IBM Watson Oncology

Built with Memorial Sloan Kettering

Jane Smith

Patient

Jane Smith is a 65 year old woman who has been diagnosed with stage IA breast cancer.

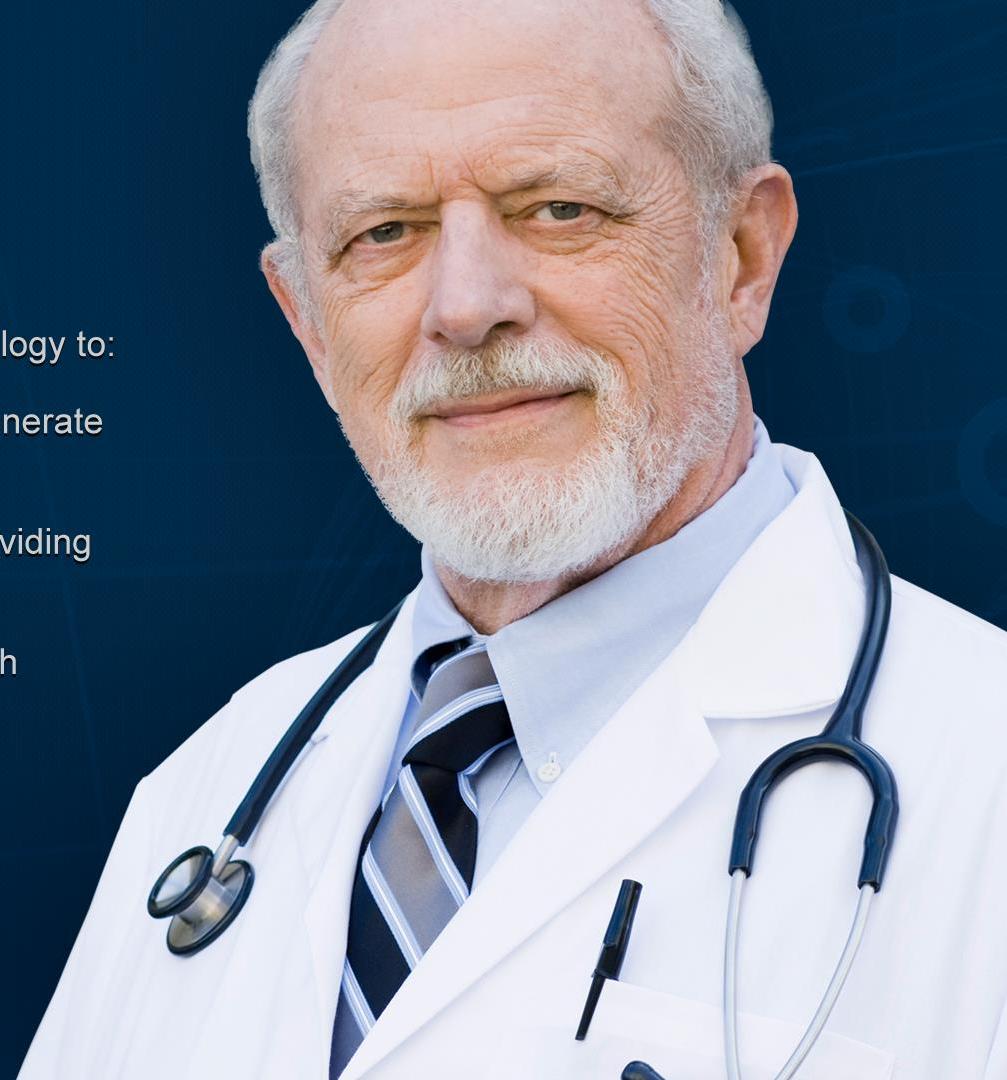
She has an appointment with Dr. Stone to determine her treatment options.

