



# Αρχές Χειρουργικής Ογκολογίας

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Α' Χειρ Κλινική ΛΑΙΚΟ Νοσοκομείο*



# Ορισμός

- Ο ρόλος της Χειρουργικής στη “διαχείριση” της νεοπλασματικής νόσου



# Τι περιλαμβάνει

Καταγραφή των αλγορίθμων παραγωγικότητας

Πρόγραμμα & διαδικασίες έλεγχου

Έναρξη δράσεων ή/και Συστήρι στην κοφίδια

Συλλογή πληροφοριών και Μέθοδοι παρακολούθησης

Διασφάλιση της συνέπειας των εργαζομένων

Συμμετοχή εργαζομένων

Προσέλευση

Προσέλευση

Προσέλευση

Ανασκόπηση

Μεταγραφή παρακολούθησης



# Γιατί την χρειαζόμαστε?

- Η επίπτωση του καρκίνου αυξάνεται σταθερά τα τελευταία 50 χρόνια
- Πλήθος θεραπευτικών επιλογών είναι διαθέσιμες στην εποχή μας
- Πλήθος χειρουργικών τεχνικών, υλικοτεχνικού εξοπλισμού και τεχνολογικών εξελίξεων χαρακτηρίζουν την τελευταία 30ετία
- Πολυ-αιτιολογική, Πολυ-παραγοντική αιτιολογία της καρκινογένεσης
- Δια-επιστημονική προσέγγιση για την επιλογή της καταλληλότερης θεραπείας.




# Cancer Epidemiology




## ESTIMATED NEW CASES

### MEN:



Prostate	33%
Lung and Bronchus	14%
Colon and Rectum	11%
Urinary Bladder	6%
Melanoma of the Skin	4%
Non-Hodgkin's Lymphoma	4%
Kidney	3%
Oral Cavity	3%
Leukemia	3%
Pancreas	2%
All Other Sites	17%

### WOMEN:



Breast	32%
Lung and Bronchus	12%
Colon and Rectum	11%
Uterine Corpus	6%
Ovary	4%
Non-Hodgkin's Lymphoma	3%
Melanoma of the Skin	3%
Thyroid	3%
Pancreas	2%
Urinary Bladder	2%
All Other Sites	20%




# Cancer Epidemiology




## ESTIMATED DEATHS

### MEN:



Lung and Bronchus	31%
Prostate	10%
Colon and Rectum	10%
Pancreas	5%
Non-Hodgkin's Lymphoma	4%
Leukemia	4%
Esophagus	4%
Liver	3%
Urinary Bladder	3%
Kidney	3%
All Other Sites	22%

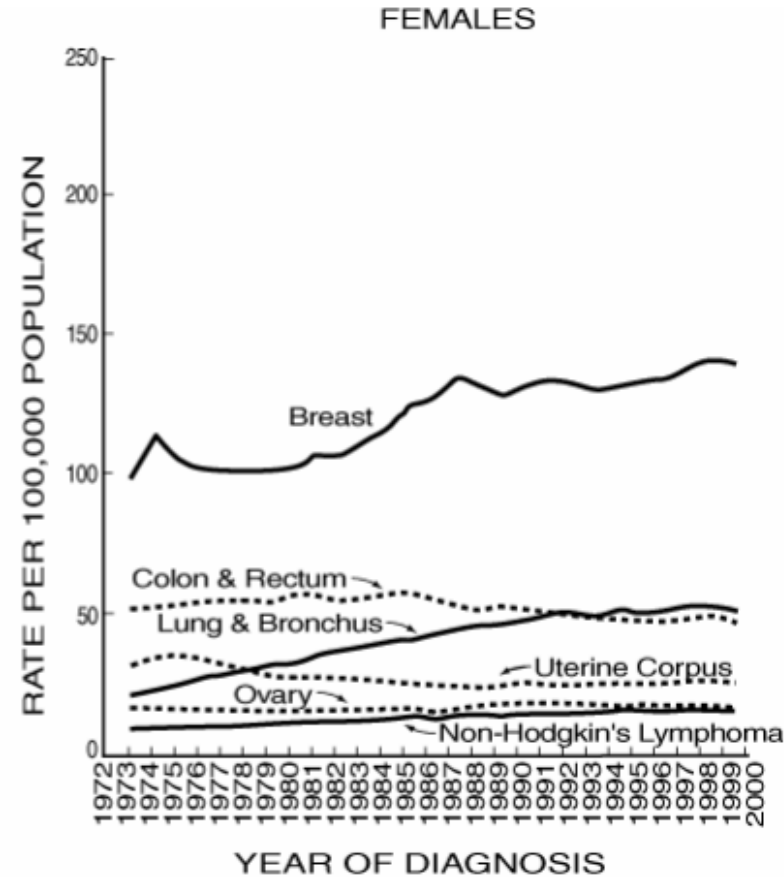
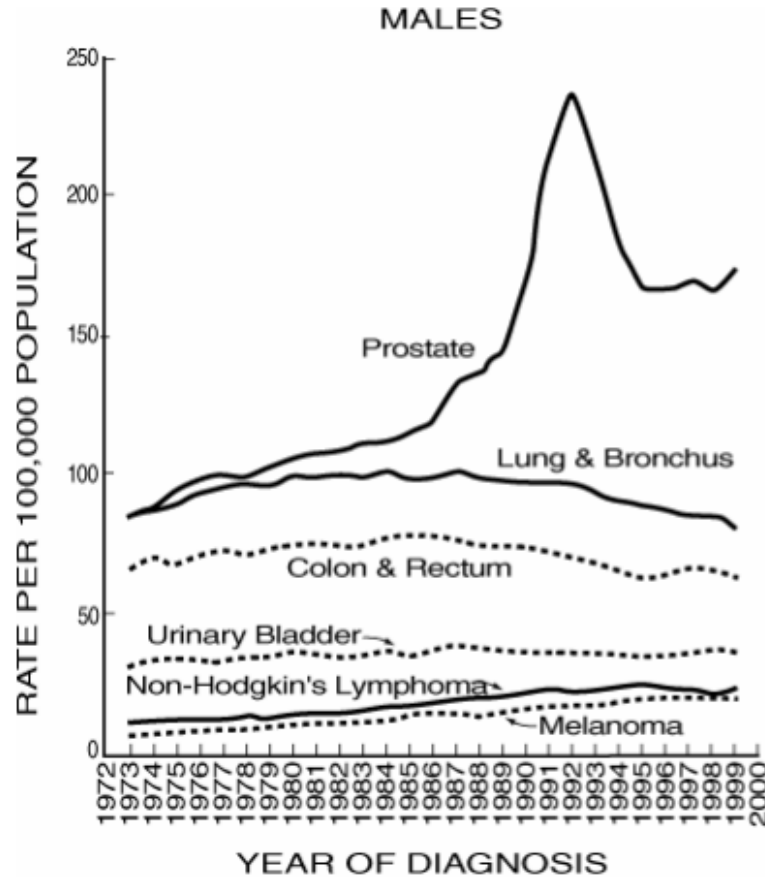
### WOMEN:



Lung and Bronchus	25%
Breast	15%
Colon and Rectum	11%
Pancreas	6%
Ovary	5%
Non-Hodgkin's Lymphoma	4%
Leukemia	4%
Uterine Corpus	3%
Brain	2%
Multiple Myeloma	2%
All Other Sites	23%



# Trends in Cancer Incidence and Mortality

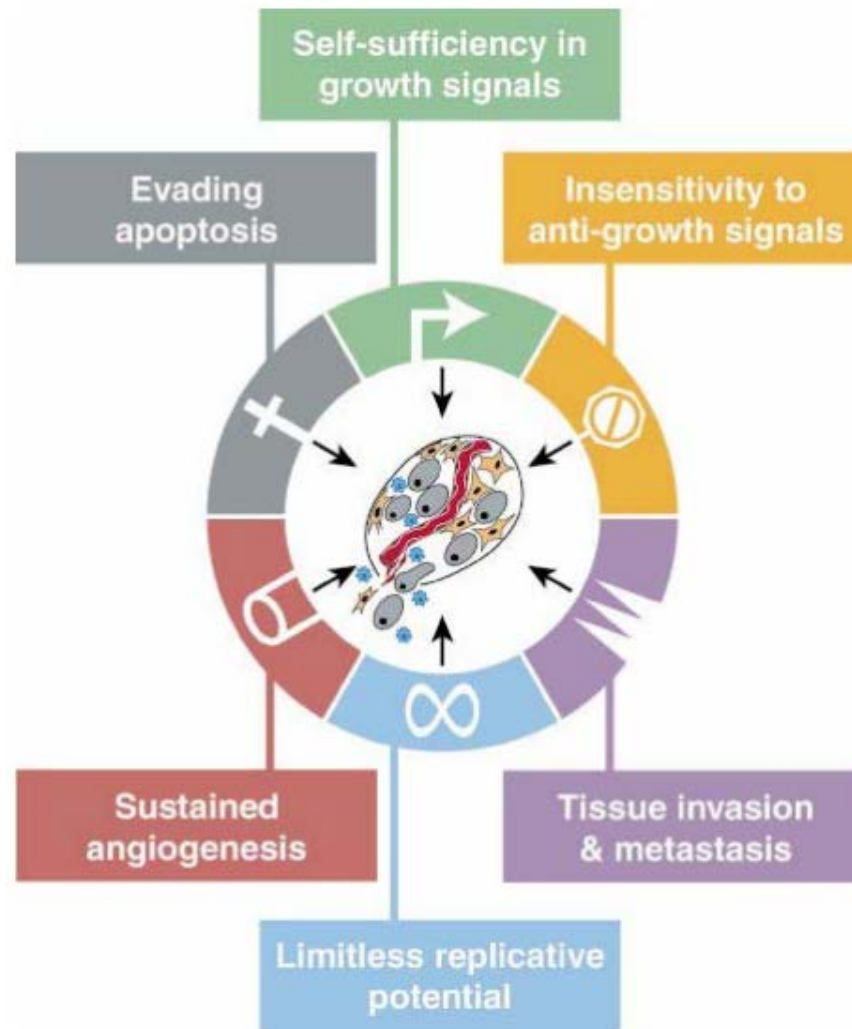




# Κατανόηση καρκινογένεσης

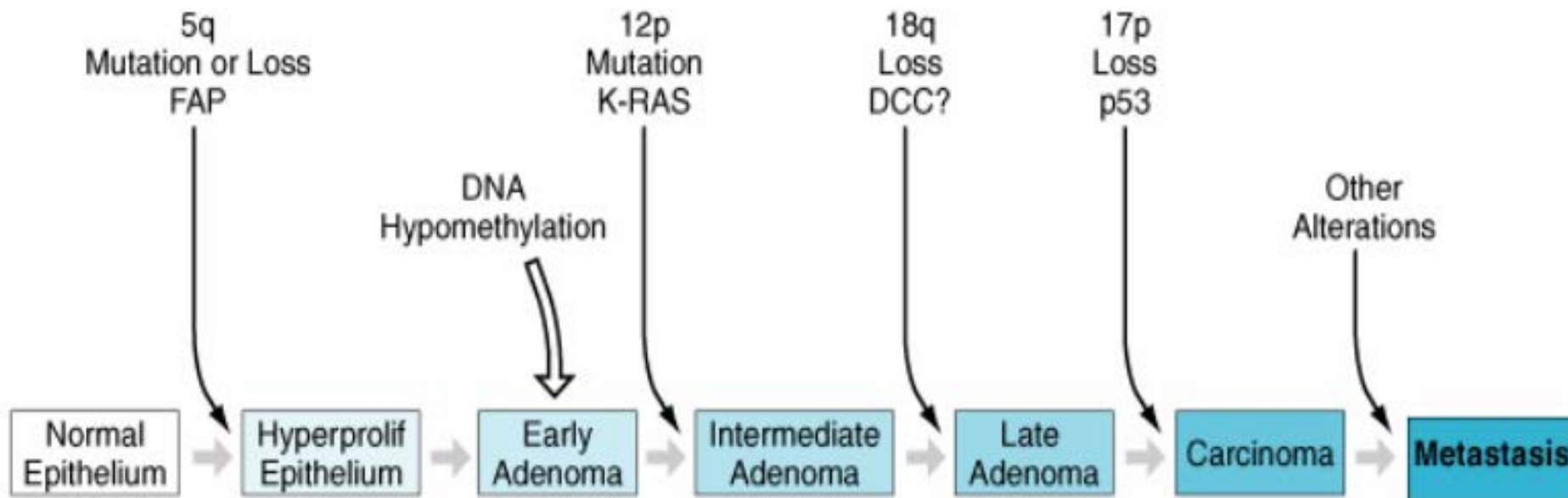








Καρκινογένεση = Έναρξη, Ανάπτυξη, Προώθηση  
*Initiation Promotion Progression*



## Genes Associated with Hereditary Cancer

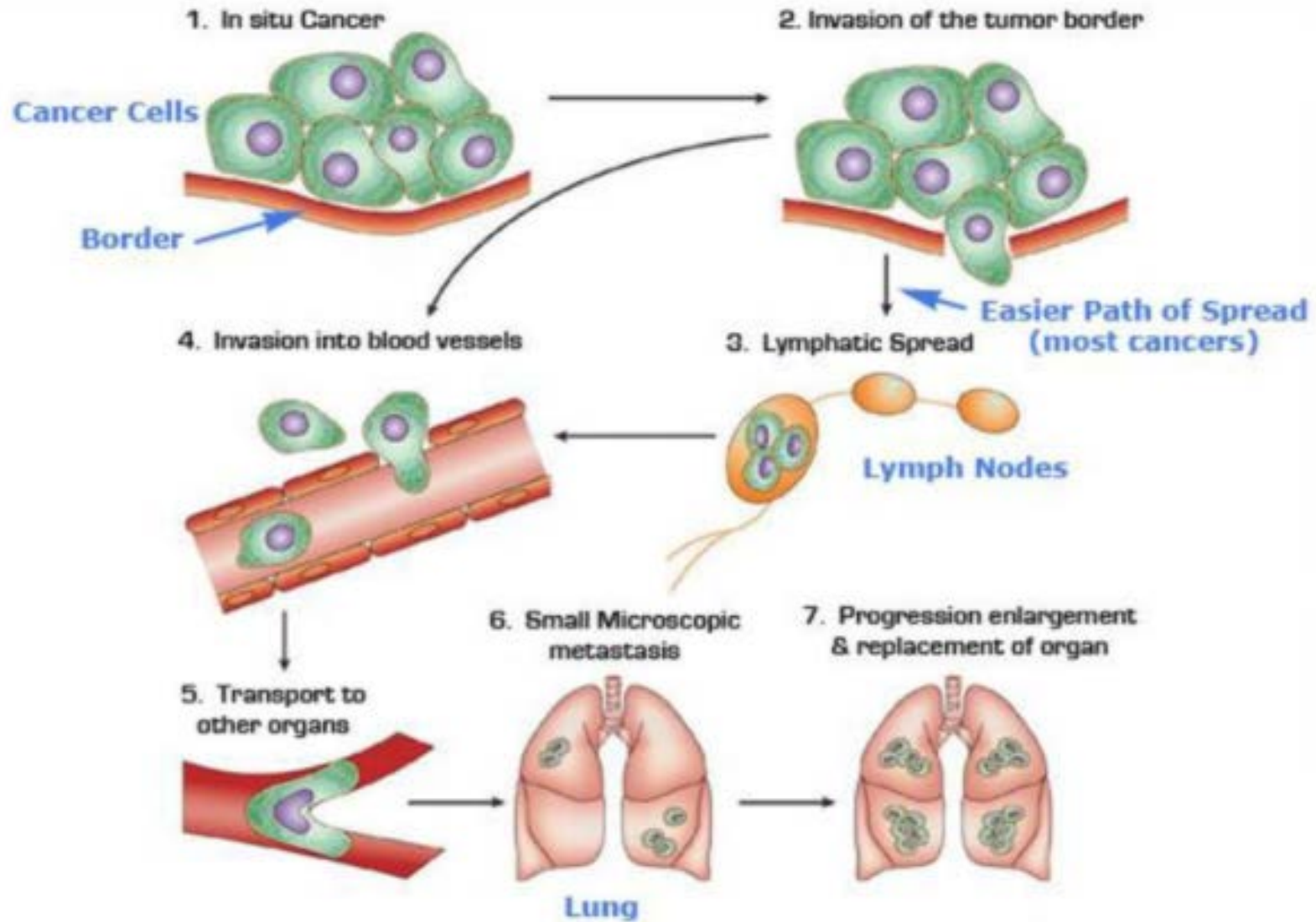
Genes	Syndrome
APC	Familial adenomatous polyposis (FAP)
BMPRIA	Juvenile polyposis coli
BRCA1	Breast/ovarian syndrome
BRCA2	Breast/ovarian syndrome
hMLH1; hMSH2; hMSH6; hPMS1; hPMS2	Hereditary nonpolyposis colorectal cancer

## Chemical Carcinogens

Chemical	Predominant Tumor Type
Aflatoxins	Liver cancer
Arsenic	Skin cancer
Benzene	Leukemia
Benzidine	Bladder cancer
Ethylene oxide	Leukemia, lymphoma
Estrogen replacement therapy	Endometrial cancer, breast cancer
Tamoxifen	Endometrial cancer
Tobacco smoke	Lung cancer, oral cancer, pharyngeal cancer, laryngeal cancer, esophageal cancer (squamous cell, pancreatic cancer, bladder cancer, liver cancer, renal cell carcinoma, cervical cancer, leukemia)

## Viral Carcinogens

Virus	Predominant Tumor Type <sup>b</sup>
Epstein-Barr virus	Burkitt's lymphoma
