

2011 Annual Cancer Care Progress Report

2010 Cancer Registry Review

North Memorial

3300 Oakdale Av N.

Robbinsdale, MN

Published December 2011 by North
Memorial's Cancer Committee

Executive Summary

- According to Standard 2.11, the American College of Surgeons requires the Cancer Committee to analyze patient outcomes and disseminate the results of the analysis on a yearly basis.
- An annual report may be published whereby the Cancer Committee has determined the content and includes the analysis of patient outcomes.
- Following is the 2011 annual report for the cancer program at North Memorial. Included are Cancer Committee activities, Tumor Registry activities and results of in-depth analysis of Breast Cancer care.

Cancer Committee

➤ **American College of Surgeons / Commission on Cancer Cancer Committee Requirements:**

- **Chair** – Dr. Harold Londer
- **Medical Oncologist** – Dr. Avanti Mehrotra
- **Cancer Liaison Physician** – Dr. James Schlaefer
- **Radiation Oncologist** – Dr. Kurt Nisi
- **Diagnostic Radiologist** – Dr. Tom Peltola
- **Pathologist** – Dr. Sue Schlafmann
- **General Surgeon** – Dr. Madeline Gartner
- **Cancer Program Administrator** – Luwanna LaPole, MPH, MBA
- **Oncology Nurse** – Mary Larpenteur
- **Social Worker** – Maureen Tyra
- **Certified Tumor Registrar** – Jennifer Watkins
- **Quality Management** – Kathy Vinson
- **Pain Control/Palliative Care** – Dr. John Degelau

➤ **Four Required Coordinators that are reappointed each year:**

- **Cancer Conference** – Jennifer Mersereau
- **Quality of Cancer Registry Data** – Dr. Harold Londer
- **Quality Improvement** – Kathy Vinson
- **Community Outreach** – Holly Guererro from the American Cancer Society

➤ **Others:**

- Jewel Butts LeeAnn Olson, CTR
- Barb Kunz Mike Parrish
- Joy Larson-Haidle Jean Pupkes, RN, CNS
- Shirley Kern, RN, CNS Cheryl Schlicht

Cancer Committee Activity Report

➤ ACOS Accreditation

- Last Surveyed in July 2010
- Received Certificate of Approval with Commendations
- Surveyed every three years (next July, 2013)
- Dr. James Schlaefer named CoC Liaison
- Dr. Schlaefer attended state CoC Physician Liaison statewide conference

Cancer Committee Activity Cont'd

- Provide Educational Opportunities
 - Weekly Tumor Conferences
 - See Next Slide For Results
 - Implemented tracking of staging and guidelines
 - Medical Provider
 - HHH Oncologists will present at the North Memorial Grand Rounds December 2011
 - Nursing
 - Various nursing iLearns were developed and available on the North Memorial Intranet

Cancer Committee Activity Cont'd

➤ 2010 Tumor Conferences:

- Conferences = 130; 128 were patient related
- Cases = 437; 421 were prospective
- Attendance =
 - 1523 total physician attendees
 - 621 total allied staff attendees

Cancer Committee Activity Cont'd

YTD (10/28/11)

- 2011 Tumor Conferences:
 - Breast (Friday) = 37
 - Chest (Thursday) = 42
 - General Tumor (Wednesday) = 39
- Conference Attendance (MD & Allied Staff):
 - 43 Breast = 598
 - 49 Chest = 588
 - 51 General = 619
- Conference Cases:
 - Breast = 133
 - Chest = 220
 - General Tumor = 189

The NCCN Guidelines are discussed at each conference.

Cancer Committee Activity Cont'd

- Provided Support To Patients & Caregivers
 - Breast Support Group
 - Lung Support Group
 - Prostate Support Group
 - Colo-Rectal Support Group
 - Lymphoma/Leukemia Support Group
 - Caregivers Support Group

Cancer Committee Activity Cont'd

➤ Active in Community Events

- Race for the Cure
- Whiz Bang Days Run
- MN Cancer Alliance
- Colon Cancer Patient Panel
- Mens Health Event
- Information Tables At North Memorial



Cancer Committee Activity Cont'd

- Continued to Support Pay-It-Forward-Fund for Pts. Needing Financial Assistance with expenses of daily living (founded by North Memorial patient)
- North Memorial Foundation is fiscal agent
- Fund Raising activities included Casino Night, JB Hudson Event and Summer Concert

Cancer Committee Activity Cont'd

- Tumor Registry Follow-up Rates and Abstracting Time Line
 - 2010 Overall Follow-Up Rate = 87.33%
 - 2011 Overall Follow-Up Rate YTD = 89.7%
 - 2010 5-Year Follow-Up Rate= 90.88%
 - 2011 5-Year Follow-Up Rate YTD= 91.03%
 - 2010 Abstracting Time Line = 9 months
 - 2011 Abstracting Time Line = YTD 3 months

Cancer Committee Activity Cont'd

- All tumor registry follow-up statistics surpass ACoS guidelines
- Due to staff shortage, abstracting short of 6 month standards in 2010
- For 2010 cases the CoC has adjusted the time frame for abstracting. We will not be held accountable due to new guidelines and rules for abstracting.
- 2011 we are currently abstracting 3 months, within standards

Cancer Committee Activity Cont'd

- Optimizing of Electronic Medical Record
 - Standardization of Chemo Protocols by P&T Committee
 - All chemotherapy ordering via EMR
 - P&T Committee reviewing all chemo protocols for inpatient and outpatients
 - Care Plans for Inpatient Patients
 - Beacon monitoring of problem lists

Cancer Committee Activity Cont'd

➤ Participation in research

- North Memorial Referrals thru Oct. '11 = 6
- North Memorial Pts. on CCOP studies thru Oct. '11 = 18
- CCOP does not document referrals per se, they see pts. at the request of physicians and decide at that time if a pt. is eligible to be placed on study.
- Currently there are no studies open

Cancer Registry Activity

- The Cancer Registry Department consists of 2 Abstractors and 1 employee who does Casefinding/Follow-up.
- 1254 cases were accessioned and abstracted by the Cancer Registry in 2010 and 663 YTD in 2011 thru July (3 month abstracting window).