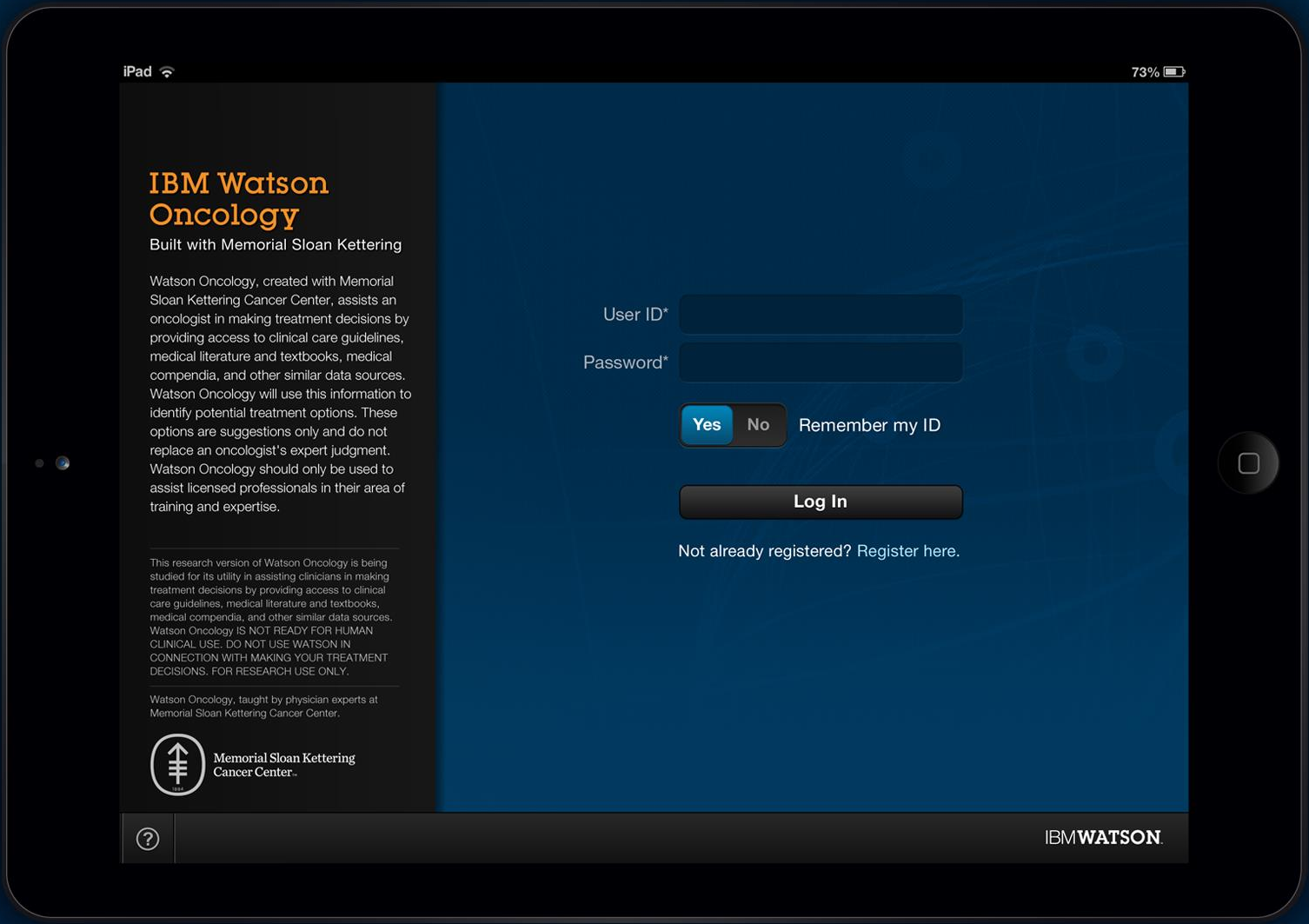
Dr. Dave Stone

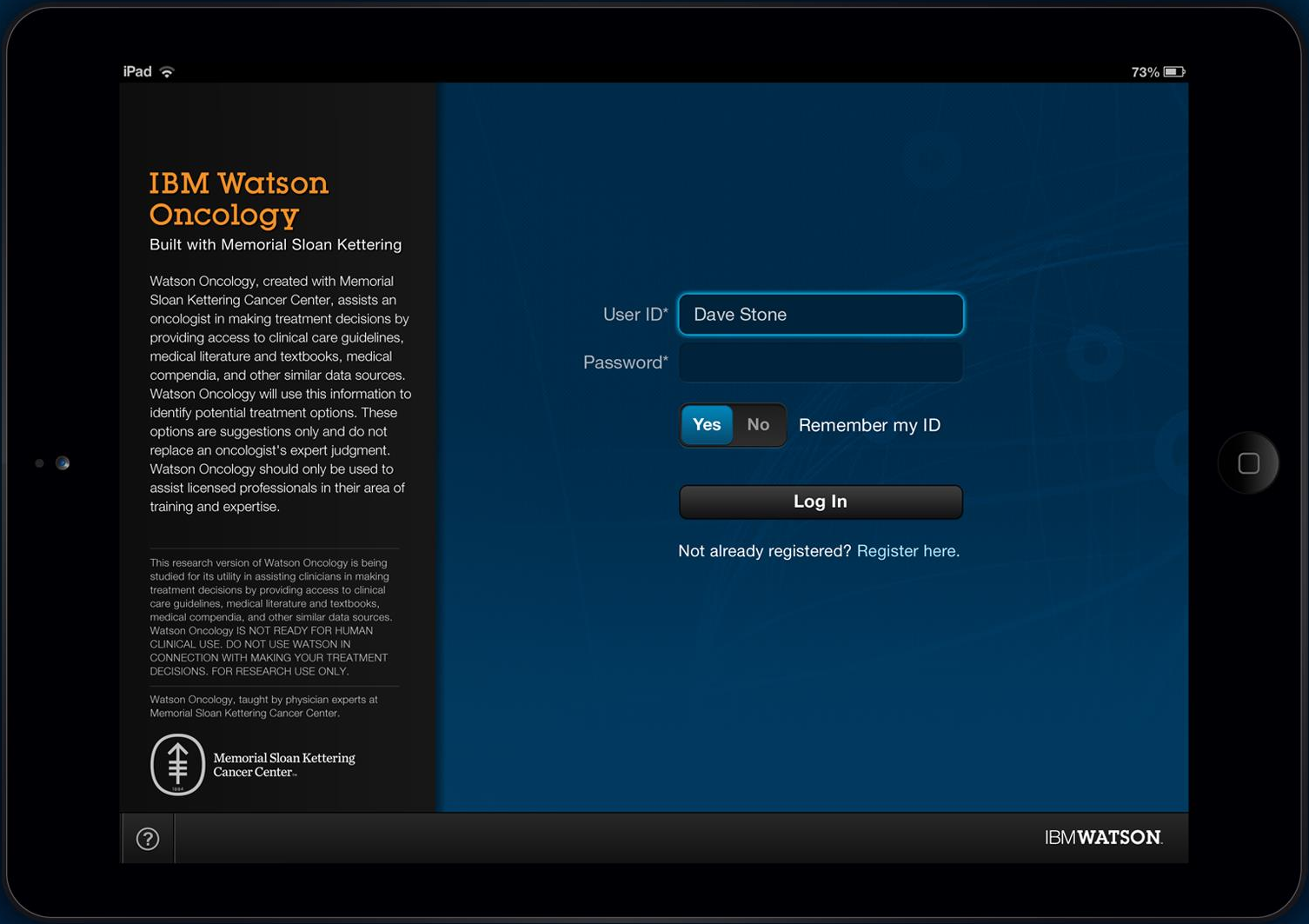
Medical Oncologist

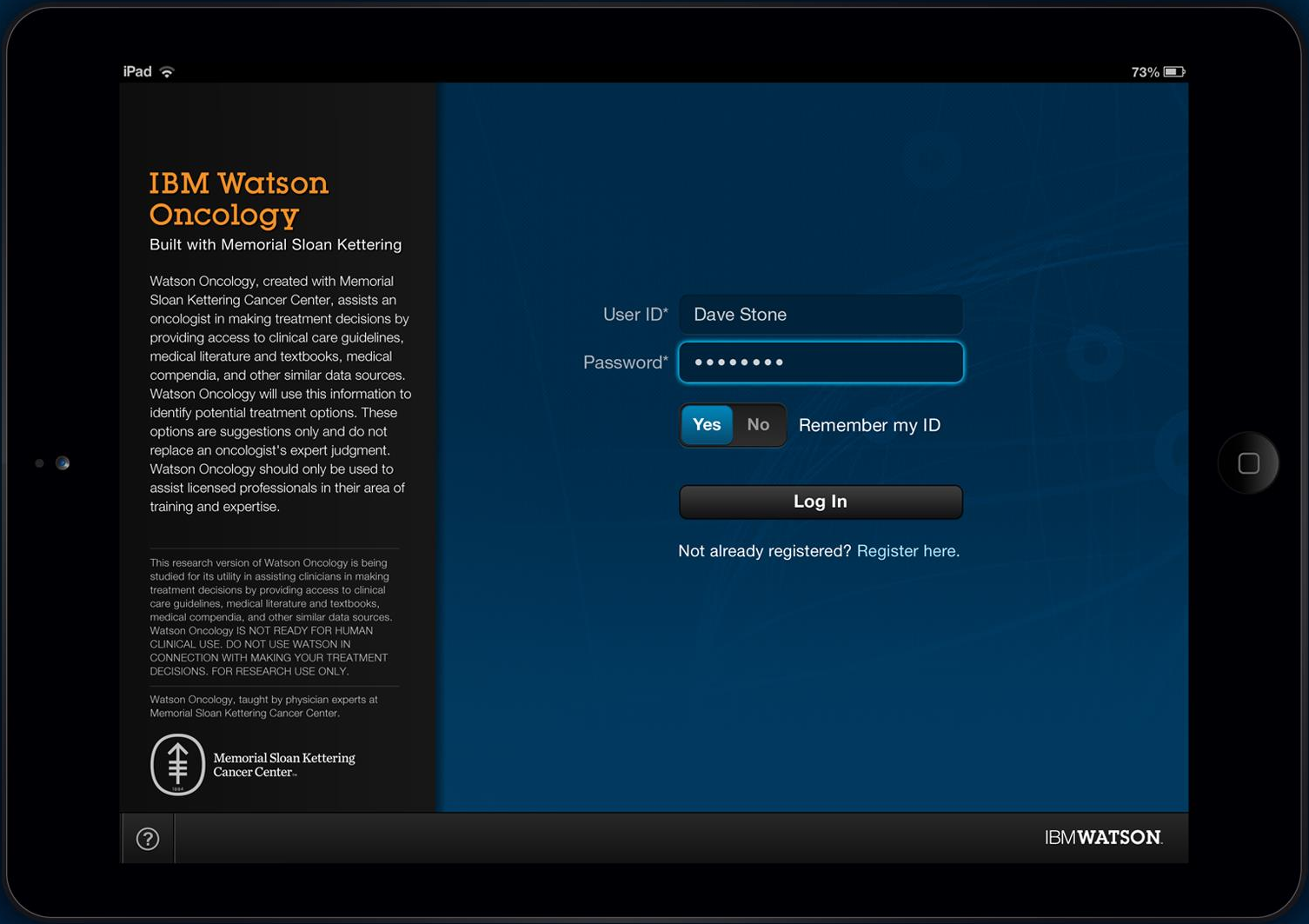
Dr. Dave Stone uses IBM Watson Oncology to:

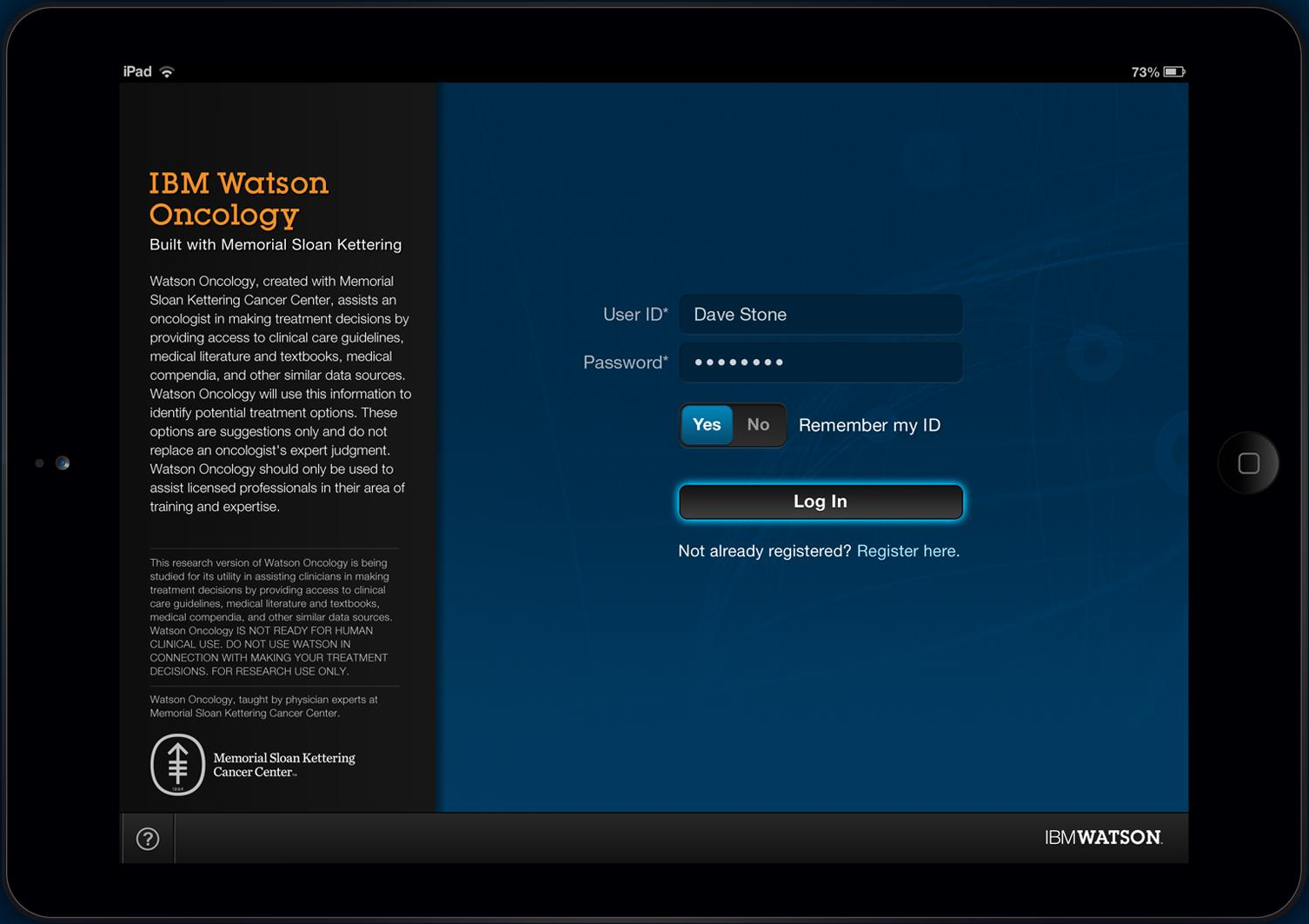
- Understand Mrs. Smith's case and generate a preliminary view of treatment plans
- Refine the treatment options after providing additional information
- Select a treatment option together with Mrs. Smith




iPad
73%
IBM Watson Oncology
Built with Memorial Sloan Kettering
Watson Oncology, created with Memorial Sloan Kettering Cancer Center, assists an oncologist in making treatment decisions by providing access to clinical care guidelines, medical literature and textbooks, medical compendia, and other similar data sources. Watson Oncology will use this information to identify potential treatment options. These options are suggestions only and do not replace an oncologist's expert judgment. Watson Oncology should only be used to assist licensed professionals in their area of training and expertise.
This research version of Watson Oncology is being studied for its utility in assisting clinicians in making treatment decisions by providing access to clinical care guidelines, medical literature and textbooks, medical compendia, and other similar data sources. Watson Oncology IS NOT READY FOR HUMAN CLINICAL USE. DO NOT USE WATSON IN CONNECTION WITH MAKING YOUR TREATMENT DECISIONS. FOR RESEARCH USE ONLY.
Watson Oncology, taught by physician experts at Memorial Sloan Kettering Cancer Center.
Memorial Sloan Kettering Cancer Center
User ID*
Password*
Yes
No
Remember my ID
Log In
Not already registered? Register here.
IBMWATSON.


iPad
73%
IBM Watson Oncology
Built with Memorial Sloan Kettering
Watson Oncology, created with Memorial Sloan Kettering Cancer Center, assists an oncologist in making treatment decisions by providing access to clinical care guidelines, medical literature and textbooks, medical compendia, and other similar data sources. Watson Oncology will use this information to identify potential treatment options. These options are suggestions only and do not replace an oncologist's expert judgment. Watson Oncology should only be used to assist licensed professionals in their area of training and expertise.
This research version of Watson Oncology is being studied for its utility in assisting clinicians in making treatment decisions by providing access to clinical care guidelines, medical literature and textbooks, medical compendia, and other similar data sources. Watson Oncology IS NOT READY FOR HUMAN CLINICAL USE. DO NOT USE WATSON IN CONNECTION WITH MAKING YOUR TREATMENT DECISIONS. FOR RESEARCH USE ONLY.
Watson Oncology, taught by physician experts at Memorial Sloan Kettering Cancer Center.
Memorial Sloan Kettering Cancer Center
User ID*
Dave Stone
Password*
Yes
No
Remember my ID
Log In
Not already registered? Register here.
IBMWATSON.


iPad
73%
IBM Watson Oncology
Built with Memorial Sloan Kettering
Watson Oncology, created with Memorial Sloan Kettering Cancer Center, assists an oncologist in making treatment decisions by providing access to clinical care guidelines, medical literature and textbooks, medical compendia, and other similar data sources. Watson Oncology will use this information to identify potential treatment options. These options are suggestions only and do not replace an oncologist's expert judgment. Watson Oncology should only be used to assist licensed professionals in their area of training and expertise.
This research version of Watson Oncology is being studied for its utility in assisting clinicians in making treatment decisions by providing access to clinical care guidelines, medical literature and textbooks, medical compendia, and other similar data sources. Watson Oncology IS NOT READY FOR HUMAN CLINICAL USE. DO NOT USE WATSON IN CONNECTION WITH MAKING YOUR TREATMENT DECISIONS. FOR RESEARCH USE ONLY.
Watson Oncology, taught by physician experts at Memorial Sloan Kettering Cancer Center.
Memorial Sloan Kettering Cancer Center
User ID*
Dave Stone
Password*
Yes
No
Remember my ID
Log In
Not already registered? Register here.
IBMWATSON.


