

M.G.L. Lung Cancer Institute

Characterization, Objective & Implementation

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McLaren
Greater Lansing Hospital

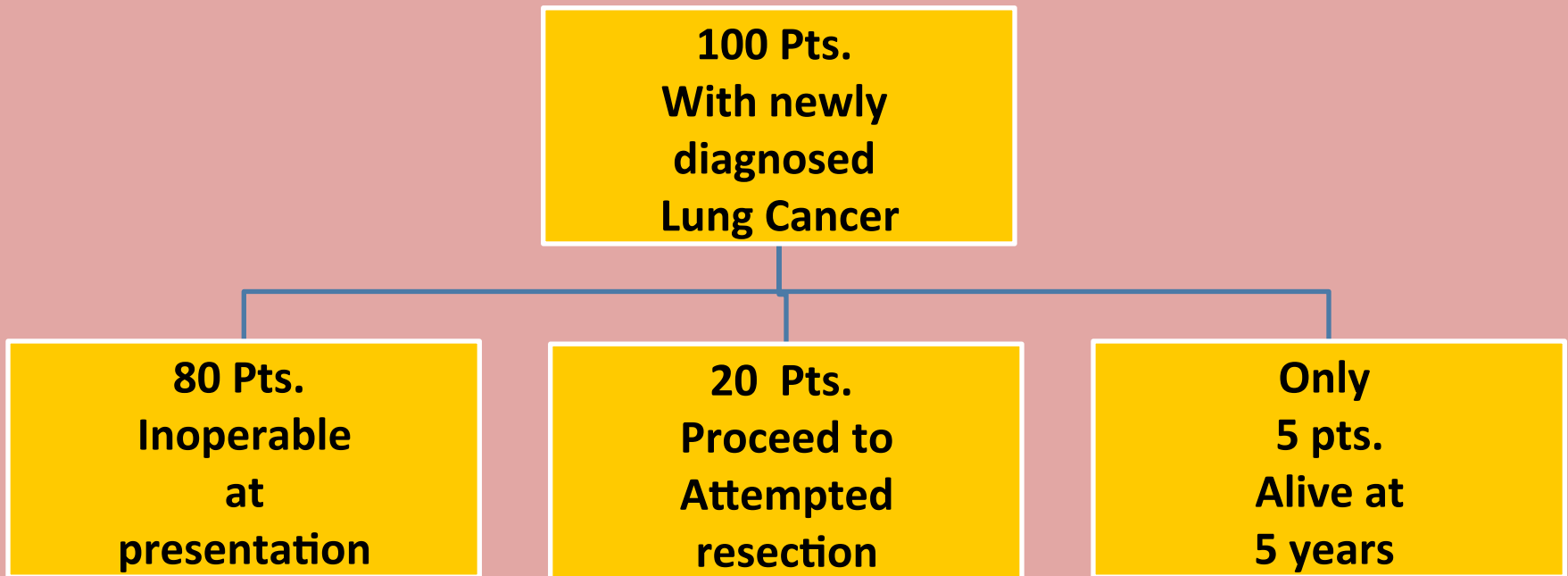
Epidemiology - Lung Cancer

- 226,160 new cases of Lung Cancer diagnosed in 2012
- 160,340 deaths expected from this disease