Cancer Registry Activity

- In 2009 the Reference Year that is used by the North Memorial Cancer Registry was changed from 1979 to 1995.
 - In Reference Year 1979 North Memorial followed **27,447** patients overall
 - In Reference Year 1995 North Memorial follows **16,510** patients overall

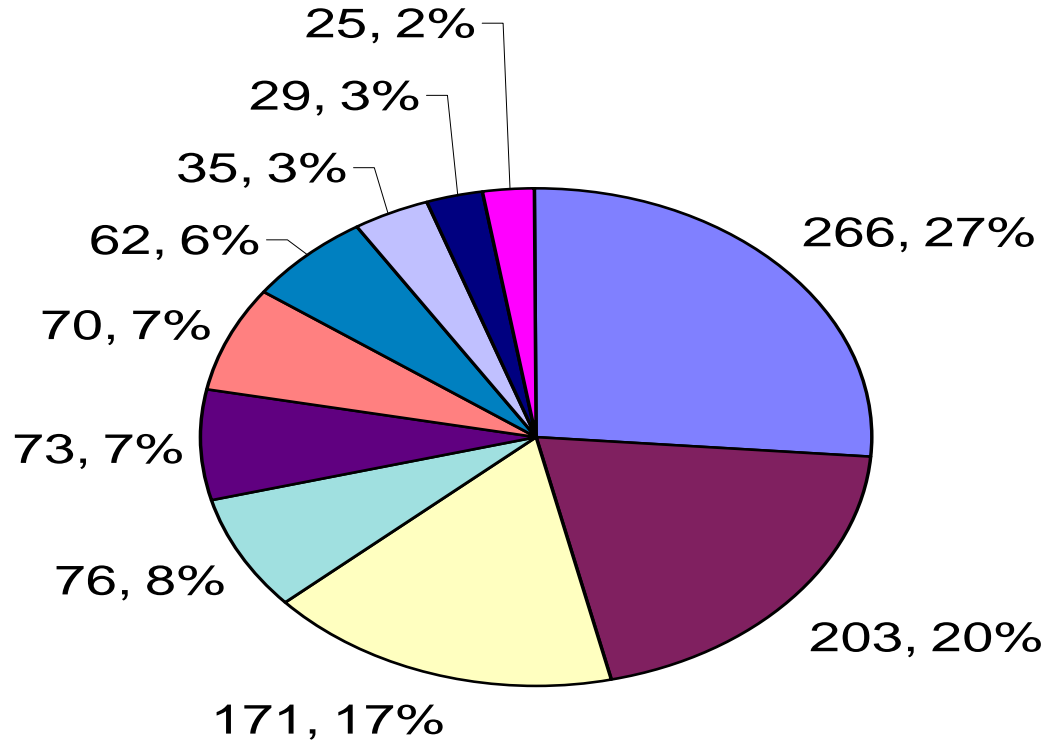
2010 Top Ten Sites

- Breast (266)
- Prostate (203)
- Lung (171)
- Colon (76)
- Leukemia (73)
- Bladder (70)
- Lymphoma (62)
- Kidney (35)
- Skin (29)
- Rectum (25)

2009 Top Ten Sites

- Breast (259)
- Prostate (226)
- Lung (190)
- Colon (66)
- Bladder (65)
- Lymphoma (62)
- Leukemia (62)
- Kidney (49)
- Rectum (26)
- Unknown Primary (24)

2010 TOP TEN SITES ACCESSIONED NORTH MEMORIAL



Cancer Registry Activity Cont'd

- The Cancer Registry obtains analytic cases (i.e. casefinding) through:
 - Daily Pathology Reports
 - HHH Dictation Reports
 - Health Information Reports
 - North Radiation Reports

Cancer Registry Activity Cont'd

- Cancer Registry data is monitored on a quarterly basis through 10% Audits of abstracts.
- Physicians and a Cancer Registry rep. go through a random selection of cases and discuss any findings or issues. Concerns are discussed, noted and fixed accordingly.
- Completed 10% Audits through 3rd Qtr of 2010.

Cancer Registry Activity Cont'd

Findings from 10% audits through 3rd Qtr 2010
(n= 83 cases):

- Staging Discrepancies = 11 (13%)
- Treatment Discrepancies = 1 (1%)
- Morphology Coding Discrepancies = 1 (1%)
- Site Code Discrepancies = 1 (1%)
- Documentation concerns = 4 (5%)

Collaborative Staging: questions about clinically staging accessible vs inaccessible lymph nodes in collaborative stage.

ACOS Standard

- ACOS requires us to do one in-depth study per year.

Breast Cancer Annual Review Sub-Committee

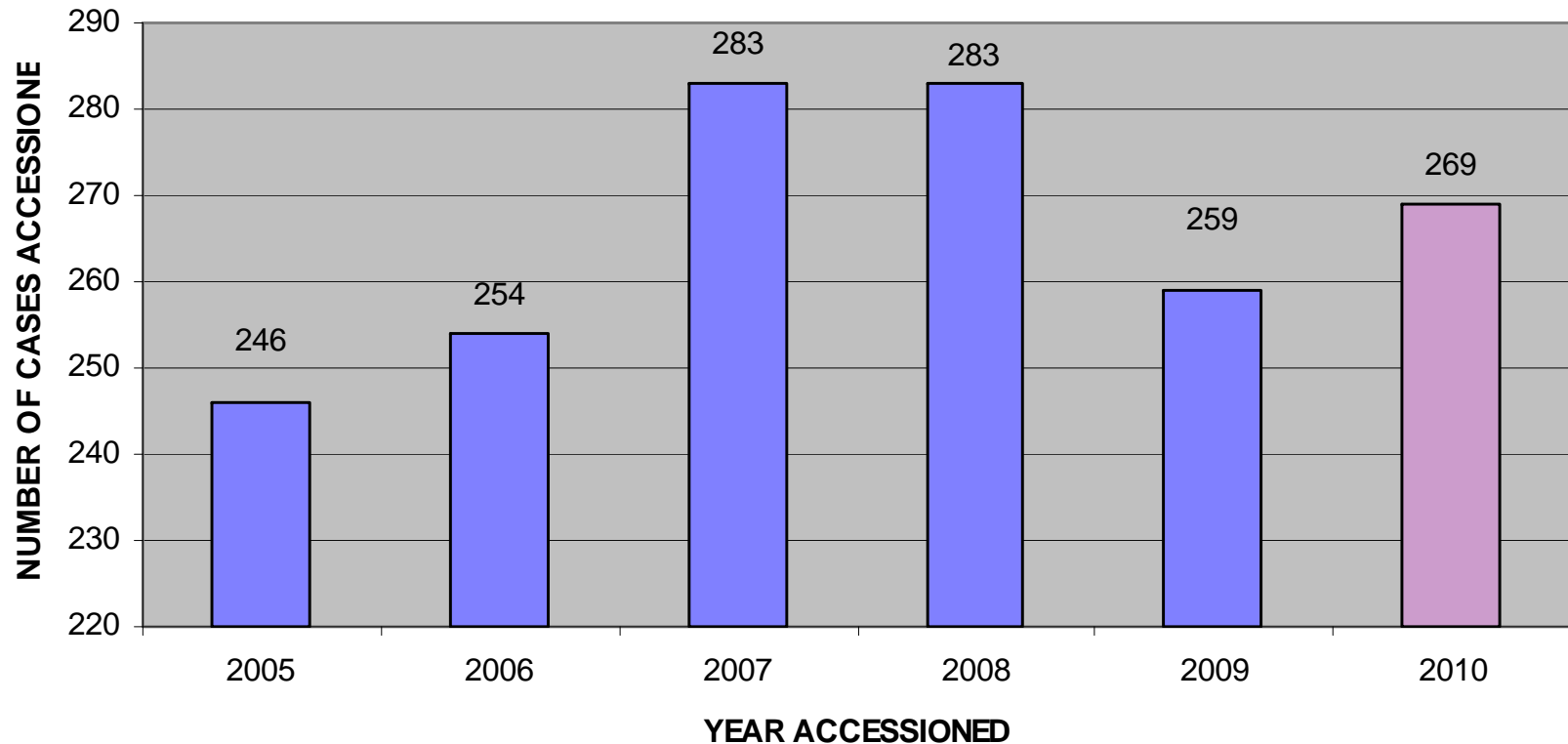
- Harold Londer, MD, Medical Oncologist & Medical Director of HHHCC
- Sue Schlafmann, MD, Pathologist
- Kurt Nisi, MD-Radiation
- Kathy Vinson, MMA, Quality
- Jennifer Watkins, CTR, Cancer Registry

