Lung cancer Age's standardized **Program** Incidence new cases/100.000 Mortality Death/100.000 Wednesday, Septer 09:30 - 10:00 10:00 - 10:15 10:15 - 11:00 Alders-standardiseret rate (Nordisk) 11:05 - 11:50 12:00 - 12:45 12:45 - 13:30 13:30 - 14:15 14:20 - 15:05 15:05 - 15.25 15:25 - 16:10 16:15 - 17:00 17000 - 10200 **1%**60 **199**0 **820**00 **97**50 Thursday, September År År År 08:15 - 09:00 Male - Female Mænd Female 09:00 - 09:45 0 **NORDCAN** 10:45 - 11:30

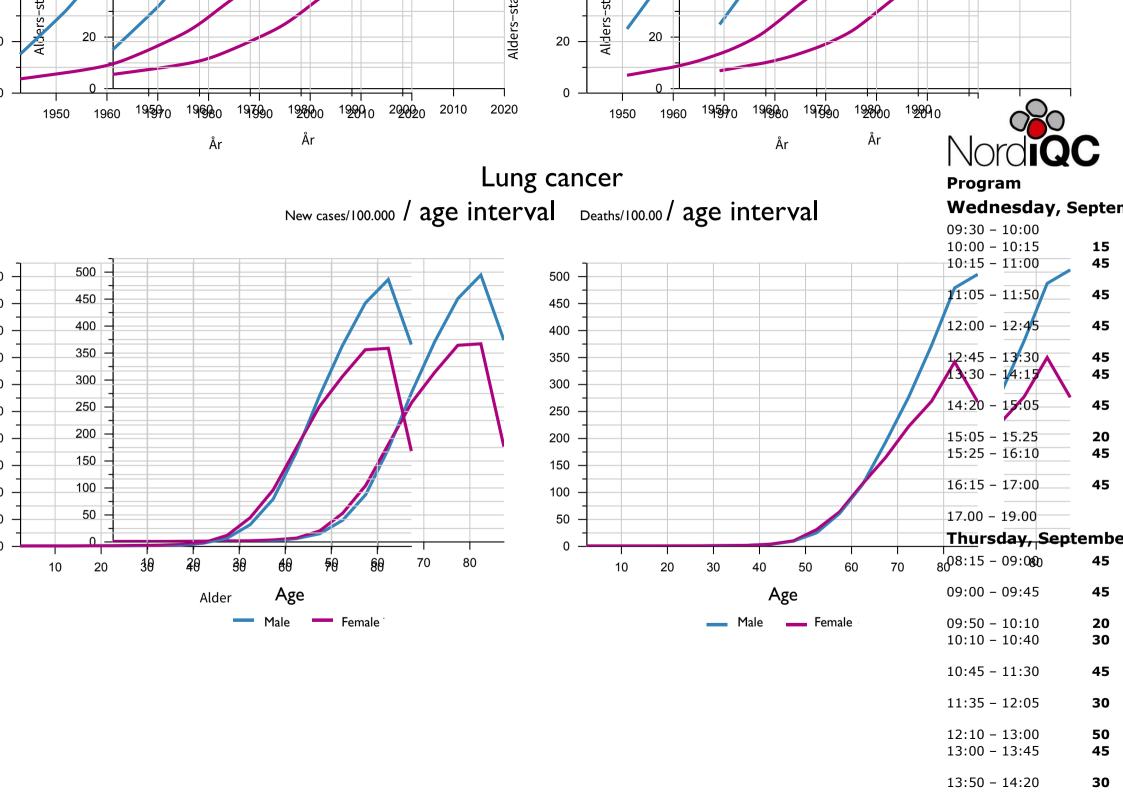
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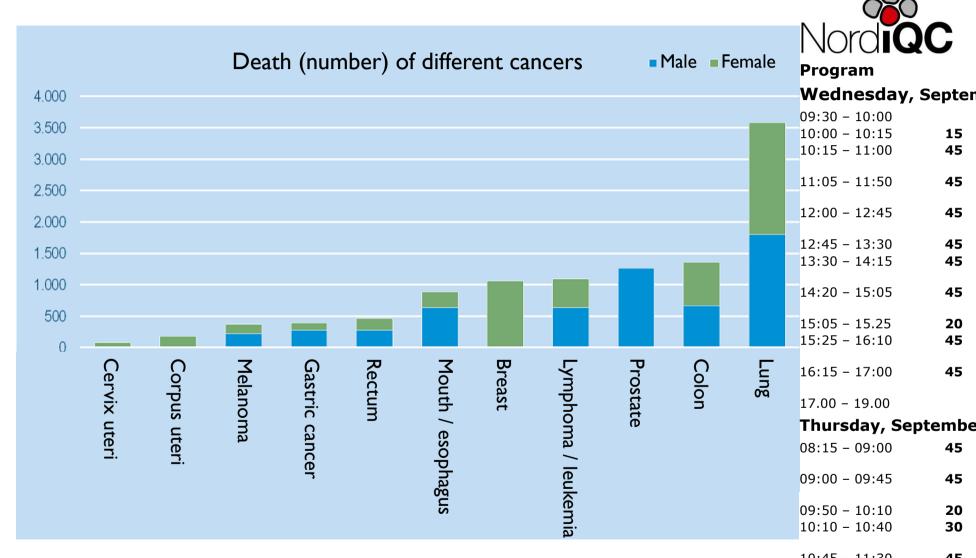
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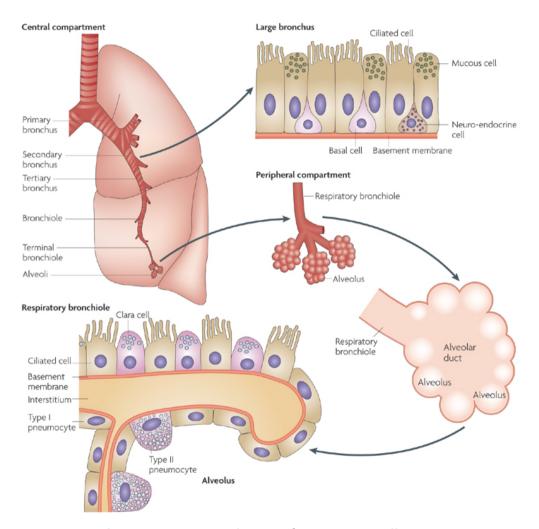
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Lung Carcinoma



Lung carcinoma derives from stem cells in the lung epithelium



Program

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Wedn	esday, Se	epte
09:30 -	10:00	
10:00 -		15
10:15 -	11:00	45
11:05 -	11.50	45
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Thurs	day, Septe	emt
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08:15 -	09:00	45

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09:00 - 09:45	45
09:50 - 10:10 10:10 - 10:40	20 30
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12:10 - 13:00	50

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13:00	- 13:45	4

malignant epithelial tumors (carcinomas)

	rea h c
TABLE 1. 2015 WHO Classification of Lung Tumor	5-,-,-
Histologic Type and Subtypes	ICDO Code
Epithelial tumors	
Adenocarcinoma	8140/3
Lepidic adenocarcinoma ^e	$8250/3^d$
Acinar adenocarcinoma	8551/3 ^d
Papillary adenocarcinoma	8260/3
Micropapillary adenocarcinoma ^e	8265/3
Solid adenocarcinoma	8230/3
Invasive mucinous adenocarcinomae	8253/3 ^d
Mixed invasive mucinous and	
nonmucinous adenocarcinoma	8254/3 ^d
Colloid adenocarcinoma	8480/3
Fetal adenocarcinoma	8333/3
Enteric adenocarcinoma ^e	8144/3
Minimally invasive adenocarcinoma ^e	
Nonmucinous	8256/3 ^d
Mucinous	8257/3 ^d
Preinvasive lesions	
Atypical adenomatous hyperplasia	$8250/0^d$
Adenocarcinoma in situe	
Nonmucinous	8250/2 ^d
Mucinous	8253/2 ^d
Squamous cell carcinoma	8070/3
Keratinizing squamous cell carcinomae	8071/3
Nonkeratinizing squamous cell carcinoma ^e	8072/3
Basaloid squamous cell carcinoma ^e	8083/3
Preinvasive lesion	0.050.00
Squamous cell carcinoma in situ	8070/2
Neuroendocrine tumors	
Small cell carcinoma	8041/3
Combined small cell carcinoma	8045/3
Large cell neuroendocrine carcinoma	8013/3
Combined large cell neuroendocrine carcinoma	8013/3
Carcinoid tumors	02.40/2
Typical carcinoid tumor	8240/3
Atypical carcinoid tumor	8249/3
Preinvasive lesion	0040/04
Diffuse idiopathic pulmonary neuroendocrine cell hyperplasia	8040/0 ^d
Large cell carcinoma	8012/3
Adenosquamous carcinoma	8560/3
Sarcomatoid carcinomas	
Pleomorphic carcinoma	8022/3
Spindle cell carcinoma	8032/3
Giant cell carcinoma	8031/3
Carcinosarcoma	8980/3
Pulmonary blastoma	8972/3
Other and Unclassified carcinomas	
Lymphoepithelioma-like carcinoma	8082/3
NUT carcinoma ^e	$8023/3^d$
Salivary gland-type tumors	
Mucoepidermoid carcinoma	8430/3
Adenoid cystic carcinoma	8200/3
Epithelial-myoepithelial carcinoma	8562/3
Pleomorphic adenoma	8940/0
	(Continued)

Histologic Type and Subtypes	ICDO Cod
Papillomas	
Squamous cell papilloma	8052/0
Exophytic	8052/0
Inverted	8053/0
Glandular papilloma	8260/0
Mixed squamous and glandular papilloma	8560/0
Adenomas	
Sclerosing pneumocytoma ^e	8832/0
Alveolar adenoma	8251/0
Papillary adenoma	8260/0
Mucinous cystadenoma	8470/0
Mucous gland adenoma	8480/0
Mesenchymal tumors	0400/0
Pulmonary hamartoma	$8992/0^{d}$
Chondroma	9220/0
PEComatous tumors ^e	9220/0
Lymphangioleiomyomatosis	9174/1
PEComa, benign ^e	8714/0
Clear cell tumor	8005/0
PEComa, malignant ^e	8714/3
Congenital peribronchial myofibroblastic tumor	8827/1
Diffuse pulmonary lymphangiomatosis	002//1
Inflammatory myofibroblastic tumor	8825/1
Epithelioid hemangioendothelioma	9133/3
Pleuropulmonary blastoma	8973/3
Synovial sarcoma	9040/3
Pulmonary artery intimal sarcoma	9137/3
Pulmonary myxoid sarcoma with EWSR1–CREB1 translocation ^e	8842/3 ^d
Myoepithelial tumors ^e	0042/3
Myoepithelioma	8982/0
Myoepithelial carcinoma	8982/3
Lymphohistiocytic tumors	0902/3
Extranodal marginal zone lymphomas of mucosa-associated Lymphoid tissue (MALT lymphoma)	9699/3
Diffuse large cell lymphoma	9680/3
Lymphomatoid granulomatosis	9766/1
Intravascular large B cell lymphoma ^e	9712/3
Pulmonary Langerhans cell histiocytosis	9751/1
Erdheim-Chester disease	9750/1
Tumors of ectopic origin	
Germ cell tumors	
Teratoma, mature	9080/0
Teratoma, immature	9080/1
Intrapulmonary thymoma	8580/3
Melanoma	8270/3
Meningioma, NOS	9530/0
Metastatic tumors	755010
"The morphology codes are from the ICDO.2 Behavior is coded/0 for /1 for unspecified, borderline or uncertain behavior, /2 for carcinoma in s intraepithelial neoplasia, and /3 for malignant tumors. "The classification is modified from the previous WHO classificat account changes in our understanding of these lesions. "This table is reproduced from the 2015 WHO Classification by Trae "These new codes were approved by the International Agency on C	itu and grade l ion ³ taking in vis et al. ¹

"New terms changed or entities added since 2004 WHO Classification.\(^3\)
LCNEC, large cell neuroendocrine carcinoma, WHO, World Health Organization;
ICDO International Classification of Diseases for Oncology.

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Program

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Thursday, September

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13:50 - 14:20

13:00	- 13:45	

WHO Committee for ICDO.

Adenocarcinoma (45%)
Squamous carcinoma (18%)
Large cell neuroendocrine carcinoma (1%)
Small cell carcinoma (12%)

listologic Type and Subtypes	ICDO Code	Histologic Type and Subtypes	ICDO Code
pithelial tumors		Papillomas	
Adenocarcinoma -	8140/3	Squamous cell papilloma	8052/0
Lepidic adenocarcinoma ^e	$8250/3^d$	Exophytic	8052/0
Acinar adenocarcinoma	8551/3 ^d	Inverted	8053/0
Papillary adenocarcinoma	8260/3	Glandular papilloma	8260/0
Micropapillary adenocarcinoma ^e	8265/3	Mixed squamous and glandular papilloma	8560/0
Solid adenocarcinoma	8230/3	Adenomas	0200/0
Invasive mucinous adenocarcinoma ^e	8253/3 ^d	Sclerosing pneumocytoma ^e	8832/0
Mixed invasive mucinous and		Alveolar adenoma	8251/0
nonmucinous adenocarcinoma	8254/3 ^d	Papillary adenoma	8260/0
Colloid adenocarcinoma	8480/3	Mucinous cystadenoma	8470/0
Fetal adenocarcinoma	8333/3	Mucous gland adenoma	8480/0
Enteric adenocarcinoma ^e	8144/3	Mesenchymal tumors	8480/0
Minimally invasive adenocarcinoma ^e	0144/3		$8992/0^{d}$
Nonmucinous	8256/3 ^d	Pulmonary hamartoma	
Mucinous	8257/3 ^d	Chondroma	9220/0
Preinvasive lesions	8237/3"	PEComatous tumorse	0.177.111
	$8250/0^{d}$	Lymphangioleiomyomatosis	9174/1
Atypical adenomatous hyperplasia	8250/0"	PEComa, benign ^e	8714/0
Adenocarcinoma in situe	00.50/0/	Clear cell tumor	8005/0
Nonmucinous	8250/2 ^d	PEComa, malignant ^e	8714/3
Mucinous	8253/2 ^d	Congenital peribronchial myofibroblastic tumor	8827/1
Squamous cell carcinoma	8070/3	Diffuse pulmonary lymphangiomatosis	
Keratinizing squamous cell carcinoma ^e	8071/3	Inflammatory myofibroblastic tumor	8825/1
Nonkeratinizing squamous cell carcinoma ^e	8072/3	Epithelioid hemangioendothelioma	9133/3
Basaloid squamous cell carcinoma ^e	8083/3	Pleuropulmonary blastoma	8973/3
Preinvasive lesion		Synovial sarcoma	9040/3
Squamous cell carcinoma in situ	8070/2	Pulmonary artery intimal sarcoma	9137/3
leuroendocrine tumors		Pulmonary myxoid sarcoma with EWSR1-CREB1 translocation ^e	$8842/3^d$
Small cell carcinoma	8041/3	Myoepithelial tumorse	
Combined small cell carcinoma	8045/3	Myoepithelioma	8982/0
Large cell neuroendocrine carcinoma	8013/3	Myoepithelial carcinoma	8982/3
Combined large cell neuroendocrine carcinoma	8013/3	Lymphohistiocytic tumors	
Carcinoid tumors		Extranodal marginal zone lymphomas of mucosa-associated	9699/3
Typical carcinoid tumor	8240/3	Lymphoid tissue (MALT lymphoma)	
Atypical carcinoid tumor	8249/3	Diffuse large cell lymphoma	9680/3
Preinvasive lesion		Lymphomatoid granulomatosis	9766/1
Diffuse idiopathic pulmonary neuroendocrine	$8040/0^{d}$	Intravascular large B cell lymphoma ^e	9712/3
cell hyperplasia		Pulmonary Langerhans cell histiocytosis	9751/1
Large cell carcinoma	8012/3	Erdheim-Chester disease	9750/1
Adenosquamous carcinoma	8560/3	Tumors of ectopic origin	
Sarcomatoid carcinomas		Germ cell tumors	
Pleomorphic carcinoma	8022/3	Teratoma, mature	9080/0
Spindle cell carcinoma	8032/3	Teratoma, immature	9080/1
Giant cell carcinoma	8031/3	Intrapulmonary thymoma	8580/3
Carcinosarcoma	8980/3	Melanoma	8270/3
Pulmonary blastoma	8972/3	Meningioma, NOS	9530/0
Other and Unclassified carcinomas		Metastatic tumors	
Lymphoepithelioma-like carcinoma	8082/3	"The morphology codes are from the ICDO.2 Behavior is coded /0 fo	r banian too
NUT carcinoma ^e	8023/3 ^d	"I ne morphology codes are from the ICDO." Benavior is coded /0 to /1 for unspecified, borderline or uncertain behavior, /2 for carcinoma in s	
Salivary gland-type tumors		intraepithelial neoplasia, and /3 for malignant tumors.	· ·
Mucoepidermoid carcinoma	8430/3	"The classification is modified from the previous WHO classificat	tion3 taking into
Adenoid cystic carcinoma	8200/3	account changes in our understanding of these lesions. 'This table is reproduced from the 2015 WHO Classification by Tra	vis et al.1
Epithelial-myoepithelial carcinoma	8562/3	^d These new codes were approved by the International Agency on C	ancer Research
Pleomorphic adenoma	8940/0	WHO Committee for ICDO.	1
i icomorphic auchoma	0240/0	New terms changed or entities added since 2004 WHO Classificati- LCNEC, large cell neuroendocrine carcinoma, WHO, World Health	
	(Continued)	ICDO International Classification of Diseases for Oncology.	



Program

09:30 - 10:00

Wednesday, Septer

10:00 - 10:15 10:15 - 11:00	15 45
11:05 - 11:50	45
12:00 - 12:45	45
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14:20 - 15:05	45
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Thursday, September

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08:15 - 09:00

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^{13:00 - 13:45}

Carcinoids I - 2%

History and Cuberna	ICDO Code	Hi-t-li- T and Subtract
Histologic Type and Subtypes	ICDO Code	Histologic Type and Subtypes
Epithelial tumors	04.40/2	Papillomas
Adenocarcinoma -	8140/3	Squamous cell papilloma
Lepidic adenocarcinoma ^e	8250/3 ^d	Exophytic
Acinar adenocarcinoma	8551/3 ^d	Inverted
Papillary adenocarcinoma	8260/3	Glandular papilloma
Micropapillary adenocarcinoma ^e	8265/3	Mixed squamous and glandula
Solid adenocarcinoma	8230/3	Adenomas
Invasive mucinous adenocarcinomae	$8253/3^d$	Sclerosing pneumocytoma ^e
Mixed invasive mucinous and		Alveolar adenoma
nonmucinous adenocarcinoma	$8254/3^d$	Papillary adenoma
Colloid adenocarcinoma	8480/3	Mucinous cystadenoma
Fetal adenocarcinoma	8333/3	Mucous gland adenoma
Enteric adenocarcinoma ^e	8144/3	Mesenchymal tumors
Minimally invasive adenocarcinoma ^e		Pulmonary hamartoma
Nonmucinous	$8256/3^d$	Chondroma
Mucinous	$8257/3^d$	PEComatous tumorse
Preinvasive lesions		Lymphangioleiomyomatosis
Atypical adenomatous hyperplasia	$8250/0^d$	PEComa, benign ^e
Adenocarcinoma in situe		Clear cell tumor
Nonmucinous	$8250/2^{d}$	PEComa, malignant ^e
Mucinous	$8253/2^{d}$	Congenital peribronchial myofib
Squamous cell carcinoma	8070/3	Diffuse pulmonary lymphangion
Keratinizing squamous cell carcinoma ^e	8071/3	Inflammatory myofibroblastic tu
Nonkeratinizing squamous cell carcinoma ^e	8072/3	Epithelioid hemangioendothelio
Basaloid squamous cell carcinoma ^e	8083/3	Pleuropulmonary blastoma
Preinvasive lesion	0003/3	Synovial sarcoma
Squamous cell carcinoma in situ	8070/2	Pulmonary artery intimal sarcon
Neuroendocrine tumors	0070/2	Pulmonary myxoid sarcoma with E
Small cell carcinoma	8041/3	Myoepithelial tumorse
Combined small cell carcinoma	8045/3	Myoepithelioma
Large cell neuroendocrine carcinoma	8013/3	Myoepithelial carcinoma
Combined large cell neuroendocrine carcinoma	8013/3	Lymphohistiocytic tumors
Carcinoid tumors	8013/3	Extranodal marginal zone lymph
Typical carcinoid tumor	8240/3	Lymphoid tissue (MALT lymp
Atypical carcinoid tumor	8249/3	Diffuse large cell lymphoma
Preinvasive lesion	0249/3	Lymphomatoid granulomatosis
	$8040/0^{d}$	Intravascular large B cell lympho
Diffuse idiopathic pulmonary neuroendocrine cell hyperplasia	8040/0"	Pulmonary Langerhans cell histi
Large cell carcinoma	8012/3	Erdheim-Chester disease
Adenosquamous carcinoma	8560/3	Tumors of ectopic origin
Sarcomatoid carcinomas	8300/3	Germ cell tumors
Pleomorphic carcinoma	8022/3	Teratoma, mature
Spindle cell carcinoma	8032/3	Teratoma, immature
•	8032/3	
Giant cell carcinoma	8980/3	Intrapulmonary thymoma Melanoma
Carcinosarcoma		
Pulmonary blastoma	8972/3	Meningioma, NOS
Other and Unclassified carcinomas	0000/2	Metastatic tumors
Lymphoepithelioma-like carcinoma	8082/3	"The morphology codes are from the
NUT carcinoma ^e	$8023/3^d$	/1 for unspecified, borderline or uncertai intraepithelial neoplasia, and /3 for mali
Salivary gland-type tumors		^b The classification is modified from
Mucoepidermoid carcinoma	8430/3	account changes in our understanding of
Adenoid cystic carcinoma	8200/3	"This table is reproduced from the 2 "These new codes were approved by
Epithelial-myoepithelial carcinoma	8562/3	WHO Committee for ICDO.
Pleomorphic adenoma	8940/0	"New terms changed or entities adde
	(Continued)	LCNEC, large cell neuroendocrine ICDO International Classification of Dis
	(memuronar crasomeditori or Dis

Histologic Type and Subtypes	ICDO Cod
Papillomas	
Squamous cell papilloma	8052/0
Exophytic	8052/0
Inverted	8053/0
Glandular papilloma	8260/0
Mixed squamous and glandular papilloma	8560/0
Adenomas	
Sclerosing pneumocytoma ^e	8832/0
Alveolar adenoma	8251/0
Papillary adenoma	8260/0
Mucinous cystadenoma	8470/0
Mucous gland adenoma	8480/0
Mesenchymal tumors	
Pulmonary hamartoma	$8992/0^{d}$
Chondroma	9220/0
PEComatous tumors ^e	
Lymphangioleiomyomatosis	9174/1
PEComa, benign ^e	8714/0
Clear cell tumor	8005/0
PEComa, malignant ^e	8714/3
Congenital peribronchial myofibroblastic tumor	8827/1
Diffuse pulmonary lymphangiomatosis	002//1
Inflammatory myofibroblastic tumor	8825/1
Epithelioid hemangioendothelioma	9133/3
Pleuropulmonary blastoma	8973/3
Synovial sarcoma	9040/3
Pulmonary artery intimal sarcoma	9137/3
Pulmonary myxoid sarcoma with EWSR1–CREB1 translocation ^e	8842/3 ^d
Myoepithelial tumors ^e	
Myoepithelioma	8982/0
Myoepithelial carcinoma	8982/3
Lymphohistiocytic tumors	
Extranodal marginal zone lymphomas of mucosa-associated Lymphoid tissue (MALT lymphoma)	9699/3
Diffuse large cell lymphoma	9680/3
Lymphomatoid granulomatosis	9766/1
Intravascular large B cell lymphoma ^e	9712/3
Pulmonary Langerhans cell histiocytosis	9751/1
Erdheim-Chester disease	9750/1
Tumors of ectopic origin	
Germ cell tumors	
Teratoma, mature	9080/0
Teratoma, immature	9080/1
Intrapulmonary thymoma	8580/3
Melanoma	8270/3
Meningioma, NOS	9530/0
Metastatic tumors	
"The morphology codes are from the ICDO.3 Behavior is coded /0 fo /1 for unspecified, borderline or uncertain behavior, /2 for carcinoma in s intraepithelial neoplasia, and /3 for malignant tumors. "The classification is modified from the previous WHO classificat account changes in our understanding of these lesions. "This table is reproduced from the 2015 WHO Classification by Trae "These new codes were approved by the International Agency on C	itu and grade I ion³ taking in vis et al.¹





Program

Wednesday, Septer

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45	11:05 - 11:50
45	12:00 - 12:45
45 45	12:45 - 13:30 13:30 - 14:15
45	14:20 - 15:05
20	15:05 - 15.25

16:15 -	17:00
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15:25 - 16:10

Thursday, September 08:15 - 09:00 45

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45	09:00 - 09:45
20 30	09:50 - 10:10 10:10 - 10:40
45	10:45 - 11:30

11:35 - 12:05

dded since 2004 WHO Classification.³ ne carcinoma, WHO, World Health Organization; Diseases for Oncology.

