#### **Commission on Cancer**

#### MASSACHUSETTS CHAPTER ACS

ANNUAL REPORT TO PROGRAMS

DECEMBER 2013

Peter Hopewood MD FACS

# CoC Outstanding Achievement Awards 2012

#### **CONGRATULATIONS TO**

Holy Family Hospital & Medical Center North Andover, Massachusetts CLP Dr. Gentry Thatcher

> Newton Wellesley Hospital Newton Massachusetts CLP Dr. Claire Cronin

# 2013 CoC Paper Competition Winning Abstract Dr Laura Rosenberg

P3	Abstract Title	<u>Sorafenib</u> Suppresses <u>Desmoid</u> Tumor Growth and Invasion via Inhibition of ERK Signaling				
	Author Block	Laura M. Rosenberg, MD <sup>1</sup> , Monica M. Bertagnolli, MD <sup>2</sup> , Nancy L. Cho,MD <sup>2</sup> 'Massachusetts General Hospital, Boston, MA, <sup>2</sup> Brigham and Women's Hospital, Boston, MA				
	Abstract Body	Background: Desmoid tumors (DTs) are invasive soft tissue lesions that are primarily treated via wide surgical resection. Medical options are limited for patients with recurrent or unresectable disease. Sorafenib is a multikinase inhibitor that blocks tumor cell proliferation via suppression of the Raf/MEK/ERK signaling cascade. We examined the effects of sorafenib on patient-derived DT cell lines, with the aim of characterizing the efficacy and mechanism of action of sorafenib in DTs.  Methods: DT-derived cells were cultured from fresh tumor specimens, resulting in 12 distinct patient-derived cell lines. Cells were treated with sorafenib, and proliferation was measured by CellTiter assay after 72 hours. To assess invasion, DT cells were plated in invasion chambers with 5 μM sorafenib for 24 hours. For immunoblot analysis, cells were treated with 5 μM sorafenib, and lysates were collected at intervals from 15 minutes to 3 days.  Results: Sorafenib (10 μM) significantly inhibited proliferation of DT-derived cells, suppressing growth to 27% relative to controls. Invasion assasys demonstrated a significant inhibition of DT cell invasion compared to controls. Immunoblot analysis revealed that sorafenib inhibited ERK phosphorylation as early as 30 minutes after treatment, and had a sustained effect with inhibition increasing from 1 day to 3 days after treatment. Total ERK levels remained unchanged. This effect correlated with inhibition of total MEK, Akt, and phospho-Akt (Ser473) levels.  Conclusion: Our results demonstrate that sorafenib suppresses proliferation and invasion of DTs via inhibition of ERK signaling. Sorafenib may be a potential therapeutic option in the treatment of desmoid tumors.				

#### WHAT'S NEW IN THE CoC?

FIRST THERE WAS NSQIP

THEN THERE WAS TQIP

NOW THERE IS .....

#### Coming to CoC Programs December 2013









Cancer Quality Improvement Program



1 of 1500 CoC Hospitals [FIN] City, State

**Annual Report 2013** 

#### WHAT IS CQIP?

EXTENSIVE CANCER QUALITY AND OUTCOME DATA BOTH SHORT AND LONG TERM

INDIVIDUALIZED FOR EACH CoC PROGRAM

PROVIDES COMPARISONS TO REGIONAL AND NATIONAL DATA

FREE TO ALL CoC ACCREDITED PROGRAMS

# CQIP ABSTRACTS DATA FROM NATIONAL CANCER DATA BASE

#### WHAT IS THE NCDB

NCDB STARTED 1988 AND MAINTAINED BY ACS

INCLUDES DATA FROM 1500 CoC PROGRAMS

29 MILLION RECORDS FROM CA REGISTRIES

#### Summary of CQIP 2013 Sections

- ☐ Cancer Program Volume (2008–2010)
- ☐ Cancer Program In/Out Migration (2006–2010)
- Quality Measure Reports
- □ Volume of Selected Complex Cancer Operations
- □ 30-Day Mortality after Selected Cancer Operations
- Unadjusted Survival Reports by Stage
- □ Breast Cancer—additional reports
- ☐ Colon Cancer—additional reports
- ☐ Non-Small Cell Lung Cancer (NSCLC)—additional rep
- ☐ Prostate Cancer—additional reports







