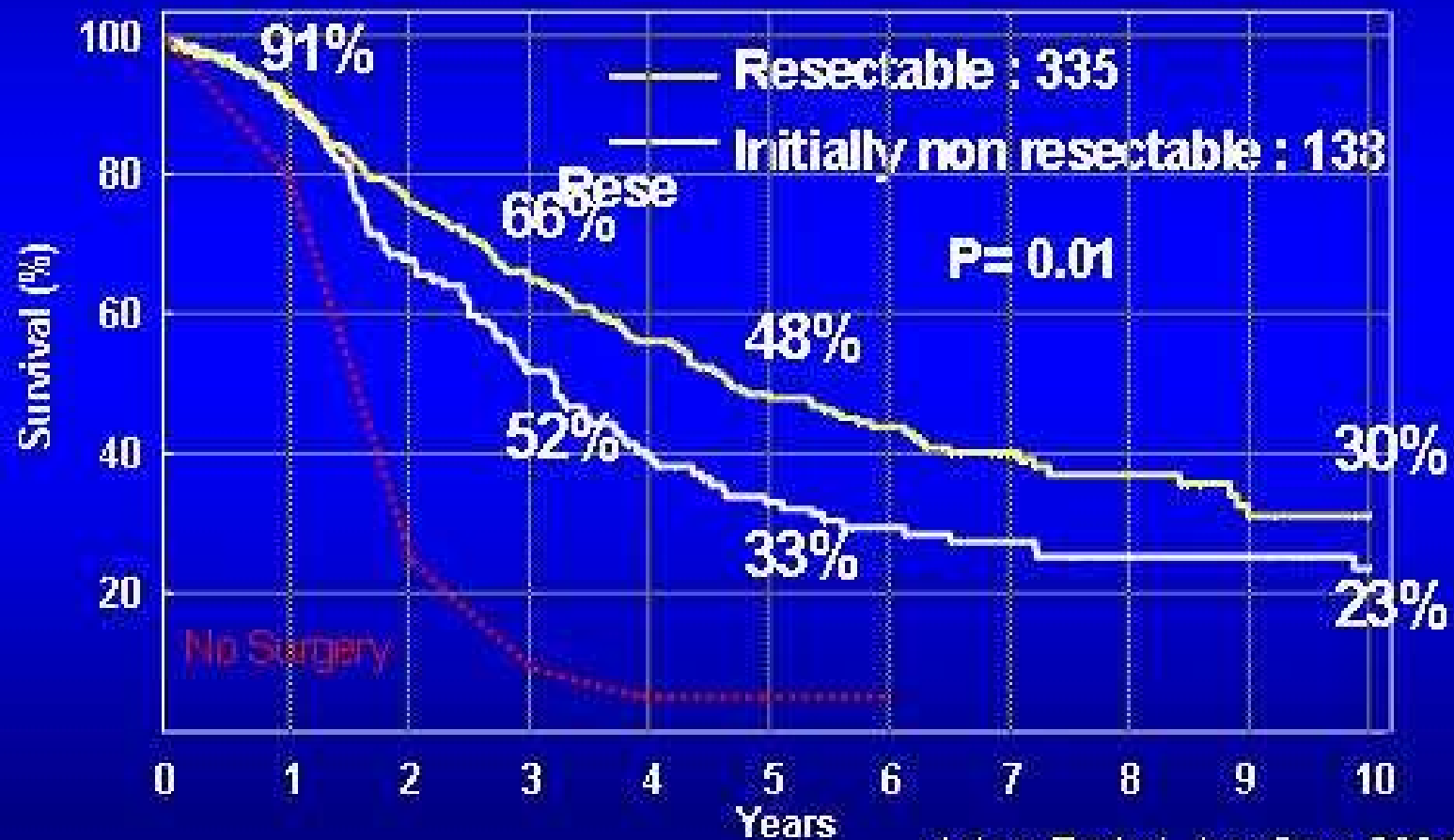
Effective Preoperative Therapy + Hepatic Resection: Long-term Results in “Unresectable” Patients

REF	n=	RO rate	Op Rate	DFS	OS
Adam, 2000	701	13.6%	14%	22% 5-year	5-year: 39% Median 39mo
Zelek, 2003	31	29%	35%	Median: 20.2 months	3-year OS= 65%
Pozzo, 2004	40	40%	33%	Median: 14.3 months	100% alive at 19 months
Alberts, 2005	42	38%	43%		Median: 26 mo

Results better than chemotherapy alone...

Survival after Liver Resection of Colorectal Metastases

Paul Brousse Hospital - 473 patients (Apr. 88 - Jul. 99)



Adam R et al. Ann Surg 2004

Ekstrahepaatiline metastaatiline levik

pole absoluutne vastunäidustus aga:

-EKSTRAHEPAATILINE LEVIK(LOKAALRETSIDIIV, PERITONEAALNE LEVIK, KOPSUMETASTAASID,RETROPERITONEAALNE LEVIK) PEAB OLEMA TÄIELIKULT RESEKTEERITAV

-PREOPERATIIVSEL KEMOTERAAPIAL PEAB OLEMA SAAVUTATUD RAVIVASTUS VÕI STABILISATSIOON

OLULISEM PROGNOOSI SEISUKOHALT ON METASTAASIDE ÜLDARV MITTE METASTAASIDA LOKALISATSIOON EKSTRAHEPAATILISELT VÕI MITTE



The "blue" liver



« Complete Response »



Before treatment



After 6 cycles of chemotherapy

Kokkuvõtteks

- *esinemus suureneb*
- *skriining vähendab tulevikus esinemust, suurendab varajaste juhtude osakaalu, parandab elulemust, on kuluefektiivne*
- *diagnostika on mõnevõrra problemaatiline, vajalik kliiniline kahtlus*
- *kuratiivne ravi on kirurgiline*
- *süsteemravi on oluliselt arenenud aga mitte kuratiivseks*
- *elulemuse paranemise võtmesõnadeks on varajane avastamine ja multimodaalsus*