Diagnostic sampling

I. Diagnosis

2. Tumor, Node, Metastasis (TNM)

- **Program** Wednesday, Septer 09:30 - 10:00
- Adenocarcinoma (45%) Squamous carcinoma (18%)
- Large cell neuroendocrine carcinoma (1%)11:05 11:50 Small cell carcinoma (12%) 12:00 - 12:45
 - 12:45 13:30 13:30 - 14:15

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10:15 - 11:00

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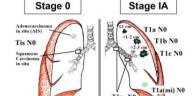
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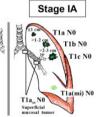
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- Lung Cancer Stage Classification (8th Edition) 14:20 15:05 Stage IB







15:05 - 15.25	20
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Thursday, September

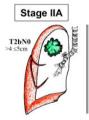
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09:00 - 09:45	4
09:50 - 10:10	2
10:10 - 10:40	3

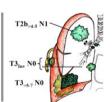
10:45 - 11:30

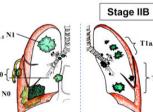
11:35 - 12:05	30

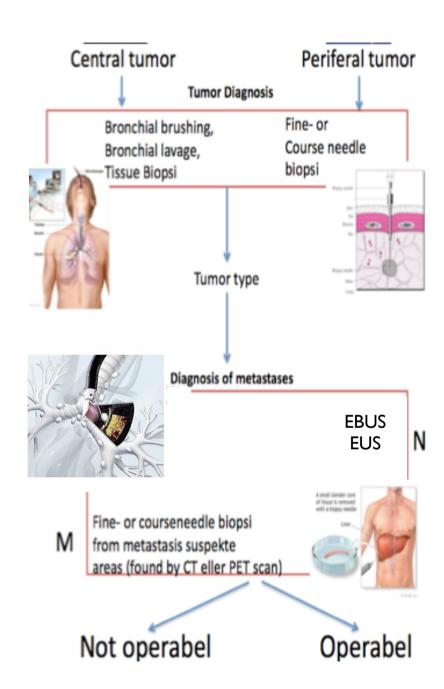
- 12:10 13:00 13:00 - 13:45
- 13:50 14:20

All Stage 1-III tumors are M0 Tx, Nx should be used only if no information at all is available about T or N stage (including no symptoms and physical exam









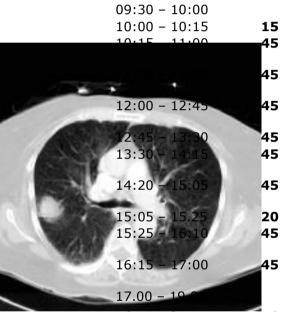
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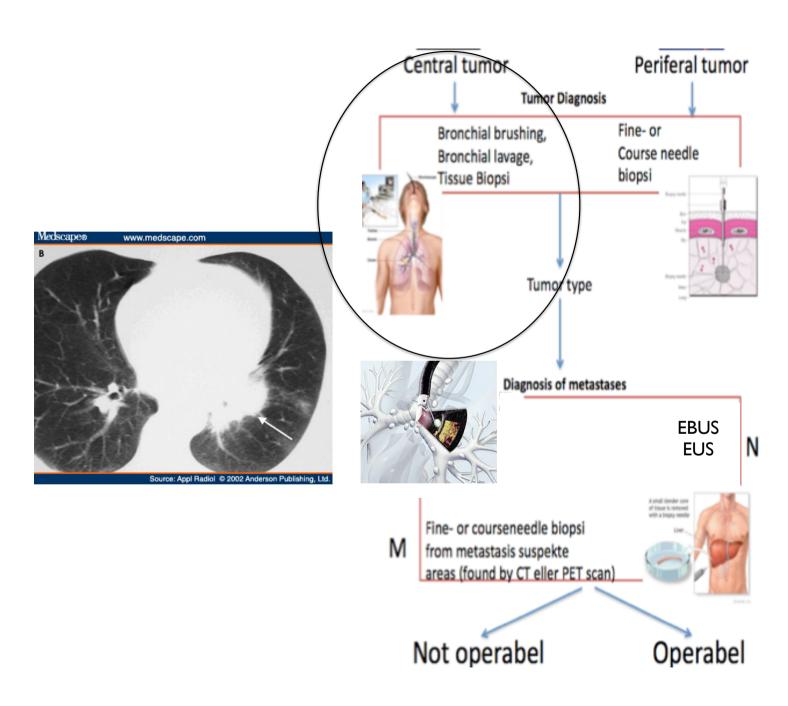
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Wednesday, Septer



Thursday, Septembe

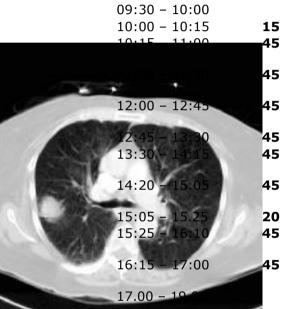
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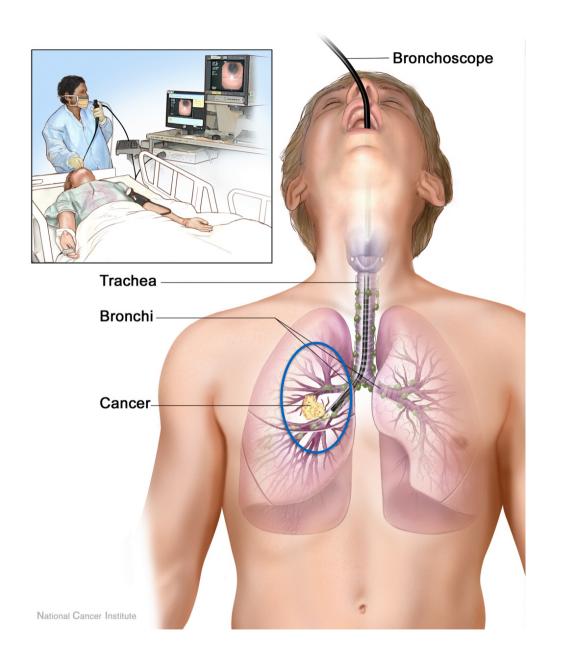
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Wednesday, Septer



Thursday, Septembe

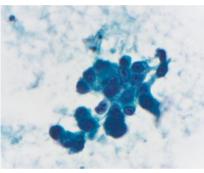
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30	13:50 - 14:20



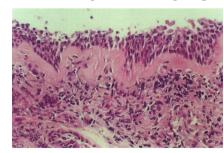
Bronkialwash **Brushbiopsy**

EBUS Endobronchial Ultrasound Scanning 10

10:15 - 11: TBNA EUS Esophagal Ultraspund Scanning 11:05 - 11 50



forceps biopsy





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12:00 - 12:45

12:45 - 13:30

13:30 - 14:15

Gytology

15:05 - 15.25

15:25 - 16:10

16:15 - 17:00

17.00 - 19.00 Thursday, September

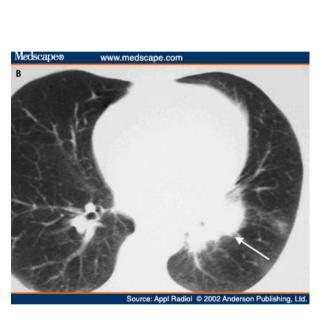
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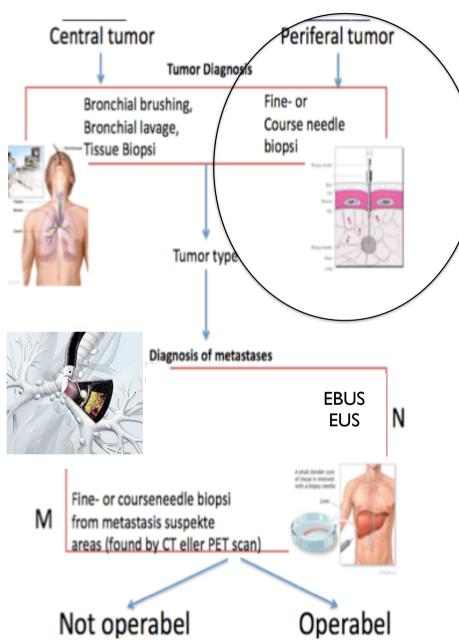
30 10:45 - 11:30 45

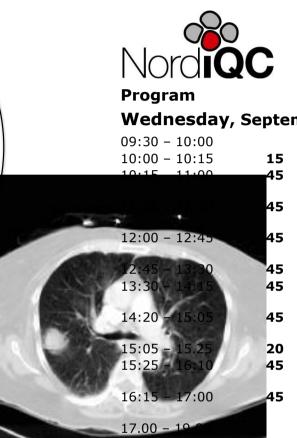
11:35 - 12:05

12:10 - 13:00 13:00 - 13:45

13:50 - 14:20



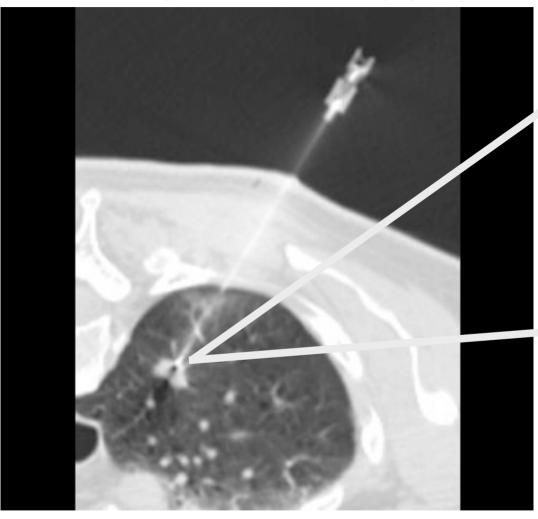




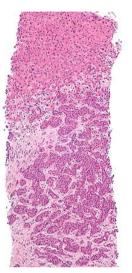
Thursday, Septembe

CCIII	inaisaay, se
45	08:15 - 09:00
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20 30	09:50 - 10:10 10:10 - 10:40
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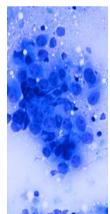
CT guided needle biopsy



Coarse needle

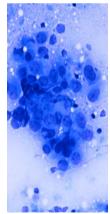


Fine needle



NordiQC

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Program	
Wednesday,	Septe
09:30 - 10:00 10:00 - 10:15 10:15 - 11:00	15 45
Histolögy	45
12:00 - 12:45	45
12:45 - 13:30 13:30 - 14:15	45 45
14:20 - 15:05	45
15:05 - 15.25 15:25 - 16:10	20 45
16:15 - 17:00	45
17.00 - 19.00	

Thursday Sentembe

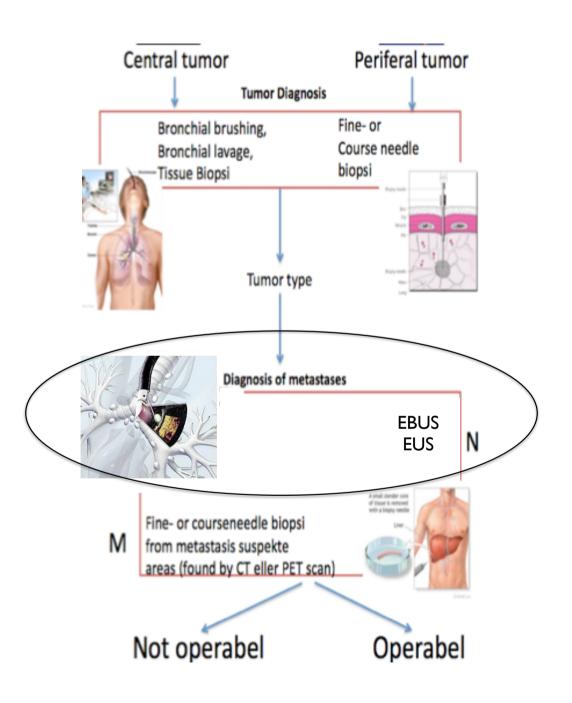
mursuay, Septe	יטווו
08:15 - 09:00	45

Cytology

9:50 - 10:10 0:10 - 10:40	20 30
0:45 - 11:30	45
1:35 - 12:05	30

12:10 - 13:00	5
13:00 - 13:45	4

13:50 - 14:20





Program

Wednesday, Septer

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(09:30 -	10:00	
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	12:00 -	12:45	45
	12:45 -	13:30	45
	13:30 -	14:15	45
	14:20 -	15:05	45
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	15:25 -	16:10	45
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Thursday, September

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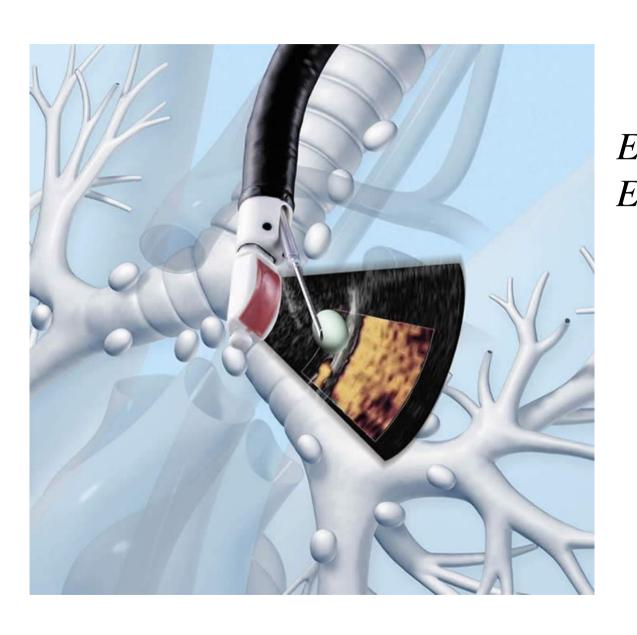
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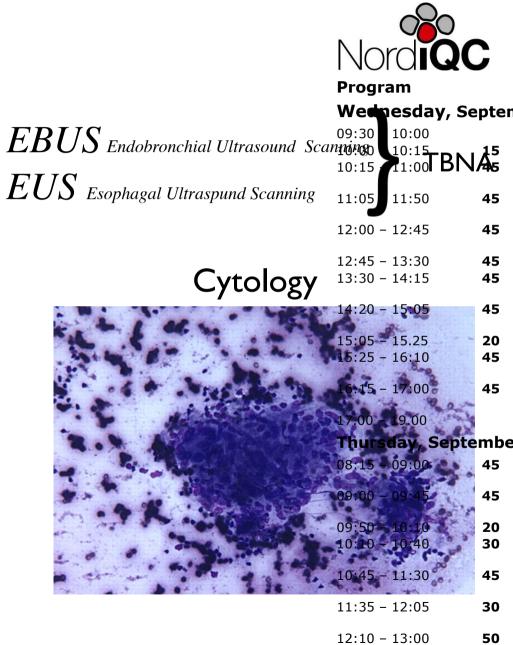
08:15 - 09:00

09:00 - 09:45	45
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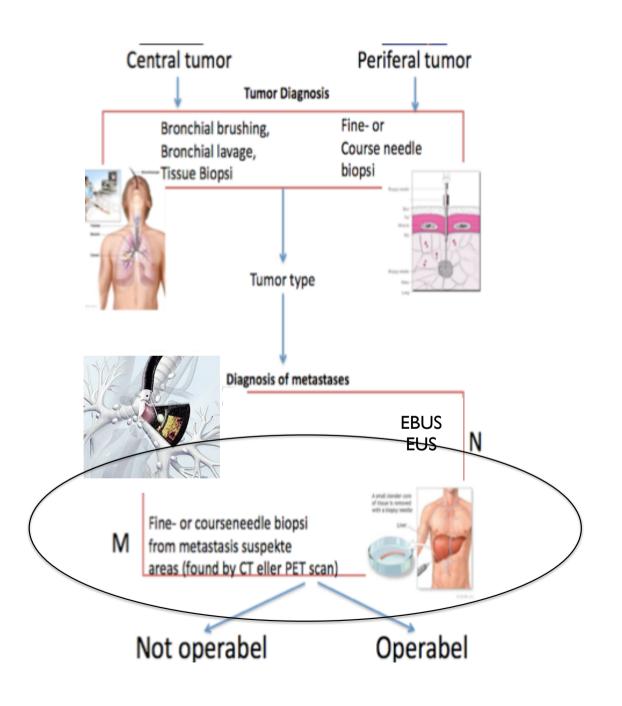




13:00 - 13:45

13:50 - 14:20

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Program

Wednesday, Septer

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09:30 -	10:00	
10:00 -	10:15	15
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11:05 –	11:50	45
12:00 -	12:45	45
12:45 -	13:30	45
13:30 -	14:15	45
14:20 -	15:05	45
15:05 -	15.25	20
15:25 -	16:10	45
16:15 -	17:00	45
17.00 -	19.00	
Thurs	day, Sept	emb

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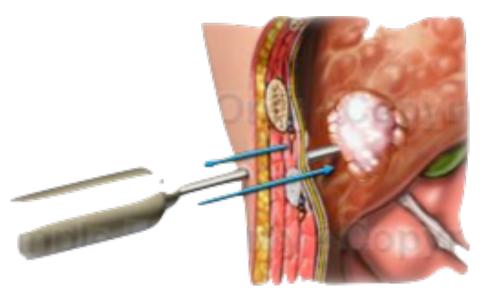
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08:15 - 09:00

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10:45 - 11:30	45

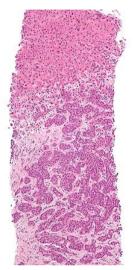
1:	35 –	12	:05	30
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12:10 - 13:00	50
13:00 - 13:45	45





Coarse needle



Fine needle



Program

10:00 - 10:15

10:15 - 11:00

Wednesday, Septer 09:30 - 10:00

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Histology - 11:50	45
12:00 - 12:45	45
12:45 - 13:30	45
13:30 - 14:15	45

12:45 - 13:30	
13:30 - 14:15	

15:05 -	15.25	

14:20 - 15:05

15:25	- 16:10	4

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16:15 - 17:00

Thursday, September

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	10:45 - 11:30)	45

11:35	- 12:05	

12:10 -	13:00
13:00 -	13.45

Patoanatomical specimen

Histology

Cytologi



Fixation
Dehydration
Parafinembedding
Microtomy

Præparation

Smear preparation



Visualization

(Staining)

	NordiQ(3
	Program	
	Wednesday, Se 09:30 - 10: 0 0	epte
	10:00 - 10:15 10:15 - 11:00	15 45
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ч	14:20 - 15:05	45
	15:05 - 15.25 15:25 - 16:10	20 45
	16:15 - 17:00	45
	17.00 - 19.00	

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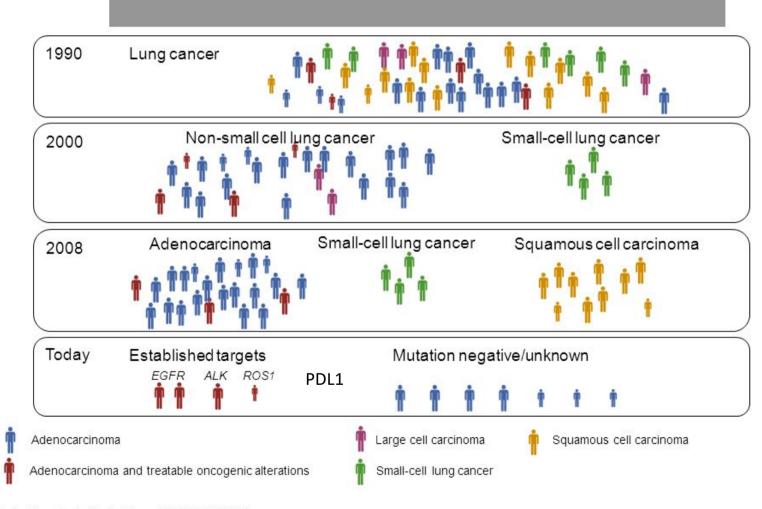
08:15 - 09:00

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12:10 - 13:00 **50** 13:00 - 13:45 **45**

13:50 - 14:20 **30**

Patient selection in lung cancer: Evolution over time



Adapted from Reck M, et al. Lancet 2013;382:709-19

	No	rdiQ	C
	Progr	am	
	Wedr	nesday, S	epte
Di	09:30 - 10:00 - 1 22月	10:15	15 45
	11:05 -	11:50	45
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	13:30 -	14:15	45
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	15:05 -	15.25	20
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	17.00 -	19.00	
D .	Thurs	day, Sept	emb
1	LEGIO	ction	45

09:00 - 09:45

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11:35 - 12:05

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13:00 - 13:45

13:50 - 14:20

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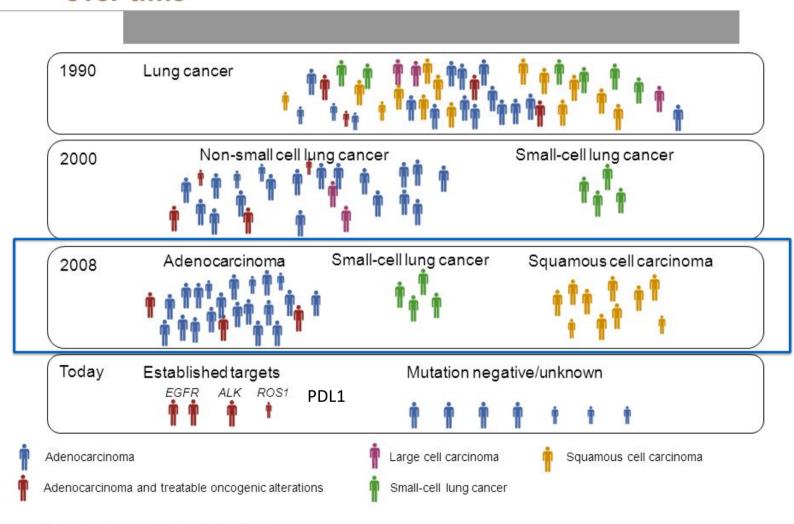
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Patient selection in lung cancer: Evolution over time



Adapted from Reck M, et al. Lancet 2013;382:709-19

	NordiQ(3
	Program	
	Wednesday, Se	epte
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	13:30 - 14:15	45
	14:20 - 15:05	45
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D	Thursday, Septe REGICTION	emb
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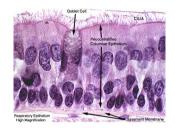
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Morphology

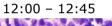


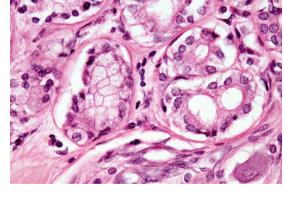


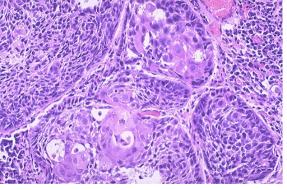
Program

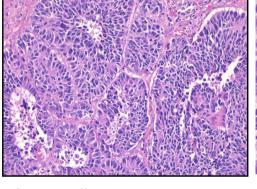
Wednesday, Septer

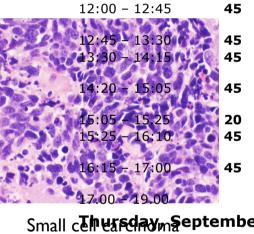
	09:30 - 10:00
15	10:00 - 10:15
45	10:15 - 11:00
45	11:05 - 11:50











Adenocarcinoma

Squamous carcinoma

Large cell neuroendocrine carc.