### HERE ARE SOME EXAMPLES OF THE UPCOMING REPORTS

#### Volume and 30-day Mortality After Selected Complex Cancer Operations

Volume of Selected Operations for Cancer

Cystectomy

Esophagectomy

Gastrectomy

Pancreatectomy

Rectal resection

Lung resection

30-day Unadjusted Mortality

Cystectomy

Esophagectomy

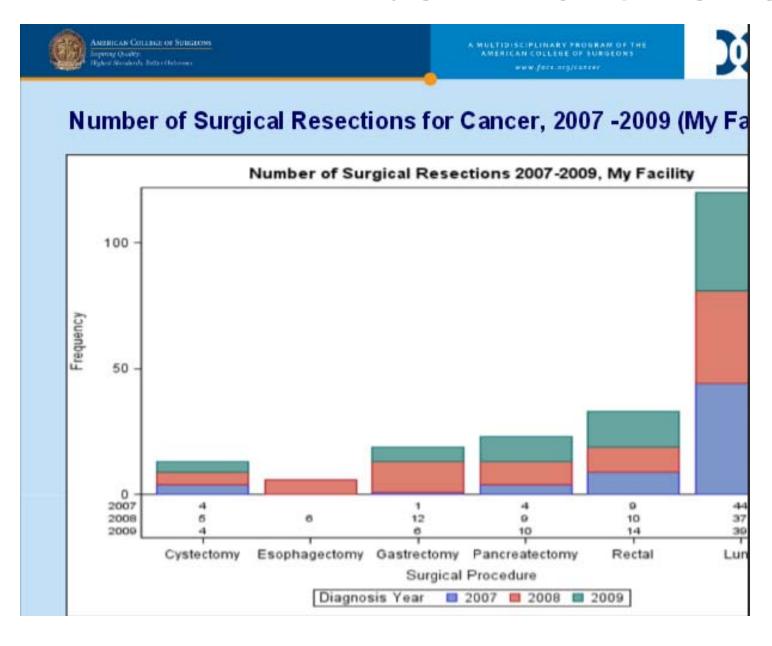
Gastrectomy

Pancreatectomy

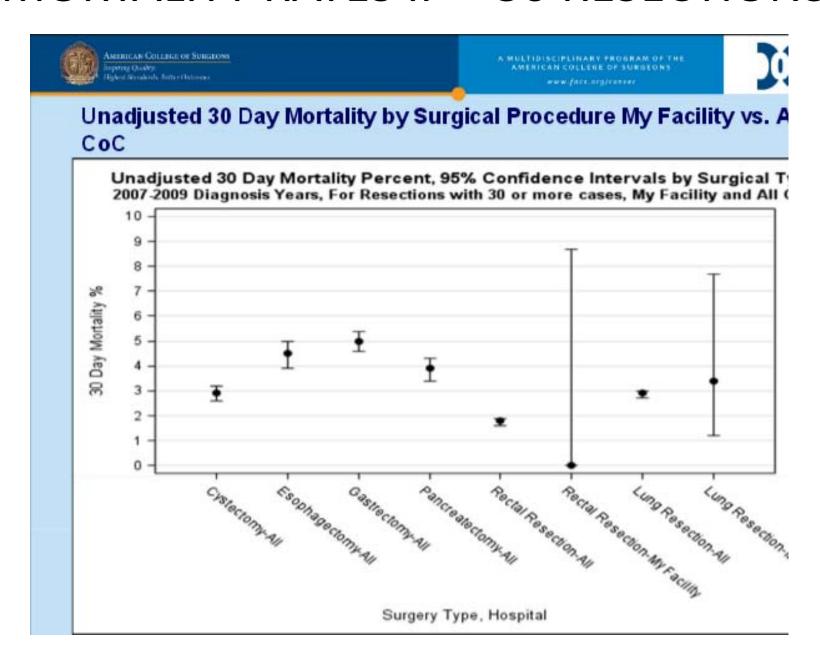
Rectal resection

Lung resection

#### **EXAMPLE: # MAJOR RESECTIONS**



#### MORTALITY RATES IF > 30 RESECTIONS

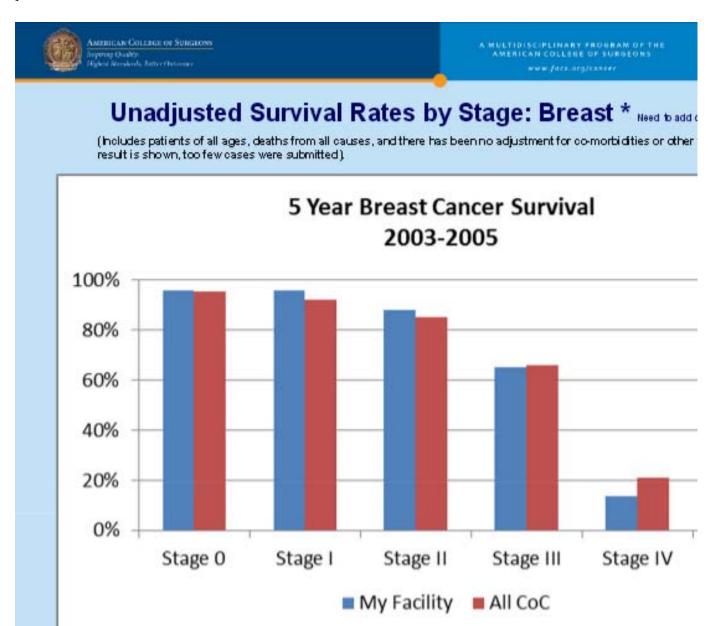


### UNADJUSTED SURVIVAL RATES NOW ADJUSTED SURVIVAL RATES 2014

SURVIVAL RATES BY STAGE

BREAST CANCER
COLON CANCER
NON-SMALL CELL LUNG CANCER
PROSTATE CANCER

#### CQIP EXAMPLE BREAST CA SURVIVAL



#### MANY REPORTS ARE AVAILABLE

#### **Prostate Cancer - Additional Reports**

- Stage Distribution
- In/Out Migration
- In/Out Migration by Insurance Status
- Race Distribution
- Insurance Status
- Distance Traveled
- First Course of Treatment Stage I and II
- Days to First Treatment: Cases Diagnosed and Treated a Facility