iPad
73%
IBM Watson Oncology
Built with Memorial Sloan Kettering
Watson Oncology, created with Memorial Sloan Kettering Cancer Center, assists an oncologist in making treatment decisions by providing access to clinical care guidelines, medical literature and textbooks, medical compendia, and other similar data sources. Watson Oncology will use this information to identify potential treatment options. These options are suggestions only and do not replace an oncologist's expert judgment. Watson Oncology should only be used to assist licensed professionals in their area of training and expertise.
This research version of Watson Oncology is being studied for its utility in assisting clinicians in making treatment decisions by providing access to clinical care guidelines, medical literature and textbooks, medical compendia, and other similar data sources. Watson Oncology IS NOT READY FOR HUMAN CLINICAL USE. DO NOT USE WATSON IN CONNECTION WITH MAKING YOUR TREATMENT DECISIONS. FOR RESEARCH USE ONLY.
Watson Oncology, taught by physician experts at Memorial Sloan Kettering Cancer Center.
Memorial Sloan Kettering Cancer Center
User ID*
Dave Stone
Password*
Yes
No
Remember my ID
Log In
Not already registered? Register here.
IBMWATSON.

iPad 73%

Add New Patient

Patients

Search

Advance Search

Sonya Herring, Female, 33, 08/12/1980, 07452
Diagnosis: Bladder Cancer

Last Updated: 03/24/2014 01:19 PM
Updated By: Dr. Dave Stone

New

Allison Cross, Female, 48, 09/03/1965, 08624
Diagnosis: Colon Cancer

Last Updated: 03/24/2014 01:04 PM
Updated By: Dr. John Smith

Jane Smith, Female, 65, 11/15/1949, 05863
Diagnosis: Breast Cancer

Last Updated: 03/24/2014 12:23 PM
Updated By: Dr. Dave Stone

Ian McGrath, Male, 58, 11/03/1955, 02685
Diagnosis: Lung Cancer

Last Updated: 03/24/2014 11:10 AM
Updated By: Dr. Andrea Barnes

Alexander Jordan, Male, 43, 06/04/1970, 03280
Diagnosis: Bladder Cancer

Last Updated: 03/24/2014 10:45 AM
Updated By: Dr. Dave Stone

New

Katherine Reynolds, Female, 63, 05/09/1950, 04862
Diagnosis: Breast Cancer

Last Updated: 03/23/2014 02:35 PM
Updated By: Dr. Dave Stone

Rolph Phillips, Male, 72, 04/23/1941, 02385

Last Updated: 03/23/2014 01:55 PM

Dr. Dave Stone

IBM WATSON

iPad 73%

Add New Patient

Patients

Search

Advance Search

Sonya Herring, Female, 33, 08/12/1980, 07452
Diagnosis: Bladder Cancer

Last Updated: 03/24/2014 01:19 PM
Updated By: Dr. Dave Stone

New

Allison Cross, Female, 48, 09/03/1965, 08624
Diagnosis: Colon Cancer

Last Updated: 03/24/2014 01:04 PM
Updated By: Dr. John Smith

Jane Smith, Female, 65, 11/15/1949, 05863
Diagnosis: Breast Cancer

Last Updated: 03/24/2014 12:23 PM
Updated By: Dr. Dave Stone

Ian McGrath, Male, 58, 11/03/1955, 02685
Diagnosis: Lung Cancer

Last Updated: 03/24/2014 11:10 AM
Updated By: Dr. Andrea Barnes

Alexander Jordan, Male, 43, 06/04/1970, 03280
Diagnosis: Bladder Cancer

Last Updated: 03/24/2014 10:45 AM
Updated By: Dr. Dave Stone

New

Katherine Reynolds, Female, 63, 05/09/1950, 04862
Diagnosis: Breast Cancer

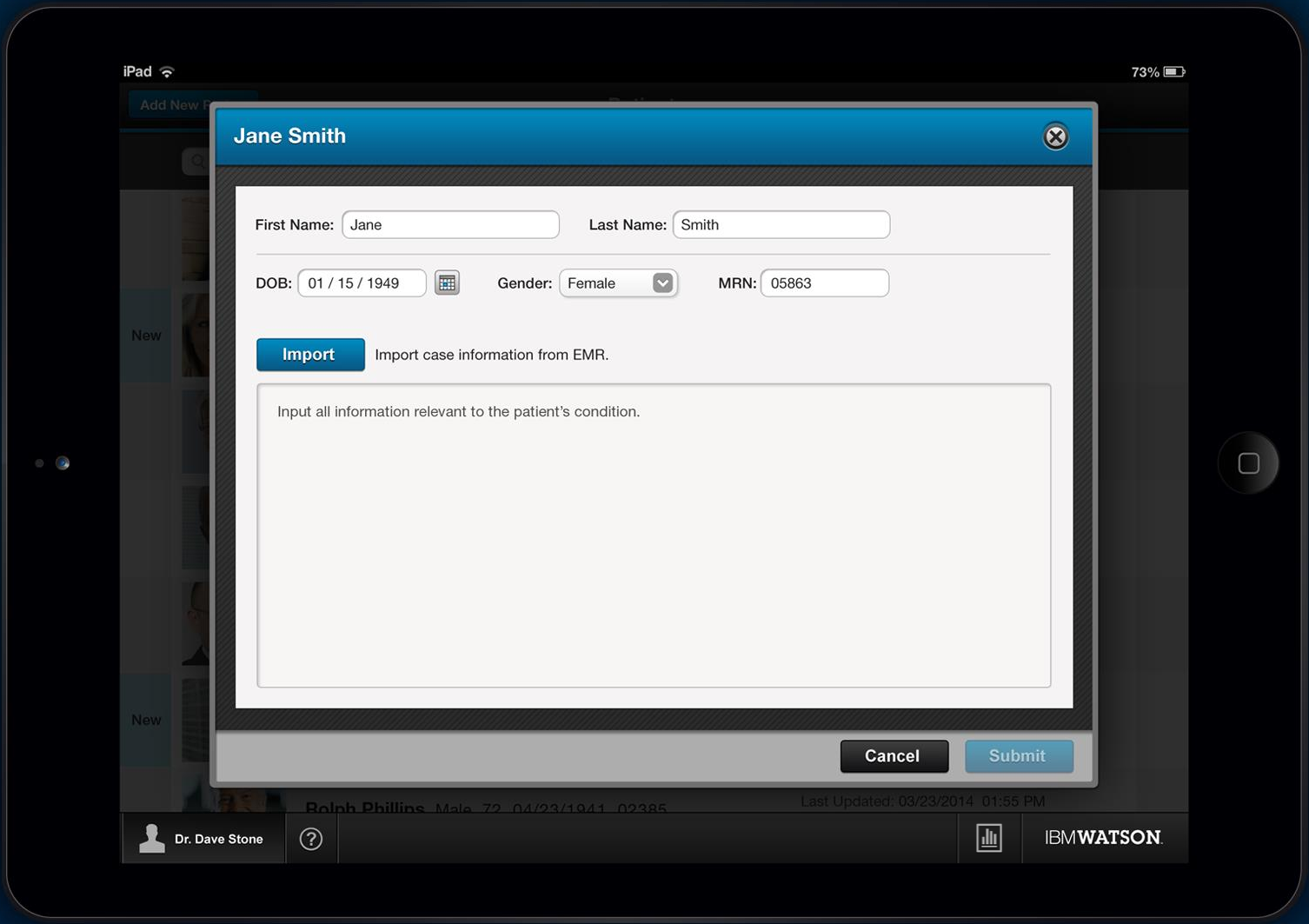
Last Updated: 03/23/2014 02:35 PM
Updated By: Dr. Dave Stone

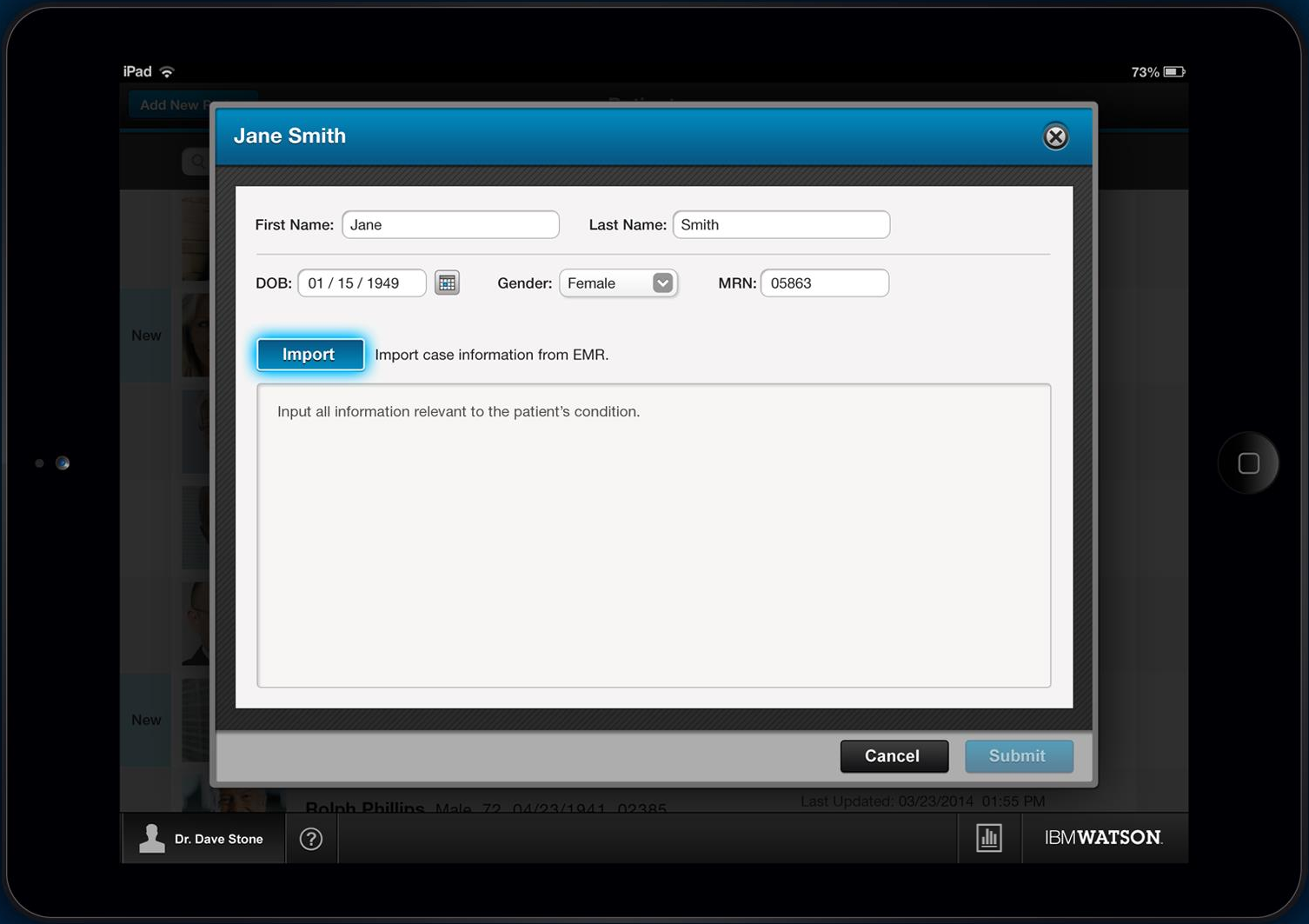
Rolph Phillips, Male, 72, 04/23/1941, 02385