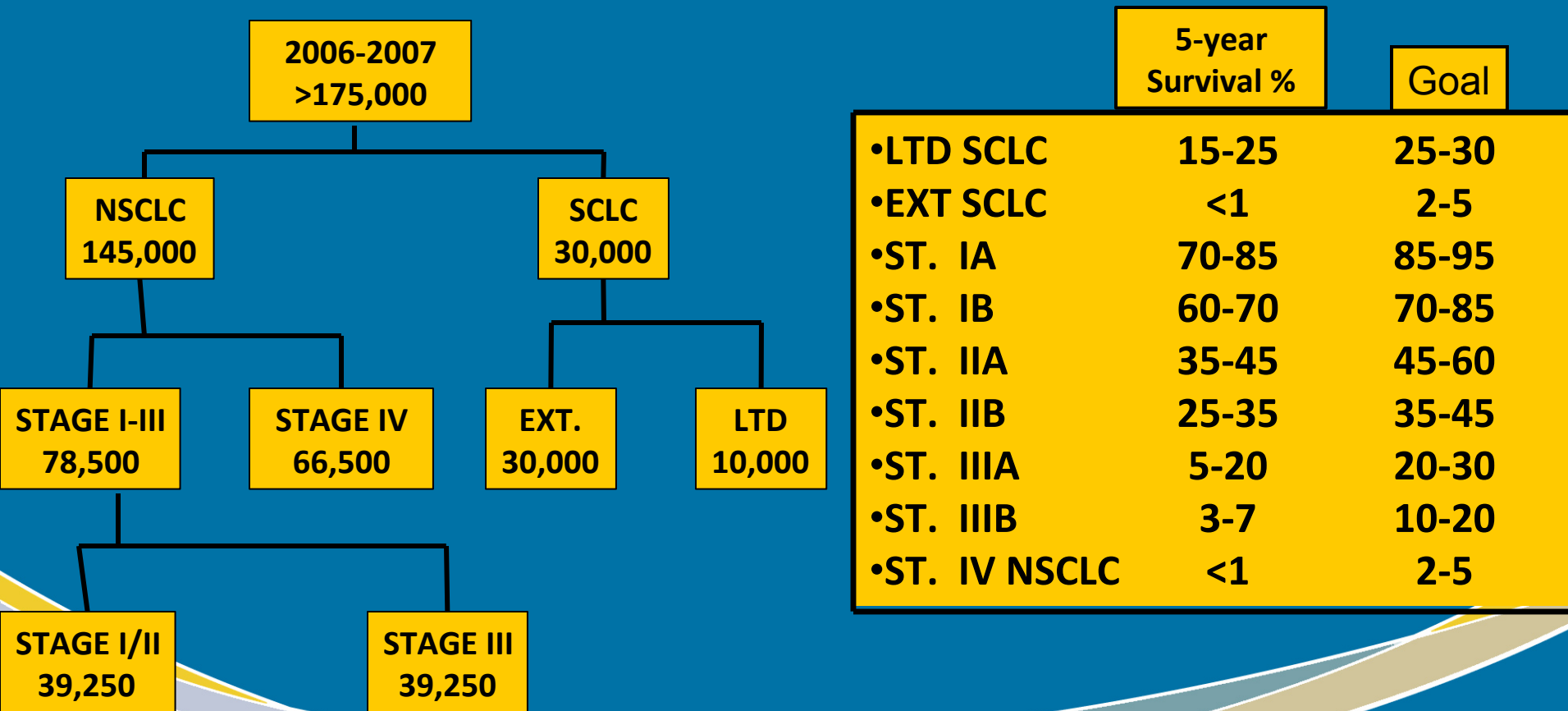
(Courtesy American Cancer Society accessed at 03/10/2012 at : www.cancer.org)

- 94,000,000 Current & Former Smokers at High Risk for
Developing Lung Cancer
- > 50% Stage III/IV at Diagnosis

Epidemiology - Lung Cancer



Lung Cancer – Incidence & 5-Yr. Survival (Post-Rx) in the U.S.A.



Courtesy: Corey Langer, Fox Chase Cancer Center
& National Comprehensive Cancer Network


M.G.L. Lung Cancer Institute (MGLLCI)

- Under Auspices of
 - M. G. L. Hospital
 - Great Lakes Cancer Institute
- Established January 2011 under Leadership of
 - Dr Raymond Demers , President GLCI
 - Mr. Pat Salow, Interim C.E.O. IRMC

