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The Roles of Thoracic Multidisciplinary Team

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Objectives



Discuss the functions of thoracic multidisciplinary team and the various roles of its members





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Roles of MDT in Lung Cancer Control



Before Diagnosis

- Prevention: Smoking Cessation and Tobacco Control
- Screening and Early Detection
- Public Education





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Fundamental Questions to be Addressed for All Cancer Patients



1. Are we sure of the diagnosis?
2. What is the stage of the disease?
3. **Can this patient be cured?**
4. If can not be cured, how can we help the patient the most?
5. Can this patient participate in a clinical trial?



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For Accurate Diagnosis



- Accurate reading for the imaging studies
 - Interpretation
 - Recommendation of further studies
- Obtaining tissue:
 - Selecting the lesion and the technique
 - Deciding on any further required test



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It can be cancer! How can be sure?



- Tissue
- Tissue
- Tissue
- Tissue
- Tissue
- “Tissue is the Issue” “No Meat: No Treat”
- Do not count on “Radio-pathology” or “it-looks- likely”



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Establishing the Accurate Diagnosis



- Need to make complete diagnosis that a clinical decision can be made based on it.
- Therefore, we do not need just tissue: We need enough tissue to do what is needed.

Metastatic NSCLC Management Guidelines



Diagnosis	1. Determining Histology Subtype 2. EGFR Mutation Testing 3. EML4 -ALK-Fusion Testing					
Characteristics	Performance Status	Non Squamous Cell Carcinoma				Squamous Cell Carcinoma
		EGFR+	EML4-ALK+	EGFR WT	EGFR Unknown	
First line	0-2	TKI or Platinum doublet (Pemetrexed) +/- Bevacizumab	Crizotinib or Platinum doublet (Pemetrexed) +/- Bevacizumab	Platinum doublet (Pemetrexed) +/- Bevacizumab	Platinum doublet (Pemetrexed) +/- Bevacizumab	Platinum doublets (no Pemetrexed or Bevacizumab)
	3	TKI single agent chemotherapy	Crizotinib, TKI, single agent chemotherapy	Single agent chemotherapy or TKI	TKI or single agent chemotherapy	TKI or single agent chemotherapy
	4	TKI* Palliative Care	Crizotinib* Palliative Care	Palliative Care	TKI* Palliative Care	Palliative Care
Maintenance	0-2	TKI or Pemetrexed Bevacizumab**	Crizotinib, TKI, Pemetrexed Bevacizumab**	Pemetrexed or TKI Bevacizumab**	Pemetrexed or TKI Bevacizumab**	TKI or Docetaxel
Second Line	0-2	TKI if not used. Pemetrexed or docetaxel	Crizotinib if not used. Ceritinib if Crizotinib is used. TKI, Pemetrexed or docetaxel	Pemetrexed if not used. TKI or Docetaxel	Pemetrexed or TKI	TKI or Docetaxel or othes
	3	TKI	Crizotinib, ceritinib, TKI	TKI	TKI	TKI
	4	TKI if not used	Crizotinib, ceritinib or TKI if not used	Palliative Care	Palliative Care	Palliative Care
Third Line	0-3	TKI	Crizotinib, ceritinib or TKI	TKI	TKI	TKI
	4	Palliative Care	Palliative Care	Palliative Care	Palliative Care	Palliative Care

TKI: Tyrosine Kinase Inhibitor: Erlotinib or Gefitinib

* Selected cases; ** Continue bevacizumab, if given first line.

Modified from: AR Jazieh. Saudi Lung Cancer Group, JIPH 2012



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Why adequate tissue is important?



- Certain therapy is harmful to a subtype of NSCLC:
Bevacizumab in squamous: Fatal hemorrhage
OR not effective, pemetrexed in squamous cell ca.
- Doing molecular studies is subtype-dependent (non-squamous)
- The benefits of targeted therapy in patients harboring the target
- Selection of maintenance therapy is histology-dependent.



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How to get tissue?