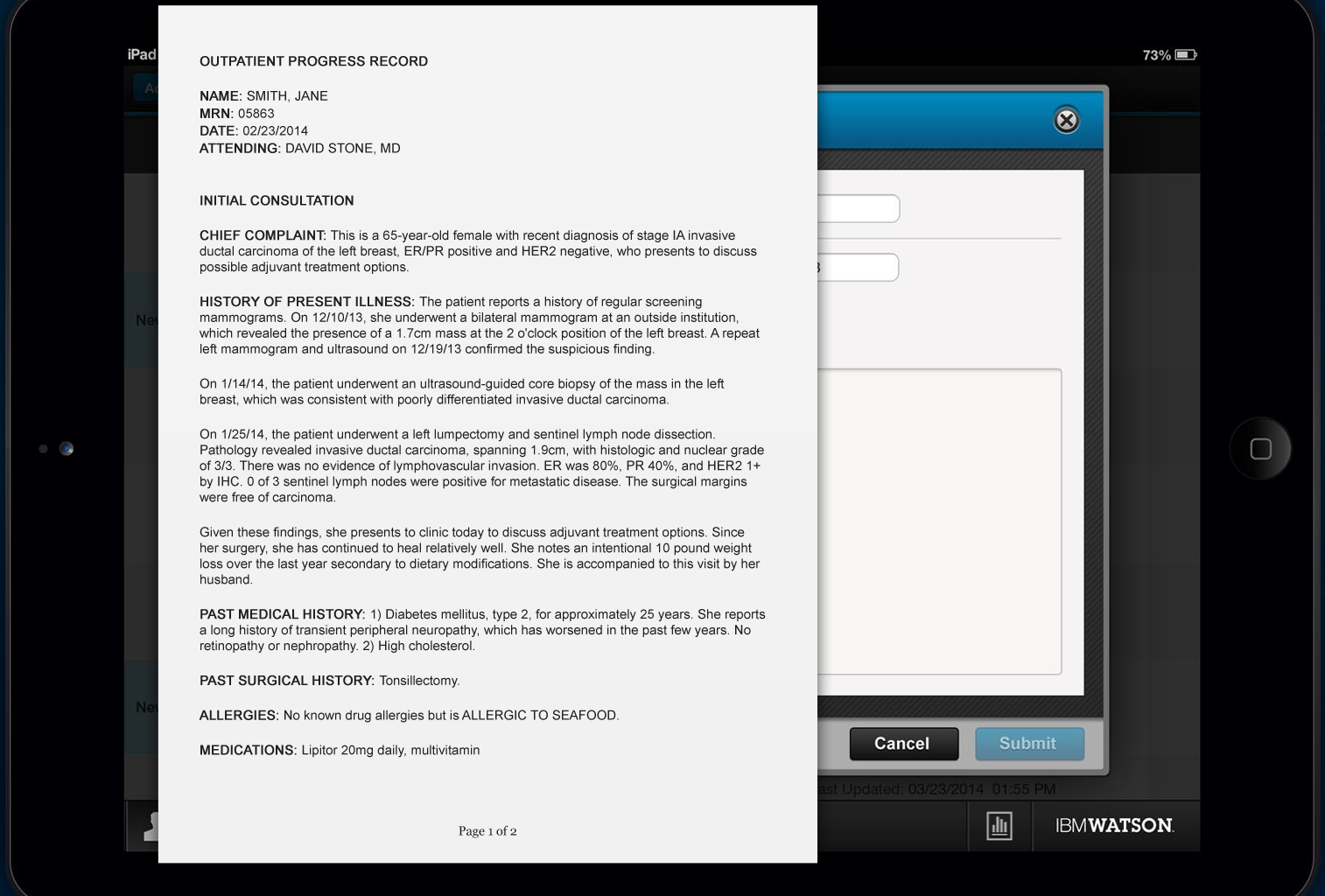
Last Updated: 03/23/2014 01:55 PM

Dr. Dave Stone

IBM WATSON


iPad
73%
Jane Smith
First Name: Jane
Last Name: Smith
DOB: 01 / 15 / 1949
Gender: Female
MRN: 05863
Import
Import case information from EMR.
Input all information relevant to the patient's condition.
Cancel
Submit
Last Updated: 03/23/2014 01:55 PM
Dr. Dave Stone
IBMWATSON


iPad
73%
Jane Smith
First Name: Jane
Last Name: Smith
DOB: 01 / 15 / 1949
Gender: Female
MRN: 05863
Import
Import case information from EMR.
Input all information relevant to the patient's condition.
Cancel
Submit
Last Updated: 03/23/2014 01:55 PM
Dr. Dave Stone
IBMWATSON



OUTPATIENT PROGRESS RECORD

NAME: SMITH, JANE
MRN: 05863
DATE: 02/23/2014
ATTENDING: DAVID STONE, MD

INITIAL CONSULTATION

CHIEF COMPLAINT: This is a 65-year-old female with recent diagnosis of stage IA invasive ductal carcinoma of the left breast, ER/PR positive and HER2 negative, who presents to discuss possible adjuvant treatment options.

HISTORY OF PRESENT ILLNESS: The patient reports a history of regular screening mammograms. On 12/10/13, she underwent a bilateral mammogram at an outside institution, which revealed the presence of a 1.7cm mass at the 2 o'clock position of the left breast. A repeat left mammogram and ultrasound on 12/19/13 confirmed the suspicious finding.

On 1/14/14, the patient underwent an ultrasound-guided core biopsy of the mass in the left breast, which was consistent with poorly differentiated invasive ductal carcinoma.

On 1/25/14, the patient underwent a left lumpectomy and sentinel lymph node dissection. Pathology revealed invasive ductal carcinoma, spanning 1.9cm, with histologic and nuclear grade of 3/3. There was no evidence of lymphovascular invasion. ER was 80%, PR 40%, and HER2 1+ by IHC. 0 of 3 sentinel lymph nodes were positive for metastatic disease. The surgical margins were free of carcinoma.

Given these findings, she presents to clinic today to discuss adjuvant treatment options. Since her surgery, she has continued to heal relatively well. She notes an intentional 10 pound weight loss over the last year secondary to dietary modifications. She is accompanied to this visit by her husband.

PAST MEDICAL HISTORY: 1) Diabetes mellitus, type 2, for approximately 25 years. She reports a long history of transient peripheral neuropathy, which has worsened in the past few years. No retinopathy or nephropathy. 2) High cholesterol.

PAST SURGICAL HISTORY: Tonsillectomy.

ALLERGIES: No known drug allergies but is ALLERGIC TO SEAFOOD.

MEDICATIONS: Lipitor 20mg daily, multivitamin

OUTPATIENT PROGRESS RECORD

NAME: SMITH, JANE
MRN: 05863
DATE: 02/23/2014
ATTENDING: DAVID STONE, MD

INITIAL CONSULTATION

CHIEF COMPLAINT: This is a 65-year-old female wit
ductal carcinoma of the left breast, ER/PR positive an
possible adjuvant treatment options.

HISTORY OF PRESENT ILLNESS: The patient repo
mammograms. On 12/10/13, she underwent a bilatera
which revealed the presence of a 1.7cm mass at the
left mammogram and ultrasound on 12/19/13 confirm

On 1/14/14, the patient underwent an ultrasound-guid
breast, which was consistent with poorly differentiated

On 1/25/14, the patient underwent a left lumpectomy
Pathology revealed invasive ductal carcinoma, spanni
of 3/3. There was no evidence of lymphovascular inva
by IHC. 0 of 3 sentinel lymph nodes were positive for
were free of carcinoma.

Given these findings, she presents to clinic today to d
her surgery, she has continued to heal relatively well.
loss over the last year secondary to dietary modificati
husband.

PAST MEDICAL HISTORY: 1) Diabetes mellitus, typ
a long history of transient peripheral neuropathy, whic
retinopathy or nephropathy. 2) High cholesterol.

PAST SURGICAL HISTORY: Tonsillectomy.

ALLERGIES: No known drug allergies but is ALLERG

MEDICATIONS: Lipitor 20mg daily, multivitamin

GYN HISTORY: Menarche at age 13. Last menstrual period was in 2001. She is G1P1. She used oral contraceptive pills for 10 years in her 20s. She denies history of hormone replacement therapy or fertility treatment.

SOCIAL HISTORY: The patient is of Irish background. She works as a high school teacher and lives with her husband in New York. She is a never smoker and drinks approximately 3 glasses of wine a week.

FAMILY HISTORY: There is no known family history for breast or ovarian carcinoma. The patient's mother is alive at age 88 with hypertension and gout. The patient's father is alive and was diagnosed with Stage IIIa colon cancer at age 82, status post resection and systemic chemotherapy. One brother died at 62 of complications from a stroke. She has four living siblings, with no history of malignancies. Her maternal grandmother had a history of leukemia diagnosed at age 49. The patient has one daughter, age 31, who is healthy.

HEALTH MAINTENANCE: Last Pap smear in 08/2013, unremarkable. Colonoscopy conducted four years ago, and a DEXA bone mineral density scan conducted several years ago. She is unclear of the exact dates but recalls the results being normal.

PHYSICAL EXAMINATION:

GENERAL: Well-appearing woman in no apparent acute distress.

VITAL SIGNS: BP 120/70, P 80, T 36.9, WT 78.5 kg, HT 168cm.

HEAD/NECK: Anicteric sclerae. No thyromegaly. No JVD.

NODES: No cervical, supraclavicular, or inguinal lymphadenopathy.

HEART: S1 and S2, regular rate and rhythm.

LUNGS: Clear to ascultation and percussion.