In-Depth Report

- In 2011, the Cancer Committee chose to conduct an in-depth review of Breast Cancer
- Reviewed cases in Tumor Registry of patients diagnosed with Breast Cancer starting
Jan 2005 through Dec 2009
- Patients with Breast Cancer = 1325 during time frame

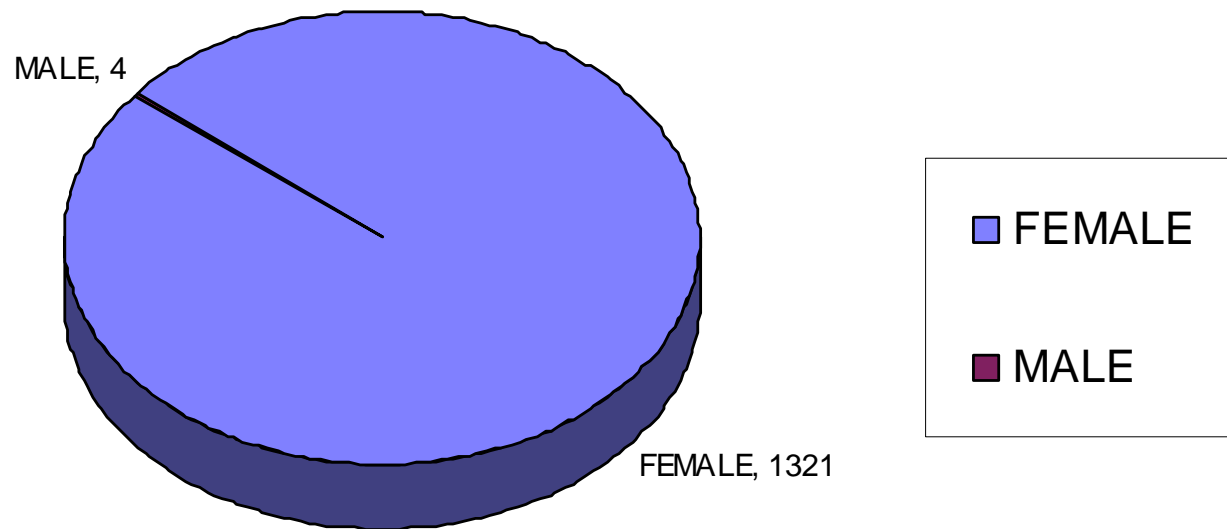
How Many Patients Have Breast Cancer?

**2005-2009 NORTH MEMORIAL BREAST CANCER CASES
BY YEAR ACCESSIONED, N= 1325**



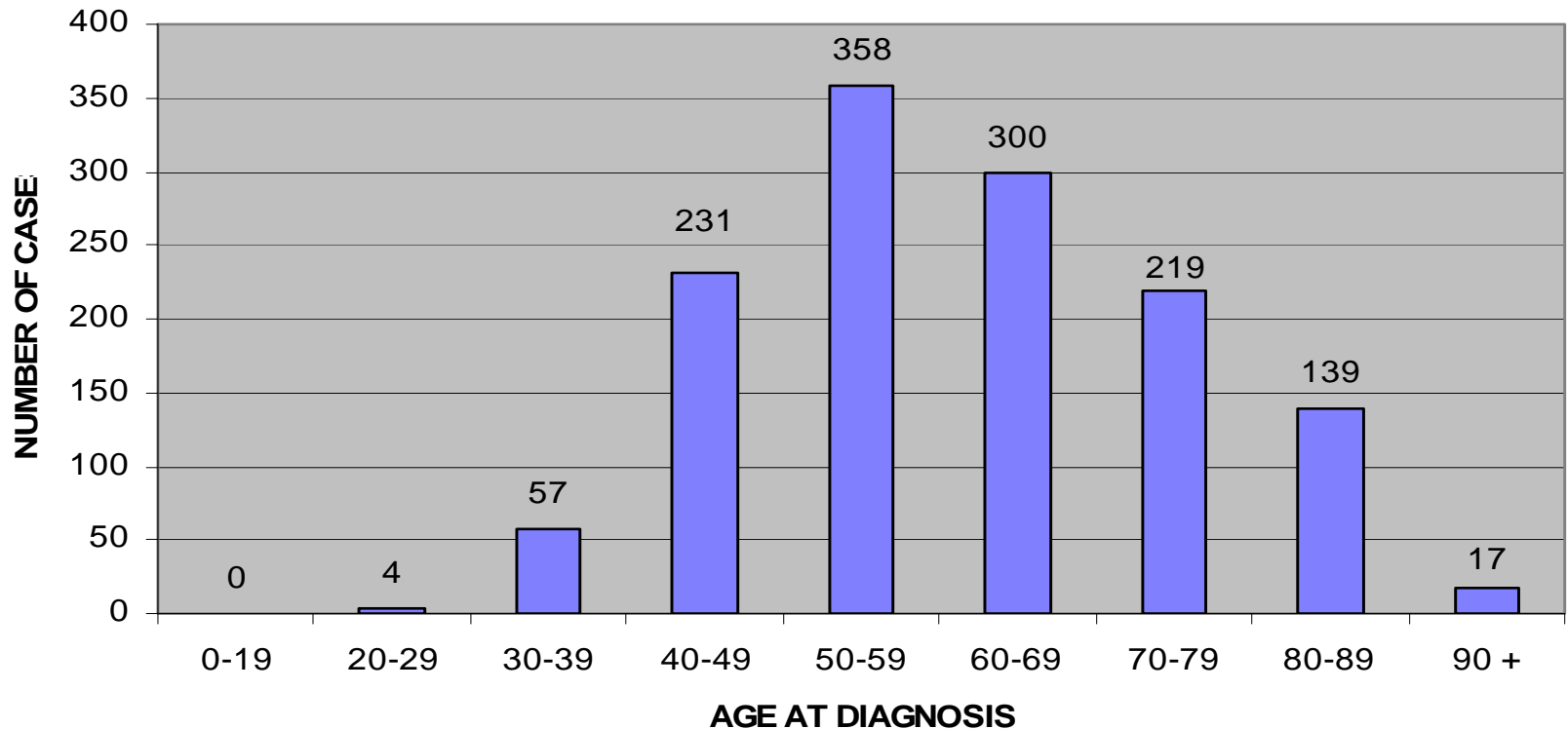
How Many Males/Females Have Breast Cancer at NM?