- Look for the most accessible lesion.
- Choose a representative lesion
- Get as much tissue as you can.
- Keep in mind that it could be something else other than what the expert tells you
- Wait till you see the report in writing, if it is not urgent.
- The diagnosis should be clear, not ambiguous, such as using the statement “suspicious for malignancy”

(The treatment of suspicious diagnosis is meticulous reevaluation)

Please do it right the first time, human being life is at stake...

Get the accurate diagnosis as early as possible.



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Methods of Obtaining Tissue Diagnosis



- Needle (CORE) biopsy: palpable lesions or CT scan/US guided biopsy
- Bronchoscopy and biopsy
- Endoscopy and biopsy
- Surgical biopsy: Mediastinoscopy, VATS, or Thoracotomy



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Q1. Am I sure of the diagnosis?

A. The Diagnosis Is Made





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Q2 What is the stage of the disease?



- Staging is important for:
 - Prognosis
 - Management
- Generally we use: TNM Staging
 - T: Tumor Size and Extension
 - N: Lymph Nodes Involved
 - M: Presence or Absence of Distant Mets





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Roles of MDT in Staging



- Interpreting imaging findings
- Deciding if further work-up is needed.
- Perform procedures for staging (mediastinoscopy)





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Q3: Can this patient be cured?

Q4: If NO, how can we help the patient?

Multidisciplinary Team Approach





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Why a Multidisciplinary Approach?



- Medical knowledge becomes increasingly complex
- Evolution of sup specialization in specific areas
- Confirmation of presumptive **diagnosis** may involve several specialties and weighing findings, risks and benefits
- Proper **staging** may requires different specialists
- Optimal **treatment** for cancer is often multidisciplinary
- **Palliative care** for incurable patients is also multidisciplinary



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What is Multidisciplinary Care?



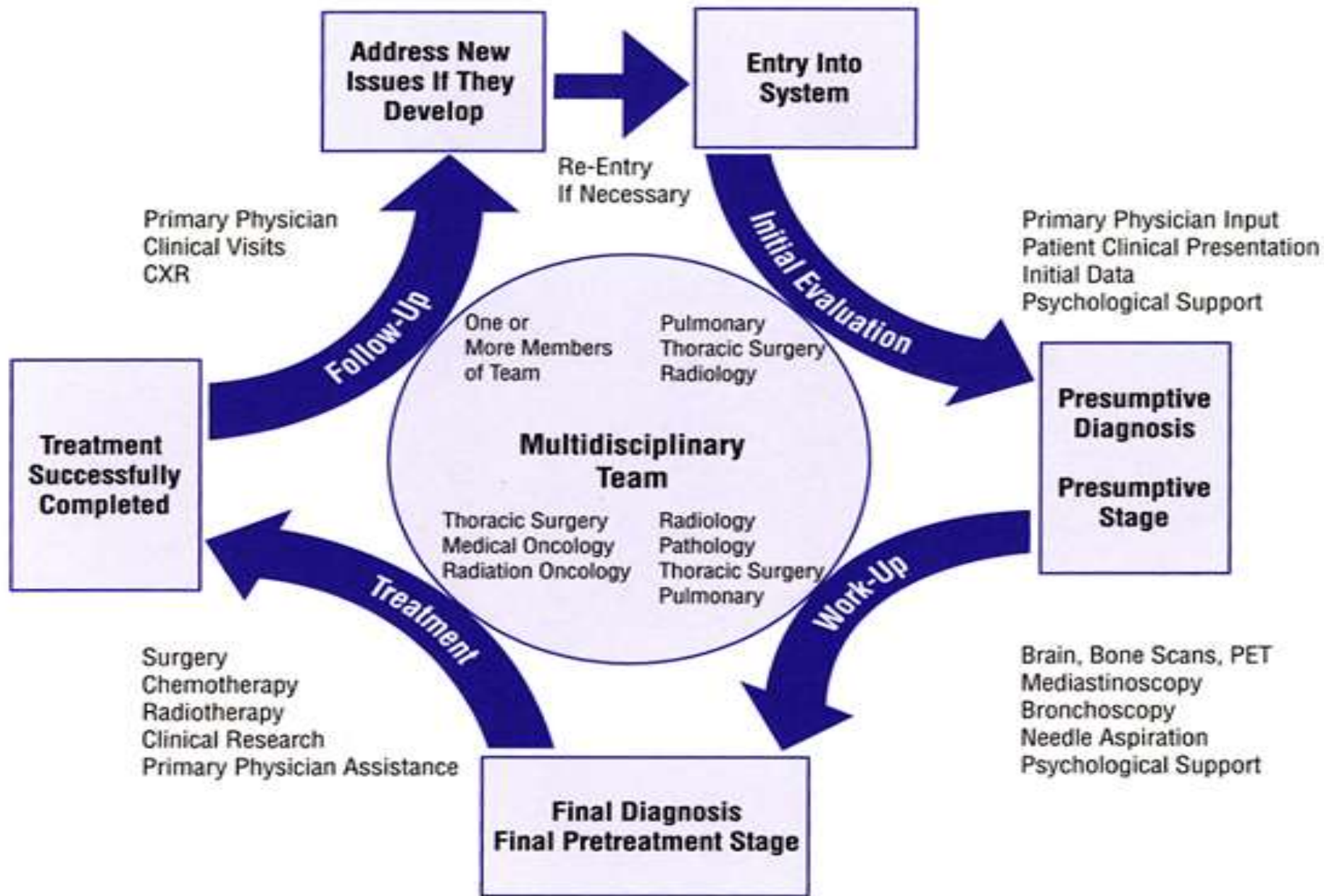
- A system that allows exchange of input from different disciplines
- Each case is discussed with all gathered information at hand, so that a conclusion can be reached
- Diagnostic work-up is based on consensus judgment about available data and about the particular patient's issues
- Treatment plan should be evidence-based



