

Horizon Healthcare Services, Inc.

Transforming Care in New Jersey



Establish transformative patient-centered partnerships based on quality not volume of services.



Reduce variation in care to eliminate waste and inefficiencies.



Align financial incentives by emphasizing safety and quality outcomes.



Restore physician leadership and decision making to improve the patient relationship and increase administrative efficiency.



Promotes access to high-quality, affordable health care while improving the patient experience.

Episodes of Care – Patient-Centered Care Delivery



Payer

Payer pays a single price for:

- All clinical services (office visits, inpatient, Rx, diagnostics).
- One bundle for a discrete diagnostic condition.
- From the onset of symptoms until treatment is complete.



Patient

Member benefits from:

- Improved safety as a result of tracking treatment and quality measurement.
- Easy navigation through complex system of care.
- Enhanced relationship with oncologist.
- A superior member experience.



Physician

Physician assumes a leadership role for safety and quality outcomes, including:

- Overall survival.
- Disease-free progression.
- Appropriate treatment (e.g. Rx efficacy and safety).
- Functional status.



CANCER OUTCOME TRACKING & ANALYSIS

"A Learning Health care Information Technology System for Cancer"

"The committee's conceptual framework for a high-quality cancer care delivery system calls for implementation of a learning health care IT system: a system that "learns" by collecting data on care outcomes and cost in a systematic manner, analyzing the captured data both retrospectively and through prospective studies, implementing the knowledge gained from these analyses into clinical practice, evaluating the outcomes of the changes in care, and generating new hypotheses to test and implement into clinical care. A learning health care IT system is a key requirement for implementing the components of the committee's conceptual framework for high-quality cancer care. In the committee's conceptual framework (see Figure S-2), a learning health care IT system supports patient-clinician interactions by providing patients and clinicians with the information and tools necessary to make well-informed medical decisions."

Institute of Medicine Sept 2013

ONCOLOGY BUNDLED REIMBURSEMENT

- ▶ A common sorting language (patient specific disease characterization to the highest level of relevant clinical/ molecular phenotype) to allow for meaningful comparisons of clinical and cost outcomes and for common bundle inclusion criteria.
- ▶ Bundled reimbursement must be accompanied by transparent real time outcome reporting to ensure that expected clinical outcomes are not compromised.
- ▶ Bundled reimbursement must reward better clinical and cost outcomes, not just cost and be associated with financial risk.
- ▶ Bundled reimbursement must be enabled for all existing and future EHR.
- ▶ Bundled reimbursement should be tied to attaining or exceeding an expected clinical outcome and not compliance to a specific therapy pathway.

COTA (Cancer Outcome Tracking and Analysis) enables you to improve cancer care outcomes, control cost and go “at-risk?”

COTA Sorting

- Sort patients at time of diagnosis to the highest level of clinical/ molecular fidelity