	Hodgkin's disease
	Immunosuppression-related lymphoma
	Sinonasal angiocentric T-cell lymphoma
Hepatitis B	Nasopharyngeal carcinoma
	Hepatocellular carcinoma
Hepatitis C	Hepatocellular carcinoma
Human immunodeficiency virus-1	Kaposi's sarcoma
	Non-Hodgkin's lymphoma
Human papillomavirus types 16 and 18	Cervical cancer
	Anal cancer
Human T-cell lymphotropic viruses	Adult T-cell leukemia/lymphoma
	leukemia)





## Cancer Screening

Cancer Site	Population	Test or Procedure	Frequency
Breast	Women, age 20+	Breast self-examination	Monthly, starting at age 20
		Clinical breast examination	Every 3 years, ages 20–39 Annual, starting at age 40
		Mammography	Annual, starting at age 40
Colorectal	Men and women, age 50+	Colonoscopy	Colonoscopy every 10 years, starting at age 50
Prostate	Men, age 50+	Digital rectal examination (DRE) and prostate-specific antigen test (PSA)	Offer PSA and DRE annually, starting at age 50, for men who have life expectancy of at least 10 years



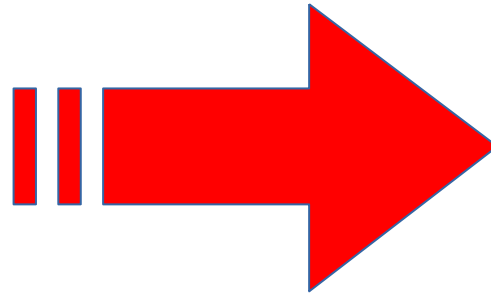
# Tumor Markers



Marker	Cancer	Sensitivity	Specificity
PSA (4 g/L)	Prostate	57–93%	55–68%
CEA	Colorectal	40–47%	90%
	Breast	45%	81%
	Recurrent disease	84%	100%
AFP	Hepatocellular	98%	65%
CA 19-9	Pancreatic	78–90%	95%
CA 27-29	Breast	62%	83%
CA 15-3	Breast	57%	87%