2005-2009 NORTH MEMORIAL BREAST CANCER CASES BY GENDER N=1325



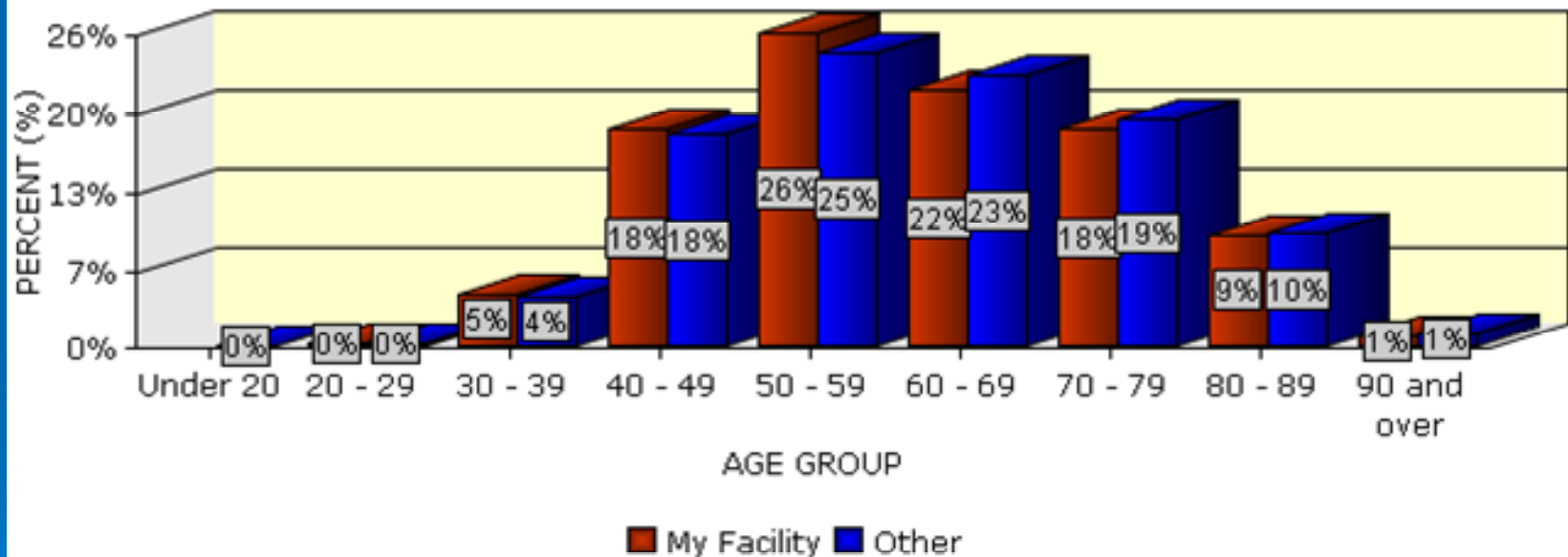
What Is The Age Range of Pts With Breast Cancer at NM?

**2005-2009 NORTH MEMORIAL BREAST CANCER CASES
AGE AT DIAGNOSIS N=1325**



National Cancer Data Base Comparison for Age at Diagnosis

Age Group of Breast Cancer Diagnosed in 2000 to 2008
North Memorial Health Care, Robbinsdale MN
vs. Comprehensive Hospitals in All States
All Diagnosed Cases



	Under 20	20 - 29	30 - 39	40 - 49	50 - 59	60 - 69	70 - 79	80 - 89	90 and over
My Facility		0%	5%	18%	26%	22%	18%	9%	1%
Other	0%	0%	4%	18%	25%	23%	19%	10%	1%

Pathology of Breast Cancer 2005-2009

The following Categories are based off of the NCDB

- Category 1: Invasive Ductal Carcinoma
 - Invasive Ductal (782)
 - Paget's w/Invasive Ductal (3)

- Category 2: Invasive Lobular Carcinoma
 - Invasive Lobular (89)
 - Invasive Lobular w/other types of carcinoma (9)

- Category 3: Invasive Ductal & Lobular Carcinoma (93)

Groups of Breast Cancer 2005-2009(continued)

- Category 4: Invasive Duct Mixed w/other Types of Carcinoma (23)

- Category 5: Carcinoma In Situ (257)
 - DCIS 236 of these
 - LCIS 21 of these

- Category 6: Others Specified Types (69)
 - Pleomorphic, Pseudosarcomatous, Tubular Adenocarcinoma, Mucinous Adenocarcinoma, Medullary, Metaplastic, Carcinoma NOS