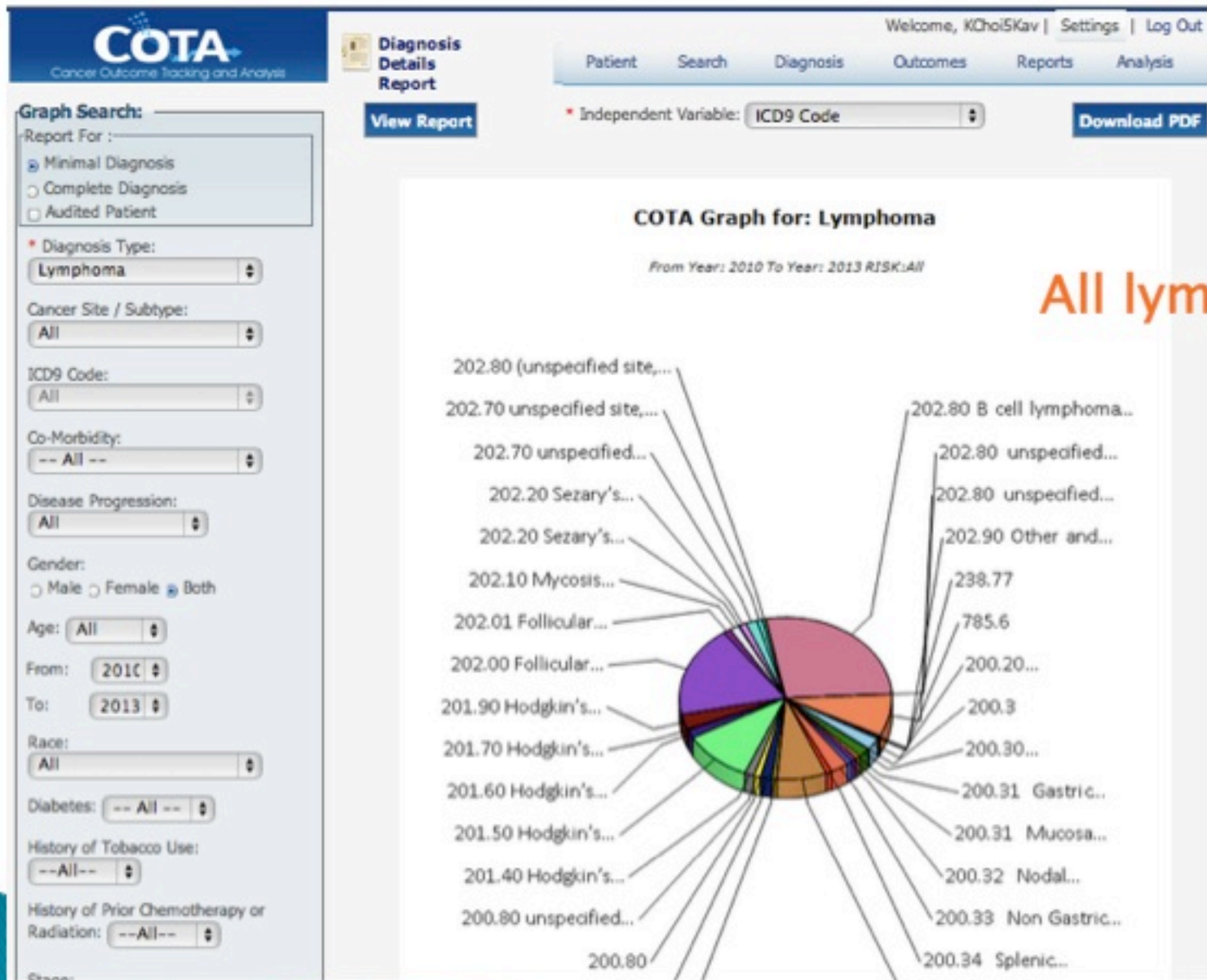
COTA Outcome Tracking & Analysis

- Track outcomes in real time
 - Overall survival (OS)
 - Progression free survival (PFS)
 - Response Rates
 - Toxicity
 - Drug Utilization (dose and dose intensity)
 - Cost

COTA Alerts

- Alert physicians in real-time at key points
 - At diagnosis
 - At progression
 - At dose change/ drug change/ toxicity
 - Trending towards variance from desired outcome

Instant access to incidence of disease by cancer



COTA has all important variables you need to consider for a particular cancer

The screenshot displays the COTA (Cancer Outcome Tracking and Analysis) web application. The main interface includes a navigation bar with the COTA logo and a 'Diagnosis Details Report' section. A 'Graph Search' sidebar on the left contains various filters: 'Report For' (Minimal Diagnosis selected), 'Diagnosis Type' (Lymphoma), 'Cancer Site / Subtype' (Hodgkin's Lymphoma), 'ICD9 Code' (All), 'Co-Morbidity' (All), 'Disease Progression' (All), 'Gender' (Both), 'Age' (All), 'From' (2010), 'To' (2013), 'Race' (All), and 'Diabetes' (All). A 'View Report' button is visible. A dropdown menu is open, listing numerous variables, with 'IPI Score' highlighted. An orange arrow points from the text 'All clinical and molecular variables pertinent for lymphoma' to the dropdown menu.

All clinical and molecular variables pertinent for lymphoma

- Select--
- ICD9 Code
- Co-Morbidity
- Disease Progression
- Gender
- Age
- Race
- Diabetes
- Tobacco History
- Chemo / Radiation History
- Stage
- Histology
- IPI Score**
- FLIPI Score
- MIPI Score
- Subtype
- IPSS Risk
- RISK
- Ki-67
- HIV
- Beta 2 Microglobulin
- ZAP 70
- IgVH Mutation
- p53 Deletion
- ALK
- BCR-ABL
- TCL1
- Bulky
- Small Cell Variant
- B Cell
- CD30 Positive
- Double Hit 14;18 with C-MYC translocation
- C-MYC
- EBV
- Anaplastic (CD30+)
- B-Symptoms present
- Grade
- B Symptoms
- Hasenclever Prognostic Score
- Sub Type (value Diff)
- t (4;11)
- CNS involvement at diagnosis
- Primary extranasal location
- Sub Type Aggressive NK Leukemia