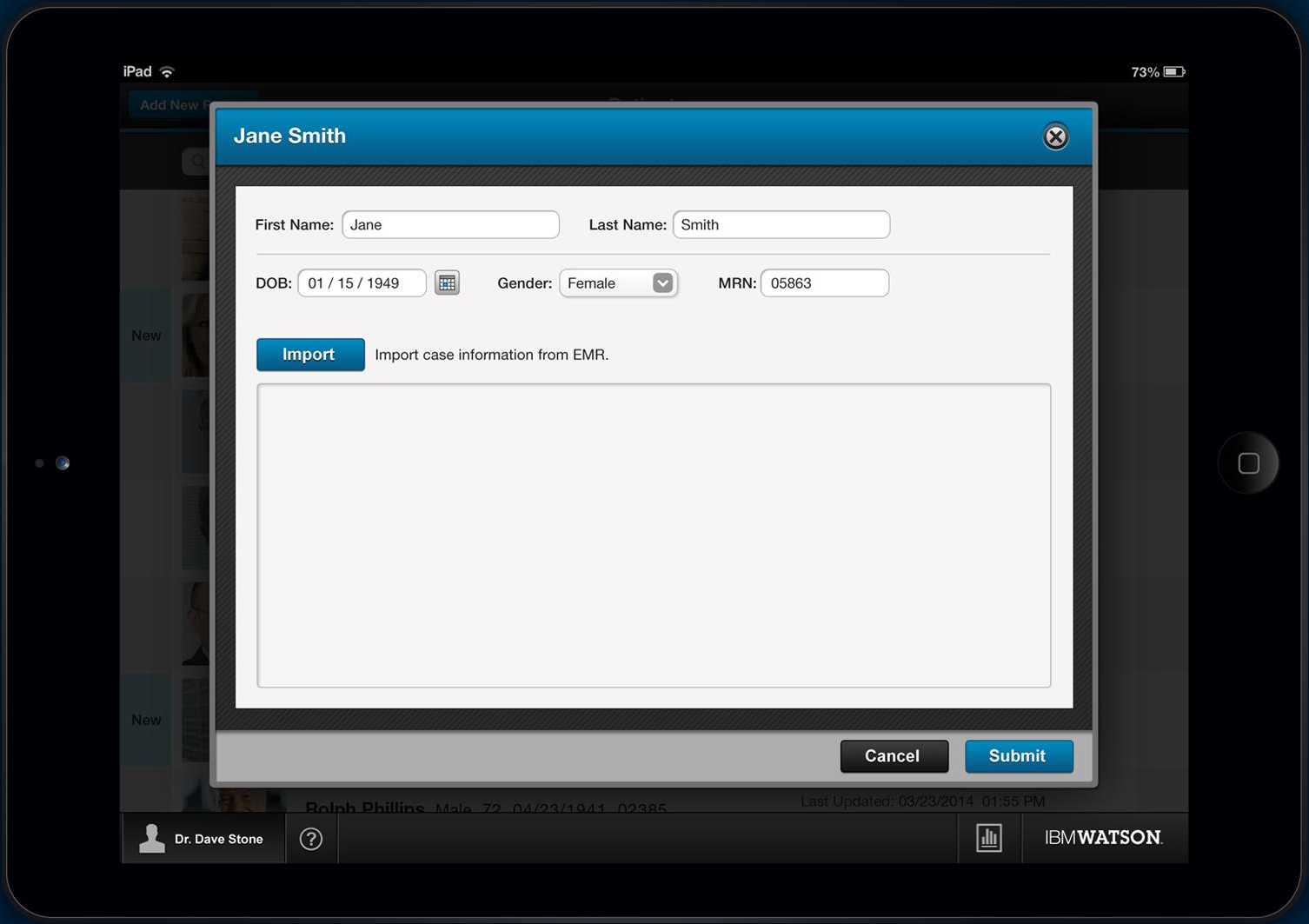
ABDOMEN: Soft, nontender, with normal bowel sounds. No hepatosplenomegaly or masses.

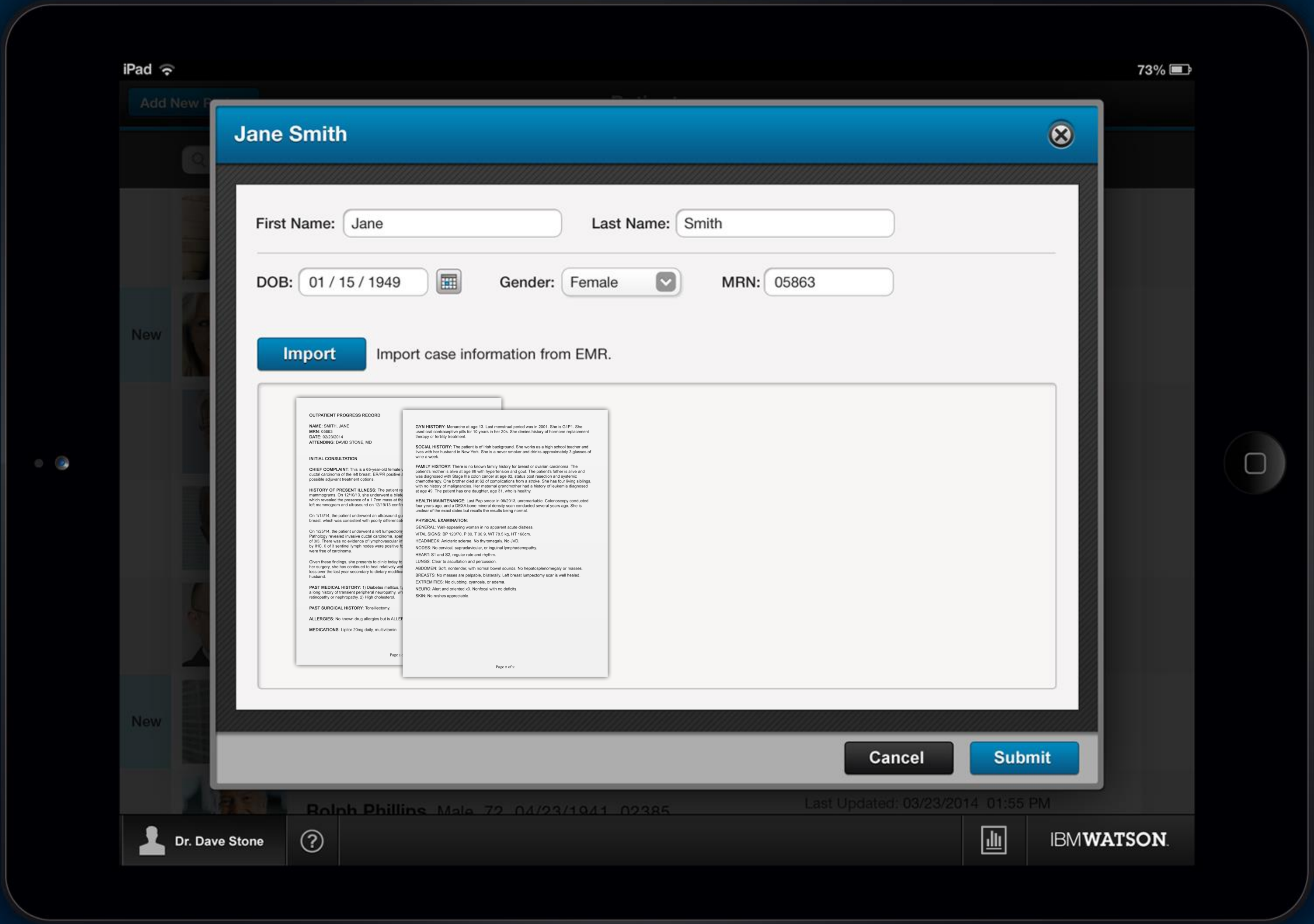
BREASTS: No masses are palpable, bilaterally. Left breast lumpectomy scar is well healed.

EXTREMITIES: No clubbing, cyanosis, or edema.

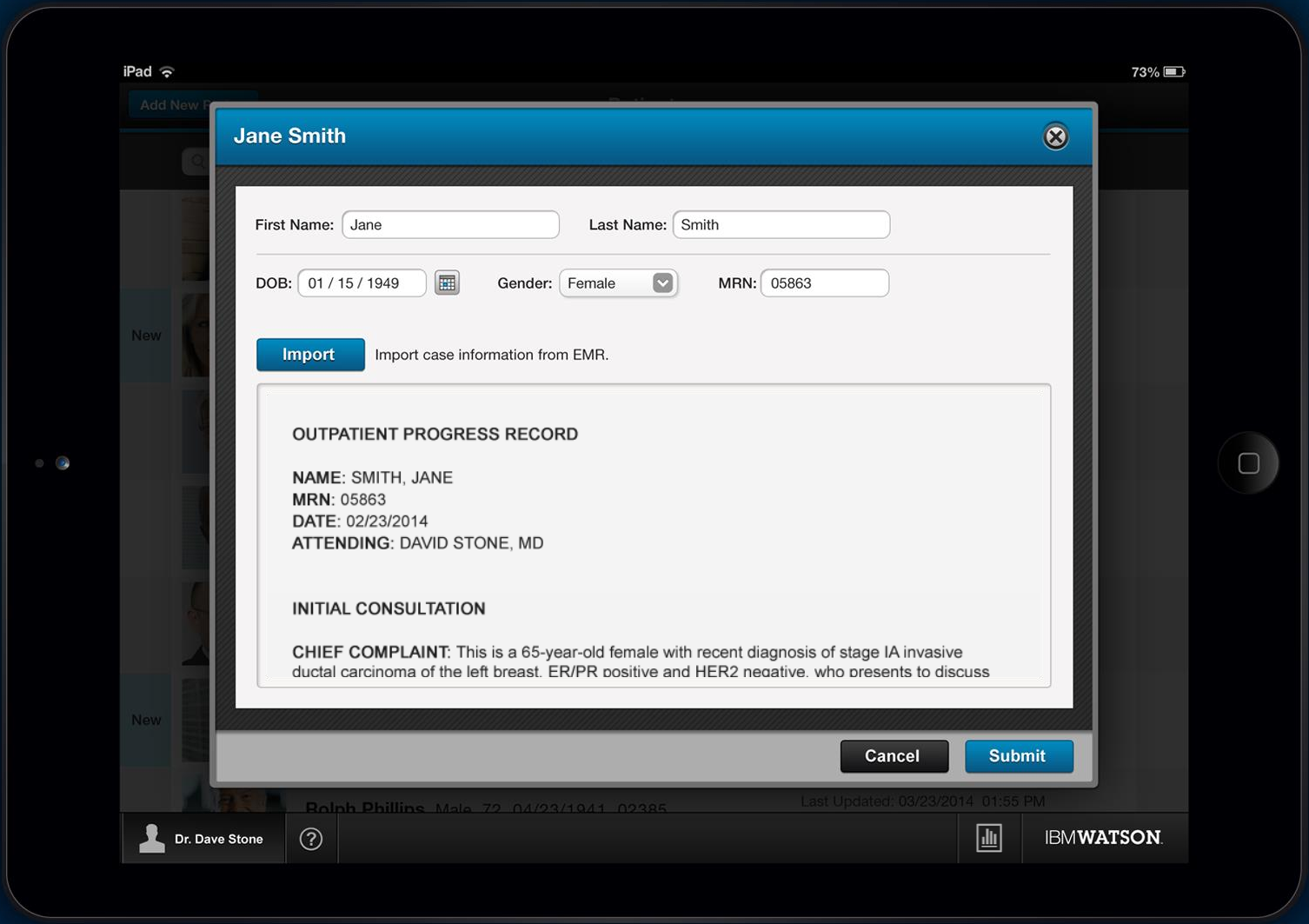
NEURO: Alert and oriented x3. Nonfocal with no deficits.