Histology of Breast Cancer Diagnosed in 2000 to 2008

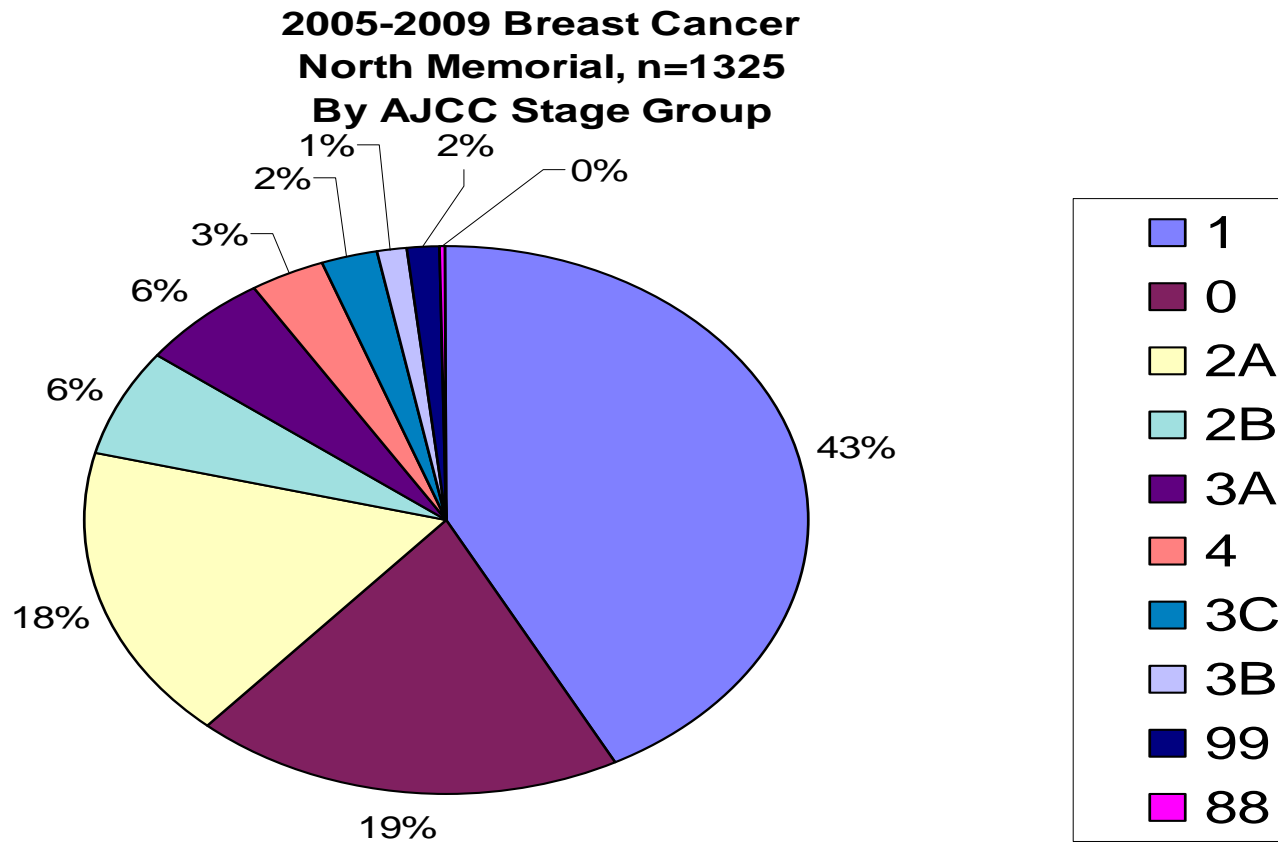
North Memorial Health Care, Robbinsdale MN

vs. Comprehensive Hospitals in All States

All Diagnosed Cases

#	<i>Histology</i>	My (N)	Oth. (N)	My (%)	Oth. (%)
1.	Infiltrating Duct Carcinoma	1552	590963	62.58%	67.34%
2.	Lobular Carcinoma, NOS	206	80520	8.31%	9.17%
3.	Infiltrating Duct and Lobular Carcinoma	156	48521	6.29%	5.53%
4.	Infiltrating Duct Mixed with Other Types of Carcinoma	156	36599	6.29%	4.17%
5.	Other Specified Types	410	121001	16.53%	13.79%
Col. TOTAL		2480	877604	100%	100%

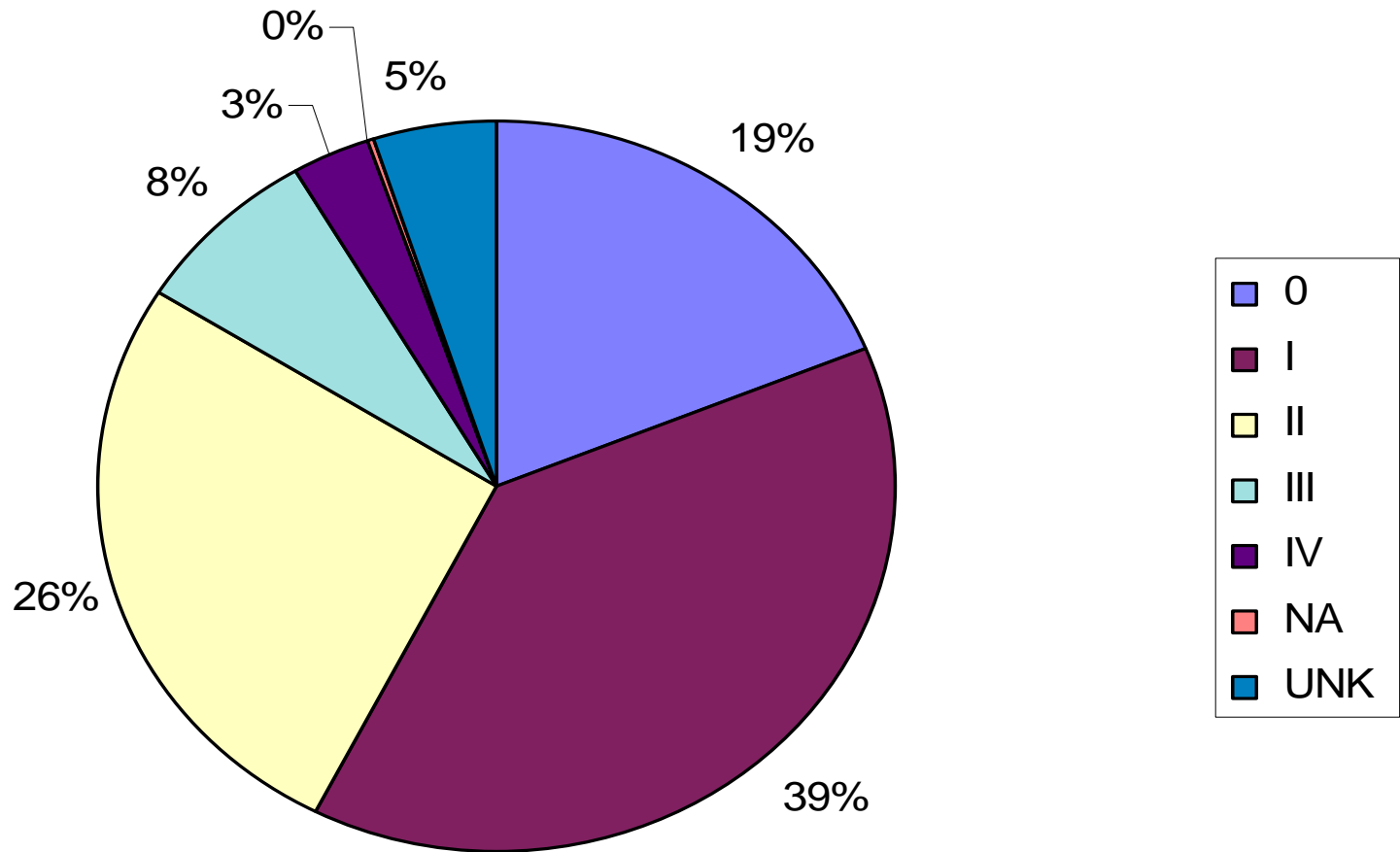
Breast Pathologic AJCC Staging Breakdown