08:15 - 09:00 45

09:00 - 09:45

13:50 - 14:20

Non Small Cell Lung Carcinoma (NSCLC)

09:50 - 10:10 Neuroendocrine carcinoma

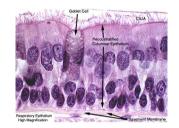
45	10:45 - 11:30
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50 45	12:10 - 13:00 13:00 - 13:45

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Morphology

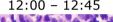




Program

Wednesday, Septer

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	09:30 - 10:00	
15	10:00 - 10:15	
45	10:15 - 11:00	
45	11:05 - 11:50	
45	12:00 - 12:45	
43	12.00 - 12.43	

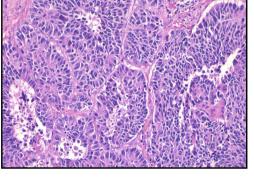












Large cell neuroendocrine carc.

Small c**Ehursday**m**Septembe** 08:15 - 09:00 **45**

09.00	- 09.43	

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Neuroendocrine carcinoma

carcinoma	
10:45 - 11:30	45

12:10 -	13:00
13:00 -	13:45

13:50 -	- 14:20	

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	WILL TO Expense	- only
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	20 400 6236	Fe one Care

Typical carcinoid

Neuroendocrine tumor

Atypical carcinoid

Immunohistochemistry



Program

Wednesday, Septer

09:30 - 10:00 10:00 - 10:15 15 45 10:15 - 11:00

11:05 - 11:50

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12:45 - 13:30 13:30 - 14:15 14:20 - 15:05 45 15:05 - 15.25 20 15:25 - 16:10 16:15 - 17:00

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Thursday, September

17.00 - 19.00

Small cell carcinoma

09:00 - 09:45

09:50 - 10:10

Neuroendocrine carcinoma 10:45 - 11:30

11:35 - 12:05

12:10 - 13:00

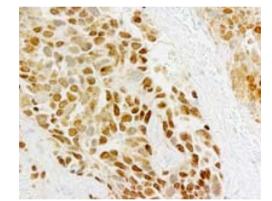
13:00 - 13:45

13:50 - 14:20

ttfl

Adenocarcinoma

p63



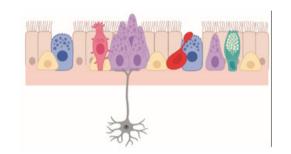
Squamous carcinoma

cd56

Large cell neuroendocrine carc

Non Small Cell Lung Carcinoma (NSCLC)

Immunohistochemistry



cd56



Program

Wednesday, Septer

15 45	09:30 - 10:00 10:00 - 10:15 10:15 - 11:00
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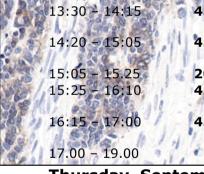
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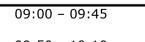
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cd56





Thursday, September Small cell carcinoma



09:50 - 10:10

Neuroendocrine carcinoma

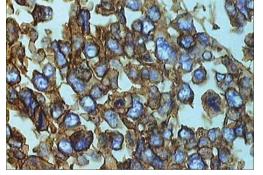
10:45 - 11:30

11:35 - 12:05

12:10 - 13:00 13:00 - 13:45

13:50 - 14:20

Atypical carcinoid



Large cell neuroendocrine carc

Neuroendocrine tumor

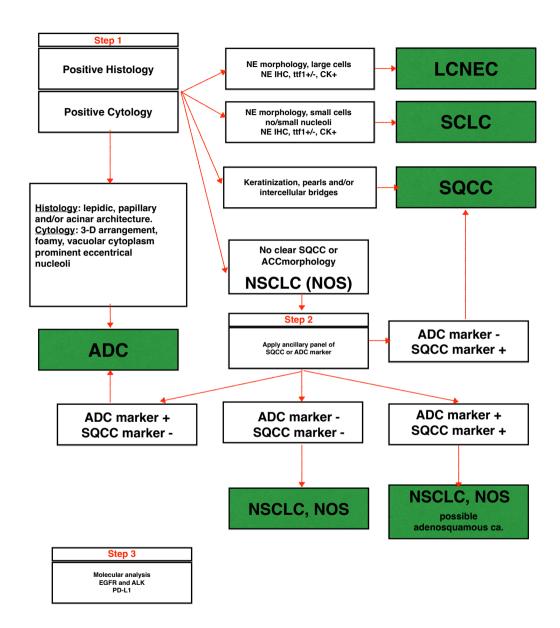
Typical carcinoid

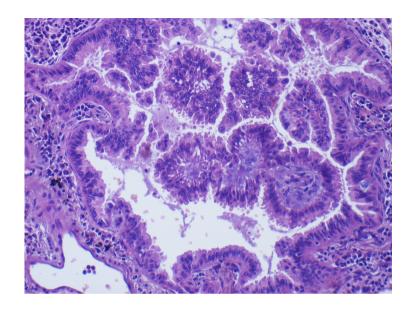
Algorithm modified from

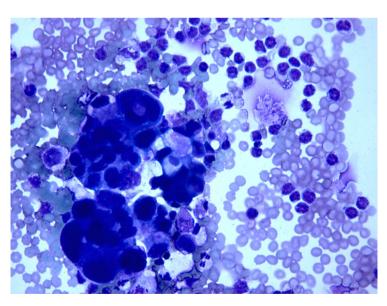
Diagnosis of Lung Cancer in Small Biopsies and Cytology

Implications of the 2011 International Association for the Study of Lung Cancer/ American Thoracic Society/European Respiratory Society Classification

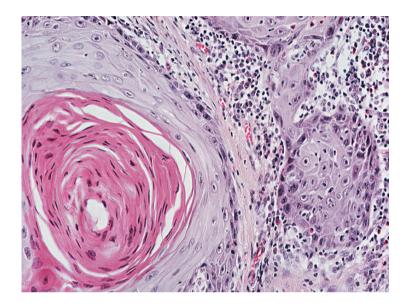
William D. Iravis, MD; Elisabeth Brambilla, MD; Masayuki Noguchi, MD; Andrew G. Nicholson, DM; Kim Ceisinger, MD; Yasushi Yatabe, MD; Yuichi Ishikawa, MD; Ignacio Wistuba, MD; Douglas B. Hieder, MD; Wilbur Franklin, MD; Adi Gazdar, MD; Philip S. Hasleton, MD; Douglas W. Henderson, MD; Keith M. Kerr, MD; Iver Petersen, MD; Victor Roggli, MD; Erik Thunnissen, MD; Ming Isao, MD

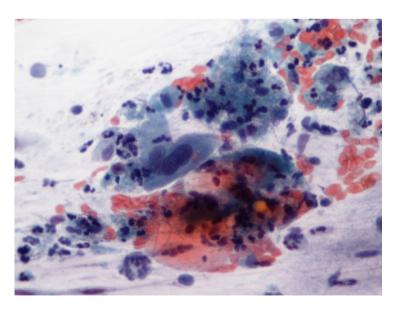


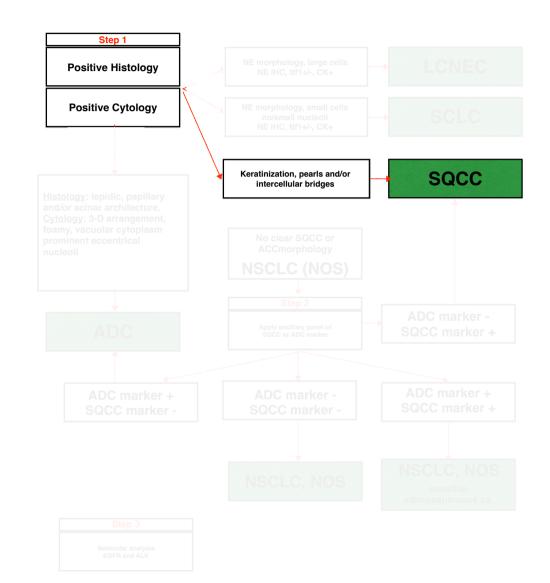


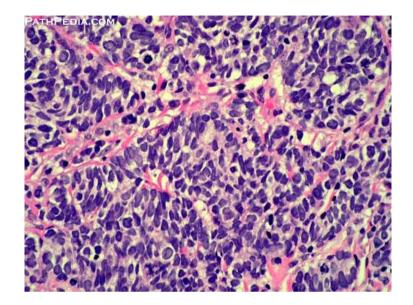


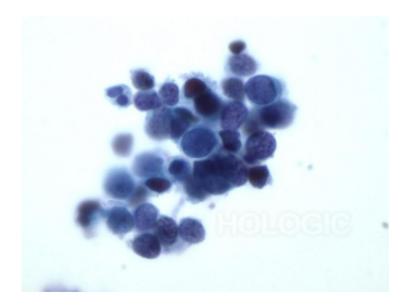


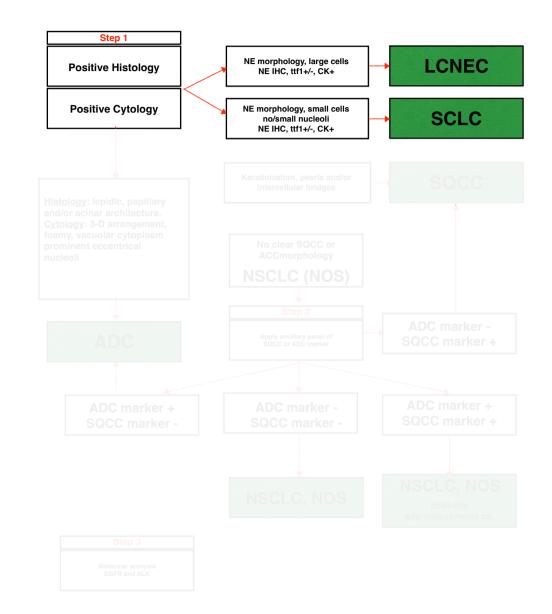


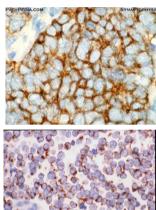


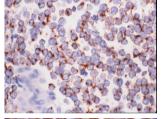




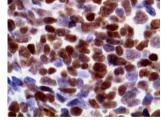




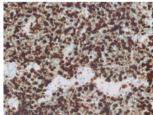




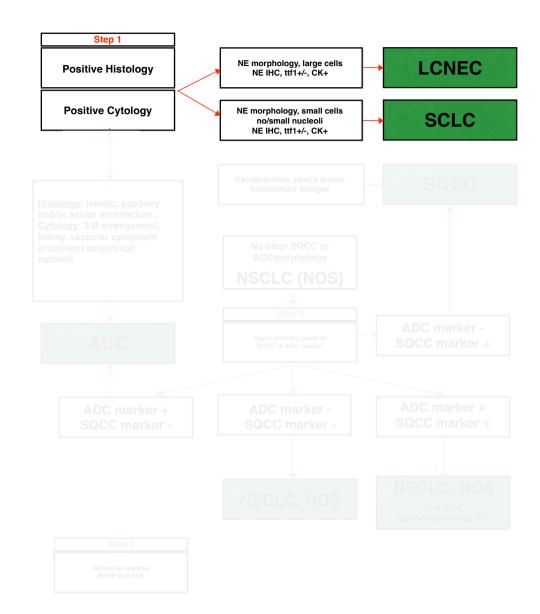
Cytokeratin

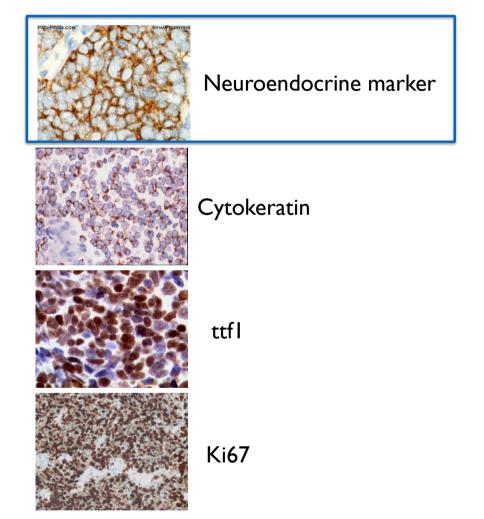


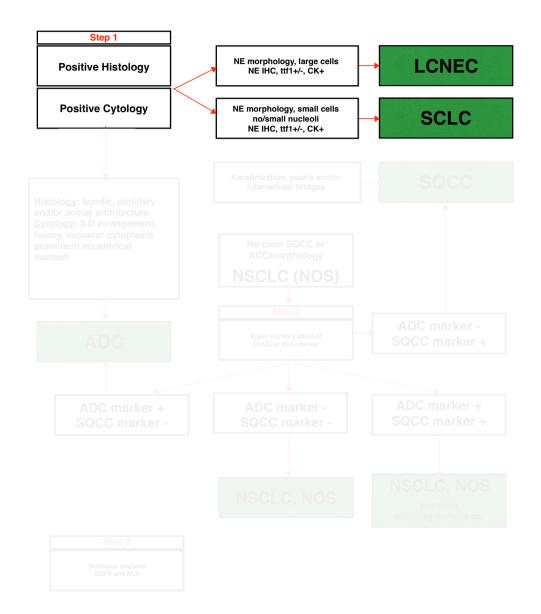
ttfl



Ki67



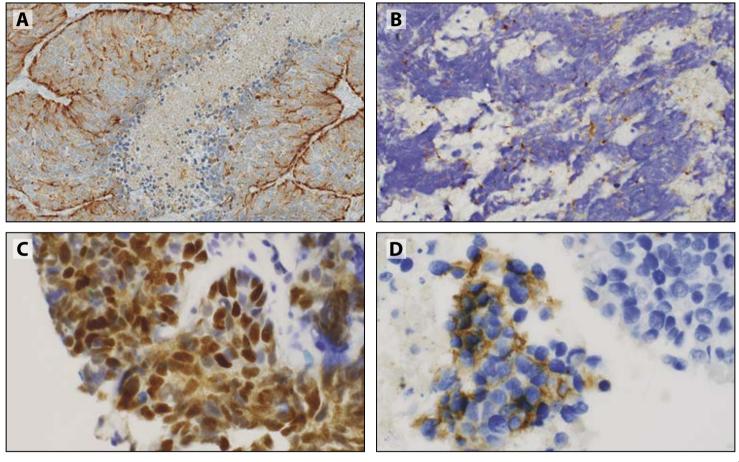




Chromogranin A

Neuroendocrine markers

Synaptofycin











Program

Wednesday, Septer

	9:30 - 10:00	
15	0:00 - 10:15	
45	0:15 - 11:00	

Sensitivity

				P	ositive Cases	s [n (%)]*	45
Entity	Overall Cases Analyzed (N)	INSM1	SYN	CHRA	CD56	Any Conventional (SYN)CHRA/CD	56) ⁴⁵
	7		9X	2	**	12:45 - 13:30	45
LCNEC	77	32 (42)	47 (61)	32 (42)	66 (86)	70 (9B) 30 - 14:15	45
SCLC	144	124 (86)	122 (85)	107 (74)	132 (92)	137 (95) 14:20 - 15:05	45
						15:05 - 15.25 15:25 - 16:10	20 45
						16:15 - 17:00	45
						17.00 - 19.00	

Insulinoma-associated Protein 1 (INSM1) in Thoracic Tumors is Less Sensitive but More Specific Compared With Synaptophysin, Chromogranin A, and CD56

Katharina Kriegsmam, MD, MBA,* Christiane Zgorzelski,† Daniel Kazdal, PhD,† ‡ Martin Cremer, MD,* Thomas Muley, PhD,\$|| Hauke Winter, MD, PhD,‡|| Rémi Longuespée, PhD,† Jörg Kriegsmam, MD, PhD,¶ Arne Warth, MD, PhD,# and Mark Kriegsmam, MD†

45	08:15 - 09:00
45	09:00 - 09:45
20 30	09:50 - 10:10 10:10 - 10:40
45	10:45 - 11:30
30	11:35 - 12:05

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12:10 - 13:00

13:00 - 13:45

13:50 - 14:20

Thursday, September



Program

Wednesday, Septer

	09:30 - 10:00
15	10:00 - 10:15
45	10:15 - 11:00

Specificity

				Po	sitive Cases	[n (%)]*	— 45
entity	Overall Cases Analyzed (N)	INSM1	SYN	CHRA	CD56	Any Conventional (SYN)CHRA/CD5	_ 6) 45
		Also.	5A 55	*	**	12:45 - 13:30	— 45
DC	47	1 (2)	6 (13)	4 (9)	7 (15)	10 (2B) 30 - 14:15	4
SqCC	44	0 (0)	2 (5)	0 (0)	9 (20)	10 (23) 14:20 - 15:05	4
						15:05 - 15.25	2
						15:25 - 16:10	
						16:15 - 17:00	
						17.00 - 19.00	
						Thursday, Sept	e

Insulinoma-associated Protein 1 (INSM1) in Thoracic Tumors is Less Sensitive but More Specific Compared With Synaptophysin, Chromogranin A, and CD56

Katharina Kriegsmam, MD, MBA,* Christiane Zgorzelski,† Daniel Kazdal, PhD,† ‡ Martin Cremer, MD,* Thomas Muley, PhD,\$|| Hauke Winter, MD, PhD,‡|| Rémi Longuespée, PhD,† Jörg Kriegsmam, MD, PhD,¶ Arne Warth, MD, PhD,# and Mark Kriegsmam, MD†

45	08:15 - 09:00
45	09:00 - 09:45
20 30	09:50 - 10:10 10:10 - 10:40
45	10:45 - 11:30
30	11:35 - 12:05

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12:10 - 13:00

13:00 - 13:45

13:50 - 14:20



Program

Wednesday, Septer

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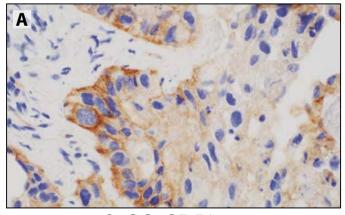
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09:30 - 10:00	
10:00 - 10:15	15
10:15 - 11:00	45



Specificity

-				Pe	ositive Cases	[n (%)]*	45
Entity	Overall Cases Analyzed (N)	INSM1	SYN	CHRA	CD56	Any Conventional (SYN)CHRA/CD5	₆₎ 45
2			1.8	**	*	12:45 - 13:30	45
ADC	47	1 (2)	6 (13)	4 (9)	7 (15)	10 (2B) 30 - 14:15	45
SqCC	44	0 (0)	2 (5)	0 (0)	9 (20)	10 (23) 14:20 - 15:05	45



SqCC, CD56

09:50 - 10:10 ADC, syn 10:10 - 10:40 DIAGNOSTIC 10:45 -

11:35

12:10 - 13:00 13:00 - 13:45

16:15 - 17:00

17.00 - 19.00

08:15 - 09:00

09:00 - 09:45

Thursday, September

13:50 - 14:20

30

Insulinoma-associated Protein 1 (INSM1) in Thoracic Tumors is Less Sensitive but More Specific Compared With Synaptophysin, Chromogranin A, and CD56

Katharina Kriegsmann, MD, MBA,* Christiane Zgorzelski,† Daniel Kazdal, PhD,†‡
Martin Cremer, MD,* Thomas Muley, PhD,\$|| Hauke Winter, MD, PhD,‡||
Rémi Longuespée, PhD,† Jörg Kriegsmann, MD, PhD,¶ Arne Warth, MD, PhD,#
and Mark Kriegsmann, MD†



NordiQC

Program

11:35 - 12:05

12:10 - 13:00

13:00 - 13:45

13:50 - 14:20

30

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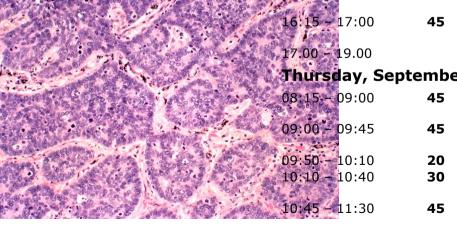
30

Wednesday, Septer

	09:30 - 10:00
1!	10:00 - 10:15
4!	10:15 - 11:00

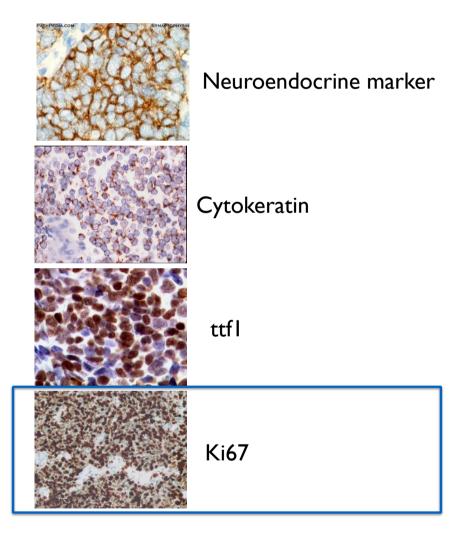
Specificity

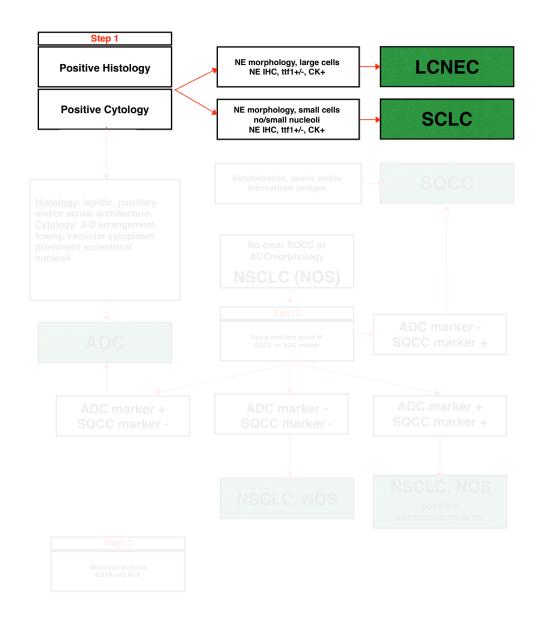
				P	ositive Cases	[n (%)]* 11:05 - 11:50	45
Entity	Overall Cases Analyzed (N)	INSM1	SYN	CHRA	CD56	Any Conventional (SYN)CHRA/CD5	56) 45
7	<i>y</i>		93.			12:45 - 13:30	45
ADC	47	1 (2)	6 (13)	4 (9)	7 (15)	10 (2B)30 - 14:15	45
SqCC	44	0 (0)	2 (5)	0 (0)	9 (20)	10 (23) 14:20 - 15:05	45
			M	1orpholog	Σλ	15:05 - 15.25	20
	9.					15:25 - 16:10	45



Insulinoma-associated Protein 1 (INSM1) in Thoracic Tumors is Less Sensitive but More Specific Compared With Synaptophysin, Chromogranin A, and CD56

Katharina Kriegsmann, MD, MBA,* Christiane Zgorzelski,† Daniel Kazdal, PhD,† ‡
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Rémi Longuespée, PhD,† Jörg Kriegsmann, MD, PhD,# Arne Warth, MD, PhD,#
and Mark Kriegsmann, MD†





Neuroendocrine markers

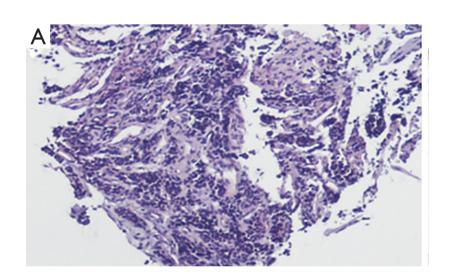


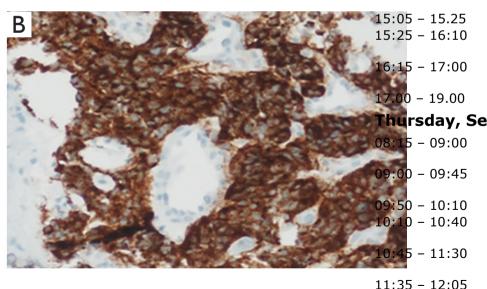
Case Report

Erroneous diagnosis of small cell lung cancer based on small biopsies with far-reaching consequences: case report of a typical carcinoid tumor

Ioannis Kyritsis¹, Bettina Krebs¹, Sandra Kampe², Dirk Theegarten³, Clemens Aigner¹, Stefan Welter¹

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Wednesday, Septer

	09:30 - 10:00
1	10:00 - 10:15
4	10:15 - 11:00
4	11:05 - 11:50
	12.00 12.45
4	12:00 - 12:45