Team Members (e.g. Thoracic MDT)



- Pulmonary Physicians
- Chest Radiologists
- Interventional Radiologists
- Thoracic Surgeons
- Medical Oncologists
- Radiation Oncologists
- Lung Pathologists
- GI Medicine Specialists
- Others: Nursing, Cancer Registrar, Research Coordinators etc.





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Disciplines	Roles and Expertise			
	Diagnosis	Staging	Treatment	Palliative Care
Thoracic Surgery	Obtain Tissue by Thoracotomy Mediastinoscopy	Mediastinoscopy	Surgical Resection	Surgery, Pleurodesis
Pulmonary	Obtain Tissue by Bronchoscopy	Work up + Wang Needle Biopsy	Determining operability Management of Rx side effects	Endobronchial Treatment, Pleurodesis, Stenting
Medical Oncology	Assure proper path report	Work up	Systemic Therapy	Symptom Control
Radiation Oncology	-	Work up	Radical Therapy	CNS Radiotherapy, Pain, Superior Vena Cava Syndrome, Cord Compression
Pathology	Pathological Diagnosis and determining targets	Pathological staging	Re-biopsy: resistance	-
Radiology	Imaging studies	Imaging Studies	Tumor Response Evaluation	-
Interventional Radiology	Obtain tissue	Obtain tissue	Radiofrequency ablation	SVC Stenting or others
GI Endoscopist	Tissue by Endoscopic Ultrasound	Biopsy of Mediastinal Lymph Node	-	Stenting Esophagus



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The Functions of MDT



- Providing the best patient care
- Improving the health care system delivery
- Education
- Research
- Career development and job satisfaction





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Improving the Health Care Delivery



- Detecting systemic errors (e.g. Delay in acting upon abnormal chest XR)
- Creating a reliable referral network for internal and external physicians
- Developing and implementing clinical guidelines
- Improving leadership confidence and support
- Increasing patient confidence and satisfaction



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Education



- Team members
- Institution colleagues
- Other outside health care professionals (symposia, workshop etc)
- Public Education (media, outreach programs etc)





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Research



- Identify areas of interest and need
- Evaluate feasibility and justification of studies
- Develop collaborative projects
- Improve accrual to studies





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Career Development and Job Satisfaction



- Sense of belonging
- Practical mentoring
- Continuous opportunities for education and research
- Ability to provide good care and get help when needed





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How can we improve MDT Function?