**Συμβολή στη  
διάγνωση**



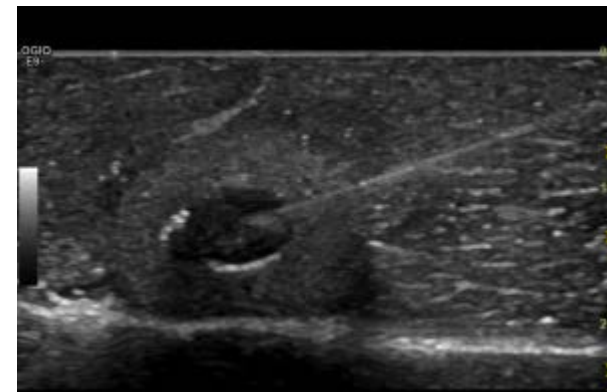
**Βιοψία**



# Βιοψία δια λεπτής βελόνας

*Fine needle aspiration biopsy (FNAB)*

*Fine needle aspiration cytology (FNAC)*

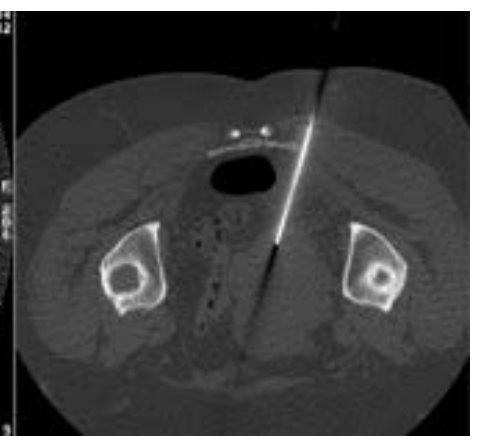
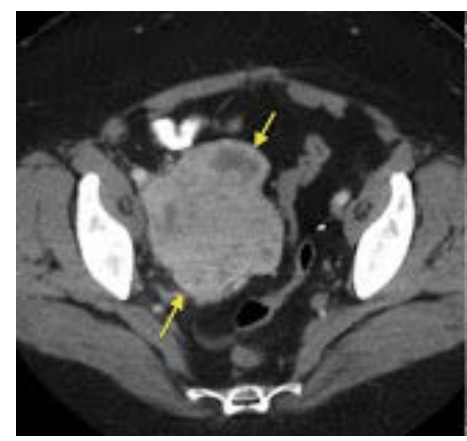
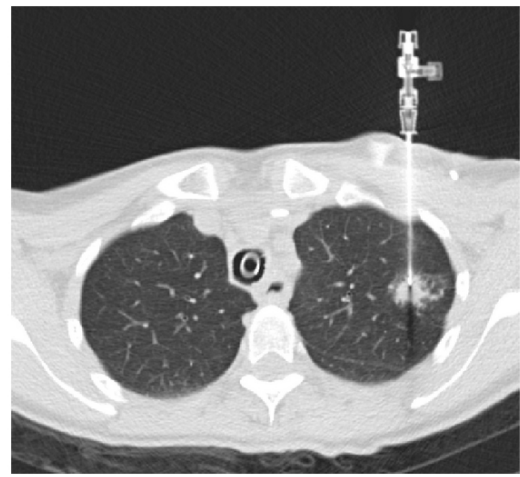
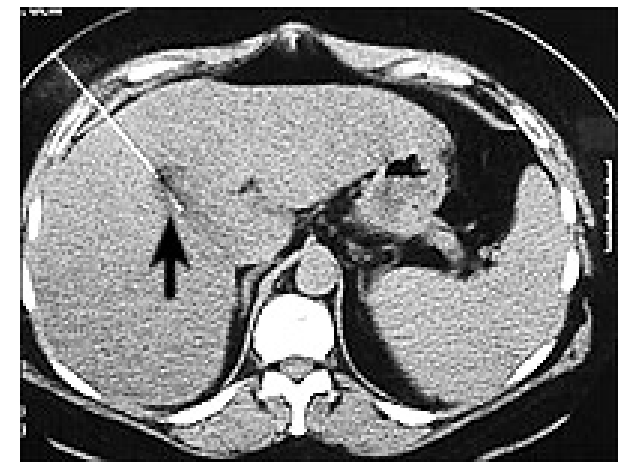