2:45 - 13	3:30	4
3:30 - 14	4:15	4

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14:20 -	15:05

15:05 - 15.25	20
15:25 - 16:10	45
_	

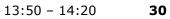
Thursday, Septembe

9:00 - 09:45	45
9:50 - 10:10 0:10 - 10:40	20

10:4) –	11:3	U
- 1949			

11:35 – 12:05	30
12:10 - 13:00	50

13:	:00	- 1	L3:4	1 5	



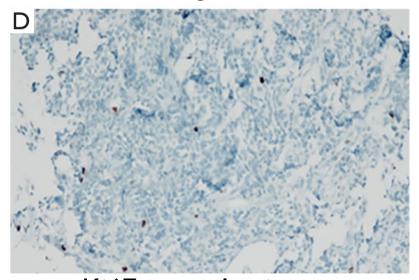
Neuroendocrine markers

Case Report

Erroneous diagnosis of small cell lung cancer based on small biopsies with far-reaching consequences: case report of a typical carcinoid tumor

Ioannis Kyritsis¹, Bettina Krebs¹, Sandra Kampe², Dirk Theegarten³, Clemens Aigner¹, Stefan Welter¹

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Ki67, re-evaluation

Program Wednesday, Septer 09:30 - 10:00 10:00 - 10:15 15 10:15 - 11:00 45 11:05 - 11:50 45 12:00 - 12:45 45 12:45 - 13:30 45 45 13:30 - 14:15 14:20 - 15:05 45 15:05 - 15.25 20 15:25 - 16:10 45 16:15 - 17:00 45 17.00 - 19.00 Thursday, September 08:15 - 09:00 45 09:00 - 09:45 45 09:50 - 10:10 20 10:10 - 10:40 30 10:45 - 11:30 45 11:35 - 12:05 30 12:10 - 13:00 50 13:00 - 13:45 45

13:50 - 14:20



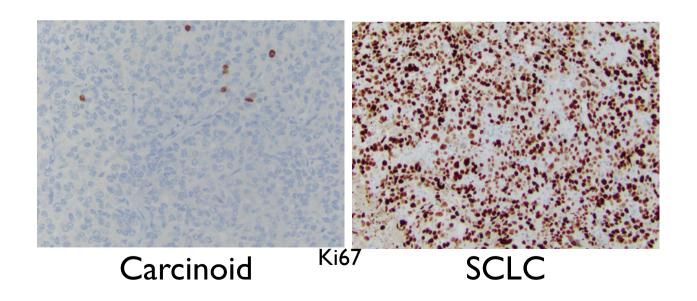


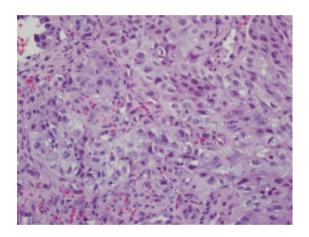
Specificity

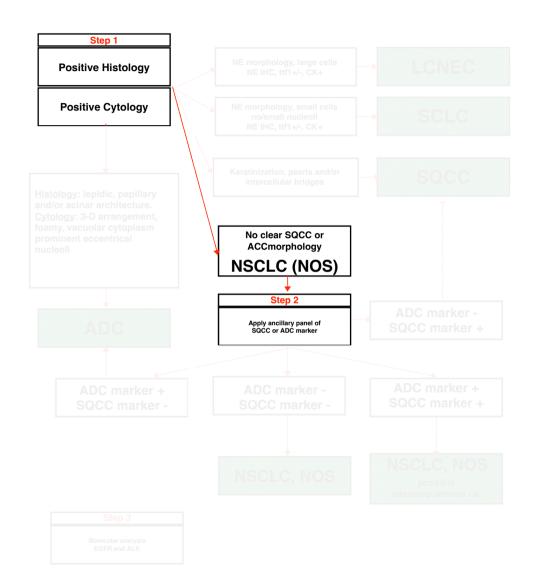
		Positive Cases [n (%)]*				
Entity	Overall Cases Analyzed (N)	INSM1	SYN	CHRA	CD56	Any Conventional (SYN/CHRA/CD56)
Typical carcinoid Atypical carcinoid	112 39	91 (81) 29 (74)	111 (99) 39 (100)	111 (99) 39 (100)	112 (100) 39 (100)	112 (100) 39 (100)

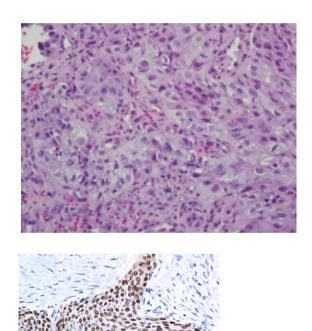
Insulinoma-associated Protein 1 (INSM1) in Thoracic Tumors is Less Sensitive but More Specific Compared With Synaptophysin, Chromogranin A, and CD56

Katharina Kriegsmam, MD, MBA,* Christiane Zgorzelski,† Daniel Kazdal, PhD,†‡
Martin Cremer, MD,* Thomas Muley, PhD,\$|| Hauke Winter, MD, PhD,‡||
Rémi Longuespée, PhD,† Jörg Kriegsmam, MD, PhD,¶ Arne Warth, MD, PhD,#
and Mark Kriegsmam, MD†

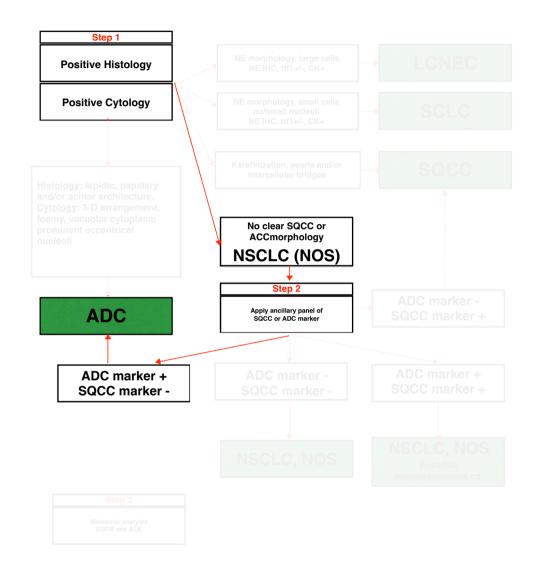


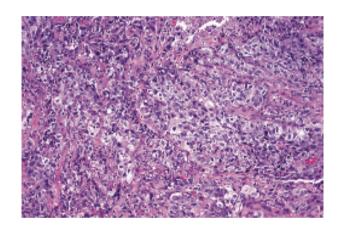


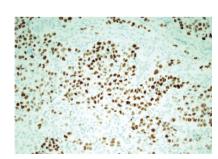




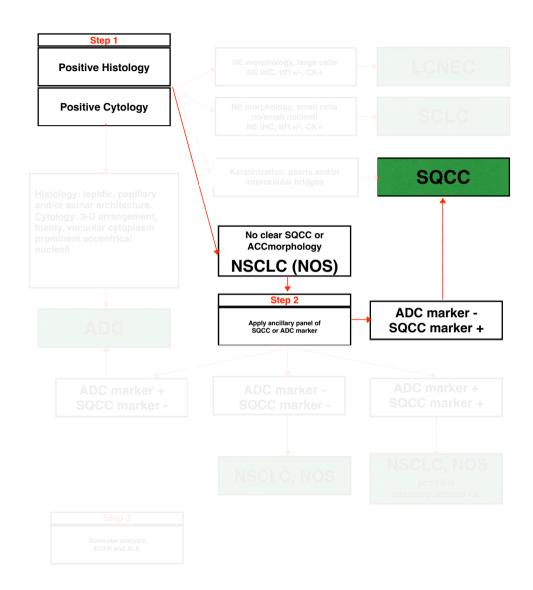
(+Cytokeratin 7)

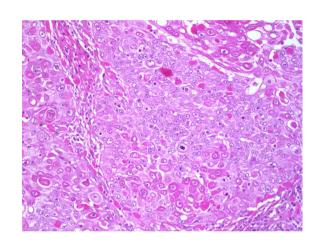


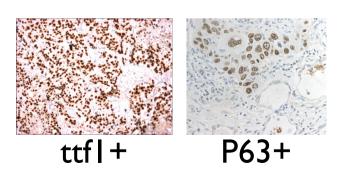


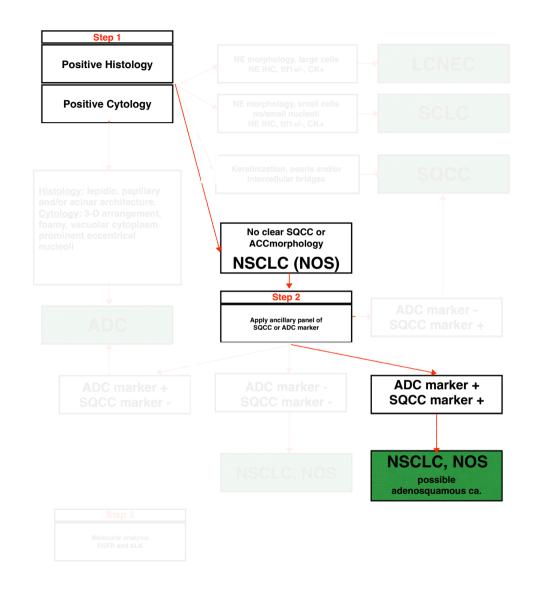


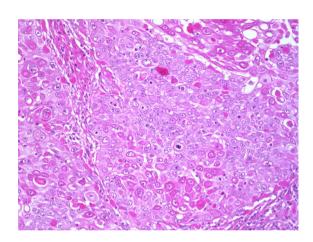
P63+ (+Cytokeratin 5/6)

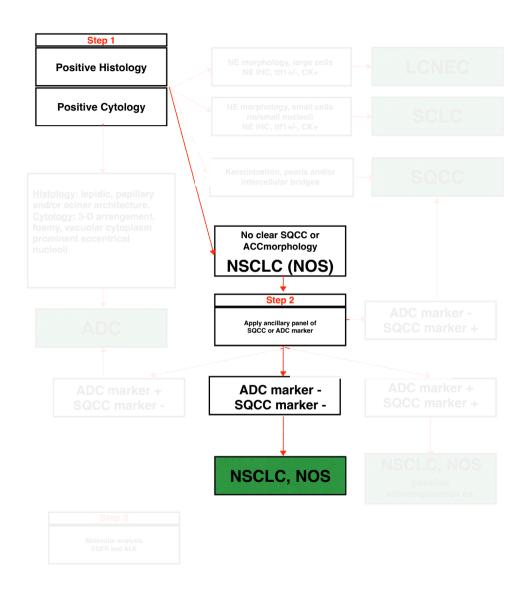












TtfI- P63-





Adenocarcinoma (+neuroendocrine)
Approx. 80% (+neuroendocrine)

12:2455-13:390
12:350-14:155



CK5/6

P63



मिस्सुस्म Wednesday, Septer

 $\begin{array}{c} 099390 - 190000 \\ 19000 - 190155 \\ 190155 - 11000 \end{array}$ 1<u>5</u>5 4<u>4</u>5

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11i.955-11i.590

144220-15505

 $\substack{\substack{15:05-\\15:25}\\15:25-\\16:10}$

16;15-17;00

17700-11900

Thursday, September 08:15-09:00 445

099000-09945

 $^{095}_{1}^{50}^{-1}_{0}^{-1}^{01}_{0}^{1}_{0}$

100455-11i300

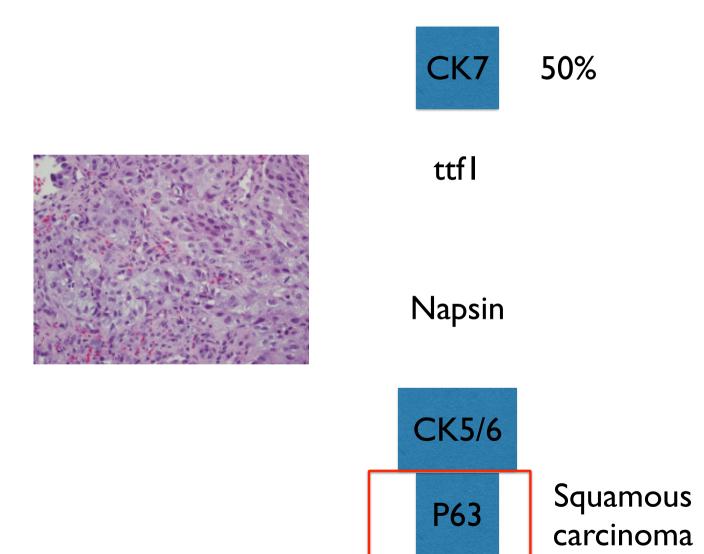
¹1; ³⁵5-12; ⁰⁵5

 $\substack{122190-13300\\133000-13345}$

13350-14420

590 445 330

Napsin





Program

Wednesday, Septer

VV Cuii	csuuy, s	Cpt
09:30 -	10:00	
10:00 -	10:15	15
10:15 -	11:00	45
11:05 -	11:50	45
12:00 -	12:45	45
12:45 -	13.30	45
13:30 -		45
14:20 -	15:05	45
15:05 -	15 25	20
15:05 -		20 45
13.23 -	10.10	45
16:15 -	17:00	45
17.00 -	19.00	

Thursday, Septembe

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08:15 - 09:00	
09:00 - 09:45	
09:50 - 10:10 10:10 - 10:40	
10:45 - 11:30	
11:35 - 12:05	

12:10 - 13:00

13:00 - 13:45



Diagnosis of primary lung tumor

Program

Wednesday, Septer 09:30 - 10:00

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	09.30 10.00	
	10:00 - 10:15	15
	10:15 - 11:00	45
Lung2	11:05 - 11:50	45
Lungz	12:00 - 12:45	45
PAN CK	(AEI/AE3)	
	12:45 - 13:30	45
CK7	13:30 - 14:15	45
Ttfl	14:20 - 15:05	45
$DV \wedge O$	15.05 - 15.25	20

Synaptofycinhursday, September

4	09:00 - 09:45
2 3	09:50 - 10:10 10:10 - 10:40
4	10:45 - 11:30
3	11:35 - 12:05

PAX8 15:25 - 16:10 CK5(/6) 16:15 - 17:00 P63 (P40) 17.00 - 19.00

ChromograninA 09:00

CD56	09:00 - 09:45	4
Ki67	09:50 - 10:10 10:10 - 10:40	2 3

12:10 - 13:00 13:00 - 13:45

13:50 - 14:20

Lungl

CK7 Ttfl PAX8 CK5(/6) P63 (P40)

Suggestion

Problems:



Adenocarcinoma can be P63+



Program

Wednesday, Septer

- -	_
09:30 - 10:00	
10:00 - 10:15	15
10:15 - 11:00	45
11:05 - 11:50	45
11.05 - 11.50	45
12:00 - 12:45	45
12:45 - 13:30	45
13:30 - 14:15	45
13.30 - 14.13	73
44.00 45.05	
14:20 - 15:05	45
15:05 - 15.25	20
15:25 - 16:10	45
13.23 10.10	75
16:15 17:00	45
16:15 - 17:00	45
17.00 - 19.00	

Thursday, September

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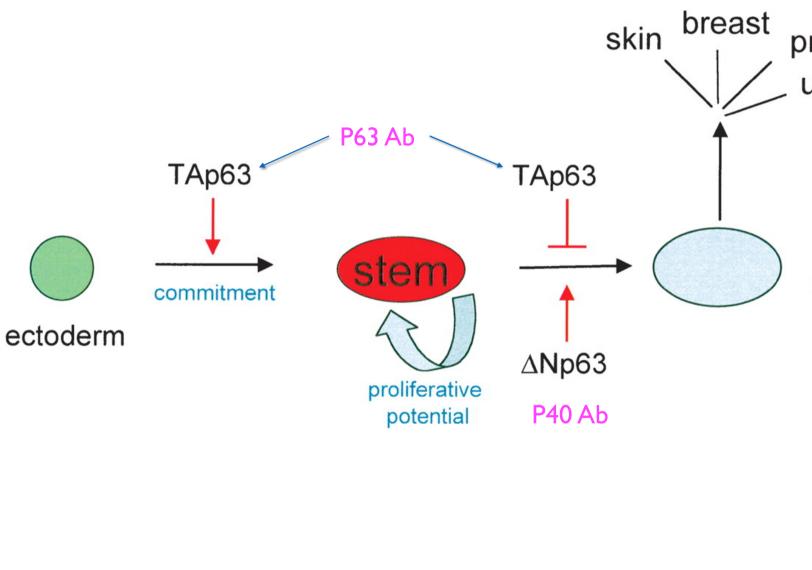
08:15 - 09:00

45	09:00 - 09:45
20 30	09:50 - 10:10 10:10 - 10:40
45	10:45 - 11:30
30	11:35 - 12:05

12:10 - 13:00	

12:10 - 13:00	50
13:00 - 13:45	45

The P63 family



NordiQC

Program

pro Wednesday, S	epte
urothelium	15 45
11:05 - 11:50	45
12:00 - 12:45	45
12:45 - 13:30 13:30 - 14:15	45 45
14:20 - 15:05	45
₁ऻॣक़ॖॻॎiक़ॖaॖऻऽ di ffeit entfeitfon	20 45
16:15 - 17:00	45
17.00 - 19.00	

Thursday, September

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45	09:00 - 09:45
20 30	09:50 - 10:10 10:10 - 10:40
45	10:45 - 11:30
30	11:35 - 12:05

08:15 - 09:00

12:10 - 13:00

13:00 - 13:45





Table 8-1. Studies Comparing p40 Against p63 for Squamous Cell Carcinoma (SQCC)

Program

				p40			p63	Wednesday 09:30 - 10:00	, Septe
Study	Total, n	SQCC, n	Clone	Sensitivity, %	Specificity, %	Clone	Sensitivity, %	Specificity, 15	15 45
Bishop et al 2012	470	81	5-17	100	98	4A4	100	11:05 - 11:50 60	45
Nonaka 2012	200	50	p40	100	100	4A4	100	12:00 - 12:45 82	45
Pelosi et al 2013	141	27	Poly	100	97	4A4	100	12:45 - 13:30 13:30 - 14:15	45 45
Ao et al 2014	154	77	Poly	81	90	4A4	94	14890 - 15:05	45
Koh et al 2014	184	59	Poly	93	98	7JUL	80	98 15:05 - 15.25	20
Tatsumori et al 2014	580	158	5-17	97	97	4A4	97	15 7 35 - 16:10	45
Kadota et al 2015	469	449	5-17	100	85	4A4	100	16 6 1 5 – 17:00	45
Tran et al 2016	557	167	BC28	94	96	4A4	95	17890 - 19.00	_
Micke et al 2016	656	192	BC28	97	98	4A4	97	Thursday, Se 74 08:15 - 09:00	eptemb 45
^∰andi et al 2018	70	35	BC28	77	100	DAK-p63	86	63 09:00 - 09:45	45
gsmann et al 2019	1244	569	BC28	94	97	4A4	94	84 09:50 - 10:10	20
# * AMM								10:10 - 10:40	30





10:45 - 11:30

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11:35 - 12:05

12:10 - 13:00

13:00 - 13:45

Problems:



Differential diagnosis between primary and metastatic carcino

Other (adeno) carcinomas are positive for ttf l

	Nor	diQC)
	Progra	am	
	Wedn	esday, Se	pte
	09:30 - 10:00 - 10:15 -	10:15	15 45
	11:05 -	11:50	45
	12:00 -	12:45	45
	12:45 -		45
n	13:30 - OMa		45
•	14:20 -		45
	15:05 - 15:25 -		20 45
	16:15 -	17:00	45
	17.00 -	19.00	
	Thurso	day, Septe	mb

08:15 - 09:00

09:00 - 09:45

09:50 - 10:10

10:10 - 10:40

10:45 - 11:30

11:35 - 12:05

12:10 - 13:00

13:00 - 13:45

13:50 - 14:20

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09:30 - 10:00

		8G7G3/1		SPT24 11:05 - 11:50
Primary carcinoma	n	Positive, n (%)	n	Positive, n (%)
Ovarian carcinoma	615	22 (3.6%)	161	16 (91 9%) 0 - 14:15
Endometrial adenocarcinoma	215	17 (7.9%)	68	19 (2 7.9%) - 15:05
Uterine cervical adenocarcinoma	92	3 (3.3%)	39	6 (15!4%)5 - 15.25 15:25 - 16:10
Uterine cervical squamous carcinoma	7	0 (0%)		16:15 - 17:00
Breast carcinoma	297	4 (1.5%)	580	13 (2.4%) 17.00 - 19.00
Colon adenocarcinoma	594	11 (1.8%)	258	^{17:00 = 19:00}
Gastric adenocarcinoma	170	3 (1.8%)	110	1 (0.9%) 5 - 09:00
w along a 0.6762/1 and CDT24 are no diffe		0 1 20121		09:00 - 09:45

r clones 8G7G3/1 and SPT24 are modified based on data from Ordonez 2012b.





09:50 - 10:10 **20** 10:10 - 10:40 **30** 10:45 - 11:30 **45**

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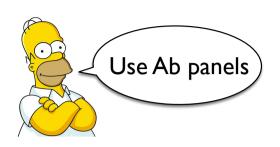
45

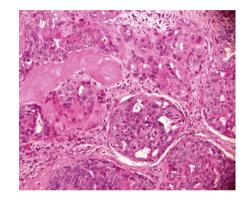
30

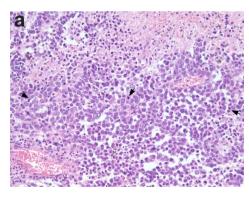
11:35 - 12:05 **30**

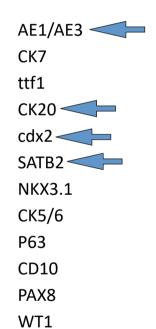
12:10 - 13:00

13:00 - 13:45



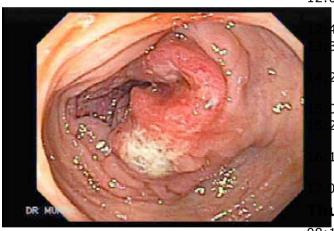






GATA3

Colon





Program

10:00 - 10:15

10:15 - 11:00

Wednesday, Septer 09:30 - 10:00

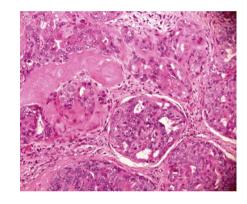
15 45

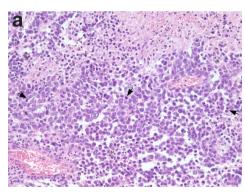
	11:05 - 11:50	45
	12:00 - 12:45	45
1	45 - 13:30 30 - 14:15	45 45
	20 - 15:05	45
•	05 - 15.25 25 - 16:10	20 45
	16.15 – 17:00	45
	17.00 – 19.00	

ursday, Septembe

08:15 - 09:00	45
09:00 - 09:45	45
09:50 - 10:10 10:10 - 10:40	
10:45 - 11:30	45
11:35 - 12:05	30
12:10 - 13:00 13:00 - 13:4!	