High Level Expertise

COE

MD Direct
Patient Care

MD Clinic

Quality Improvement
Research
Education
EBM

Enhanced TB

MD
Conference

Basic TB

KEY:

COE: Center of Excellence

MD: Multidisciplinary

TB: Tumor Board

EBM: Evidence Based Medicine



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Forms



- [Requirements to Establish Tumor Board](#)
- [Case Discussion Form](#)
- [Tumor Board Members](#)
- [Tumor Board Attendance Sheet](#)
- [Cumulative Attendance Sheet](#)
- [Tumor Board Activity Report](#)
- [Tumor Board Team Evaluation](#)
- [Cancer Conference Grid](#)



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Form: Requirements to Establish Tumor Board



TUMOR BOARD NAME: _____

I. Objective:

II. The Meeting Set-up

A. Meeting Schedule

Frequency of Meeting: _____

Day: _____ Time: _____

B. Venue: _____

C. Structure: (See TB Members Form)

➤ Facilitators : _____

➤ Co-Facilitators: _____

➤ Members (preferably 2 members from each discipline):

➤ Coordinator : _____

➤ Administrative Assistant: _____

D. Process:

➤ Communication/Notice/Cancellation should be channeled through one (1) person:

➤ _____

➤ Case Submission Form (*see Case Discussion form*)

➤ Deadline for Submission: _____

➤ Other Activities of the Board:

Lectures

Research

Education



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Form: Tumor Board Members



Name	Position	Service	Pager	Ext
Facilitator				
Co-Facilitator				
Members				
Clinical Coordinator				
Administrative Assistant				



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Form: Tumor Board Members



ONCOLOGY TUMOR BOARD MEETING
 ATTENDANCE SHEET

Date: _____

Venue: _____

NAME	PAGER	BADGE NO.	DEPT/DIV.	SIGNATURE
FACILITATOR				
CO-FACILITATOR				
MEMBER – ONCOLOGY				
MEMBER – ONCOLOGY				
MEMBER – MEDICAL IMAGING				
MEMBER – MEDICAL IMAGING				
MEMBER - PATHOLOGY				
MEMBER – NUCLEAR MEDICINE				
MEMBER – THORACIC SURGERY DEPT				
MEMBER- PULMONARY				
MEMBER – CLINICAL COOR				
MEMBER - NURSING				



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Form: Tumor Board Team Evaluation



Tumor Board: _____

Tumor Board / Multidisciplinary Team Evaluation Name: _____ BN: _____ - _____ Date: _____

No.	CORE	Provide your opinion with regard to the value of the current Tumor Board Structure in following areas:	Provide suggestions for improvement
1	Patient Care		
2	Education		
3	Quality Improvement		
4	Professional Development		
5	Other		



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Form: Cancer Conference Grid

Cancer Conference Grid: All Tumor Boards Multidisciplinary Meetings



Meeting	Freq	Meetings Held	Canceled Meetings	Attendance Hematology / /Medical Oncology	Attendance Pediatric Hematology / Oncology	Attendance Radiation Oncology	Attendance Surgery	Attendance Pathology	Attendance Medical Imaging	Attendance Other Medical Specialty	Cases Presented	
Breast												
Gastro-Intestinal												
Gynecology-Oncology												
Head & Neck												
Hepatocellular Carcinoma												
Lymphoma												
Pediatric Tumor Board												
Pediatric Neuro-Oncology												
Thoracic												
		Total # Conferences:		Average % Attendance:		Average % Attendance:	Average % Attendance :	Average % Attendance:	Average % Attendance:	Average % Attendance:	Total # Cases Presented:	Total # Cases Presented :



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THANK YOU