# Βιοψία δια βελόνης

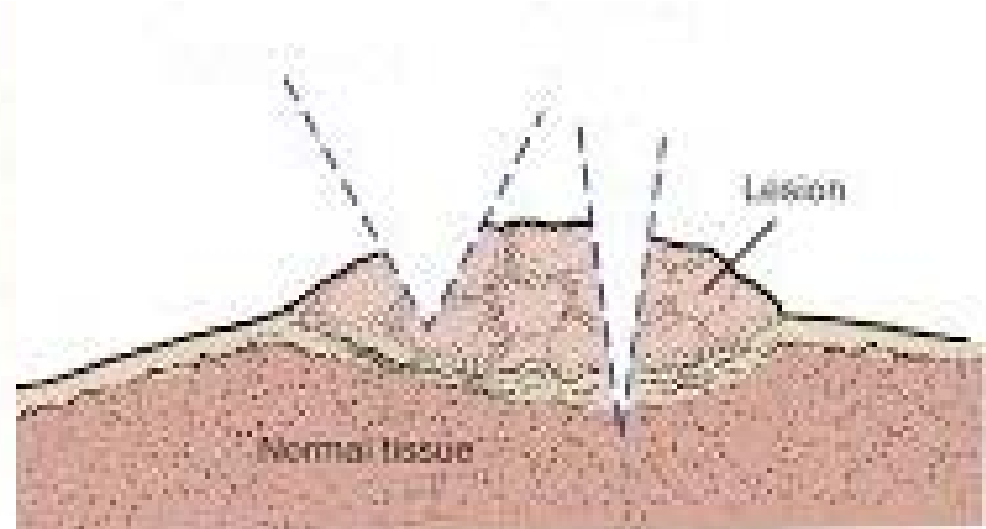
*Tru-cut biopsy*





# Βιοψία διατομής

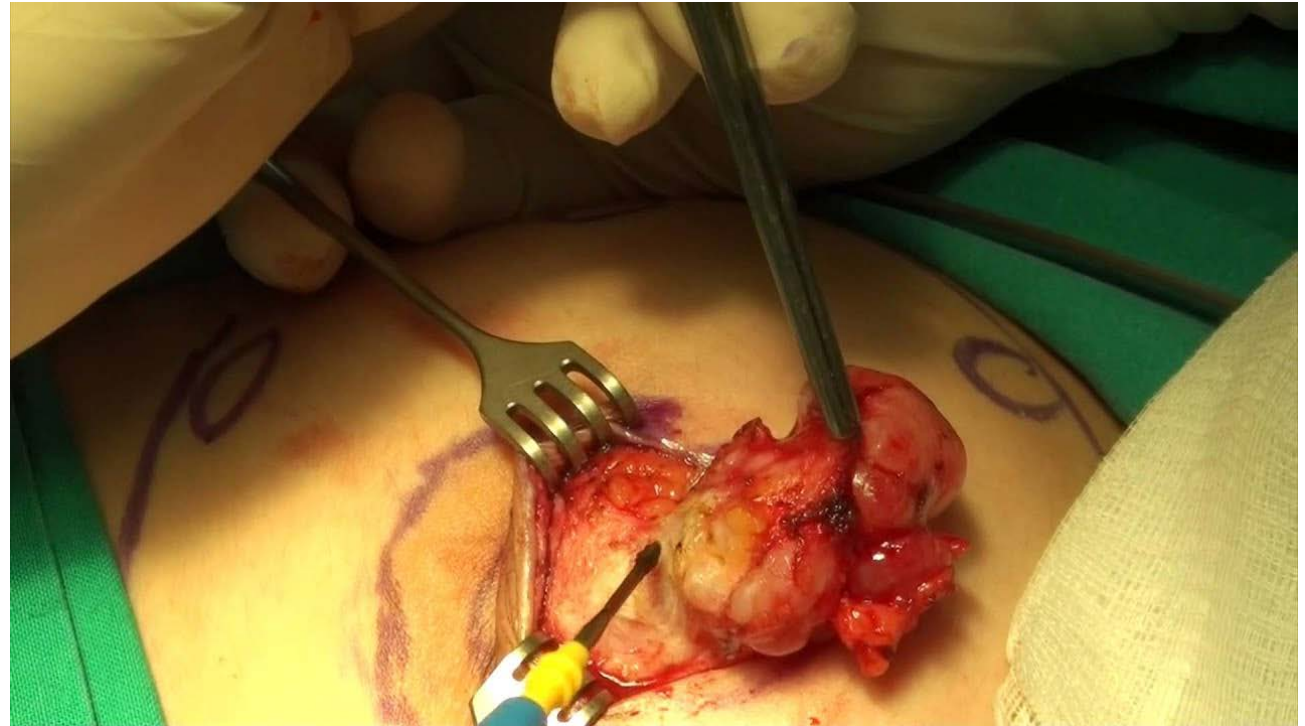
*Incisional biopsy*





# Βιοψία εκτομής

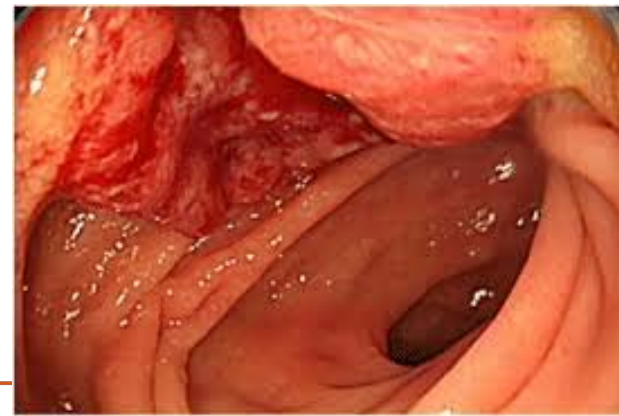
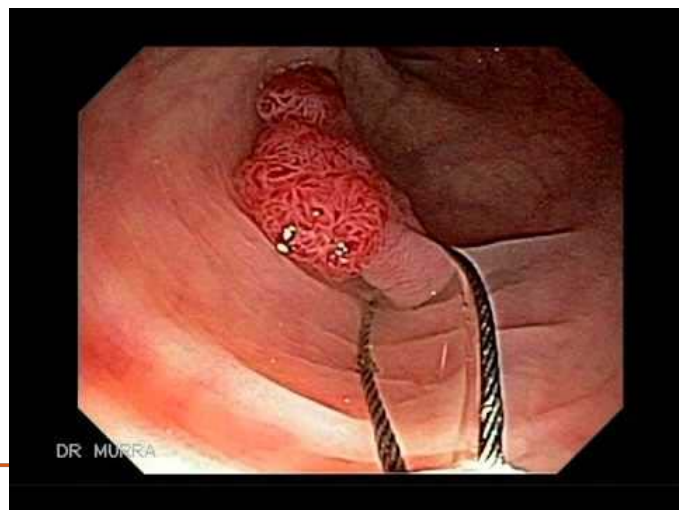
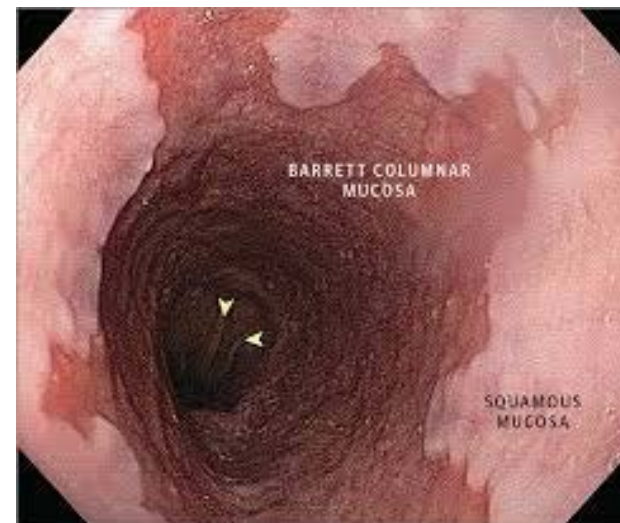
*Excisional biopsy*





# Ενδοσκοπική βιοψία

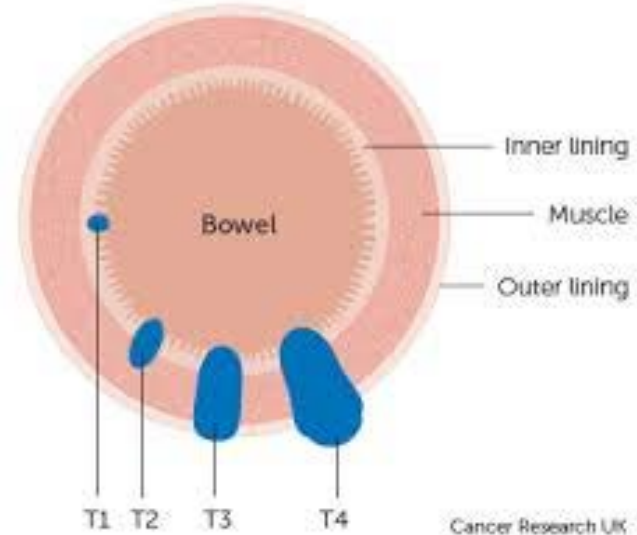
## *Endoscopic biopsy*





# Σταδιοποίηση

before surgery	subsequent	right bilateral	subsequent surgery										
<b>PRIMARY TUMOR (T)</b>													
<input type="checkbox"/>	TX	Primary tumor cannot be assessed	<input type="checkbox"/>										
<input type="checkbox"/>	T0	No evidence of primary tumor	<input type="checkbox"/>										
<input type="checkbox"/>	Tis	Carcinoma <i>in situ</i> : intraepithelial or invasion of lamina propria	<input type="checkbox"/>										
<input type="checkbox"/>	T1	Tumor invades submucosa	<input type="checkbox"/>										
<input type="checkbox"/>	T2	Tumor invades muscularis propria	<input type="checkbox"/>										
<input type="checkbox"/>	T3	Tumor invades through the muscularis propria into pericolorectal tissues	<input type="checkbox"/>										
<input type="checkbox"/>	T4a	Tumor penetrates to the surface of the visceral peritoneum	<input type="checkbox"/>										
<input type="checkbox"/>	T4b	Tumor directly invades or is adherent to other organs or structures	<input type="checkbox"/>										
<b>REGIONAL LYMPH NODES (N)</b>													
<input type="checkbox"/>	NX	Regional lymph nodes cannot be assessed	<input type="checkbox"/>										
<input type="checkbox"/>	N0	No regional lymph node metastasis	<input type="checkbox"/>										
<input type="checkbox"/>	N1	Metastasis in 1 to 3 regional lymph nodes	<input type="checkbox"/>										
<input type="checkbox"/>	N1a	Metastasis in 1 regional lymph node	<input type="checkbox"/>										
<input type="checkbox"/>	N1b	Metastasis in 2-3 regional lymph nodes	<input type="checkbox"/>										
<input type="checkbox"/>	N1c	Tumor deposit(s) in the subserosa, mesentery, or non-peritonealized pericolic or perirectal tissues without regional nodal metastasis	<input type="checkbox"/>										
<input type="checkbox"/>	N2	Metastasis in 4 or more regional lymph nodes	<input type="checkbox"/>										
<input type="checkbox"/>	N2a	Metastasis in 4 to 6 regional lymph nodes	<input type="checkbox"/>										
<input type="checkbox"/>	N2b	Metastasis in 7 or more regional lymph nodes	<input type="checkbox"/>										
<b>DISTANT METASTASIS (M)</b>													
<input type="checkbox"/>	M0	No distant metastasis (no pathologic M0; use clinical M to complete stage group).	<input type="checkbox"/>										
<input type="checkbox"/>	M1	Distant metastasis.	<input type="checkbox"/>										
<input type="checkbox"/>	M1a	Metastasis confined to one organ or site (e.g., liver, lung, ovary, non-regional node).	<input type="checkbox"/>										
<input type="checkbox"/>	M1b	Metastases in more than one organ/site or the peritoneum.	<input type="checkbox"/>										
<b>ANATOMIC STAGE – PROGNOSTIC GROUPS</b>													
<b>CLINICAL</b>		<b>PATHOLOGICAL</b>											
<b>GROUP</b>	<b>T</b>	<b>N</b>	<b>M</b>	<b>Dukes</b>	<b>MAC</b>	<b>GROUP</b>	<b>T</b>	<b>N</b>	<b>M</b>	<b>Dukes</b>	<b>MAC</b>		
<input type="checkbox"/>	0	Tis	N0	M0	-	-	<input type="checkbox"/>	0	Tis	N0	M0	-	-