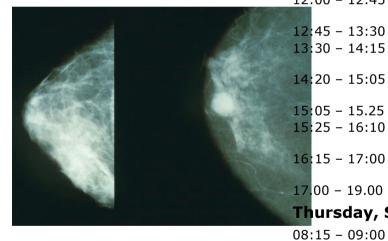
30





AE1/AE3 CK7 ttf1 CK20 cdx2 SATB2 **NKX3.1** CK5/6 P63 CD10 PAX8 WT1

GATA3 ⋖



Program

10:00 - 10:15

10:15 - 11:00

Wednesday, Septer 09:30 - 10:00

15 45

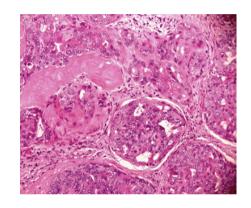
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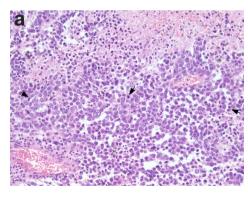
Mamma	11:05 - 11:50	45
	12:00 - 12:45	45
	12:45 - 13:30 13:30 - 14:15	45 45
	14:20 - 15:05	45
	15:05 - 15.25 15:25 - 16:10	20 45
	16:15 - 17:00	45
1	17.00 - 19.00 Thursday, Ser	ntembe

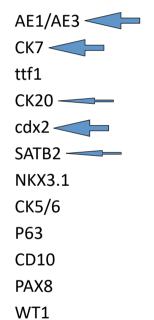
9:0	00 –	09:	45	4
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	_			_

10:45 - 11:30	45
11:35 - 12:05	30

12:10 - 13:00	50
13:00 - 13:45	45







GATA3

Upper GI



NordiQC

Program

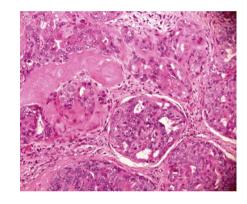
Wednesday, Septer

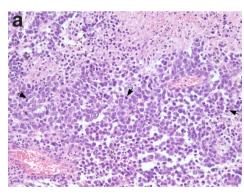
09:30 - 10:00	
10:00 - 10:15	15
10:15 - 11:00	45
11:05 - 11:50	45
12:00 - 12:45	45
12:45 - 13:30	45
13:30 - 14:15	45
14:20 - 15:05	45
15:05 - 15.25	20
15:25 - 16:10	45
16:15 - 17:00	45
17.00 - 19.00	

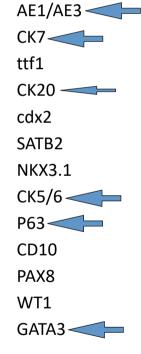
MDAM. Thursday, Septembe

08:15 - 09:00	45
09:00 - 09:45	45
09:50 - 10:10 10:10 - 10:40	20 30
10:45 - 11:30	45
11:35 - 12:05	30
12:10 - 13:00 13:00 - 13:45	50 45

30









Program

10:00 - 10:15

10:15 - 11:00

08:15 - 09:00

09:00 - 09:45

09:50 - 10:10

10:10 - 10:40

10:45 - 11:30

11:35 - 12:05

12:10 - 13:00

13:00 - 13:45

13:50 - 14:20

Wednesday, Septer 09:30 - 10:00

15 45

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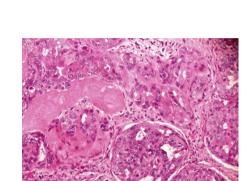
45

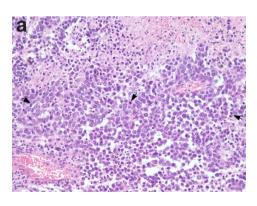
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	11:05 - 11:50	45
Jrothelial care	cinoma ^{12:00 - 12:45}	45
	2:45 - 13:30 3:30 - 14:15	45 45
	::20 - 15:05	45
Charles III	1 5:05 - 15.25 1 5:25 - 16:10	20 45
	15:15 - 17:00	45
	7.00 - 19.00 hursday Sen	
	nursday, sen	rembe







NordiQC

Program

09:30 - 10:00 10:00 - 10:15

10:15 - 11:00

09:00 - 09:45

09:50 - 10:10

10:10 - 10:40

10:45 - 11:30

11:35 - 12:05

12:10 - 13:00

13:00 - 13:45

13:50 - 14:20

Wednesday, Septer

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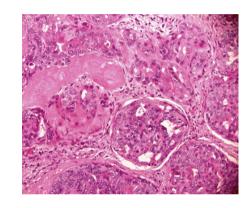
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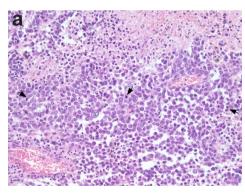
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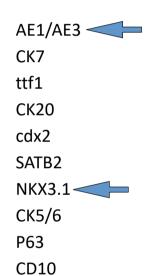
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Renal cell carcinoma	11:05 - 11:50	45
	12:00 - 12:45	45
	45 - 13:30 30 - 14:15	45 45
1 1000	20 - 15:05	45
7 7 7	05 – 15.25	20
	25 - 16:10	45
	15 – 17:00	45
	00 - 19.00	
	ursday, Sep	temb
	15 - 09:00	45



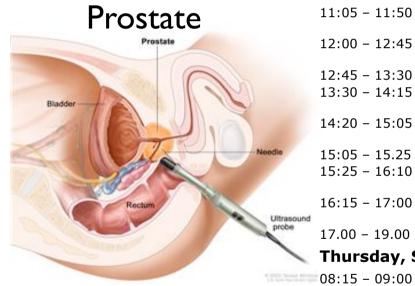




PAX8

WT1

GATA3



Program

Wednesday, Septer

	• •
09:30 - 10:00	
10:00 - 10:15	15
10:15 - 11:00	45
11:05 - 11:50	45
12:00 - 12:45	45
12:45 - 13:30	45
13:30 - 14:15	45
14:20 - 15:05	45
15:05 - 15.25	20
15:25 - 16:10	45
16:15 - 17:00	45
17.00	
17.00 - 19.00	

Thursday, September

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45	09:00 - 09:45
20 30	09:50 - 10:10 10:10 - 10:40
45	10:45 - 11:30

12:10 - 13:00	
13:00 - 13:45	

11:35 - 12:05



Program

09:30 - 10:00

Wednesday, Septer

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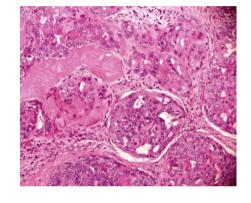
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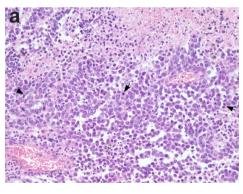
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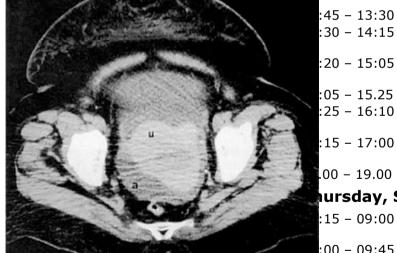






CK7 ≪ ttf1 CK20 cdx2 SATB2 **NKX3.1** CK5/6 P63 CD10 PAX8 < WT1< GATA3

AE1/AE3 ≪



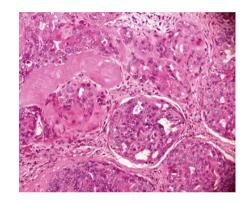
ursday, Septembe

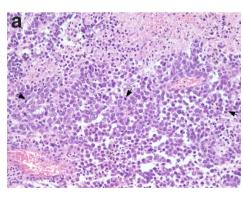
:15 - 09:00	45
:00 - 09:45	45

10:10 - 10:40	30
10:45 - 11:30	45
11:35 - 12:05	30

12:10 -	13:00
13:00 -	13:45

09:50 - 10:10



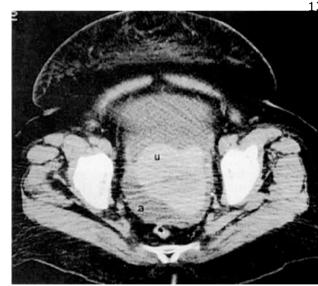


AE1/AE3 CK7 < ttf1 CK20 cdx2 SATB2 **NKX3.1** CK5/6 P63 CD10 PAX8 <

WT1<

GATA3

Ovarian cancer





Program

10:00 - 10:15

Wednesday, Septer 09:30 - 10:00

10:15 - 11:00	45
11:05 - 11:50	45
<u>12</u> :00 – 12:45	45
:45 - 13:30 :30 - 14:15	45 45
:20 - 15:05	45
:05 - 15.25 :25 - 16:10	20 45
:15 - 17:00	45
.00 – 19.00	
S ursday, Sep	temb
:15 - 09:00	45

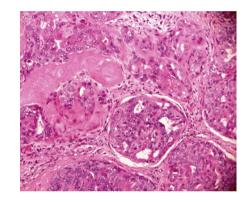
4	:00 - 09:45
2 3	09:50 - 10:10 10:10 - 10:40
4	10:45 - 11:30

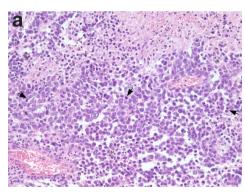
11:35 -	12:05

2:10 - 13:00	50
3:00 - 13:45	45

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L3:50 - 14:20	
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AE1/AE3 CK7 ttf1

CK20

cdx2

SATB2 **NKX3.1**

CK5/6

P63

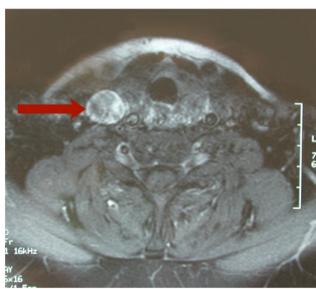
CD10

PAX8 <

WT1

GATA3

Thyroid cancer



Program

Wednesday, Septer 09:30 - 10:00

	10:00 - 10:15 10:15 - 11:00	
	11:05 - 11:50	45
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	12:45 - 13:30 13:30 - 14:1!	
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L 7	16:15 - 17:00	45
	17.00 - 19.00	
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08:15 - 09:00

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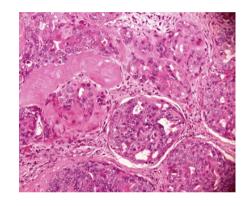
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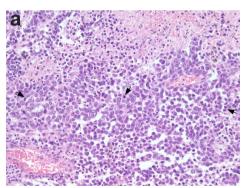
45	09:00 - 09:45
20 30	09:50 - 10:10 10:10 - 10:40
45	10:45 - 11:30

12:10 -	13:00
12.00	12.45

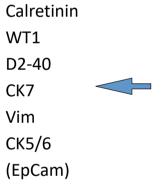
11:35 - 12:05

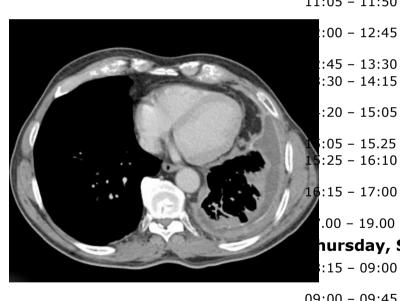
13:00 - 13:45	45
13:50 - 14:20	30





Mesothelioma





Ó	20
Nord	iQC

Program

Wednesday, Septer 09:30 - 10:00

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16:15 - 17:00	45
7.00 - 19.00	
nursday, Se _l	ptemb
:15 - 09:00	45

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09:50 - 10:10 10:10 - 10:40	20 30
10:45 - 11:30	45

11:35	- 12:05

12:10 - 13:00	50
13:00 - 13:45	45

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13:50 - 14:20



Nordi**QC**

Program

Wednesday, Septer

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Adeno - male

CK7

CK20

CDX2

Ttfl

PAX8

NKX3.I

Suggestion

	11:05 - 11:50	45
Adeno -	female	
CK7	12:00 - 12:45	45
	12:45 - 13:30	45
CK20	13:30 - 14:15	45
CDX2	14:20 - 15:05	45
Ttf I	15:05 - 15.25	20
	15:25 - 16:10	45
PAX8	16:15 - 17:00	45
GATA3	17.00 10.00	
	17.00 - 19.00	
WTI	Thursday, Sep	tembe
ER	08:15 - 09:00	45

09:00 - 09:45

09:50 - 10:10

10:10 - 10:40

10:45 - 11:30

11:35 - 12:05

12:10 - 13:00

13:00 - 13:45

13:50 - 14:20

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The MultiDisciplinary Teamconference **MDT**



Program

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epte	Wednesday, Se
15 45	09:30 - 10:00 10:00 - 10:15 10:15 - 11:00
45	11:05 - 11:50
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45	14:20 - 15:05
20 45	15:05 - 15.25 15:25 - 16:10
45	16:15 - 17:00
	17.00 - 19.00
emb	Thursday, Septe
45	08:15 - 09:00
45	09:00 - 09:45

08:15 - 09:00	45
09:00 - 09:45	45
09:50 - 10:10 10:10 - 10:40	20 30
10:45 - 11:30	45
11:35 - 12:05	30

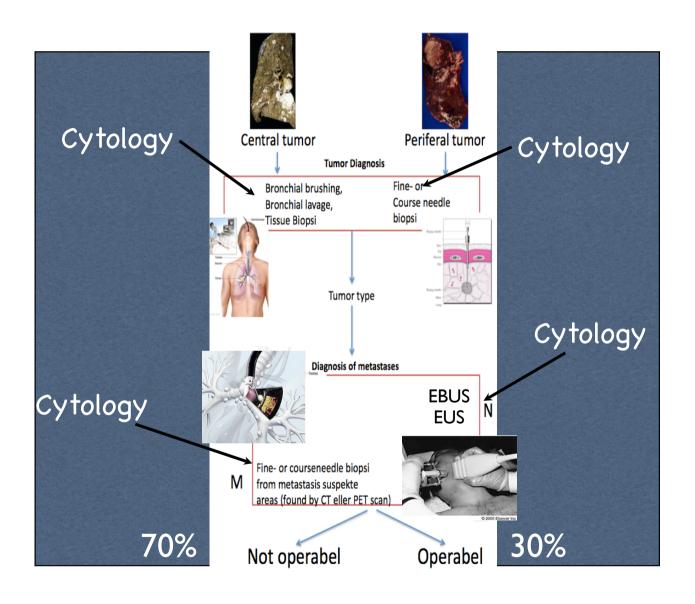
13:50 - 14:20 30

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12:10 - 13:00

13:00 - 13:45





Program

'ednesday,	Septe
:30 - 10:00 :00 - 10:15 :15 - 11:00	15 45
:05 - 11:50	45
:00 - 12:45	45
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45	10:45 - 11:30

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12:10 - 13:00	50

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13:00 - 13:45	45

Patoanatomical specimen

Cytology



Histology

Fixation
Dehydration
Parafinembedding
Microtomy

Præparation

Smear preparation



Visualization

(Staining)

Nordia Program	C
Wednesday,	Septe
09:30 - 10:00 10:00 - 10:15 10:15 - 11:00	15 45
11:05 - 11:50	45
12:00 - 12:45	45
12:45 - 13:30	45
13 B 0 - 1415	45
14:20 - 15:05	45
15:05 - 15.25	20
15:25 - 16:10	45
16:15 - 17:00	45
17.00 - 19.00	

Thursday, September

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08:15 - 09:00

09:00 - 09:45

09:50 - 10:10

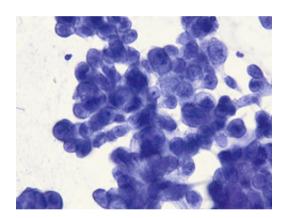
10:10 - 10:40

10:45 - 11:30

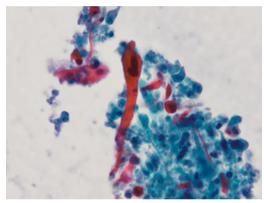
11:35 - 12:05

12:10 - 13:00

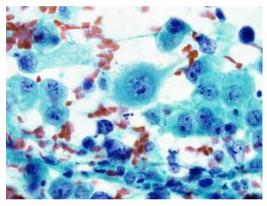
13:00 - 13:45







Squamous carcinoma



Large cell neuroendocrine carc.

Non Small Cell Lung Carcinoma (NSCLC)



Program

Wednesday, Septer

			-
	09:30 - 10:00 - 10:15 -	10:15	15 45
6 0 0 V	11:05	11:50	45
of the	12:00 -	12:45	45
	12:45 - 13:30 -		45 45
	14:20 -	15:05	45
ď	15:05 <u>-</u> 15:25 -		20 45
Small ce	16:15 - ell carcir	17:00 noma	45
	17.00 -	19.00	

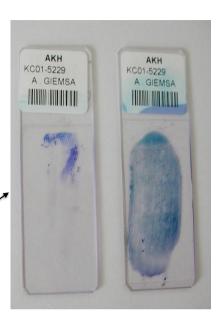
Thursday, September

45	08:15 - 09:00
45	09:00 - 09:45
20 30	09:50 - 10:10 10:10 - 10:40
45	10:45 - 11:30
30	11:35 - 12:05
50 45	12:10 - 13:00 13:00 - 13:45

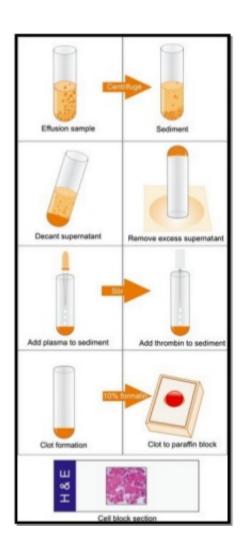
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Immuncytology



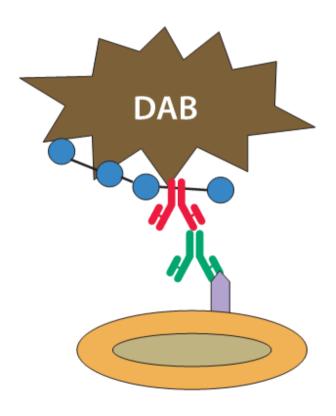


Smear



Cellblock

Immuncytology

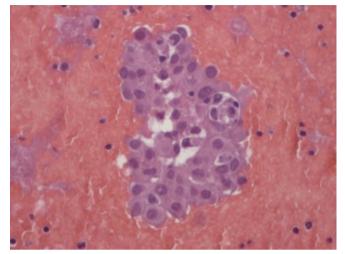


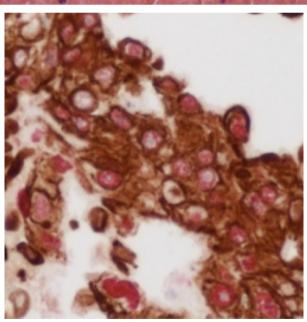
Kromogen (farvestof)

Visualiseringssystem (enzymer)
Sekundært antistof

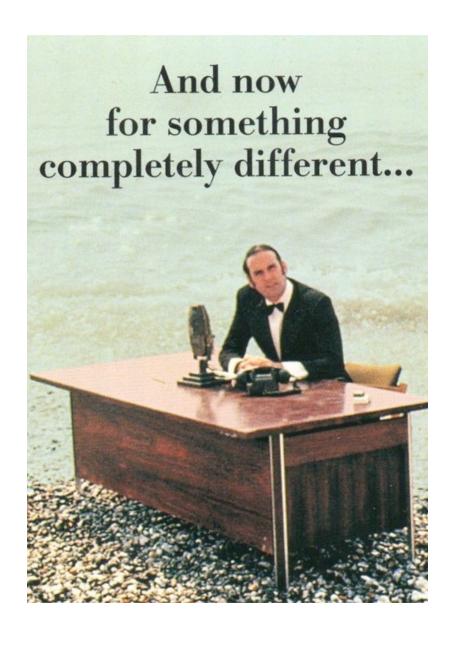
Primært antistof

Antigen Cellens cytoplasma Cellekerne





ttfI-CK7





Program

Septe	weanesaay,		
	09:30 - 10:00		
15	10:00 - 10:15		
45	10:15 - 11:00		
45	11:05 - 11:50		
45	12:00 - 12:45		
45	12:45 - 13:30		
45	13:30 - 14:15		
45	14:20 - 15:05		
20	15:05 - 15.25		
45	15:25 - 16:10		
45	16:15 - 17:00		
45	16.15 - 17.00		
	17.00 - 19.00		
Thursday, Septemb			
45	08:15 - 09:00		

00.20		
09:00 -	09:45	45
09:50 - 10:10 -		20 30
10:45 -	11:30	45
11:35 -	12:05	30

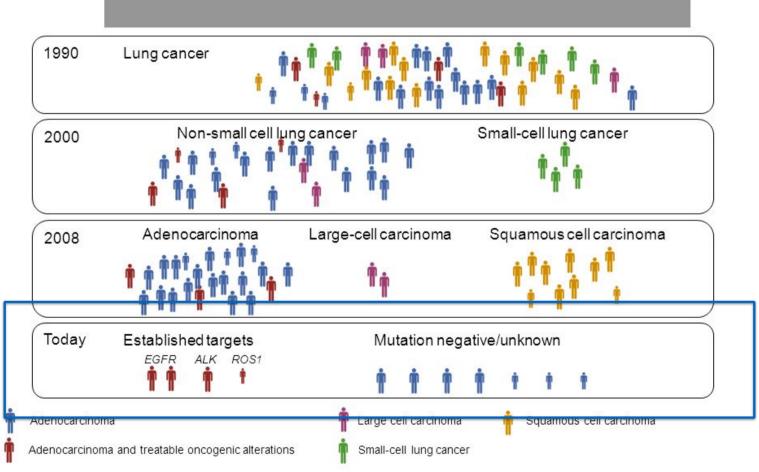
12:10 - 13:00

13:00 - 13:45 45

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Patient selection in lung cancer: Evolution over time



Adapted from Reck M, et al. Lancet 2013;382:709-19

Program

Wednesday, Septer

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	09:30 -	10:00	
	10:00 -	10:15	15
	10:15 -	11:00	45
	44.05	44 50	
	11:05 -	11:50	45
	12:00 -	12:45	45
	12.00	120	
	12:45 -	13:30	45
	13:30 -	14:15	45
	14:20 -	15:05	45
	15:05 -	15 25	20
	15:25 -		45
	15.25 -	16.10	43
	16:15 -	17:00	45
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17.00 - 19.00

Thursday, September 08:15 - 09:00

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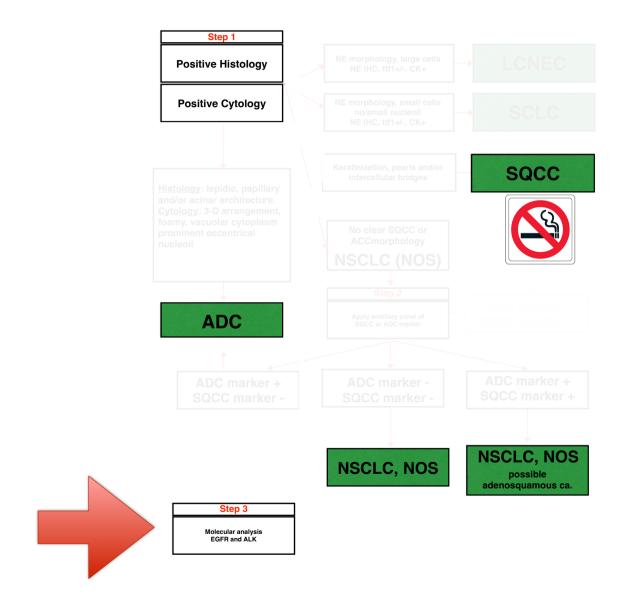
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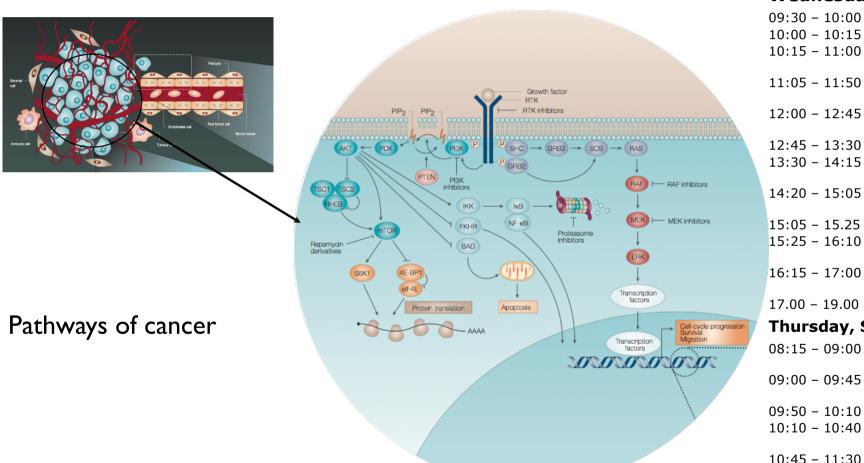
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09:00 - 09:45	
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10:45 - 11:30	
11:35 - 12:05	

13:00 - 13:45 45

12:10 - 13:00





Wednesday, Septer

	09:30 - 10:00 - 10:15 -	10:15	15 45
	11:05 -	11:50	45
	12:00 -	12:45	45
	12:45 - 13:30 -		45 45
١	14:20 -	15:05	45
	15:05 - 15:25 -		20 45
	16:15 -	17:00	45
	17.00 -	10.00	