MGLLCI - Members

- Hospital Administrator in Charge - M.G.L. - Pat Salow/Thomas Mee
- Medical Director - MGLLCI - Divyakant Gandhi, MD
- **Nurse Coordinator /Navigator** - **M.G.L.** - **Rachel Cruz/Becky Loomis**
- Radiation Oncology - M.S.U./U.M. - Dr Webb/ Dr. Dragovic
- Medical Oncology - M.S.U.
- M.G.L. - Anas Al-Janadi, MD et al.
- Beth Layhe, DO et al.
- Radiology - M.G.L.
- M.S.U. - G.Mitchinson/ Lawson
- Kevin Berger, MD et al
- Pathology - M.G.L. - Mehboob Fatteh, MD et al
- Pulmonary - M.G.L.
- M.G.L. - Chandra Gera, MD et al
- John Morlock, DO
- CT Surgery - MCTV Surgeons - Divyakant Gandhi, MD

MGLLCI - Objectives

- Early detection of Lung Cancer
 - **Multi-Disciplinary Approach** to Mx of Patients with Lung Cancer & Other Thoracic Malignancies
 - Establishment and Application of Minimally Invasive Techniques for Treatment of Lung Cancer
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The French Approach

ORIGINAL ARTICLES

Multidisciplinary Management of Lung Cancer: A Randomized Trial to Test Its Efficacy?

Francesco Leo, MD,* Nicolas Venissac, MD,* Michel Lecomte, MD,† Josiane Otto, MD,† Jérôme Mouroux, MD,* and the Groupe d'Oncologie Thoracique Azuréen (GOThA)

The multidisciplinary management of lung cancer has been universally accepted. In France, the multidisciplinary approach for cancer patients is established by law. However, the efficacy of this approach remains theoretical, given that no evaluation criteria have been made available and no previous reports have been published on the prospective follow-up of these patients. The Groupe d'Oncologie Thoracique Azuréen carried out a 1-year prospective study on patients discussed during its multidisciplinary weekly meetings, to analyze the concordance between the proposed and administered treatment, the delay of treatment, and the 1-year actuarial survival. Of the 344 patients discussed during the period considered, the therapeutic decision was chemotherapy in 183 patients, surgery in

patients, no matter where they are treated, should benefit from a diagnostic and therapeutic strategy defined by a multidisciplinary team composed of an oncologist, surgeon, organ specialist, pathologist, radiotherapist, and general practitioner.³

The therapeutic strategy decided by the multidisciplinary team must be derived from evidence-based guidelines and ongoing clinical protocol tailored to patient information given during the common clinical presentation of the case.

To verify the theoretical advantages of this approach, follow-up information is needed to assess how many patients did indeed receive the planned treatment and, in case of discordance, to verify the cause. Unfortunately, there is currently no information available in literature regarding the

“In France, the multidisciplinary approach for cancer patients is established by law.”

Why Multidisciplinary Approach?

- Traditional approach

- Referral to specialists in a sequential fashion results in
 - Slow, Fragmented, Poorly Coordinated Care
 - Delays in Care Common
 - Patient Confusion Because of Pitfalls in Communication
 - Even Occasional Inappropriate Care

Why Multidisciplinary Approach?

- Establishing a Seamless Coordinated Multidisciplinary Approach
 - Streamlines Workup & Treatment
 - Provides a Forum of Collegial Exchange of Differing Opinions
 - Helps Convey a Clear and Consistent Management Opinion to the Patient
 - Helps Develop Parallel Work-up Strategy to Reduce Delays in Implementing Treatment Protocols

MGLLCI – Implementation of Objectives

- **“Multi-Disciplinary Thoracic Oncology Conference”**
 - Regularly scheduled and conducted every alternate Tuesday for the 7-8 years
 - Discuss and develop Management strategies for patients presented at the conference
 - Convey Written Conclusions to the treating Physicians
 - Re-evaluate the results of recommendations on a periodic basis
- Development of **“Lung Cancer Screening Program”**
- Establish, Develop, Support & Effectively Utilize **“Nurse Coordinator/Navigator”**
- Establish & Implement **“Door to Therapy”** Concept