# Σταδιοποίηση: α) τοπικο-περιοχική νόσος



Διαταραχή του περιγράμματος  
(διήθηση?) της SMV

Χωρίς διήθηση της SMA

***Borderline resectable PC***



M 2  
07 Feb

Σαφής διήθηση της SMV

<180° διήθηση της SMA

**Borderline resectable PC**



360° επαφή με SMV  
>180° επαφή με την SMA

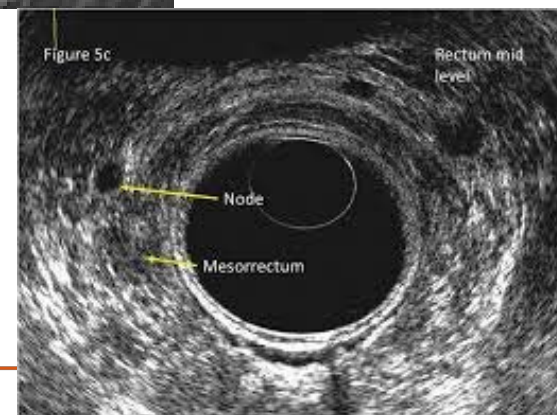
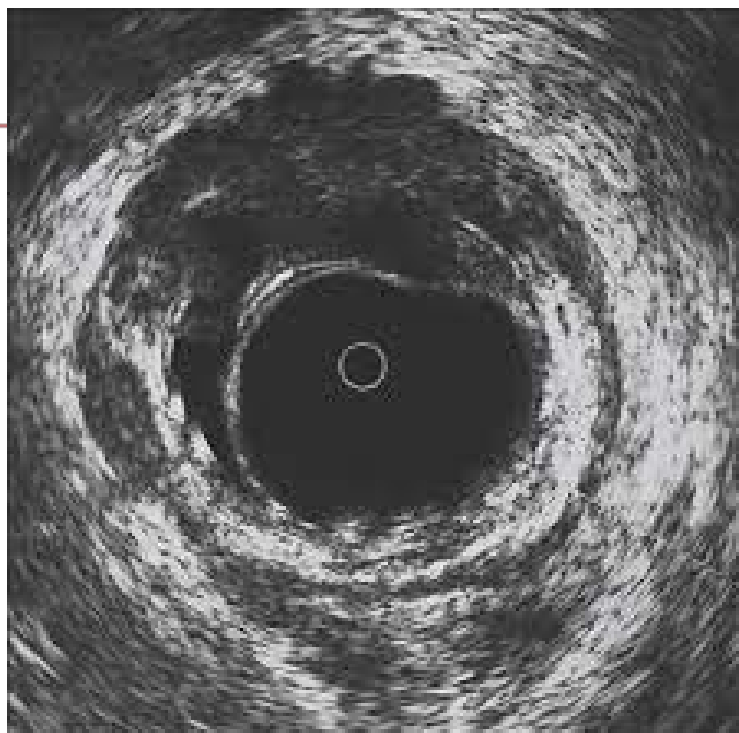
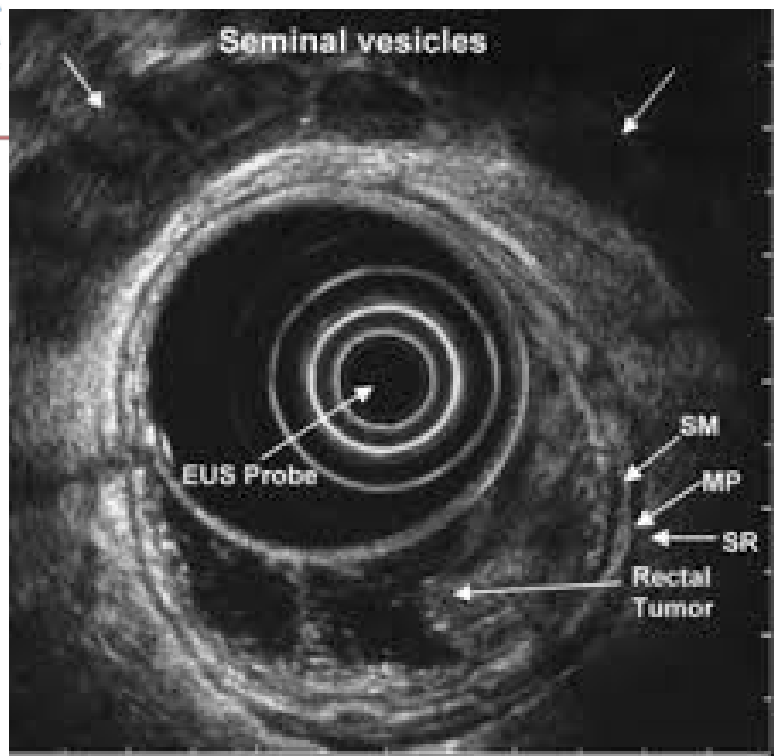