- Days to First Treatment: Cases Diagnosed at My Facility Elsewhere; Treated at My Facility

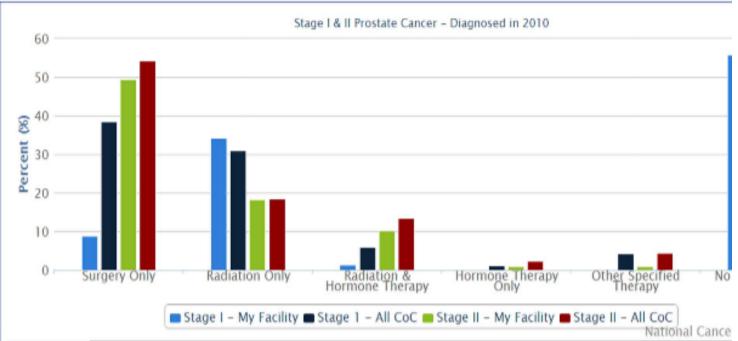






#### CQIP PROSTATE RX STAGE I&II

### First Course Treatment Stage I & II Prostate Cancer (My Facility vs. All CoC)



	Surgery Only	Radiation Only	Radiation &	Hormone Therapy		No 1st Cours
	oungery only	reading of the	Hormone Therapy	Only	Therapy	
Stage I - My Facility	8.9 %	34.2 %	1.3 %	0 %	0 %	55.7 %
Stage 1 - All CoC	38.4 %	30.9 %	6 %	1.2 %	4.2 %	19.2 %
Stage II - My Facility	49.5 %	18.3 %	10.1 %	0.9 %	0.9 %	20.2 %
Stage II - All CoC	54.2 %	18.5 %	13.4 %	2.3 %	4.4 %	7.1 %







#### **Breast Cancer - Additional Reports**

- Stage Distribution
- In/Out Migration
- In/Out Migration by Insurance Status
- Race Distribution
- Insurance Status
- Distance Traveled
- First Course Treatment Stage I
- Days to First Treatment: Cases Diagnosed and Treated at My F
- Days to First Treatment: Cases Diagnosed at My Facility or Elsewhere; Treated at My Facility
- Radiation Treatment After Breast Cancer Surgery Out Migration Map By Zip Code