COTA: Outcomes Tracking

1. Type of Therapy

- Anti-neoplastic drugs
- Cellular Therapy
- Radiation Therapy
- Surgery

2. Best Response (Time to TO)

- Stable
- PR
- CR w/ residual abn, but PET neg
- CR

3. Survival

- OS
- PFS

4. Dose Intensity Delivered

- Regimen
- Component

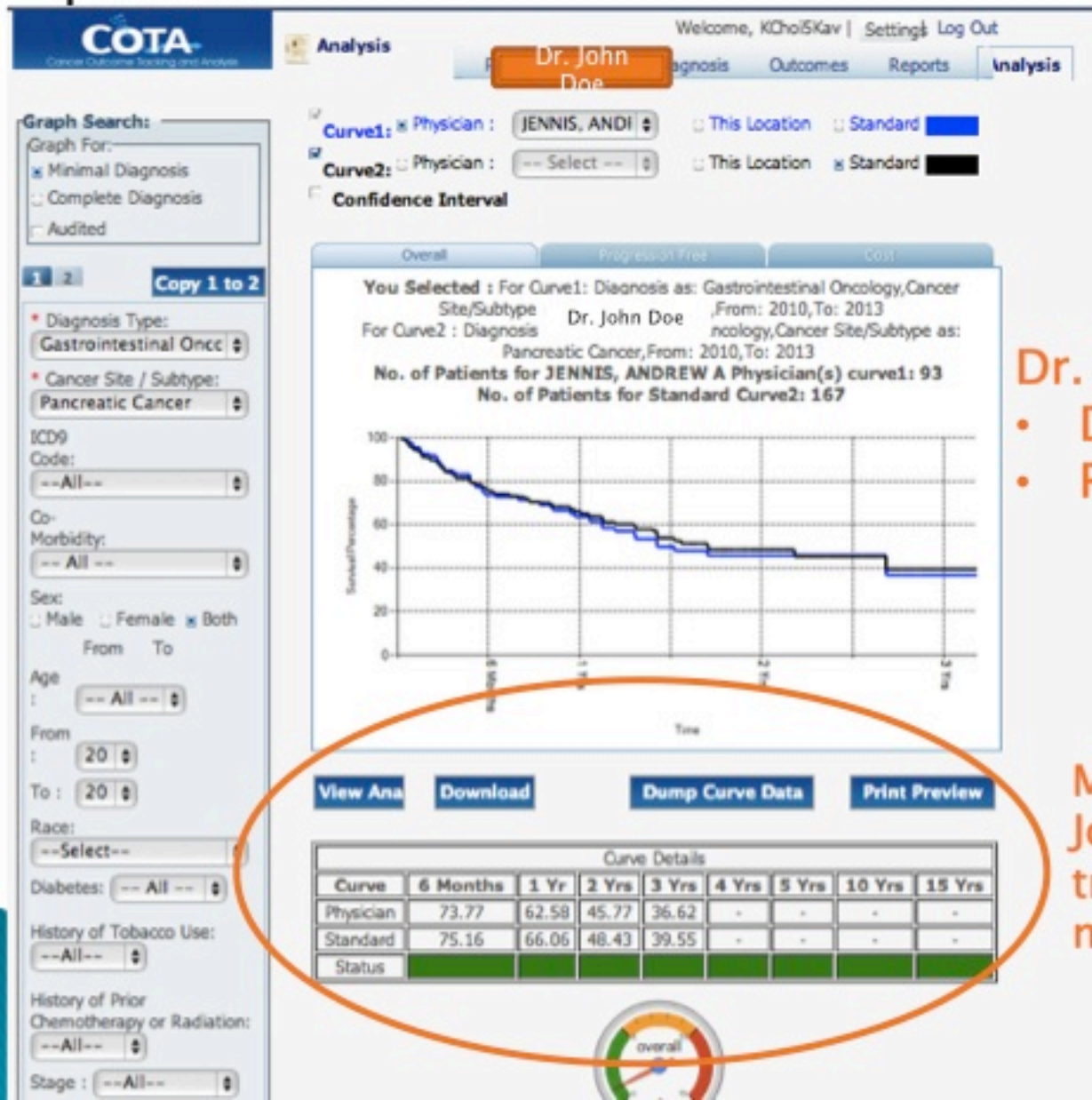
5. Toxicity

- Incidence
- Severity

6. ECOG Performance

7. Cost

Real-time benchmarking of outcomes between 2 parties



Dr. John Doe v. the rest

- Dr. John Doe (blue)
- Rest of institution (black)