****NOTE: UNKNOWN STAGE: UNSTAGEABLE DUE TO OTHER CONTRAINDICATIONS**

Stage of Breast Cancer Diagnosed in 2000 to 2008

National Cancer Data Base/CoC, All other Comprehensive Hospitals



Breast Cancer Biopsies and Surgical Procedures of Inv. Ductal and Inv. Lobular Carcinoma

- 565 Lumpectomy or Excisional biopsy
- 296 Simple Mastectomy
- 196 Modified Radical Mastectomy
- 66 Reexcision of the biopsy site
- 20 No Surgery
- 1 Subcutaneous Mastectomy (nipple sparing mastectomy)

Breast Cancer Surgery with Sentinel Lymph Node Biopsy and Regional Lymph Node Dissection, Inv. Ductal & Inv. Lobular Carcinoma

- **331** Patients had a Sentinel Lymph Node Biopsy
- **278** Patients had a SLN biopsy and Regional lymph nodes removed at same time or timing not stated
- **231** Patients had 4 or more Regional Lymph Nodes removed (The procedure is not specified as a SLN Biopsy)
- **117** Patients had 1-3 Regional Lymph Nodes removed (The procedure is not specified as a SLN Biopsy)
- **64** Patients had No Lymph Nodes biopsied or dissected
- **9** Patients had SLN Biopsy and Regional lymph nodes removed at different times
- **3** Patients-Unknown if LN Biopsy or Dissection done

Patients with Lumpectomy and Radiation Treatment 2005-2009 Patients

- **510** Received Radiation
- **110** Radiation not recommended
 - 55 Stage I
 - 37 Stage 0
 - 11 Stage 2A
 - 2 Stage 2B
 - 1 Stage 4
 - 1 Stage 3B
 - 1 Stage 3C
 - 2 Unknown Stage
- **36** Patients Refused Radiation
- **26** No Radiation due to other comorbidity
- **7** Unknown if Radiation was recommended

Patients with Mastectomy n=599 and Radiation treatment 2005-2009

- 422 No radiation recommended
- 141 Radiation received
 - 21 Patients refused radiation
 - 12 No radiation due to other comorbidities
 - 3 Unknown if radiation done

Breast Cancer Treatment

n= 1325, Radiation Treatment

- 647 patients received Radiation
- 604 patients: radiation therapy was not administered because it was not part of the planned first course treatment
- 44 patients: radiation was recommended but patient refused
- 19 patients: radiation not recommended due to contraindications to other patient risk factors
- 8 patients: It is unknown if radiation therapy was recommended or administered. Death certificate and autopsy cases only.
- 2 patients: radiation was recommended but was not administered as part of first course treatment. No reason was noted in patient's record.
- 1 patient: radiation was recommended but it is unknown whether it was administered

Radiation Treatment Location

- 477 patients that did receive radiation received it at North Memorial
- 163 patients received their radiation treatment elsewhere
- 5 patients had radiation, location unknown, not in patients EMR
- 1 patient received the regional treatment at North Memorial and boost elsewhere

Breast Cancer Treatment Chemotherapy, n=1325

- 790 patients: chemo not recommended
- 448 patients: received chemotherapy
- 66 patients: refused recommended chemo
- 12 patients: no chemo due to other contraindications
- 8 patients: unknown if chemo recommended or given, not able to track down in patients EMR
- 1 patient: chemo recommended unknown if done, pt not traceable

Breast Cancer Treatment Hormone Therapy, n=1325

- 707 patients: hormone therapy given
- 478 patients: hormone therapy not recommended
- 88 patients: refused hormone treatment
- 18 patients: hormone therapy not recommended due to contraindications
- 11 patients: chemo recommended, unknown if done, not stated in patient chart
- 23 patients: reason unknown for no hormone treatment

Breast Cancer Treatment (continued)

- Reasons for NO Treatment include:
 - Patient or guardian refused treatment
 - Pt Expired before treatment
 - Hospice was decided on
 - No treatment due to other medical conditions
 - No treatment due to age
 - No treatment, not specified as to why

Systemic Therapy of Breast Cancer Diagnosed in 2000 to 2008

North Memorial Health Care, Robbinsdale MN

vs. Comprehensive Hospitals in All States

All Diagnosed Cases

#	Systemic Therapy	My (N)	Oth. (N)	My (%)	Oth. (%)
1.	No Systemic Therapy	777	351219	31.33%	40.02%
2.	Chemotherapy Alone	371	171509	14.96%	19.54%
3.	Hormone Therapy Alone	834	221513	33.63%	25.24%
4.	Immunotherapy Alone	2	236	0.08%	0.03%
5.	Endocrine Surgery or Radiation	.	337	.	0.04%
6.	Chemotherapy and Hormone Therapy	472	108529	19.03%	12.37%
7.	Chemotherapy and Immunotherapy	12	2554	0.48%	0.29%
8.	Hormone Therapy and Immunotherapy	1	119	0.04%	0.01%
9.	Systemic Therapy, NOS	11	21498	0.44%	2.45%
10.	Unknown if Systemic Therapy Administered	.	90	.	0.01%
Col. TOTAL		2480	877604	100%	100%