17.00 - 19.00

Thursday, September

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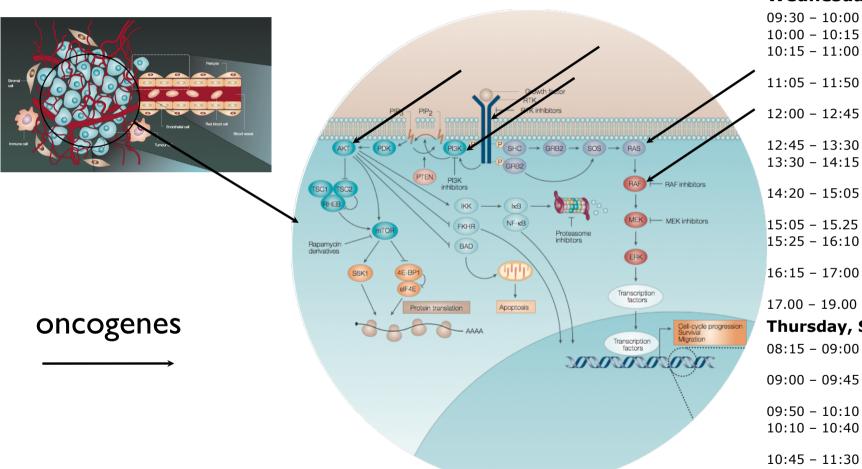
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09:00 - 09:45	
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Wednesday, Septer

09:30 - 10:00 10:00 - 10:15 10:15 - 11:00	15 45
11:05 - 11:50	45
12:00 - 12:45	45
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14:20 - 15:05	45
15:05 - 15.25 15:25 - 16:10	20 45
16:15 - 17:00	45
17.00 - 19.00	

Thursday, September

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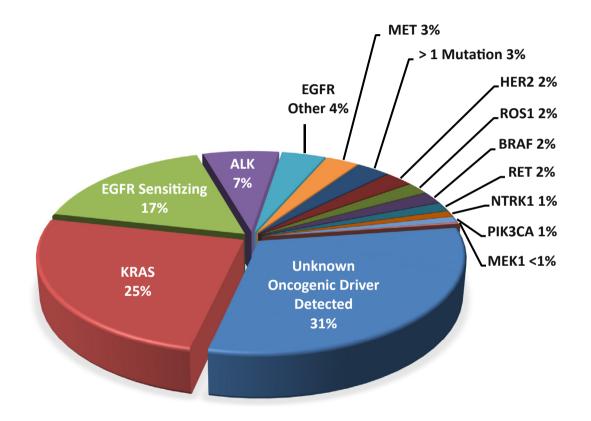
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45	09:00 - 09:45
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12:10 - 13:00	50

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13:00 -	- 13:45	4

Driver mutations Lung Adenocarcinoma





STATE OF THE ART: CONCISE REVIEW

Scientific Advances in Lung Cancer 2015

Journal of Thoracic Oncology Vol. 11 No. 5: 613-638



Vordi**QC**

Program

Wednesday, Septer

		P
09:30 -		
10:00 -	10:15	15
10:15 -	11:00	45
11:05 -	11:50	45
12:00 -	12:45	45
12:45 -	13:30	45
13:30 -	14:15	45
14:20 -	15:05	45
15:05 -	15.25	20
15:25 –	16:10	45
16:15 -	17:00	45
17.00 -	19.00	
Thurs	day Santa	mh

Thursday, Septembe 08:15 - 09:00 **45**

45	09:00 - 09:45
20 30	09:50 - 10:10 10:10 - 10:40
45	10:45 - 11:30
30	11:35 - 12:05

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12:10 - 13:00

Danish Lung Cancer Group (DLCG)





Lungecancer – Patologi

- 46. Reflextest af de obligatoriske markører bør foretages ved den primære diagnostik af nedenstående grupper. (A)
 - o EGFR, ALK, ROS1: adenokarcinomer + ikke-småcellede karcinomer, hvor typen ikke sikkert kan afgøres
 - o PD-L1: alle ikke-småcellede karcinomer

Version 2.0

GODKENDT Faglig godkendelse 12. oktober 2020 (Dalupa) Administrativ godkendelse 9. november 2020 (Sekretariatet for Kliniske Retningslinjer på Kræftområdet)

Program

Wednesday, Septer

	09:30 - 10:00
15	10:00 - 10:15
45	10:15 - 11:00
45	11:05 - 11:50
45	12:00 - 12:45
45	12:45 - 13:30
45	13:30 - 14:15
45	14:20 - 15:05
20	15:05 - 15.25

16:15 - 17:00 17.00 - 19.00

15:25 - 16:10

Thursday, September 08:15 - 09:00

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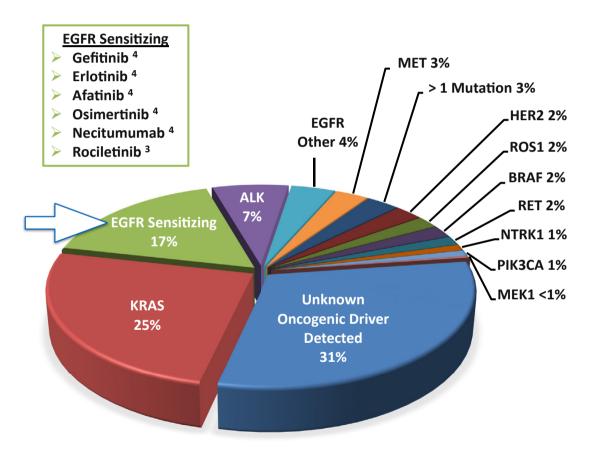
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10:45 - 11:30	4

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2:10 -	13:00	5
3:00 -	13:45	4





Wednesday, Septer

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10:00 -	10:15	15
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11:05 -	11:50	45
12:00 -	12:45	45
10.45	12.20	45
12:45 –		45
13:30 -	14:15	45
14:20 -	15:05	45
15:05 -	15.25	20
15:25 -	16:10	45
16:15 -	17:00	45
17.00 -	19.00	

Thursday, Septembe 08:15 - 09:00 **45**

09:00 - 09:45	4!
09:50 - 10:10 10:10 - 10:40	20 30
10:45 - 11:30	4!

11:35 - 12:05

12:10 - 13:00 13:00 - 13:45

:00 - 13:45 **45**

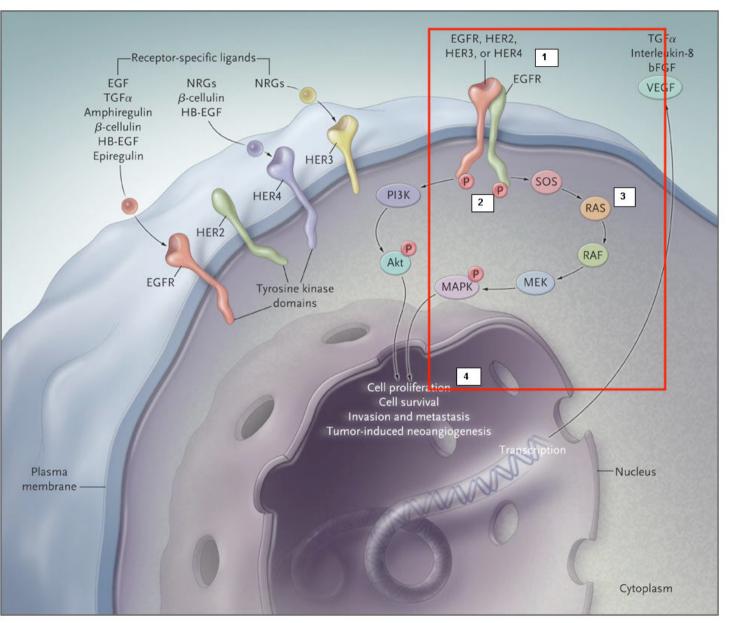
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13:50 - 14:20

IASLC





Wednesday, Septer

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11:05 -	11:50	45
12:00 -	12:45	45
12:45 -	13:30	45
13:30 -		45
14:20 -	15:05	45
15:05 -	15.25	20
15:25 -		45
16:15 -	17:00	45
17.00 -	19.00	

08:15 - 09:00

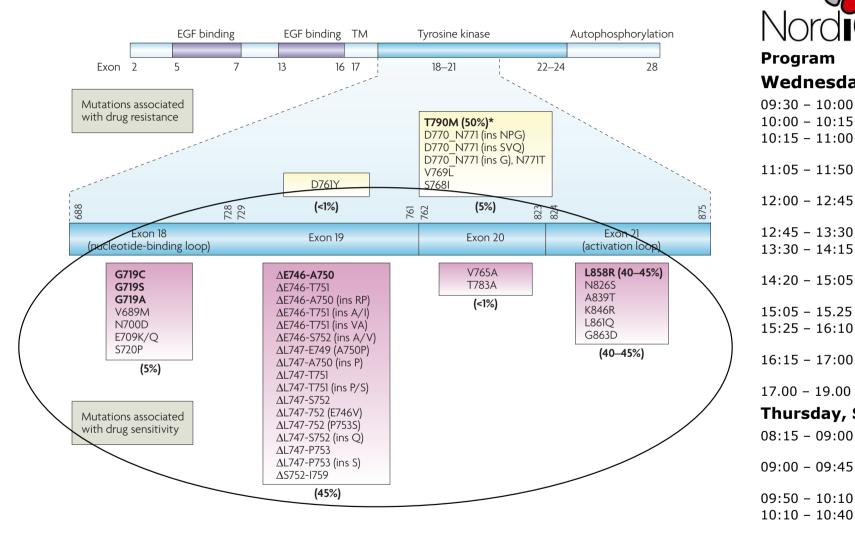
Thursday, September

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09:00	- 09:45	4
	- 10:10 - 10:40	20 30
10:45	- 11:30	4!
11:35	- 12:05	3(

12:10 - 13:00 **50** 13:00 - 13:45 **45**



autoactivates EGFR

Program Wednesday, Septer 09:30 - 10:00 10:00 - 10:15 15 45 10:15 - 11:00 45 11:05 - 11:50 12:00 - 12:45 45 45 12:45 - 13:30 45 13:30 - 14:15 14:20 - 15:05 45 15:05 - 15.25 20 15:25 - 16:10 45 45

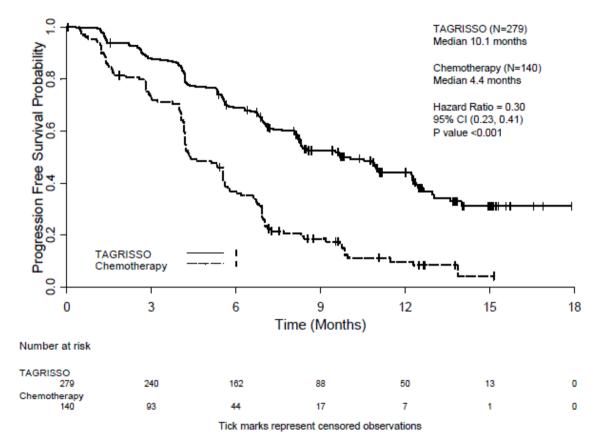
Thursday, September

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45	09:00 - 09:45
20 30	09:50 - 10:10 10:10 - 10:40
45	10:45 - 11:30
30	11:35 - 12:05

12:10 - 13:00	50
13:00 - 13:45	45







Wednesday, Septer

weariesday,	Septe
09:30 - 10:00	
10:00 - 10:15	15
10:15 - 11:00	45
11:05 - 11:50	45
12:00 - 12:45	45
12:45 - 13:30	45
13:30 - 14:15	45
14:20 - 15:05	45
15:05 - 15.25	20
15:25 - 16:10	45
16:15 - 17:00	45
17.00 - 19.00	
	09:30 - 10:00 10:00 - 10:15 10:15 - 11:00 11:05 - 11:50 12:00 - 12:45 12:45 - 13:30 13:30 - 14:15 14:20 - 15:05 15:05 - 15:25 15:25 - 16:10 16:15 - 17:00

Thursday, Septembe

08:15 - 09:00

12:10 - 13:00

13:00 - 13:45

13:50 - 14:20

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20 30	09:50 - 10:10 10:10 - 10:40
45	10:45 - 11:30
30	11:35 - 12:05

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Contents lists available at ScienceDirect

Lung Cancer

journal homepage: www.elsevier.com/locate/lungcan

Novel EGFR mutation-specific antibodies for lung adenocarcinoma: Highly specific but not sensitive detection of an E746_A750 deletion in exon 19 and an L858R mutation in exon 21 by immunohistochemistry

An Na Seo a,b,1, Tae-In Park b,1, Yan Jin a,c, Ping-Li Sun a,c, Hyojin Kim a,c, Hyun Chang^d, Jin-Haeng Chung^{a,c,*}



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	<u>Progra</u> m				
	Wedn	esday,	Septer		
	09:30 -	10:00			
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12:45 - 13: 13:30 - 14:		45 45
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15:05 - 15. 15:25 - 16:		20 45
16:15 - 17:	00	45
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08:15	- 0	9:00)	45	5
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09:50 10:10				20 30	
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11:35 - 12:05

12:10 - 13:00

13:00 - 13:45

13:50 - 14:20

Thursday, September

a Department of Pathology, Seoul National University Bundang Hospital, 300 Gumi-dong, Bundang-gu, Seongnam-si, Gyeonggi 463-707, Republic of Korea

b Department of Pathology, Kyungpook National University College of Medicine, 680 Gukchaebosang-ro, Jung-gu, Daegu 700-842, Republic of Korea

^c Department of Pathology, Seoul National University College of Medicine, 103 Daehak-ro, Jongno-gu, Seoul 110-799, Republic of Korea

d Department of Internal Medicine, Seoul National University Bundang Hospital, 300 Gumi-dong, Bundang-gu, Seongnam-si, Gyeonggi 463-707, Republic of Korea



Wednesday, Septer

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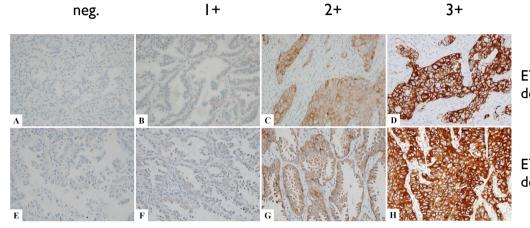
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09:30 - 10:00 E746-A750 10:00 - 10:15 15 del-specific AB SP l1ld:15 - 11:00 45

12:00 - 12:45 45 E746-A750 45

11:05 - 11:50

del-specific AB SPI₁II₁2:45 – 13:30 13:30 - 14:15

PPV (%)

30.7% 64.9%

100.0%

14:20 - 15:05

Table 2 Diagnostic power of mutation-specific antibodies comparing with EGFR mutational status.

EGFR mutations

≥Score 2 as positive

≥Score 3 as positive

Mutation-specific antibodies

15:05 - 15.25 15:25 NN6(%)0

				. ,		
Anti-EGFR E746_A750 del	E746_A750 deletion ≥Score 1 as positive	94.1%	96.1%	80.0%	16:15 - <u>9</u> 17:00	45
	≥Score 2 as positive	70.6%	99.0%	92.3%	95.3%	
	≥Score 3 as positive	29.4%	- 100.0%	100.0%	17.00 - 8₫,₽%00	
	All deletions in exon 19				Thursday Se	ntembe
	≥Score 1 as positive	54.8%	96.6%	85.0%	Thursday, Se	ptembe
	≥Score 2 as positive	40.3%	99.4%	96.2%	08:15 -82 09 %00	45
	≥Score 3 as positive	16.1%	- 100.0%	100.0%	77.4%	
Anti-EGFR L858R	L858R				09:00 - 09:45	45
	≥Score 1 as positive	93.5%	50.0%	30.7%	97.0%	

80.4%

41.3% •

Sensitivity (%)

Specificity (%)

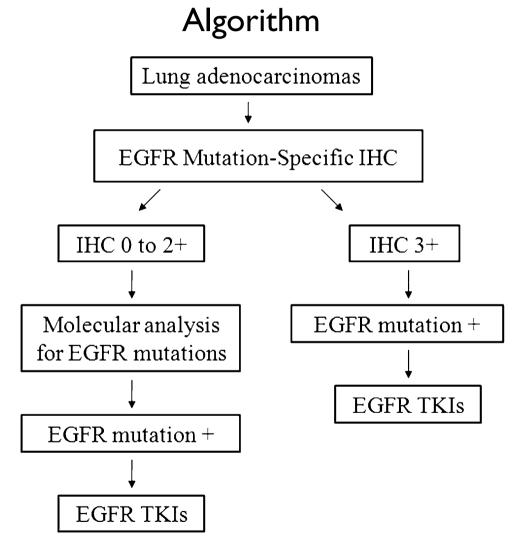
89.7%

100.0%

Abbreviations: PPV, positive predictive value; NPV, negative predictive value.

L0:45 -	11:30	

 $09:50 - \frac{95}{10}$ 10





Wednesday, Septer

vvcan	csuay, se	pro
09:30 -	10:00	
10:00 -	10:15	15
10:15 -	11:00	45
11:05 -	11:50	45
12:00 -	12:45	45
12:45 -	13:30	45
13:30 -		45
14:20 -	15:05	45
15:05 -	15.25	20
15:25 -	16:10	45
16:15 -	17:00	45
17.00 -	19.00	
Thurse	day, Septe	emb

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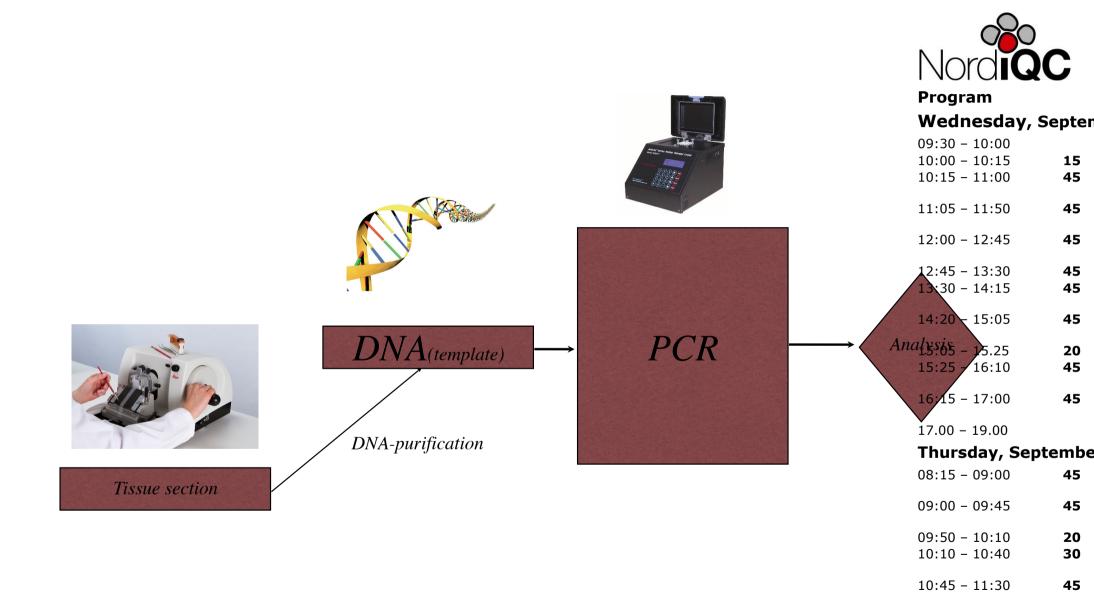
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08:15 - 09:00

45	09:00 - 09:45
20 30	09:50 - 10:10 10:10 - 10:40
45	10:45 - 11:30

11:35 -	12:05	

12:10 -	- 13:00
12.00	10 15



11:35 - 12:05

12:10 - 13:00

13:00 - 13:45

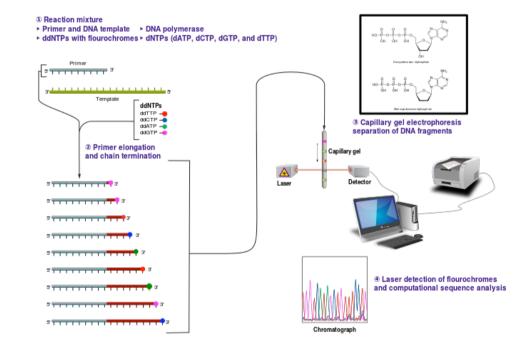
13:50 - 14:20

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Sequencing







Program

Wednesday, Se	epte
09:30 - 10:00	
10:00 - 10:15	15
10:15 - 11:00	45
11:05 - 11:50	45
12:00 - 12:45	45
12:45 - 13:30	45
13:30 - 14:15	45
14:20 - 15:05	45
15:05 - 15.25	20
15:25 - 16:10	45
16:15 - 17:00	45
17.00 - 19.00	
Thursday, Septe	emb
08:15 - 09:00	45

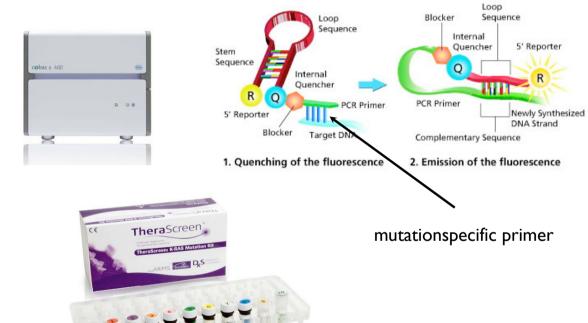
09:00 - 09:45	45
09:50 - 10:10 10:10 - 10:40	20 30
10:45 - 11:30	45

11:35 - 12:05	30
12:10 - 13:00	50

13:50 - 14:20

12:10 - 13:00	50
13:00 - 13:45	45

PCR bassed test









Program

Wednesday, Septer

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09:30 - 10:0	0	
10:00 - 10:1	.5	15
10:15 - 11:0	0	45
11:05 - 11:5	0	45
12:00 - 12:4	.5	45
12:45 - 13:3	0	45
13:30 - 14:1	.5	45
14:20 - 15:0	15	45
15:05 - 15.2	5	20
15:25 - 16:1		45
16:15 - 17:0	0	45
	_	
17.00 - 19.0	0	

Thursday, September 08:15 - 09:00

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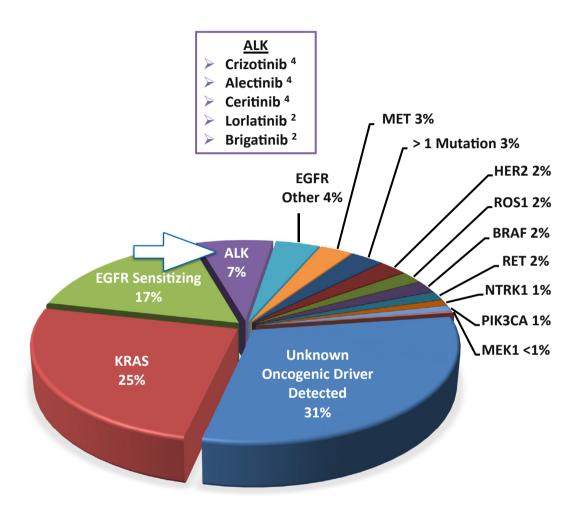
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09:00 - 09:45	
09:50 - 10:10 10:10 - 10:40	
10:45 - 11:30	
11:35 - 12:05	

12:10 - 13:00

13:00 - 13:45





Wednesday, Septer

		• •	-
09:30 -	10:00		
10:00 -	10:15		15
10:15 -	11:00		45
11:05 -	11:50		45
12:00 -	12:45		45
12:45 -	13:30		45
13:30 -	14:15		45
14:20 -	15:05		45
15:05 -	15.25		20
15:25 -			45
16:15 -	17:00		45
	40.00		
17.00 -	19.00		

Thursday, September

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09:00 - 09:45	4
09:50 - 10:10 10:10 - 10:40	2 3
10:45 - 11:30	4

11:35	- 12:05

08:15 - 09:00







Wednesday, Septer

15 45

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Program

09:30 - 10:00

10:00 - 10:15

10:15 - 11:00

11:05 - 11:50

12:00 - 12:45

12:45 - 13:30

13:30 - 14:15 Proliferation

14:20 - 15:05

16:15 - 17:00

17.00 - 19.00

08:15 - 09:00

09:00 - 09:45

12:10 - 13:00

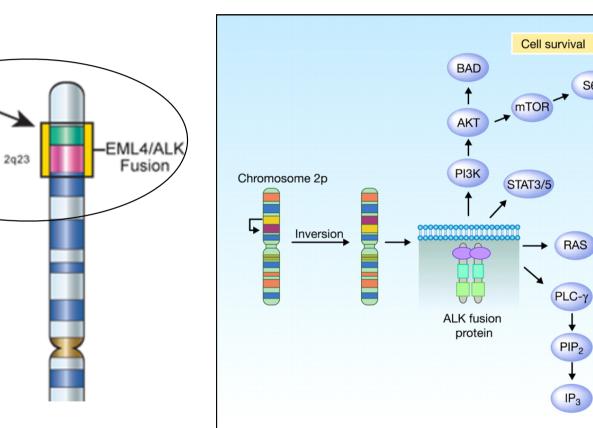
MEK¹5:05 Erk5.25 15:25 - 16:10

S6K

RAS

PIP₂

IP₃



CCR Molecular Pathways

09:50 – 10:10 © 2011 American Association for Çanceh Research 10:40	20 30
10:45 - 11:30	45
11:35 - 12:05	30

Thursday, September

13:00 - 13:45 45 13:50 - 14:20 30

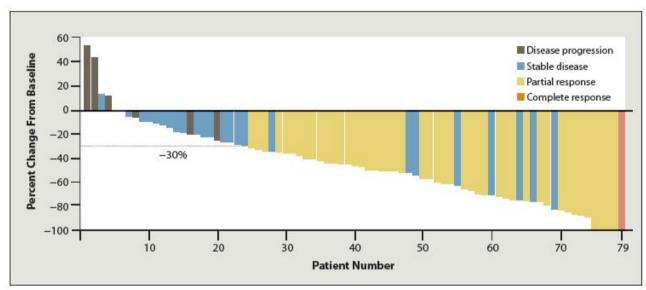
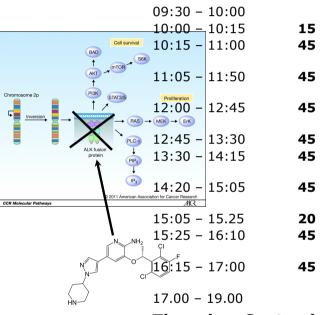
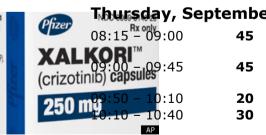


Figure 2: Waterfall plot showing response to crizotinib in patients with EML4-ALK NSCLC. Percent change in tumor burden relative to pretreatment baseline is represented. (Reproduced with permission from Kwak et al. N Engl J Med. 2010;363:1693-1703. Copyright © 2010, Massachusetts Medical Society.)