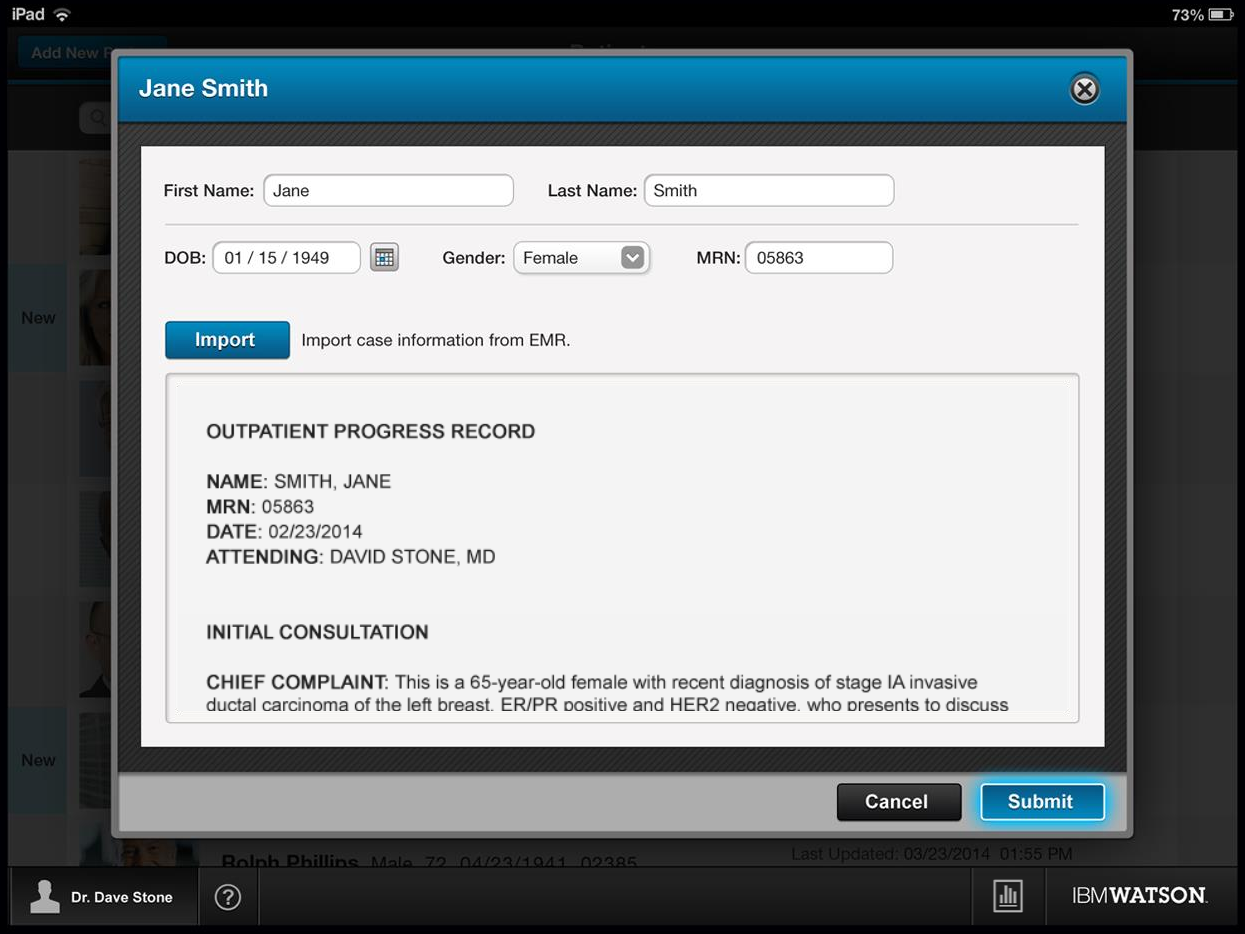
SKIN: No rashes appreciable.


iPad
73%
Jane Smith
First Name: Jane
Last Name: Smith
DOB: 01 / 15 / 1949
Gender: Female
MRN: 05863
Import
Import case information from EMR.
Cancel
Submit
New
New
Last Updated: 03/23/2014 01:55 PM
Dr. Dave Stone
IBMWATSON


iPad
73%
Jane Smith
First Name: Jane
Last Name: Smith
DOB: 01 / 15 / 1949
Gender: Female
MRN: 05863
Import
Import case information from EMR.
OUTPATIENT PROGRESS RECORD
Cancel
Submit
Dr. Dave Stone
IBMWATSON

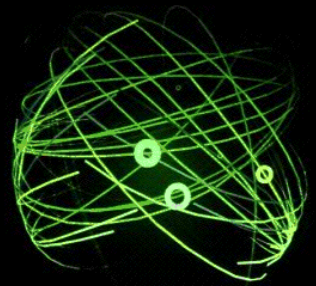
IBMWATSON


iPad
73%
Jane Smith
First Name: Jane
Last Name: Smith
DOB: 01 / 15 / 1949
Gender: Female
MRN: 05863
Import
Import case information from EMR.
OUTPATIENT PROGRESS RECORD
NAME: SMITH, JANE
MRN: 05863
DATE: 02/23/2014
ATTENDING: DAVID STONE, MD
INITIAL CONSULTATION
CHIEF COMPLAINT: This is a 65-year-old female with recent diagnosis of stage IA invasive ductal carcinoma of the left breast, ER/PR positive and HER2 negative, who presents to discuss
Cancel
Submit
Last Updated: 03/23/2014 01:55 PM
Dr. Dave Stone
IBMWATSON


iPad
73%
Jane Smith
First Name: Jane
Last Name: Smith
DOB: 01 / 15 / 1949
Gender: Female
MRN: 05863
Import
Import case information from EMR.
OUTPATIENT PROGRESS RECORD
NAME: SMITH, JANE
MRN: 05863
DATE: 02/23/2014
ATTENDING: DAVID STONE, MD
INITIAL CONSULTATION
CHIEF COMPLAINT: This is a 65-year-old female with recent diagnosis of stage IA invasive ductal carcinoma of the left breast, ER/PR positive and HER2 negative, who presents to discuss
Cancel
Submit
Last Updated: 03/23/2014 01:55 PM
Dr. Dave Stone
IBMWATSON