Radiation Therapy of Breast Cancer Diagnosed in 2000 to 2008

North Memorial Health Care, Robbinsdale MN

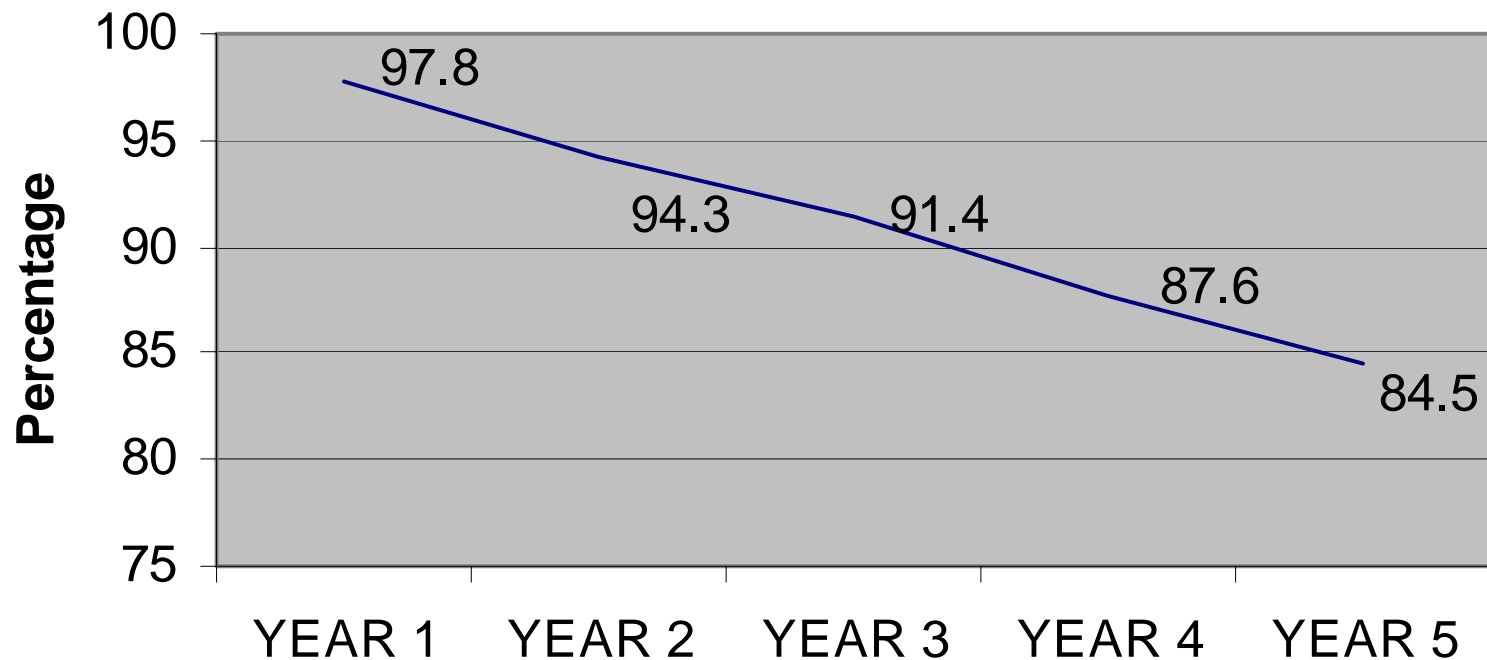
vs. Comprehensive Hospitals in All States

All Diagnosed Cases

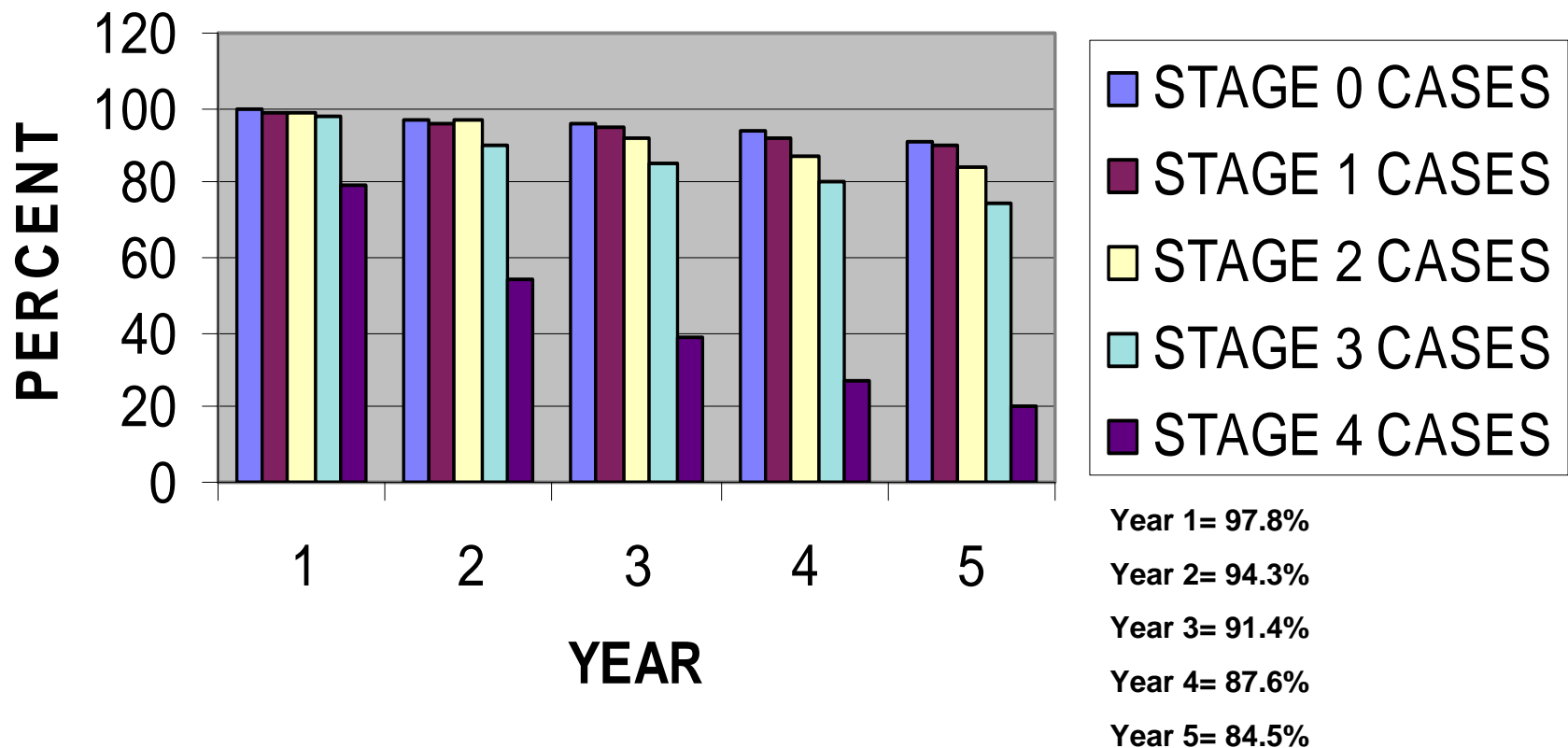
#	<i>Radiation Therapy</i>	My (N)	Oth. (N)	My (%)	Oth. (%)
1.	No Radiation Treatment	1219	444241	49.15%	50.62%
2.	Beam Radiation	1253	403135	50.52%	45.94%
3.	Brachytherapy	.	19662	.	2.24%
4.	Radiation Therapy, NOS	.	3764	.	0.43%
5.	Unknown if Radiation Therapy Recommended or Administered	8	6802	0.32%	0.78%
Col. TOTAL		2480	877604	100%	100%