Wednesday, Septer





11:35 - 12:05	30
12:10 - 13:00	50

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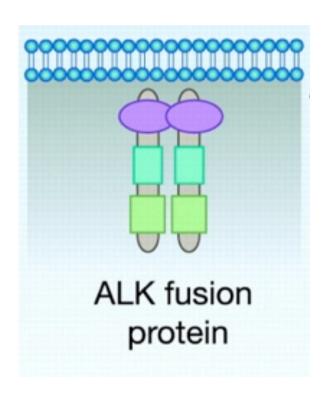
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12:10 -	13:00	50
13:00 -	13:45	45

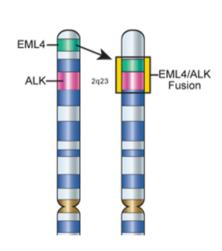
10:45 - 11:30

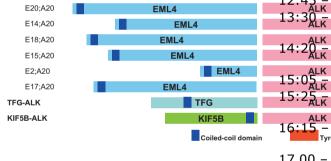
Wednesday, Septer 09:30 - 10:00 10:00 - 10:15 15 Detection of fusion RNA 45 11:05 - 11:50 45 12:00 - 12:45 45 EML4 EML4 45 EML4 45 EML4 EML4 45 EML4 20 45 45 17.00 - 19.00 Thursday, September 08:15 - 09:00 45

Detection of fusion protein



Detection of chromosomal changes





EML4-ALK

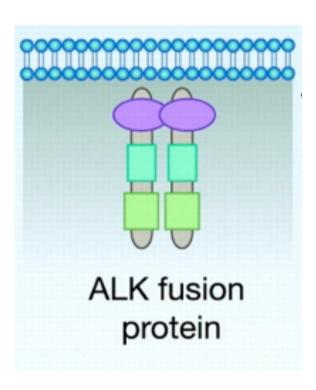
E13;A20

E6;A20

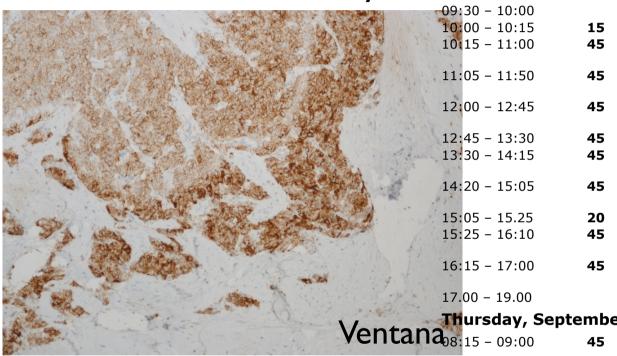
45	09:00 - 09:45
20 30	09:50 - 10:10 10:10 - 10:40
45	10:45 - 11:30
30	11:35 - 12:05

12:10 -	13:00
13:00 -	13:45

Detection of fusion protein



Immunohistochemistry



Detects ALK independent of fusion partner

09:50 - 10:10 10:10 - 10:40	20 30
10:45 - 11:30	45
11:35 - 12:05	30
12:10 - 13:00 13:00 - 13:45	50 45

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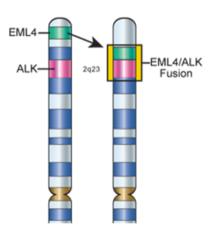
09:00 - 09:45

13:50 - 14:20

Program

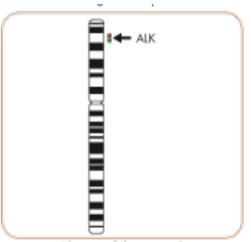
Wednesday, Septer

Detection of chromosomal changes

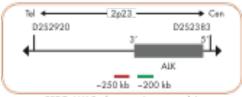




F(C)ISH



Ideogram of chromosome 2 indicating the hybridization locations.



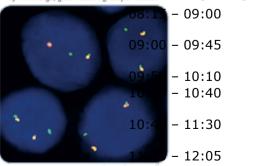
SPEC ALK Probe map (not to scale).



Program

Control of the last	Wed	nesday,	Septe
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ARRESTA	10:00	- 10:15	15
and the second	10:15	- 11:00	45
	11:05	- 11:50	45
多個空程	12:00	- 12:45	45
1000 S	12:45	- 13:30	45
1 miles		- 14:15	45
•	.14:2	- 15:05	45
100	15	- 15.25	20
		- 16:10	45
	16.	- 17:00	45
SPEC ALK Dural Codes Re	17.0	- 19.00	

SPEC AIX Dual Color Break Apair Probe
hybridized to normal interphase cells of Third rsday, Septembe
by two crange/green fusion signals per historial.



12:10 -	13:00
13:00 -	13:45

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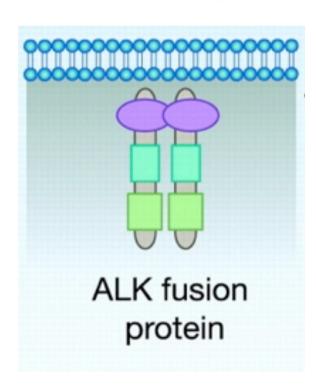
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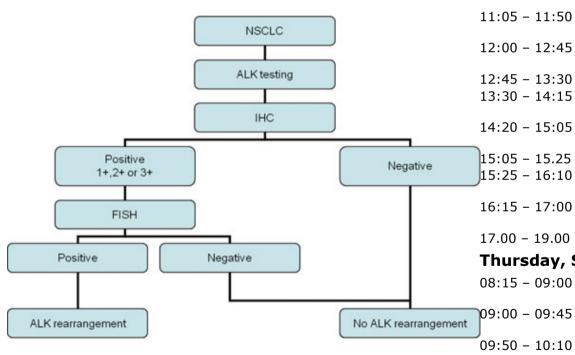
30

Detection of fusion protein



EML4-ALK testing in non-small cell carcinomas of the lung: a review with recommendations

Algorithm



Program

Wednesday, Septer 09.30 - 10.00

	09:30 - 10:00
15	10:00 - 10:15
45	10:15 - 11:00
45	11:05 - 11:50
4-	12.00 12.45
45	12:00 - 12:45
45	12:45 - 13:30
45	13:30 - 14:15
45	14:20 - 15:05
45	14.20 - 15.05
20	15:05 - 15.25
45	15:25 - 16:10

15:25 - 16:10

17.00 - 19.00

Thursday, September

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09:00 - 09:45 45

09:50 - 10:10 20 30 10:10 - 10:40

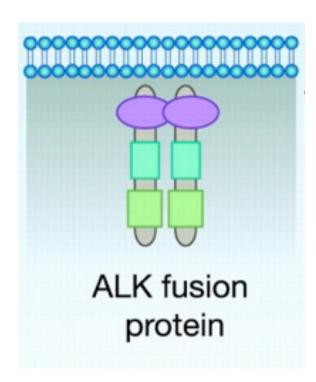
10:45 - 11:30

11:35 - 12:05

12:10 - 13:00

13:00 - 13:45

Detection of fusion protein

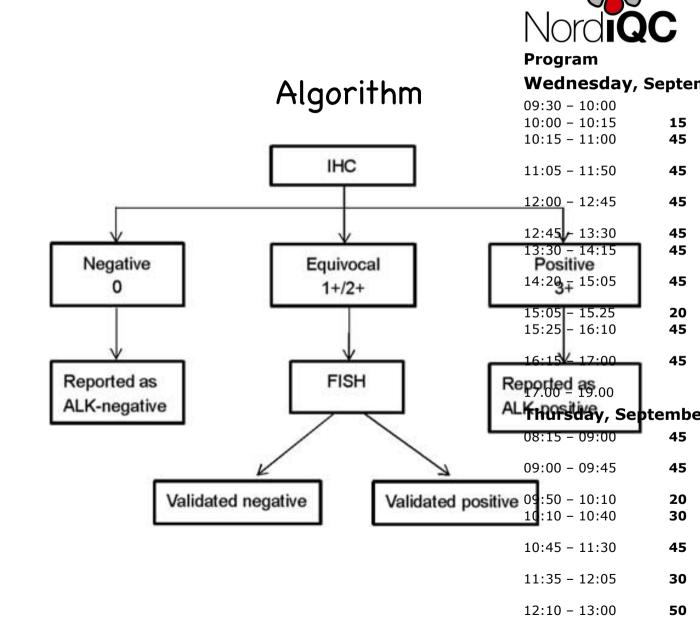


OOI 10.1007/s00428-012-1281-4

REVIEW AND PERSPECTIVES

EML4-ALK testing in non-small cell carcinomas of the lung: a review with recommendations

ik Thunnissen - Lukas Bubendorf - Manfred Dietel iran Elmberger - Keith Kerr - Fernando Lopez-Rios
iger Moch - Wlodzimierz Olszewski trick Pauwels - Frédérique Penault-Llorca olito Persi -

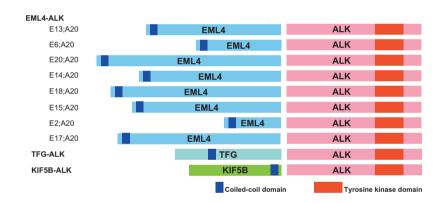


13:00 - 13:45

13:50 - 14:20

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Detection of fusion RNA



RT PCR based test







Program

Wednesday, Septer 09:30 - 10:00

15	10:00 - 10:15
45	10:15 - 11:00
45	11:05 <u>- 11:5</u> 0



08:15 - 09	:00	45
09:00 – 09	:45	45

09:50 -	10:10	20
10:10 -	10:40	30

10:45 - 11:30	

12:10 - 13:00	50
13:00 - 13:45	45

RNA Sequencing based test



17.00 - 19.00

13:50 - 14:20

Program

09:30 - 10:00

10:00 - 10:15

10:15 - 11:00

11:05 - 11:50

Wednesday, Septer

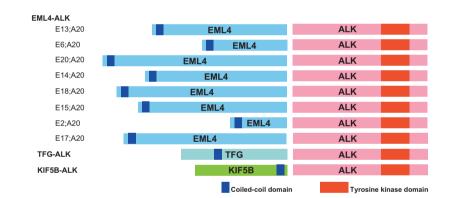
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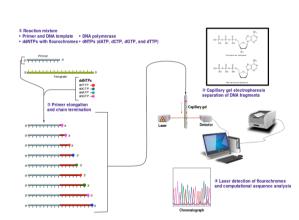
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Thursday, September

08:15 - 09:00	45
09:00 - 09:45	45
09:50 - 10:10 10:10 - 10:40	20 30
10:45 - 11:30	45
11:35 - 12:05	30
12:10 - 13:00 13:00 - 13:45	50 45



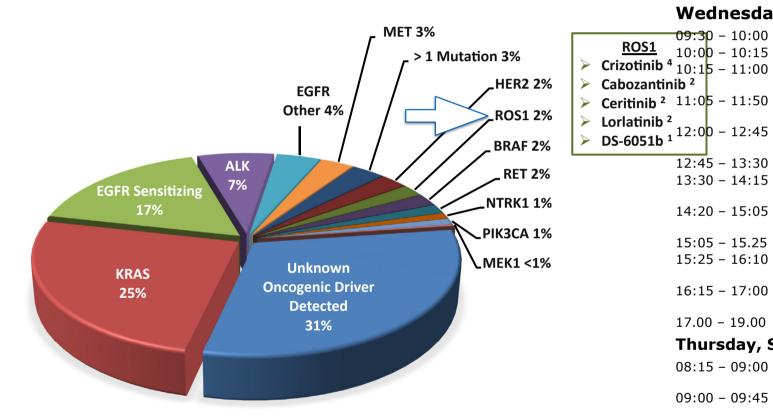
Detection of fusion RNA



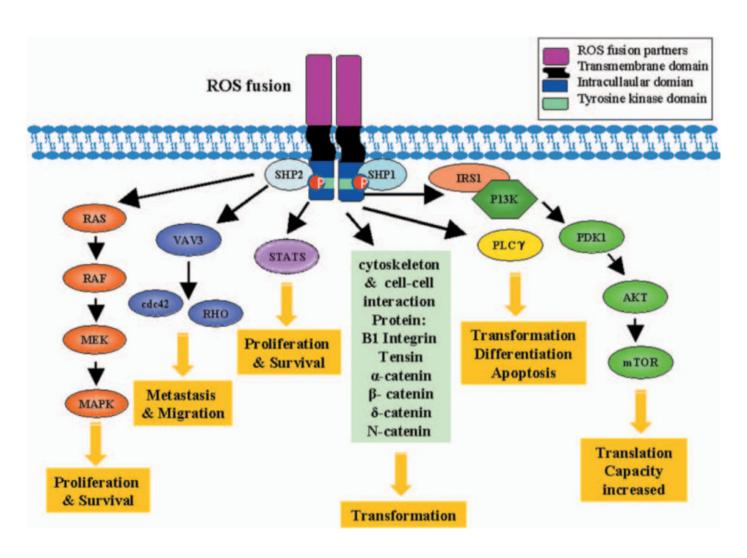
ROS1

Wednesday, Septer 09:30 - 10:00

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2 1	1:0 <mark>5 -</mark>	11:50	45
b ² b ¹ 12	2:00 –	12:45	45
		13:30 14:15	45 45
14	4:20 -	15:05	45
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16	5:15 -	17:00	45
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09	9:00 -	09:45	45
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			30
10	0:45 -	11:30	45
1	1:35 -	12:05	30
12	2:10 -	13:00	50
		13:45	45
13	3:50 -	14:20	30





Wednesday, Septer

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Thursday, September

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08:15 - 09:00

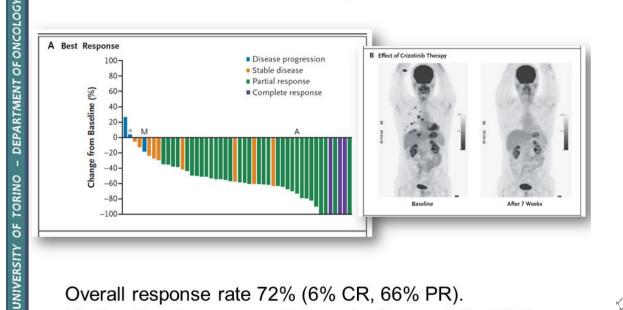
45	09:00 - 09:45
20 30	09:50 - 10:10 10:10 - 10:40
45	10:45 - 11:30
30	11:35 - 12:05

12:10 - 13:00	50
13:00 - 13:45	45

13.50	- 14:20	

Tumor responses to crizotinib in ROS1-rearranged NSCLC





Overall response rate 72% (6% CR, 66% PR). Median time to response 7.9 weeks (range, 4.3 - 32.0)

Shaw AT et al, N Engl J Med 2014;371:1963-71.



Program

Wednesday, Septer

	, , .	- P
09:30 -	10:00	
10:00 -	10:15	15
10:15 -	11:00	45
11:05 -	11:50	45
12:00 -	12:45	45
12:45 -	13:30	45
13:30 -		45
14:20 -	15:05	45
15:05 -	15.25	20
15:25 -	16:10	45
16:15 -	17:00	45

17.00 - 19.00

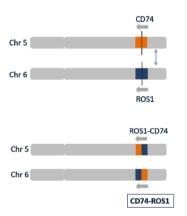
reiiin	illuisuay, se
45	[©] 08:15 – 09:00
45	09:00 - 09:45
20 30	09:50 - 10:10 10:10 - 10:40
45	10:45 - 11:30

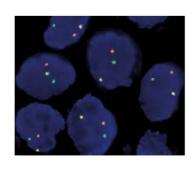
11:35 - 12:05 30

12:10 - 13:00 **50** 13:00 - 13:45 45

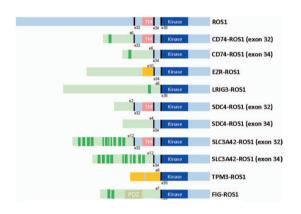
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Detection of chromosomal changes





Detection of fusion RNA





Program

Detection of fusion protein 09:30 - 10:00 10:00 - 10:15 15 45 10:15 - 11:00 11:05 - 11:50 45 3' ROS1 5' Fusion partners 12:00 - 12:45 45 Variable region FIG (GOPC) (exons 32-35) SLC34A2, CD74, SDC4, TPM3, EZR, LRIG3, 12.45 - 13.30 45 (includes kinase KDELR2, CCDC6, 13:30 - 14:15 45 YWHAE, TFG, CEP85L 14:20 - 15:05 **>** 45 15:05 - 15.25 20 15:25 - 16:10 45 16:15 - 17:00 45



45	
20 30	09:50 - 16:10 10:10 - 18:48
45	10:45 - 11:30
30	11:35 - 12:05
50 45	12:10 - 13:00 13:00 - 13:45
30	13:50 - 14:20



Suggestion

Next generation seq.

DNA workflow

DNA purification Sequencing Variant calling Library prep. (Bioinformatics)

RNA workflow

RNA purification Sequencing Variant calling Library prep. (Bioinformatics) **EGFR**

ALK, ROSI





Program

Wedn	esday,	Septe
09:30 - 10:00 - 10:15 -	10:15	15 45
11:05 -	11:50	45
12:00 -	12:45	45
12:45 - 13:30 -		45 45
14:20 -	15:05	45
15:05 - 15:25 -		20 45

17.00 - 19.00

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16:15 - 17:00

08:15 - 09:00

11:35 - 12:05

12:10 - 13:00

13:00 - 13:45

13:50 - 14:20

Thursday, September

09:00 - 09:45	4!
09:50 - 10:10 10:10 - 10:40	20 30
10:45 - 11:30	45





Possible, probable or definite

adenocarcinoma

Molecular testing

Patient is never or

long-time ex-smoker (MDT discussion or

pre-emptive

request)

Other lung carcinoma e.g. squamous, small cell

Reflex

decision by pathologist

Bespoke

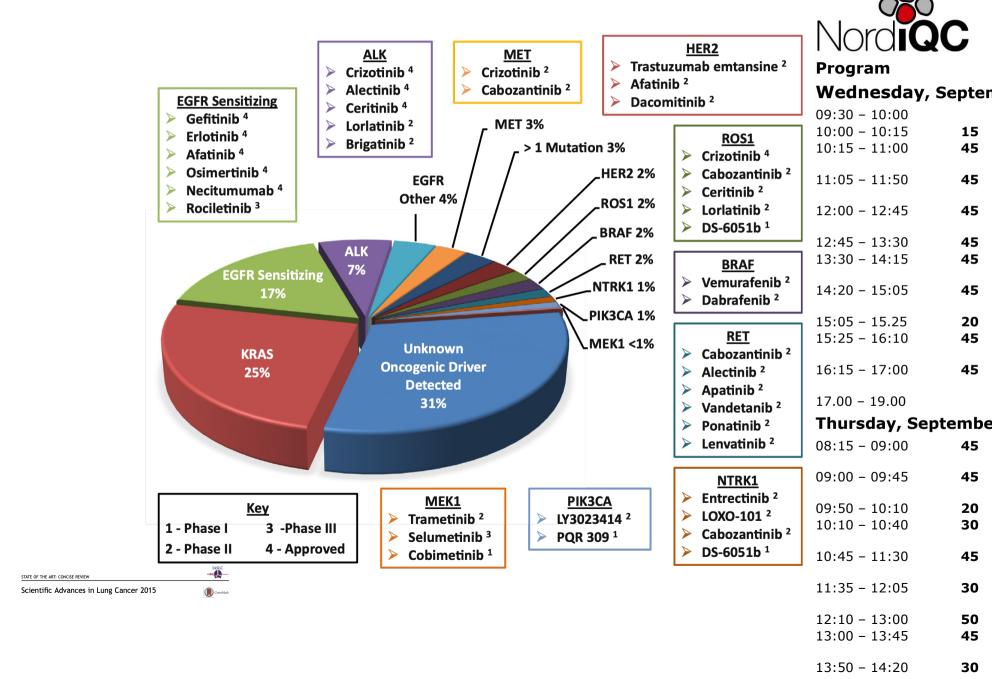
decision

by MDT

FFPE

Quality

Tumor cell %





Possible, probable or definite

adenocarcinoma

Molecular testing

Patient is never or long-time ex-smoker (MDT discussion or pre-emptive

request)

Other lung carcinoma e.g. squamous, small cell

Reflex

decision by pathologist

Bespoke decision

by MDT

Suggestion

Next generation seq.



DNA purification

Sequencing

Library prep.

Variant calling (Bioinformatics)

RNA workflow

RNA purification

Sequencing

Library prep.