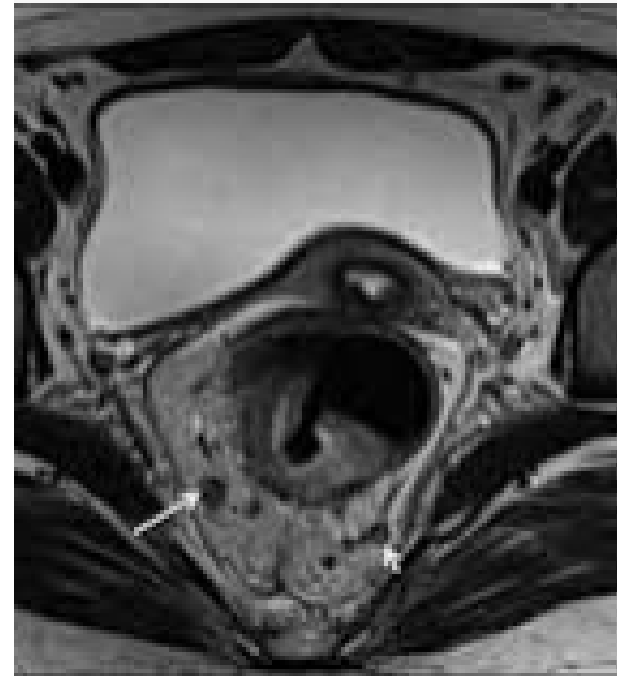


# Οριακά εξαιρέσιμος- Borderline resectable

Table 2 Different definitions of **borderline resectable** pancreatic cancer

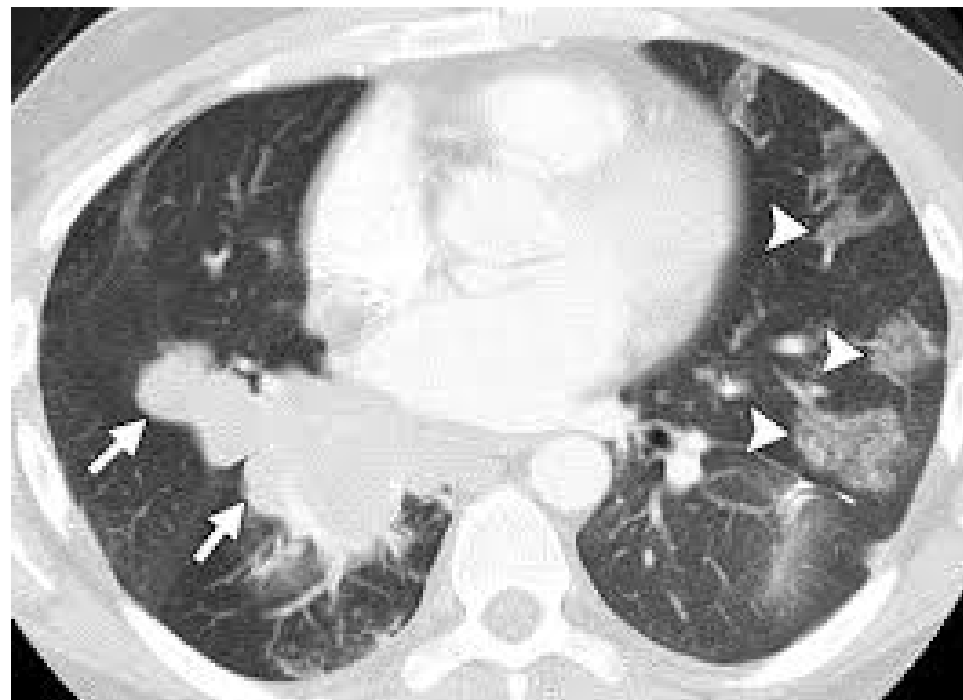
Anatomy	NCCN 2014	AHPBA/SSAT/SSO	MD Anderson Cancer Center	ISGPS	ACTO
Superior mesenteric vein/portal vein	Involvement with distortion/narrowing and/or occlusion amenable to reconstruction	Abutment, encasement, or short-segment occlusion amenable to reconstruction	Short-segment occlusion amenable to reconstruction	Involvement with distortion/narrowing and/or occlusion amenable to reconstruction	Tumor-vessel interface $\geq 180^\circ$ and/or occlusion amenable to reconstruction
Superior mesenteric artery	Abutment ( $\leq 180^\circ$ )	Abutment ( $\leq 180^\circ$ )	Abutment ( $\leq 180^\circ$ )	Abutment ( $\leq 180^\circ$ )	Tumor-vessel interface $< 180^\circ$
Common hepatic artery	Abutment or short-segment encasement	Abutment or short-segment encasement	Short segment encasement/ abutment	Abutment or short-segment encasement	Short-segment tumor-vessel interface (any degree) amenable to reconstruction
Celiac artery	No abutment or encasement	No abutment/ encasement	No abutment or encasement	No abutment or encasement	Tumor-vessel interface $< 180^\circ$