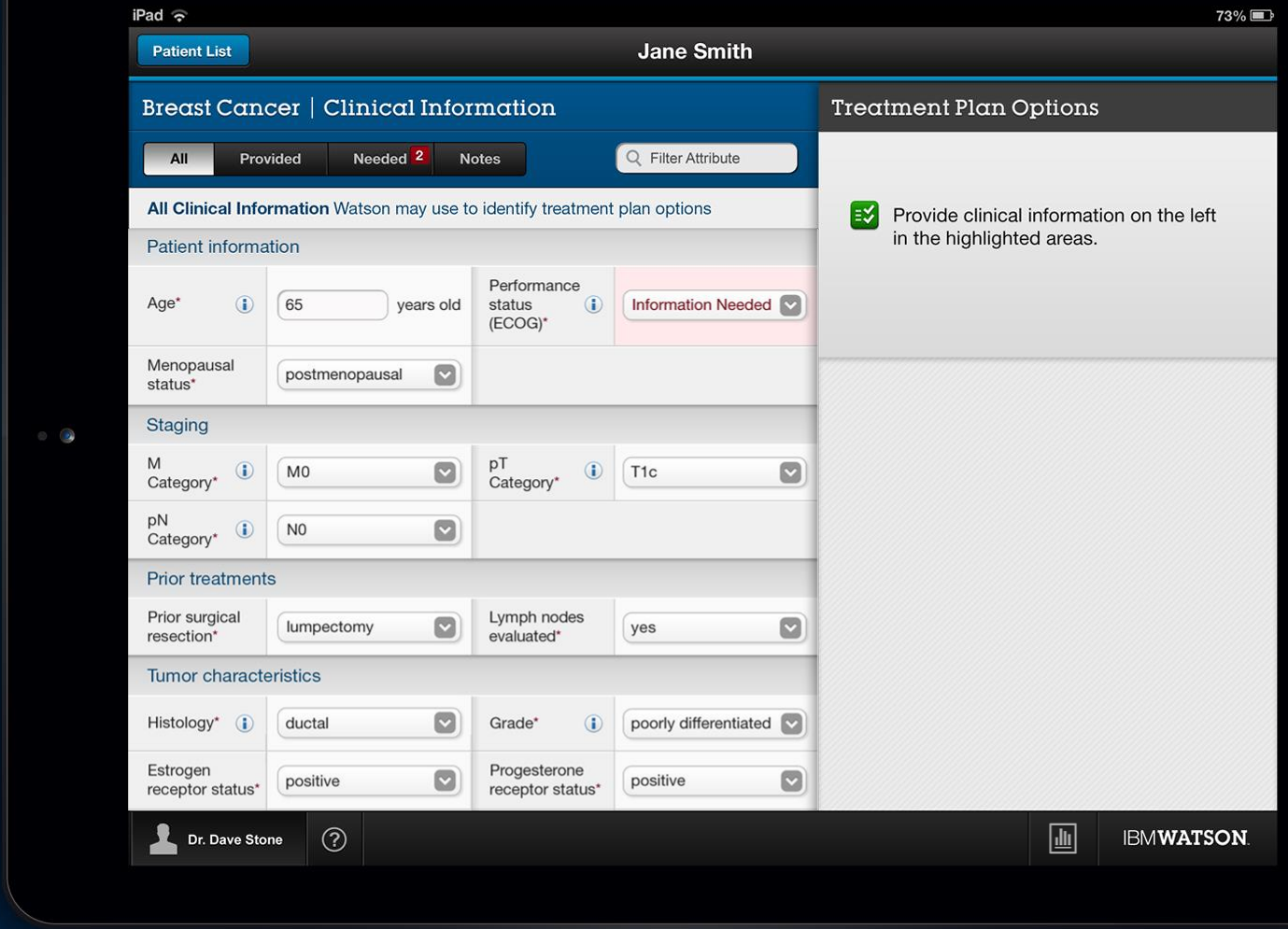
iPad

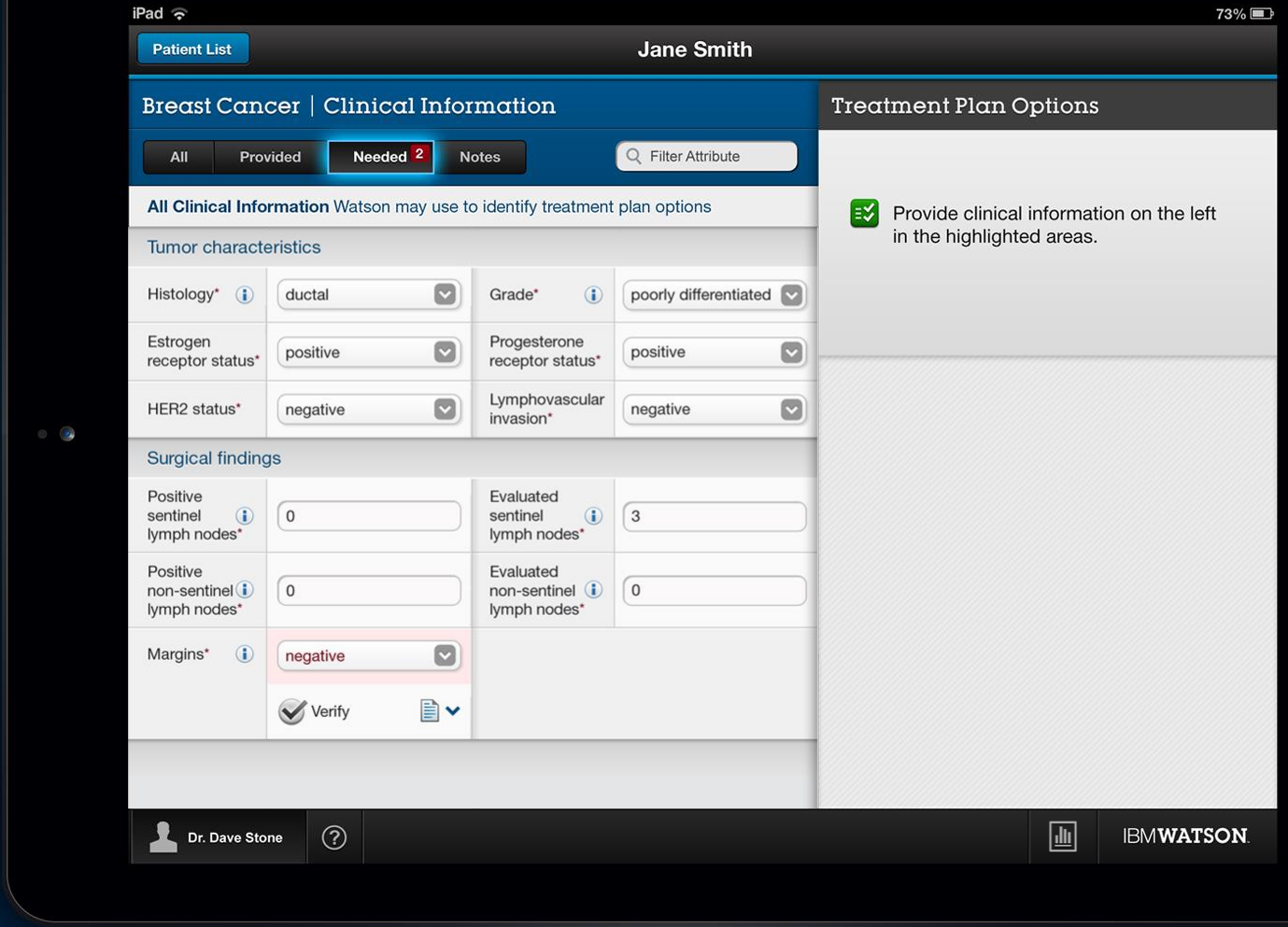
73%

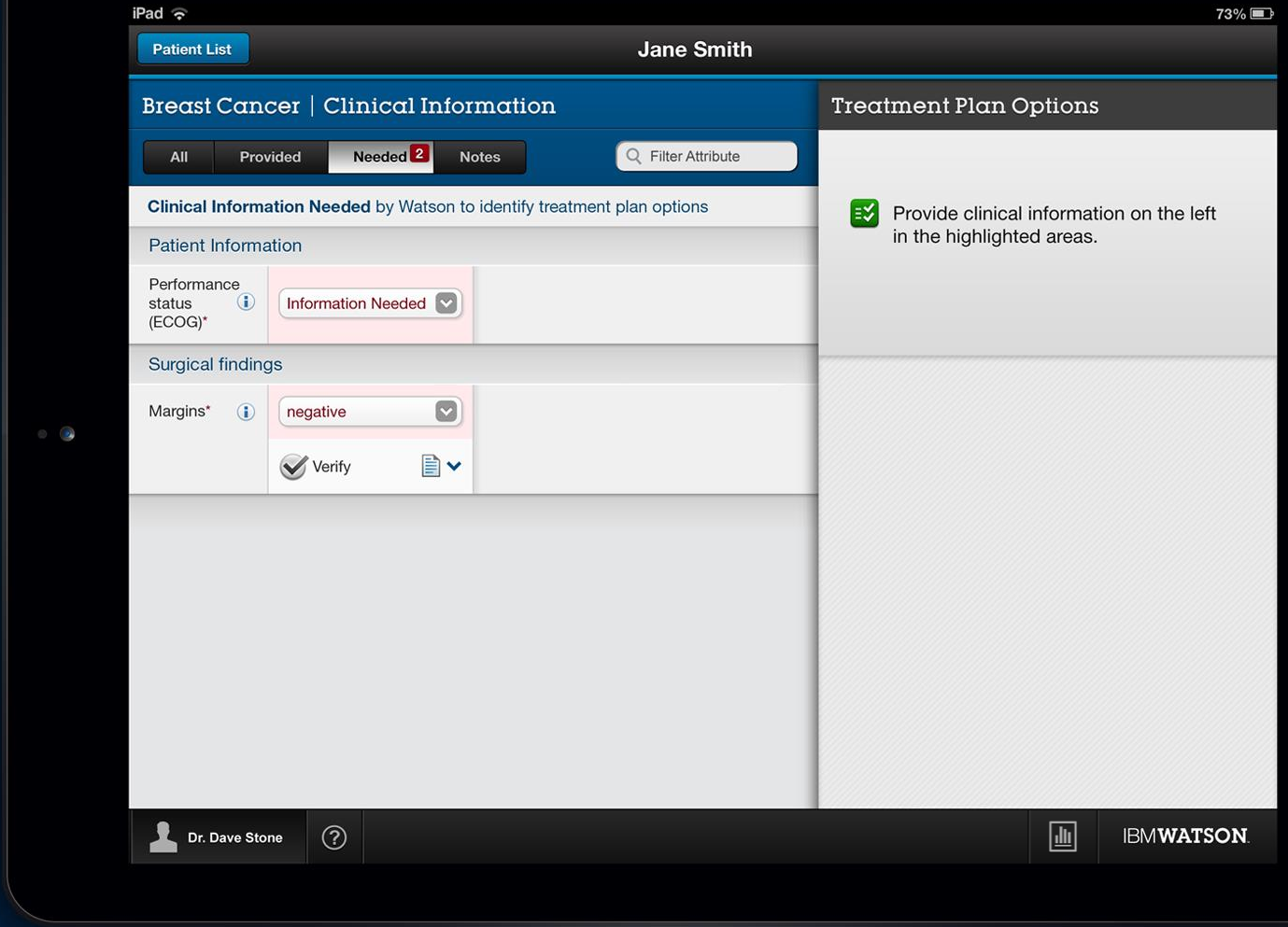


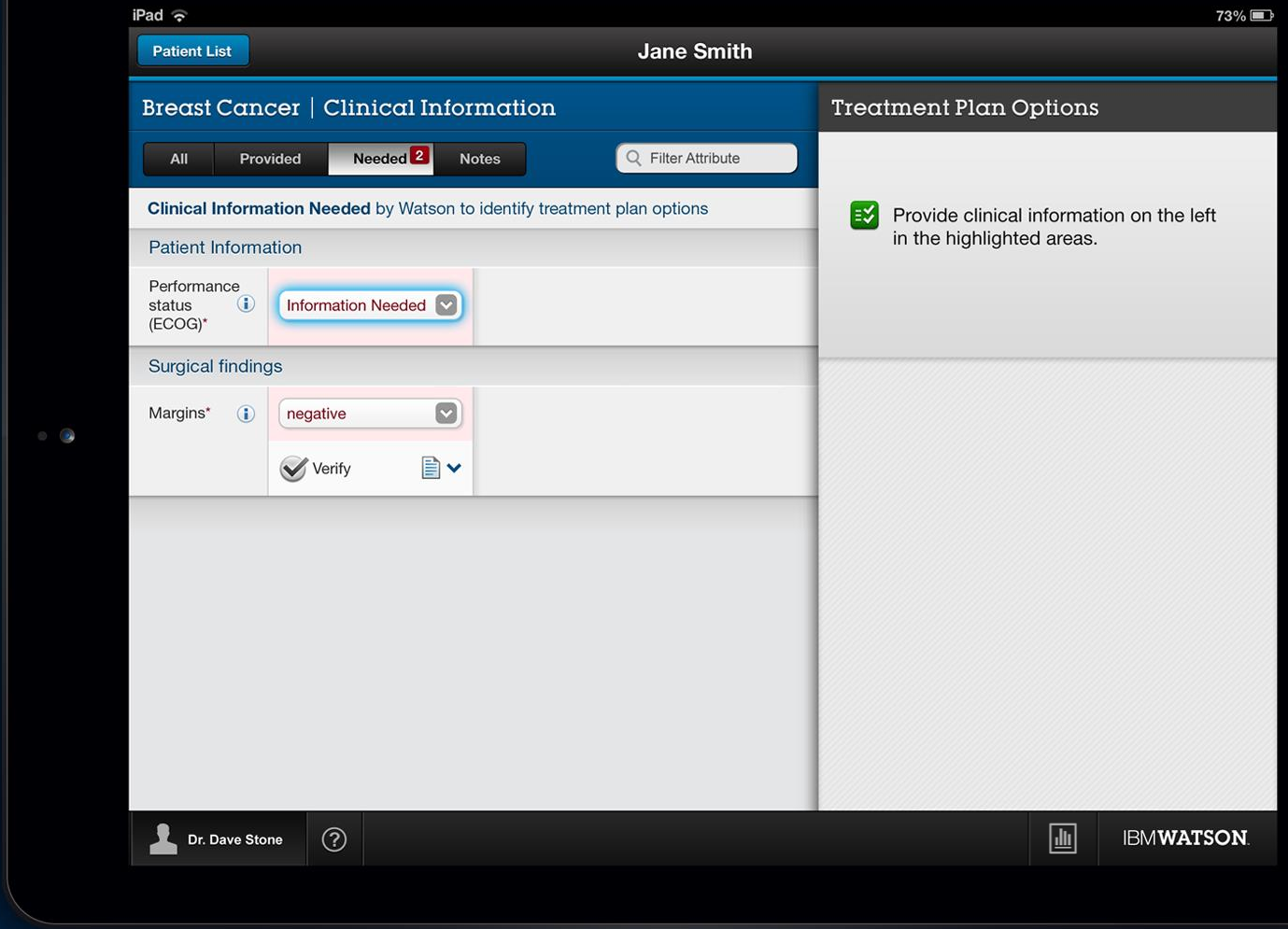
Watson is gathering key points for the patient summary...