Variant calling (Bioinformatics)

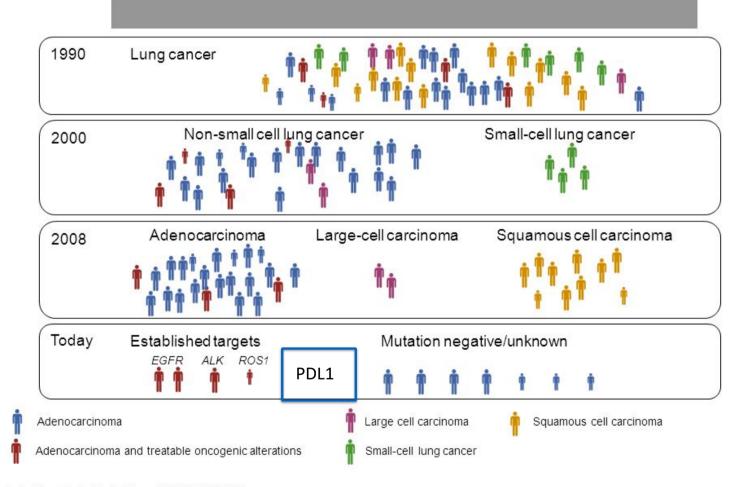
Comprehensive Result



FFPE



Patient selection in lung cancer: Evolution over time



Adapted from Reck M, et al. Lancet 2013;382:709-19

Program

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09:30 -	10:00	
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Thursday, September 08.15 - 09.00

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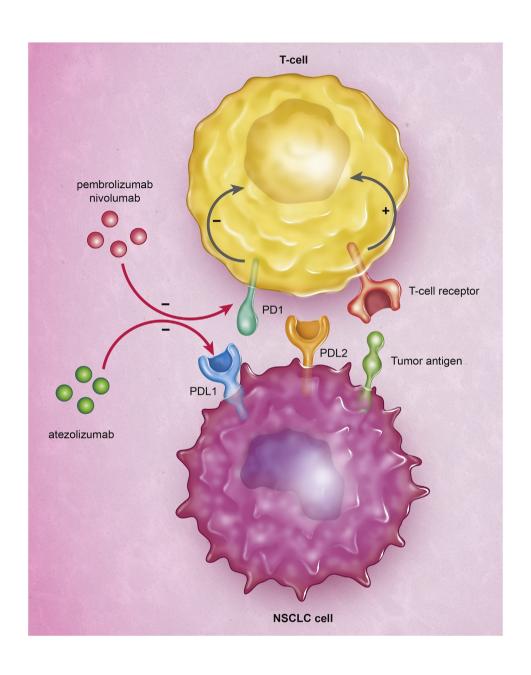
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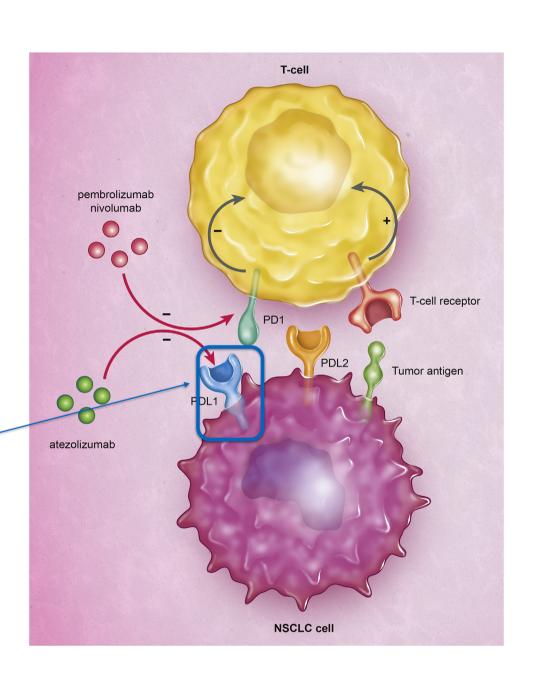
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10:45 - 11:30	4!

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Predictive marker



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12:10 - 13:00

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The NEW ENGLAND JOURNAL of MEDICINE

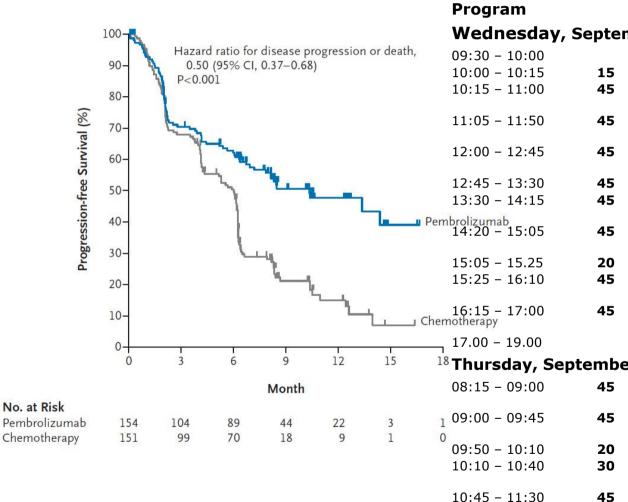
ESTABLISHED IN 1812

NOVEMBER 10, 2016

VOL. 375 NO. 1

Pembrolizumab versus Chemotherapy for PD-L1–Positive Non–Small-Cell Lung Cancer

Martin Reck, M.D., Ph.D., Delvys Rodríguez-Abreu, M.D., Andrew G. Robinson, M.D., Rina Hui, M.B., B.S., Ph.D., Tibor Csőszi, M.D., Andrea Fülöp, M.D., Maya Gottfried, M.D., Nir Peled, M.D., Ph.D., Ali Tafreshi, M.D., Sinead Cuffe, M.D., Mary O'Brien, M.D., Suman Rao, M.D., Katsuyuki Hotta, M.D., Ph.D., Melanie A. Lelby, Ph.D., Gregory M. Lubiniecki, M.D., Yue Shentu, Ph.D., Reshma Rangwala, M.D., Ph.D., and Julie R. Brahmer, M.D., for the KEYNOTE:024 Investigators*



11:35 - 12:05

12:10 - 13:00

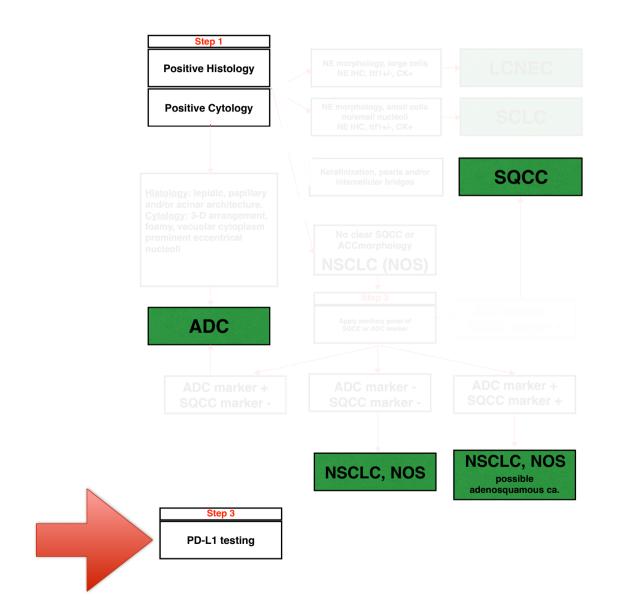
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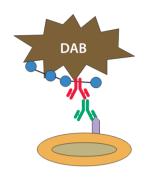
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Primært antistof

Antiger Cellens Celleke



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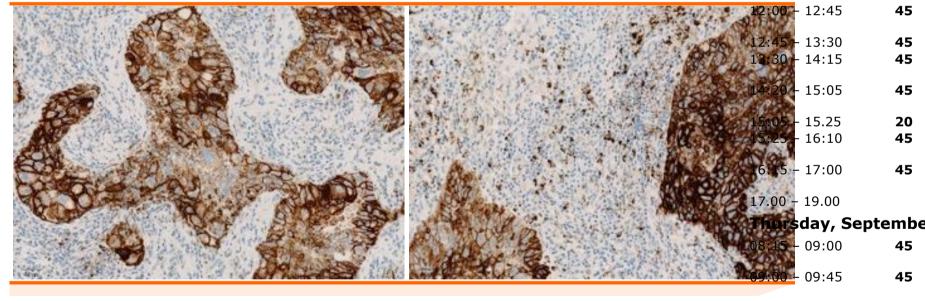
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Tumor cells (TCs)

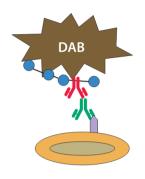
Tumor and immune cells10:00 - 10:15 - 11:00

(TCs and ICs) 11:05 - 11:50



Immunhistological staining for PDL1

09:50 -	- 10:10
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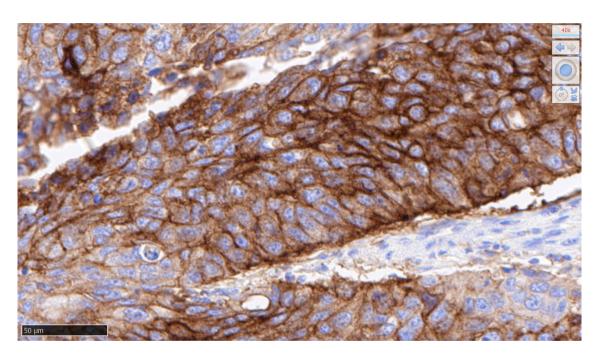


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Primært antistof

Antigen Cellens cytoplasma Cellekerne



Biopsy NSCLC 100% TPS

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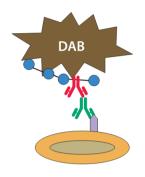
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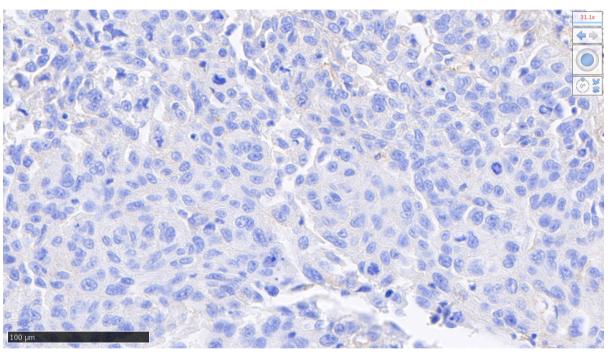


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Primært antistof

Antigen Cellens cytoplasma Cellekerne



Biopsy NSCLC 0% TPS



Program

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Thursday, September

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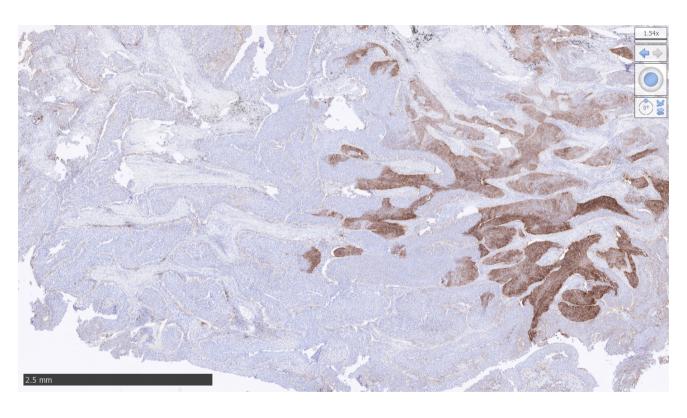
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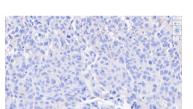
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Program

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12:10 - 13:00 13:00 - 13:45	50 45

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					Prog	ıram	
Test					Wed	Inesday	, S
	Ventana SP263 (1)	Dako 22C3 (2)	Dako 28-8 (3)	Ventana SP142 (4)		- 10:00	
						- 10:15 - 11:00	
Developed as companion	Durvalumab (AstraZeneca/	Pembrolizumab (Merck Sharp	Nivolumab	Atezolizumab			
diagnostic assay for:	MedImmune)	& Dohme)	(Bristol-Myers Squibb)	(Genentech)	11:05	5 – 11:50	
					12:00	- 12:45	
Instrument	VENTANA BenchMark ULTRA	Dako Autostainer Link 48	Dako Autostainer	VENTANA BenchMark ULTRA	12:45	- 13:30	
instrument	VENTANA DELICIIWAR OLITA	Dako Autostalilei Eliik 40	Link 48	VENTANA BENCHIVIAR OLITA		- 14:15	
	Olana ODOGO (sabbit	Olara 0000 (mana		Olare OD440 (rabbit	14:20	- 15:05	
PD-L1 antibody	Clone SP263 (rabbit	Clone 22C3 (mouse	Clone 28-8 (rabbit monoclonal)	Clone SP142 (rabbit	4 5 0 5	45.05	
	monoclonal)	monoclonal)		monoclonal)		- 15.25 - 16:10	
				Tumor cells and tumor-			
Compartment	Tumor cell membrane	Tumor cell membrane	Tumor cell membrane	infiltrating immune cells	16:15	5 – 17:00	
				≥50% of tumor cells	17.00	- 19.00	
Cut-off(s) for	≥25% of tumor cells (5)	≥1%; ≥50% of tumor cells (6)	≥1%; ≥5%; ≥10% of tumor cells	or ≥10% of tumor area with		rsday, Se	י ומי
high PD-L1 expression	=23 % of turnor cens (0)	= 170, = 50 % of turnor cons (0)	(7)	immune cells (if <50% of tumor	08:15	2 - 3 :00	4
				inimidile cells (il <50 % of turnor	09:00	- 09:45	
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						- 10:10 - 10:40	
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12:10 - 13:00

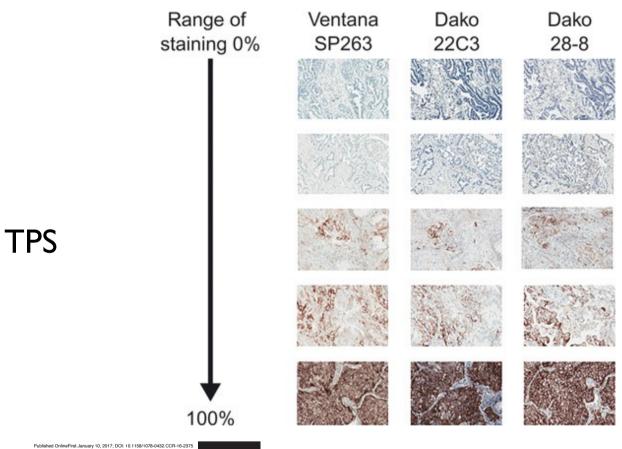
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Program

Wednesday, Septer 09:30 - 10:00

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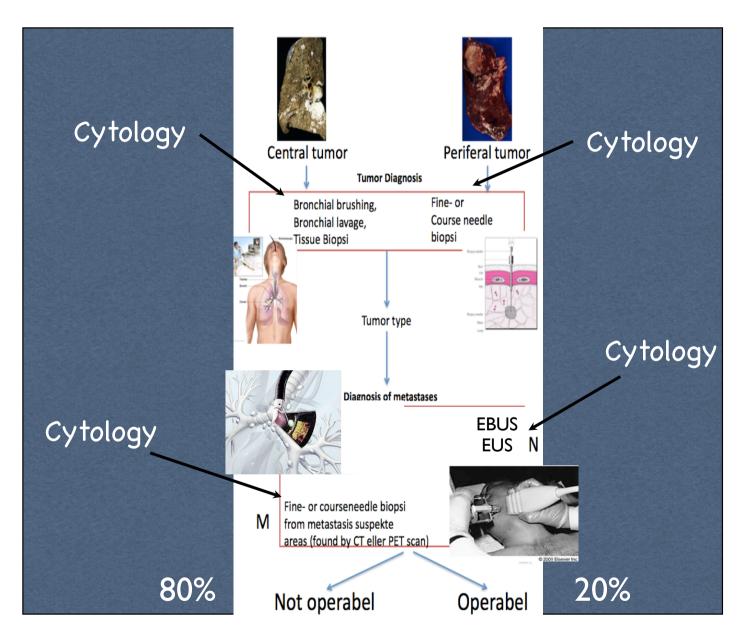
13:00 - 13:45

13:50 - 14:20

116

Agreement between Programmed Cell Death Ligand-1 Diagnostic Assays across Multiple Protein Expression Cutoffs in Non-Small Cell Lung Cancer 2

Marianne J. Ratcliffe¹, Alan Sharpe², Anita Midha¹, Craig Barker², Marietta Scott², Paul Scorer², Hytham Al-Masri³, Marlon C. Rebelatto⁴, and Jill Walker²





Program

Wednesday, Septer

17.00 - 19.00

08:15 - 09:00

Thursday, September

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12:10 -	13:00	

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13:00 - 13:45	45

RESEARCH ARTICLE

Paired Comparison of PD-L1 Expression on Cytologic and Histologic Specimens From Malignancies in the Lung Assessed With PD-L1 IHC 28-8pharmDx and PD-L1 IHC 22C3pharmDx

Birgit G. Skov, MD, DrMedSci* and Torsten Skov, MD, PhD†

Conclusion: PD-L1 assessment is feasible on cytologic material with the tested assays using cutoffs for positivity similar to those used on histologic material.

TABLE 3. IHC Staining Outcome in Cytology Samples Compared With Histologic Samples by Agreement Statistics for Different Thresholds of PD-L1 Positivity

	Cutoff ≥ 1%	Positive Cells	Cutoff ≥ 50% Positive Cells
PD-L1 IHC 22C3pharmDx			
Overall agreement	85 (7	⁷ 6-91)	94 (87-98)
Positive percent agreement	80 (7	70-87)	100 (96-100)
Negative percent agreement	89 (8	31-94)	93 (86-97)
	Cutoff $\geq 1\%$ positive cells	Cutoff $\geq 5\%$ positive cells	Cutoff ≥ 10 % positive cells
PD-L1 IHC 28-8 pharmDx	•	•	•
Overall agreement	87 (79-93)	95 (89-98)	90 (81-94)
Positive percent agreement	81 (72-88)	91 (83-95)	79 (70-87)
Negative percent agreement	93 (86-97)	98 (93-100)	95 (88-98)

Values are represented as percent, 95% CI.

CI indicates confidence interval; IHC, immunohistochemistry; PD-L1, programmed cell death ligand-1.

Table 2. Assessment marks f	le 2. Assessment marks for IHC assays and antibodies run C13, PD-L1 TPS/CPS (KEYTRUDA®)							
CE-IVD / FDA approved PD-L1 assays	n	Vendor	Optimal	Good	Borderline	Poor	Suff. ¹	OR ²
rmAb clone SP263, 741-4905 (VRPS) ³	41	Ventana/Roche	5	33	3	-	93%	12%
rmAb clone SP263, 741-4905 (LPMS) ⁴	2	Ventana/Roche	-	1	1	-	-	-
rmAb clone SP263, 740-4907 (VRPS) ³	12	Ventana/Roche	3	9	-	-	100%	25%
mAb clone 22C3 pharmDX, SK006 (VRPS) ³	19	Dako/Agilent	14	4	-	1	95%	74%
mAb clone 22C3 pharmDX, SK006 (LMPS) ⁴	20	Dako/Agilent	13	5	2	-	90%	65%
mAb clone 22C3 pharmDX, GE006 (VRPS) ³	29	Dako/Agilent	23	6	-	-	100%	79%
mAb clone 22C3 pharmDX, GE006 (LMPS) ⁴	18	Dako/Agilent	12	4	2	-	89%	67%
rmAb clone 28-8 pharmDX, SK005 (VRPS) ³	3	Dako/Agilent	2	1	-	-	-	-
Antibodies ⁵ for laboratory developed PD-L1 assays, concentrated antibodies	n	Vendor	Optimal	Good	Borderline	Poor	Suff. ¹	OR ²
mAb clone 22C3	44	Dako/Agilent	18	19	7	-	84%	41%
rmAb CAL10	4 1	Zytomed Systems Biocare Medical	2	2	-	1	80%	40%
rmAb clone E1L3N	4	Cell Signaling	1	3	-	-	-	-
rmAb clone QR1	2	Quartett	2	-	-	-	-	-
rmAb clone 28-8	1	Dako/Agilent	-	1	-	-	-	-
rmAb clone ZR3	1	Zeta Corporation	-	1	-	-	-	-
rmAB clone SP142	1	Abcam	1	-	-	-	-	-
Ready-To-Use antibodies ⁶	n	Vendor	Optimal	Good	Borderline	Poor	Suff.1	OR ²
rmAb clone SP263, 790-4905⁶ (VRPS) ³	13	Ventana/Roche	-	11	2	-	85%	-
rmAb clone SP263, 790-4905⁶ (LMPS) ⁴	16	Ventana/Roche	1	15	-	-	100%	6%
rmAb clone 73-10 PA0832	6	Leica Biosystems	5	1	-	-	100%	83%
rmAb MX070C MAB-0854	2	Fuzhou Maixin	1	1	-	-	-	26
mAb clone C9C9 CPM-0278	1	Celnovte	-	1	-	-	-	
rmAb clone AC37 AD80167	1	Abcarta	1	-	-	-	-	-
rmAb clone RM320 8263-C010	1	Sakura Finetek	1	-	-	-	-	-
rmAb clone BP6099 I12052E	1	Biolynx	1	-	-	-	-	-
Total	243		106	118	17	2		
Proportion			44%	48%	7%	1%	92%	
Proportion of sufficient stains (optimal 2) Proportion of optimal results.	or good)							

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The Diagnostic algorithm



Program

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Thursday, September

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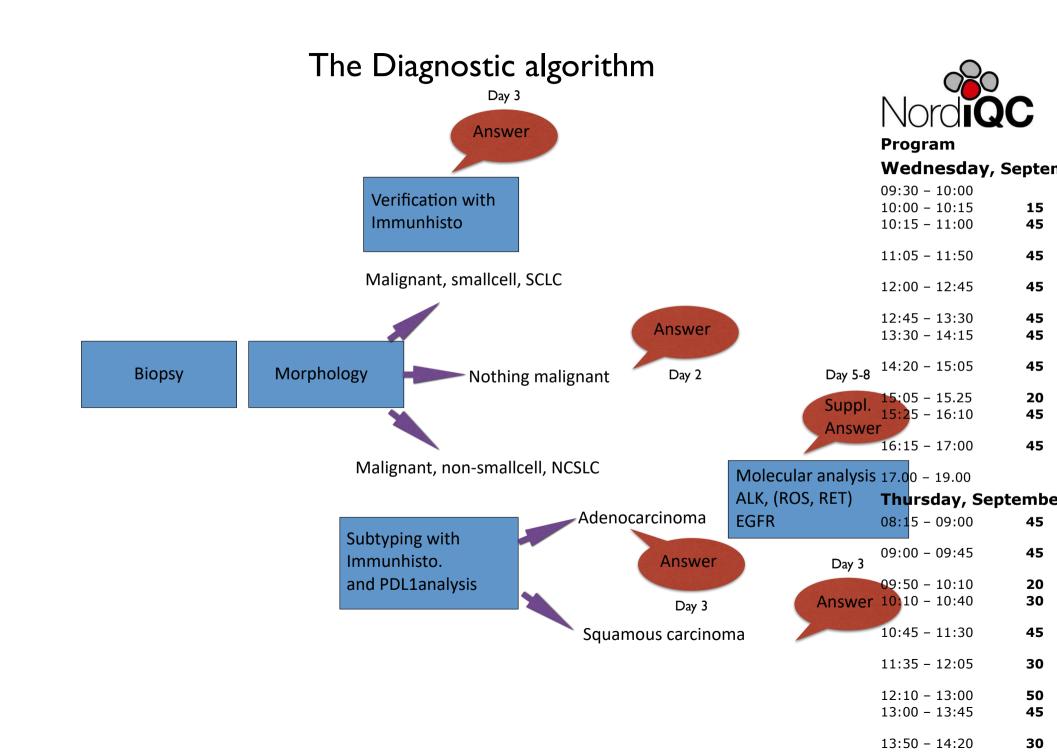
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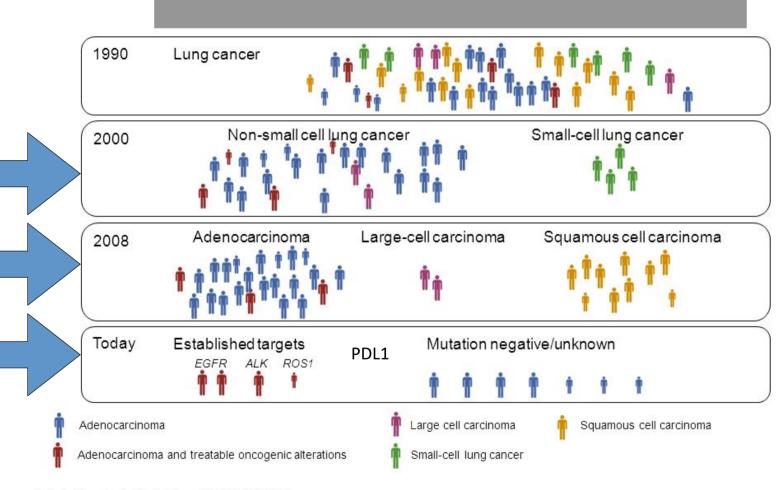
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Patient selection in lung cancer: Evolution over time



Adapted from Reck M, et al. Lancet 2013;382:709-19

Nordi**QC**

Program

Wednesday, Septer

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Thursday, September

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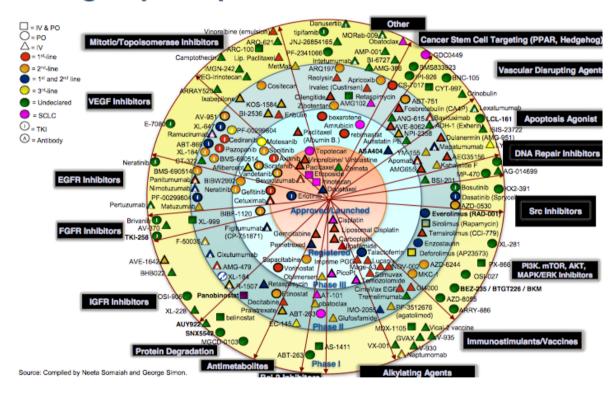
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13:00 - 13:45

Lung cancer research landscape – MoA group and phase



Future