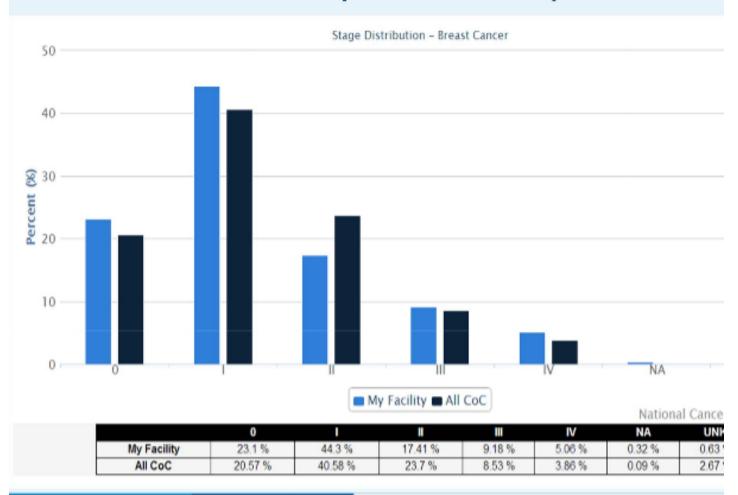






#### Compares you to all CoC Programs

### Stage Distribution-Breast Cancer Diagnosed in 201 Hospital vs. All CoC)









#### Colon Cancer - Additional Reports

- Stage Distribution
- In/Out Migration
- In/Out Migration by Insurance Status
- Race Distribution
- Insurance Status
- Distance Traveled
- Days to First Treatment: Cases Diagnosed and Treated a Facility
- Days to First Treatment: Cases Diagnosed at My Facility Elsewhere; Treated at My Facility







#### Non-Small-Cell Lung Cancer (NSCLC) - Additional Re

- Stage Distribution
- In/Out Migration Cancer
- In/Out Migration by Insurance Status
- Race Distribution
- Insurance Status
- Distance Traveled
- First Course of Treatment Stage I
- Days to First Treatment: Cases Diagnosed and Treated a Facility
- Days to First Treatment: Cases Diagnosed at My Facility Elsewhere; Treated at My Facility

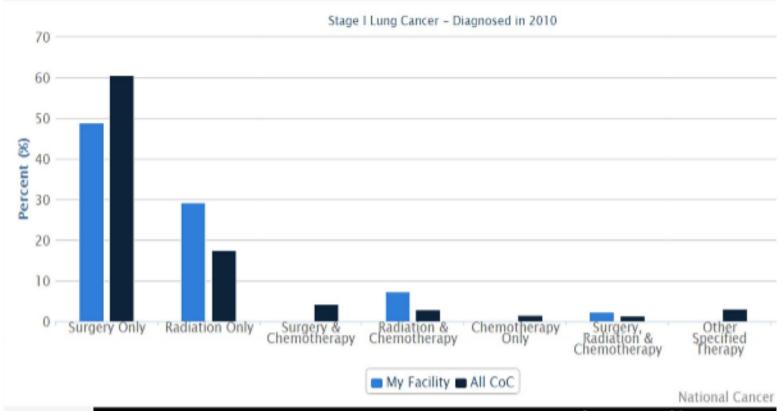






#### LUNG CA 1<sup>ST</sup> RX STAGE I

#### First Course Treatment Stage I Non-small Cell Lu Cancer, 2011



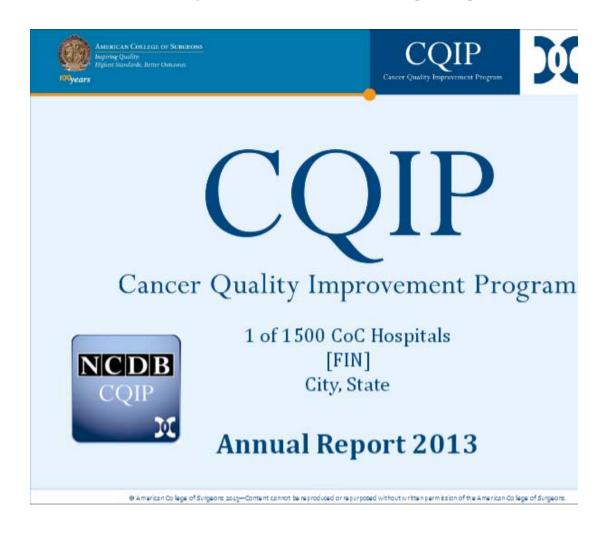
	Surgery Only	Radiation Only	Surgery & Chemotherapy	Radiation & Chemotherap		Surgery, Radiation & Chemotherapy		No 1st Co Rx
My Facility	48.8 %	29.3 %	0 %	7.3 %	0 %	2.4 %	0 %	12.2 %
All CoC	60.5 %	17.5 %	4.3 %	2.9 %	1.6 %	1.4 %	3 %	8.8 %







# COMING TO ALL CoC PROGRAMS DECEMBER 2013



### Thank you for not smoking