“Door to Therapy” Concept

- **Reduce time lag**

- Referral to Establishment of Therapy (Goal < 30 days)
- Initial Consultation within 1 week of Referral
- Development of Algorithms for Parallel & Prompt Evaluation Facilitated by the Nurse Navigator
 - Diagnosis/Staging Work-up
 - Physiologic Pulmonary, Cardiac & Performance Evaluation to Assess Ability to Withstand Therapy
 - Acquire Prompt Opinion of Various Sub-specialties at the Multi-Disciplinary Thoracic Oncology Conference

The National Lung Screening Trial(NLST): Overview & Study Design

- **Randomized Multicenter study :**
 - **August 2002 – November 2010**
 - Early termination because of significant survival benefit
 - 20% Relative Reduction in Mortality from Lung Cancer
 - 6.7% Reduction in all cause mortality
 - **33 Centers**
 - 53,454 Enrollees
 - Age 55 – 74 yrs.
 - Asymptomatic
 - Current or Former Smokers with > 30 Pack-year History
 - **Compare Chest Radiograph vs. Low Dose Helical CT Scan Screening**
 - 3 Annual Screenings
 - More definitive than I-ELCAP (International Early Lung Cancer Action Project) in which there was no comparison with CXr.

(Courtesy: NEJM 2011;365:395-409)

M.G.L.M.C./M.C.I.

Lung Cancer Screening Project

- PCP' s /Internists fill request form for similar group of patients as in the NLST Trial
- Reimbursement for Screening CT Scans not covered by Insurance Providers
- MGLMC to bear the cost of CT Screening
- Any Positive Finding then Evaluated and Treated with Reimbursement Cost of those Studies/Procedures being borne by the patient's insurance carrier
- All Protocols and Algorithms Developed by a Core Group of Members from MGLLCI
- All positive findings and Incidental findings to be discussed at the Multi-Disciplinary Lung cancer Conference
- Start Date: **July 1, 2011**

Participating Primary Care Physicians

- Dr. Nguyen
- Dr. Sagan-Yewah
- Dr. Mills
- Mr. Dan Moore, PA-C
- Dr. Robertson
- Dr. Gera
- Dr. Thoutreddy
- Dr. Novis
- Dr. Mookerjee
- Dr. Hillman
- Dr. Beals
- Dr. Wheeler
- Dr. Chao
- Dr. Nelson
- Dr. Murthy

Conclusion - Reasons for Success

- Evidence based development of the Program
- Significant cooperation and support from each of the aforementioned Physicians and Departments
- Strong unequivocal support from the Administration without reservation
- Strong Nurse Navigator implementation
- Constant vigil and oversight with continuous changes as warranted
- In Short **“TEAM-WORK”**

Lung Cancer Screening Program at McLaren-Greater Lansing

	FY 2011	FY 2012	FY 2013	FY 2014	Total
Completed (as of 10/31/2013)	21	179	234	14	448
Initial Screening	21	174	178	12	385
Repeat Screening	0	5	56	2	63
Recommended follow-up					
12 month screening - No nodules	12	86	133	4	235
12 month diagnostic - Lung nodules ≤ 4 mm	1	38	38	3	80
6 month diagnostic - Lung nodules > 4-6 mm	6	34	37	5	82
3 month diagnostic - Lung nodules > 6-8 mm	2	19	12	1	34
Immediate - diagnostic studies of CT, PET, or biopsy - Lung nodules > 8 mm	0	2	14	1	17
<i>Other tests due to abnormalities not related to lung nodules (CT abd, bronch, U/S)</i>	0	3	19	0	22
Malignancy found	0	1	2	0	3
Incidental cardiac findings (since 04/26/2012)	3	28	55	7	93

48% of the screening CT's demonstrated the need to do a follow-up CT or PET/CT within the following 0-12 months

Revenue for FY 2011=\$ 0
 Revenue for FY 2012=\$119,695
 Revenue for FY 2013=\$475,420

Cardiac Revenue for FY 2011=\$ 0
 Cardiac Revenue for FY 2012=\$ 19,382
 Cardiac Revenue for FY 2013=\$187,344

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