Meter measures whether Dr. John Doe's outcomes are tracking positively or negatively



Sort:

Report For:

- Minimal Diagnosis
- Complete Diagnosis
- Audited Patient

* Diagnosis Type:

Thoracic Oncology

Cancer Site / Subtype:

Lung Cancer

ICD9 Code:

All

Co-Morbidity:

All

Disease Progression:

All

Gender:

- Male
- Female
- Both

Age:

All

Initial Visit Date

Pathologic Diagnosis Date

From : 2008

To : 2013

View Report

* Independent Variable: Cost

Download PDF

Physician : -- Select -- This Location Standard

Disease Progression : P0 P1 P2 P3 P4+

Regimen A <= \$10,000



Regimen B > \$10,000

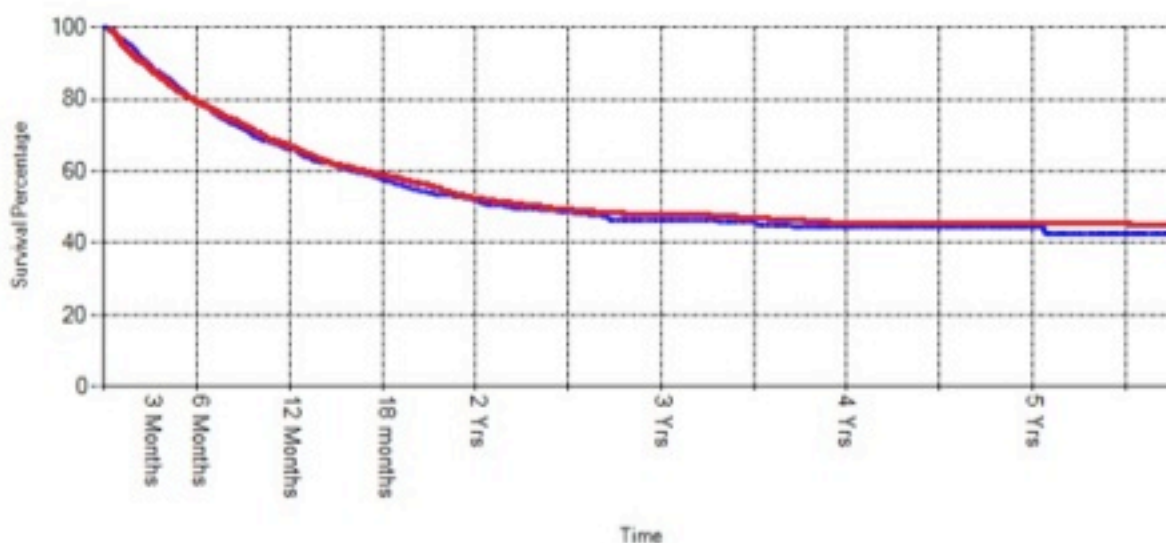


COTA Reports: Outcomes v. Cost

Overall

Progression Free

Cost



View Analysis

Download PDF

Download Curve Data

Print Preview



Sort:

Report For:

- Minimal Diagnosis
- Complete Diagnosis
- Audited Patient

* Diagnosis Type:

Thoracic Oncology

Cancer Site / Subtype:

Lung Cancer

ICD9 Code:

All

Co-Morbidity:

All

Disease Progression:

All

Gender:

Male Female Both

Age: All

Initial Visit Date
 Pathologic Diagnosis Date

From: 2008

To: 2013

View Report

* Independent Variable: Dose Intensity

Download PDF

Physician: -- Select -- This Location Standard

Disease Progression: P0 P1 P2 P3 P4+

Dose Intensity 100%



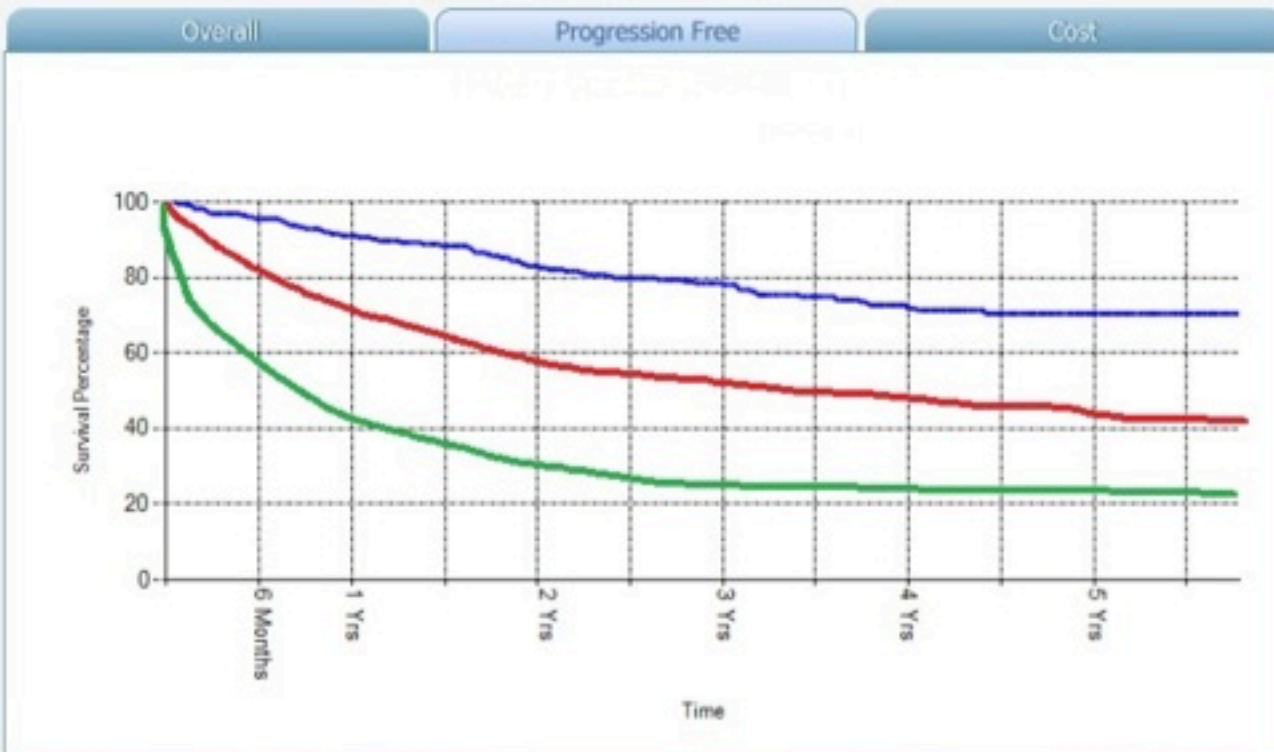
Dose Intensity 75% - 99%



Dose Intensity 25% - 74%



COTA Reports: Outcomes v. Dose Intensity



View Analysis

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Download Curve Data

Print Preview



Sort:

Report For:

- Minimal Diagnosis
- Complete Diagnosis
- Audited Patient

* Diagnosis Type:

Thoracic Oncology

Cancer Site / Subtype:

Lung Cancer

ICD9 Code:

All

Co-Morbidity:

All

Disease Progression:

All

Gender:

Male Female Both

Age: All

Initial Visit Date
 Pathologic Diagnosis Date

From : 2008

To : 2013

View Report

* Independent Variable: Toxicity

Download PDF

Physician : -- Select -- This Location Standard

Disease Progression : P0 P1 P2 P3 P4+

No Grade 3 Toxicity Incidence █
Grade 3 Toxicity Incidence █

COTA Reports: Outcomes v. Toxicity



View Analysis

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Print Preview

Physicians will get alerted based on their preferences



Triggers for COTA Alerts

At new patient diagnosis

Toxicity, Dose intensity change

At disease progression

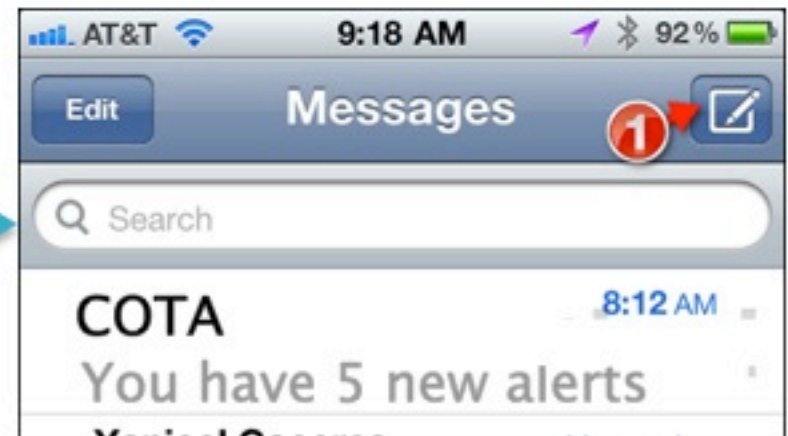
Trending towards variance from desired outcome