North Memorial Breast 5-Yr Survival Rate 2002-2006

**North Memorial Breast Cancer Survival,
2002-2006, 5 Years, n=1361**



BREAST CANCER 5 YR SURVIVAL BY AJCC STAGE, NORTH MEMORIAL 2002-2006 (n=1361)

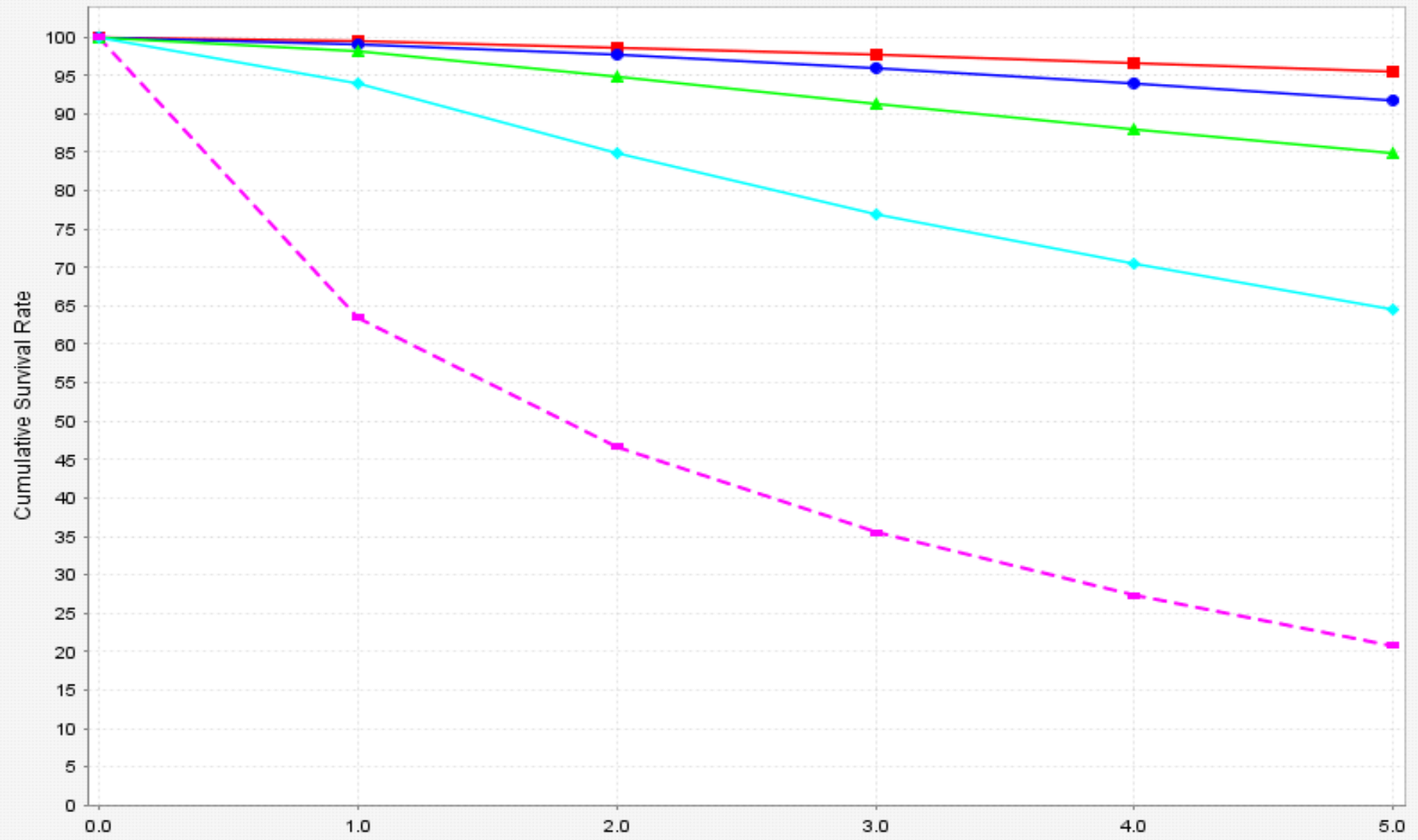


Observed Survival For Breast 'C500','C501','C502','C503','C504','C505','C506','C508','C509'

Cases Diagnosed in 2003

Data from 1327 Programs [National]

WARNING: The information within this graphic is not to be used for clinical decision making.



Years from Diagnosis

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- Stage 0
- Stage I
- Stage II
- Stage III
- Stage IV

Data Table of Observed Survival for Breast 'C500','C501','C502','C503','C504','C505','C506','C50

Stage of Disease	ENTER	0.0 yr	1.0 yr	2.0 yr	3.0 yr	4.0 yr	5.0 yr	95% CI
Stage 0	24816	100.0	99.4	98.6	97.6	96.7	95.4	95.1 - 95.7
Stage I	50645	100.0	99.0	97.7	96.0	94.0	91.8	91.5 - 92
Stage II	36758	100.0	98.1	94.8	91.3	88.0	84.8	84.4 - 85.2
Stage III	13831	100.0	94.0	84.9	76.9	70.4	64.5	63.7 - 65.4
Stage IV	4661	100.0	63.5	46.7	35.5	27.3	20.8	19.6 - 22

Breast Cancer Survival Rates

- North Memorial's 5-year survival rates for patients with breast cancer correlate to national rates



Conclusions

➤ Dr. Schlafmann: Pathology

Breast cancer cases were categorized into six major histologic groups: invasive ductal, invasive lobular, invasive mixed ductal and lobular, invasive ductal mixed with other types, carcinoma in situ and other. The "other" category included breast cancer cases that were specific types that did not meet the criteria for ductal or lobular carcinoma. The invasive ductal mixed with other types category included cases of ductal carcinoma mixed with some of the specific types in the "other" category. The number of cases in each of the major histologic groups (invasive ductal, invasive lobular, invasive mixed ductal and lobular and invasive ductal with other types of carcinoma) reflected the NCDB data very closely.

Conclusion

- Dr. Schlaefer: Surgeon

56% of the patients with Invasive Lobular or Invasive Ductal carcinoma had a Lumpectomy

44% of the patients with these carcinomas had a Mastectomy

These both follow closely with the national comparisons