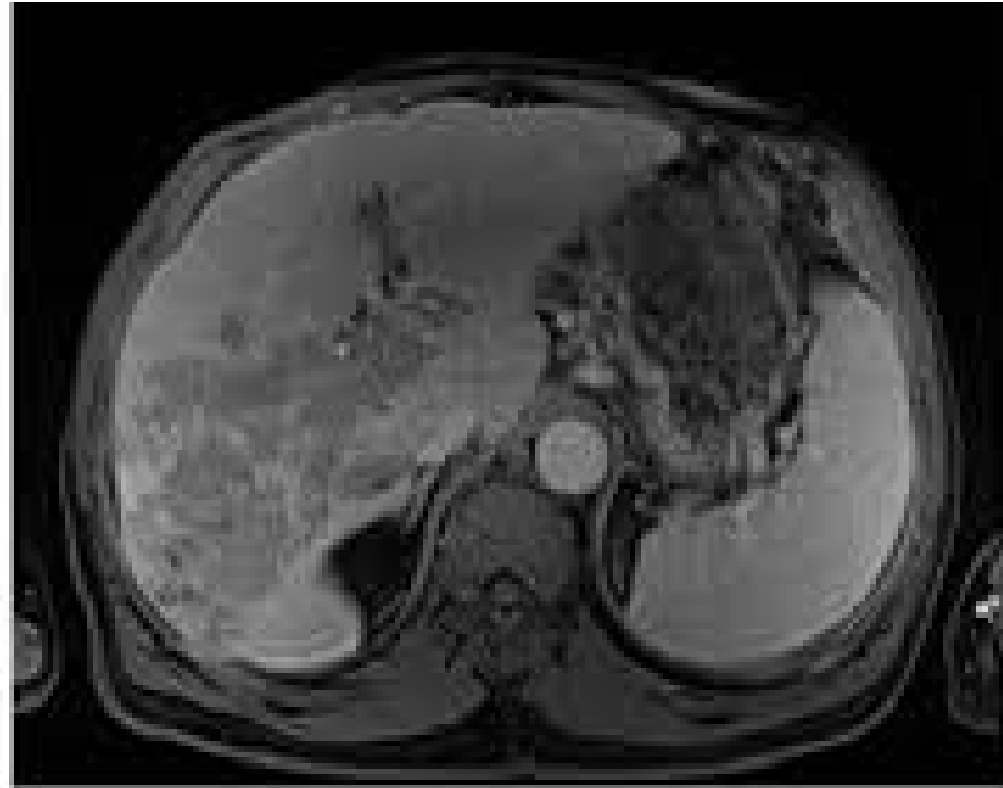


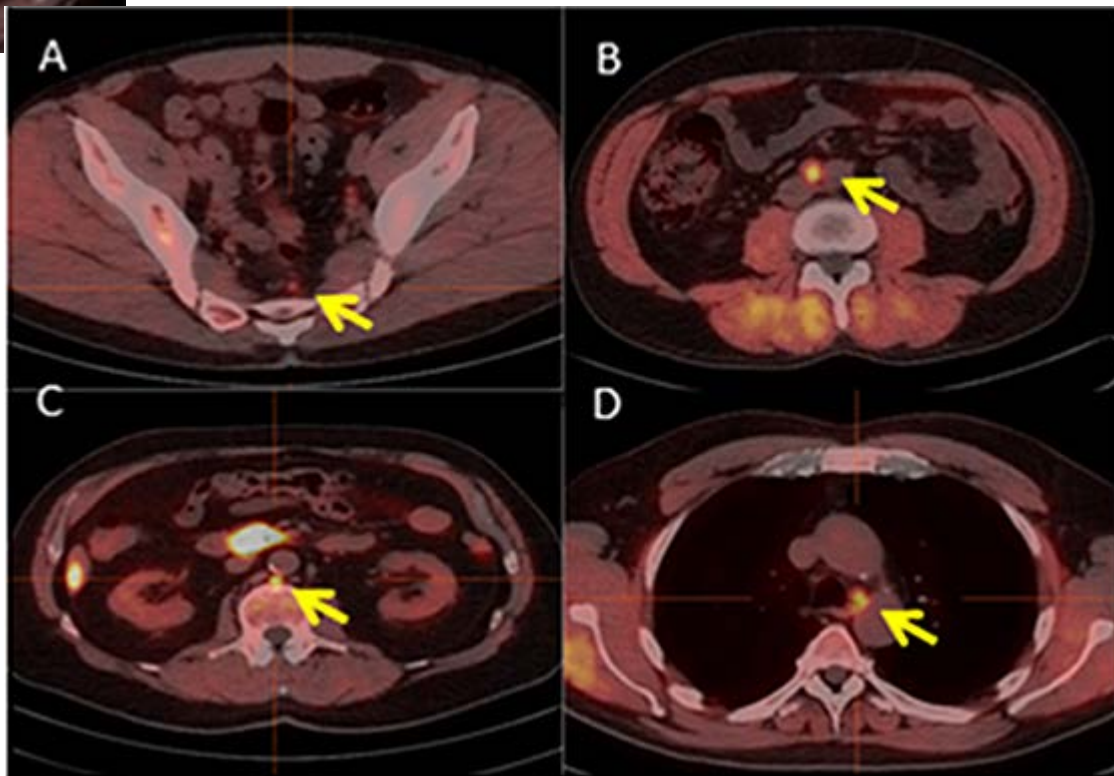
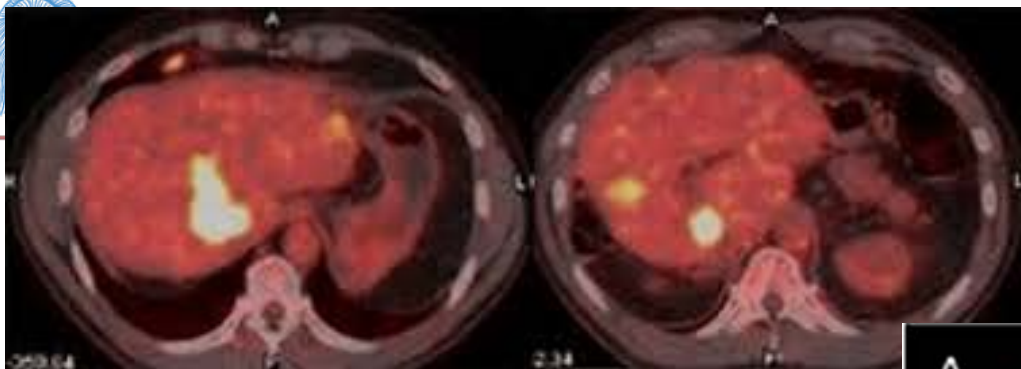




# Σταδιοποίηση: β) μεταστατική νόσος









# Multidisciplinary effort



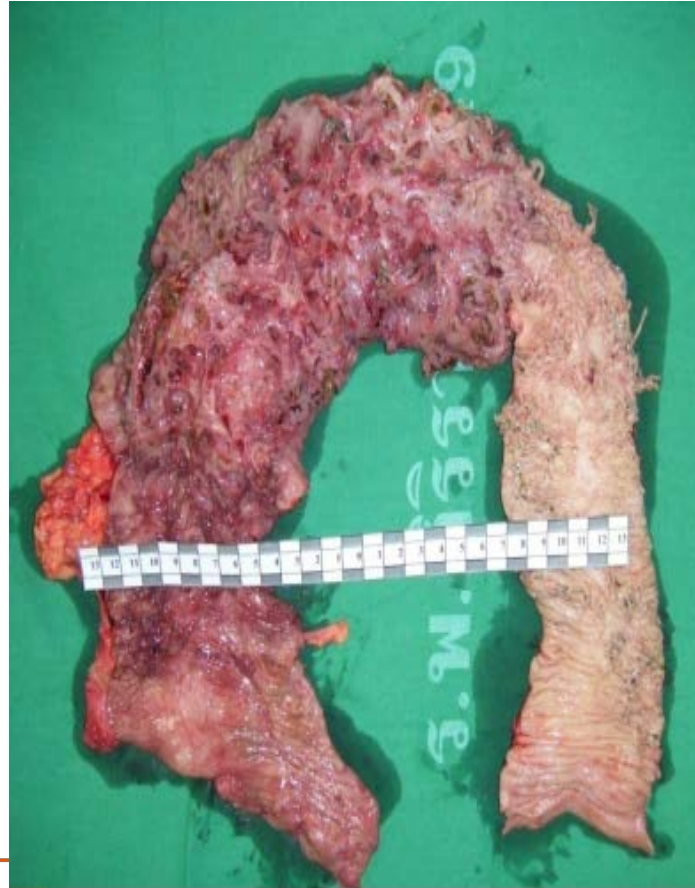


# Θεραπεία: α) προφυλακτική

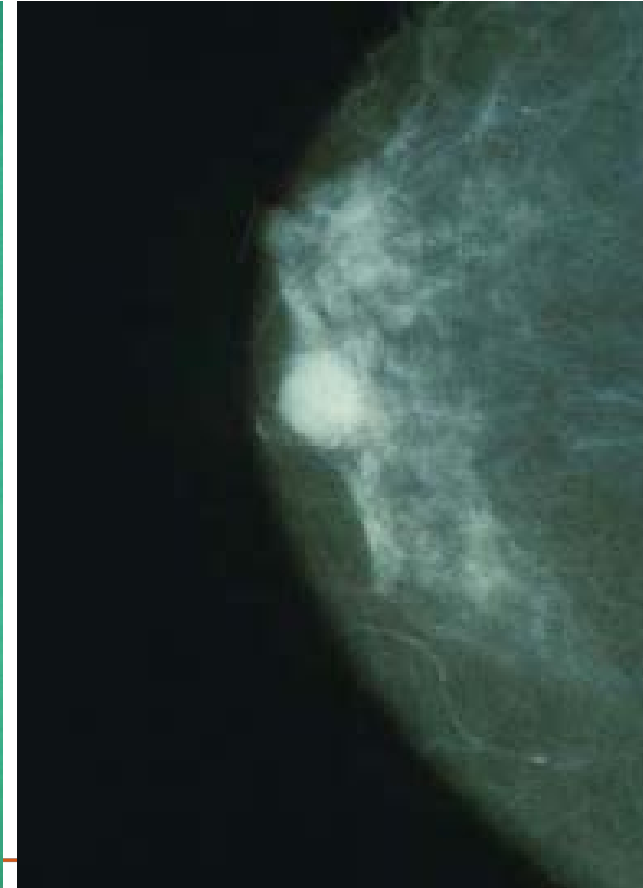
FAP



Ελκώδης κολίτιδα



Ca μαστού (BRCA1 & 2)







# Θεραπεία: β) Θεραπευτική