Prospective time or cycle dependent alerts:

- *Side effect alerts*
- *Diagnostic test reminders*

Text

Email



RCCA BREAST CANCER ADJUVANT THERAPY BUNDLES

III Anthracycline Chemotherapy Bundle

- ER positive/Her2 negative/<5mm, node negative/extensive lymphovascular invasion
ER positive/Her2 negative/5mm-5cm/ node negative/Oncotype 11-25
ER positive/Her2 negative/5mm-5cm/ node negative/Oncotype>26
 - Age<70/ PS 0-2
- ER positive/Her2 negative/5mm-5cm/node negative/Oncotype>26
 - Age≥70/ PS 0-2,
- ER positive/Her2 negative/>5cm/ node negative/Age<70/ PS 0-2
ER positive/Her2 negative/>5cm/node negative/Age≥70/PS 0-2
- ER positive/Her2 negative/<5mm/ 1-3 node positive MICROMETS
ER positive/Her2 negative/5mm-5cm/ 1-3 node positive MICROMETS/ Oncotype 11-25
- ER positive/Her2 negative/5mm-5cm/ 1-3 node positive MICROMETS/ Oncotype>26/Age<70/PS 0-2
- ER positive/Her2 negative/5mm-5cm, 1-3 node positive MICROMETS/Oncotype>26/Age≥70/PS 0-2
- ER positive/Her2 negative/>5cm/ 1-3 node positive MICROMETS/ Age<70/ PS 0-2
- ER positive/Her2 negative/>5cm, 1-3 node positive MICROMETS/Age≥70/ PS 0-2
ER positive/Her2 negative/<5mm, 1-3 node positive MACROMETS
ER positive/Her2 negative/5mm-5cm/ 1-3 node positive MACROMETS/Oncotype<11
ER positive/Her2 negative/5mm-5cm/ 1-3 node positive MACROMETS/Oncotype 11-25
ER positive/Her2 negative/5mm-5cm/ 1-3 node positive MACROMETS/Oncotype>26/Age<70/ PS 0-2

III Anthracycline Chemotherapy Bundle

YEAR 1

•**Consult:** Level 5 visit (#1)

•**Chemotherapy Regimen:**

A. Adriamycin, Cytoxan (x4 Q 2 wks), Taxol (x4 Q 2 wks) –Dose Dense (**A**)

a. Drugs: (Pass through)

i. Adriamycin (J9181) (#4)

b. Administration:

i. IV push (96375) (#28)

c. Visits: Level 5 (99215) (#8), Level 4 (#3)

d. Labs: CBC (#12), Chem (#4), Vitamin D (#3), PT/PTT (#1), CA 27-29 (#3)

B. Adriamycin, Cytoxan (x4 Q 2 wks), Taxol (x 12 Q wk) –Dose Dense (**B**)

a. Drugs: (Pass through)

b. Administration:

c. Visits: Level 5 (99215) (#16), Level 4 (#2)

d. Labs: CBC (#19), Chem (#4), Vitamin D (#3), PT/PTT (#1), CA 27-29 (#3)

C. Adriamycin, Cytoxan Taxotere (TAC) (x6 Q 3wks)

a. Drugs: (Pass through)

b. Administration:

i. IV push (96375) (#60)

c. Visits: Level 5 (99215) (#6), Level 4 (#3)

d. Labs: CBC (#111), Chem (#4), Vitamin D (#3), PT/PTT (#1), CA 27-29 (#3)

•**Imaging:** RCCA guidelines (pass through)

A. Bone Density (#1)

B. Mammography (#2)

C. Full body PET/CT (#1) (T3N1, T4, N2, N3)

•**Cardiac Function:** ECHO/MUGA (#1)

•**Radiation** (pass through)

A. Lumpectomy (breast)

B. 1-3 nodes with extra nodal extension (axilla)

C. 4 or more lymph node involvement (axilla)

D. Inflammatory (breast and axilla)