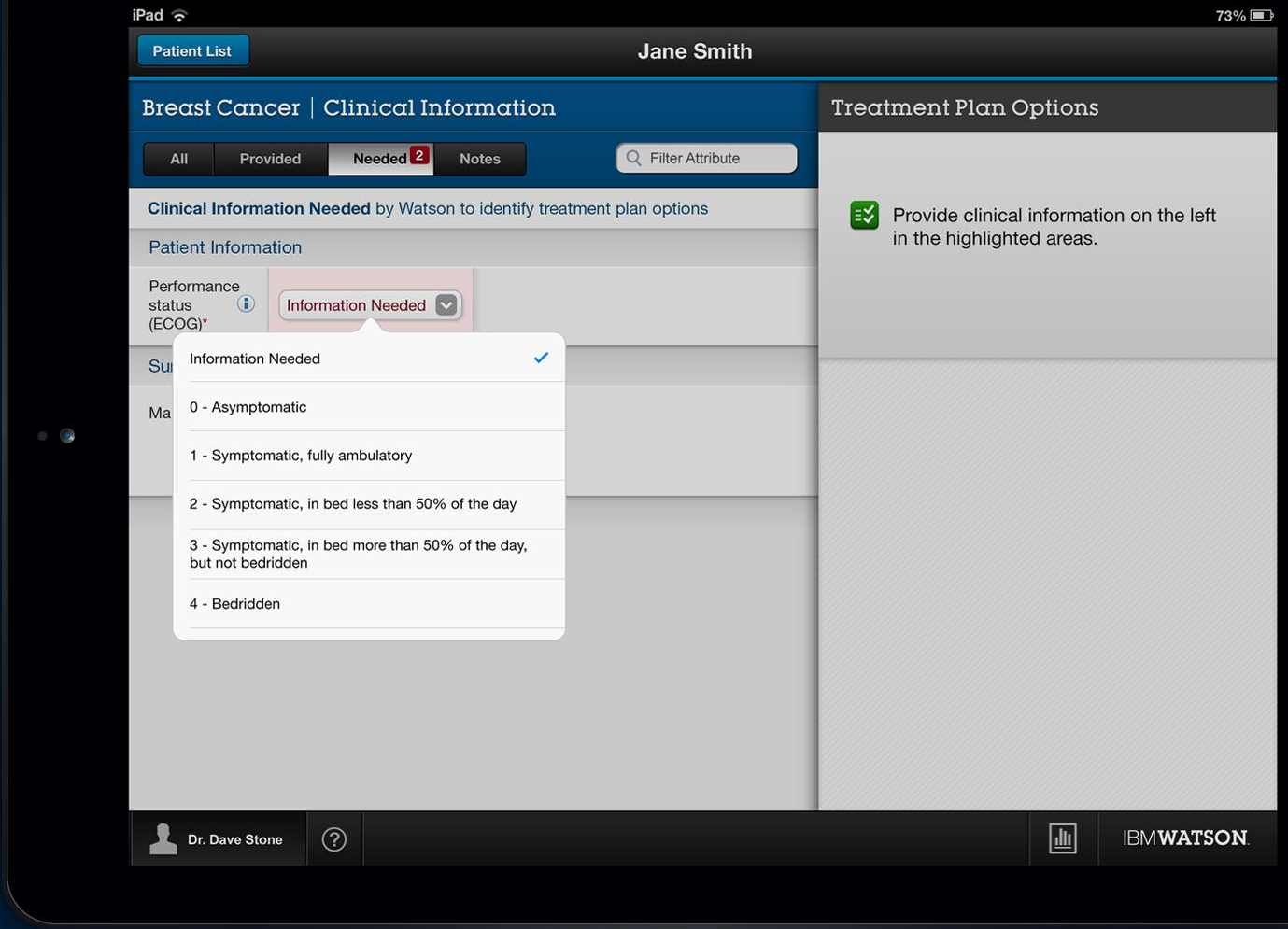
IBM WATSON

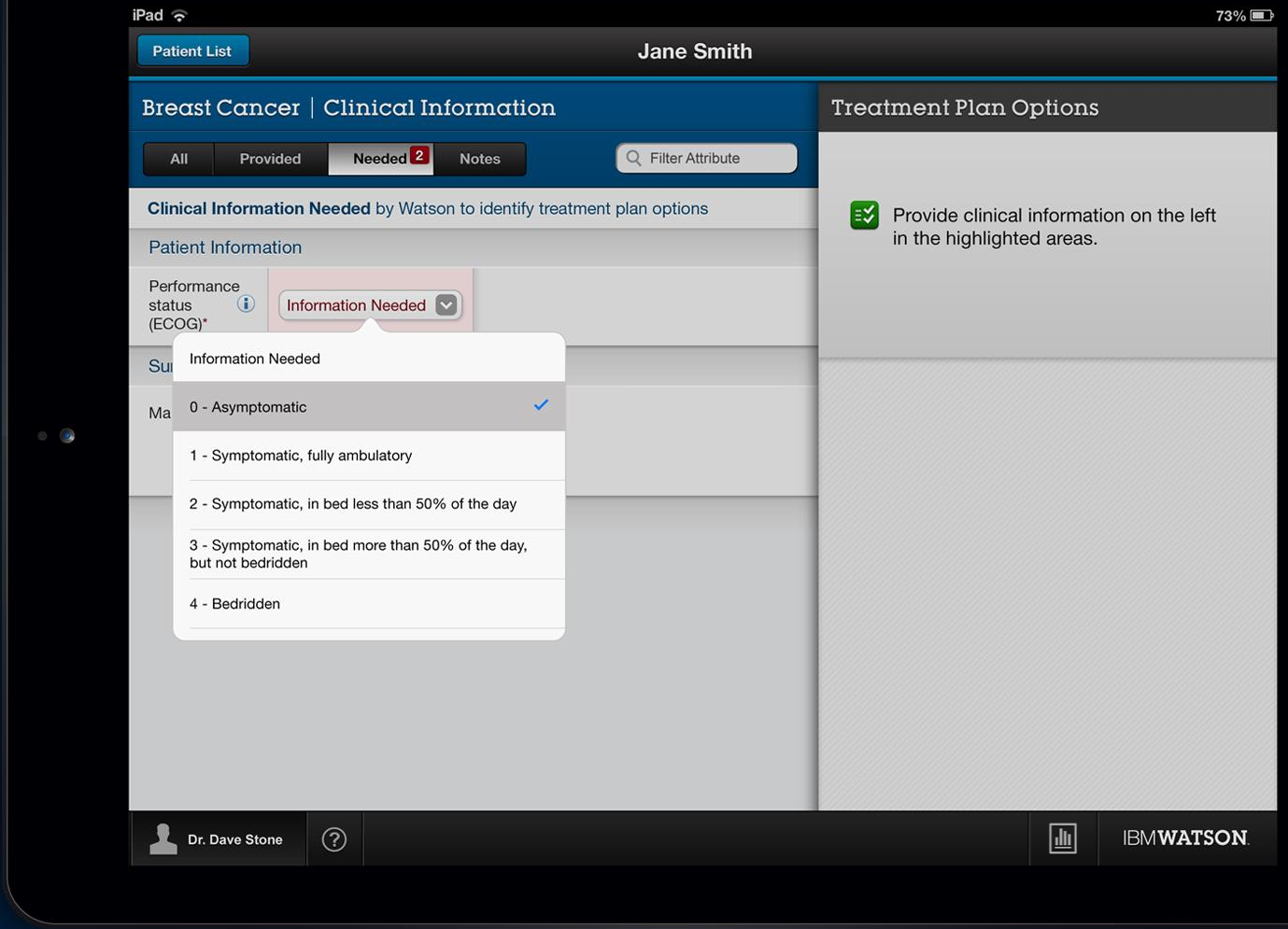

iPad
73%
Patient List
Jane Smith
Breast Cancer | Clinical Information
All
Provided
Needed 2
Notes
Filter Attribute
All Clinical Information Watson may use to identify treatment plan options
Patient information
Age*
65
years old
Performance status (ECOG)*
Information Needed
Menopausal status*
postmenopausal
Staging
M Category*
M0
pT Category*
T1c
pN Category*
N0
Prior treatments
Prior surgical resection*
lumpectomy
Lymph nodes evaluated*
yes
Tumor characteristics
Histology*
ductal
Grade*
poorly differentiated
Estrogen receptor status*
positive
Progesterone receptor status*
positive
Treatment Plan Options
Provide clinical information on the left in the highlighted areas.
Dr. Dave Stone
IBM WATSON

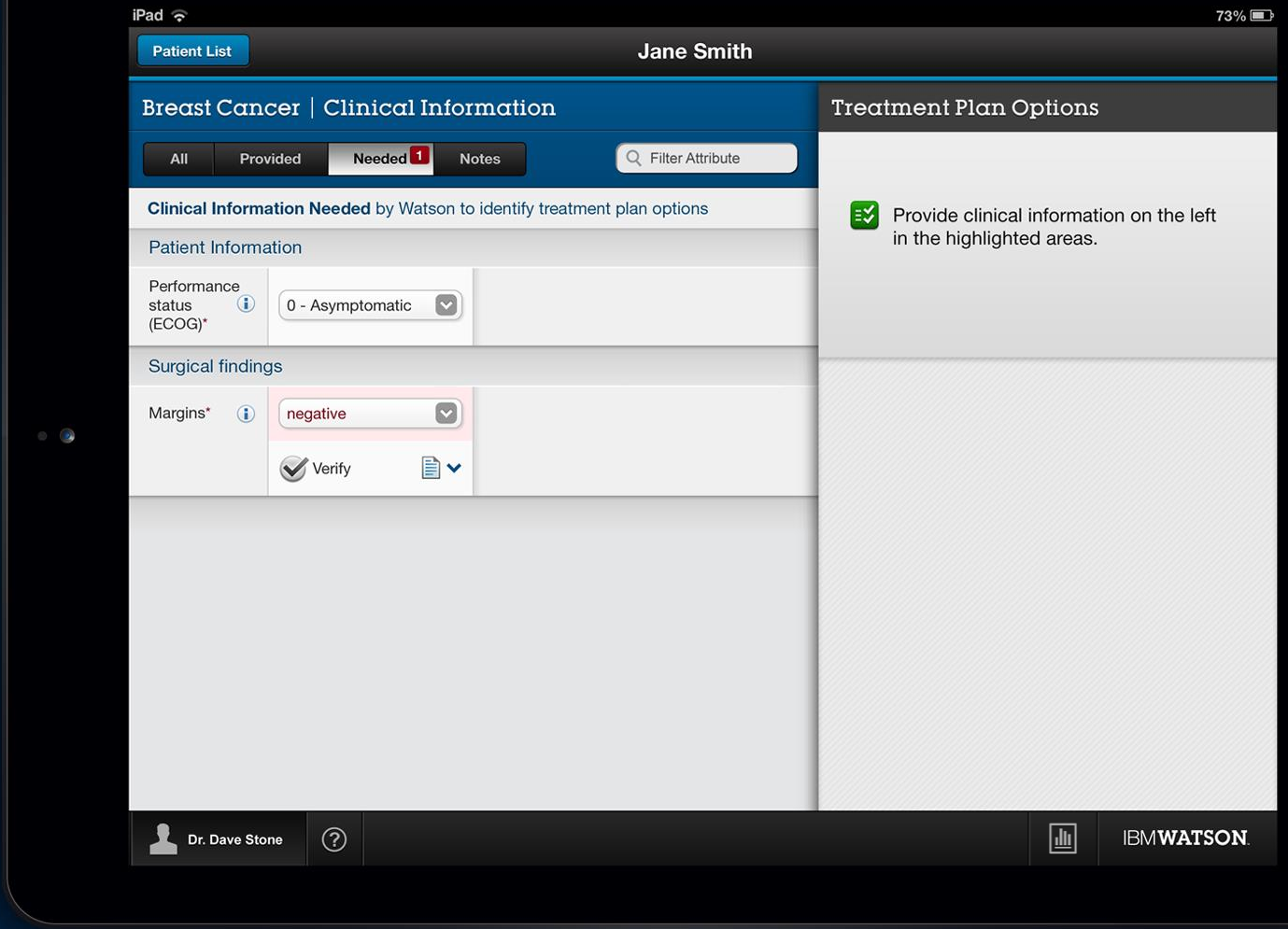

iPad
73%
Patient List
Jane Smith
Breast Cancer | Clinical Information
All
Provided
Needed 2
Notes
Filter Attribute
All Clinical Information Watson may use to identify treatment plan options
Tumor characteristics
Histology*
ductal
Grade*
poorly differentiated
Estrogen receptor status*
positive
Progesterone receptor status*
positive
HER2 status*
negative
Lymphovascular invasion*
negative
Surgical findings
Positive sentinel lymph nodes*
0
Evaluated sentinel lymph nodes*
3
Positive non-sentinel lymph nodes*
0
Evaluated non-sentinel lymph nodes*
0
Margins*
negative
Verify
Treatment Plan Options
Provide clinical information on the left in the highlighted areas.
Dr. Dave Stone
IBM WATSON

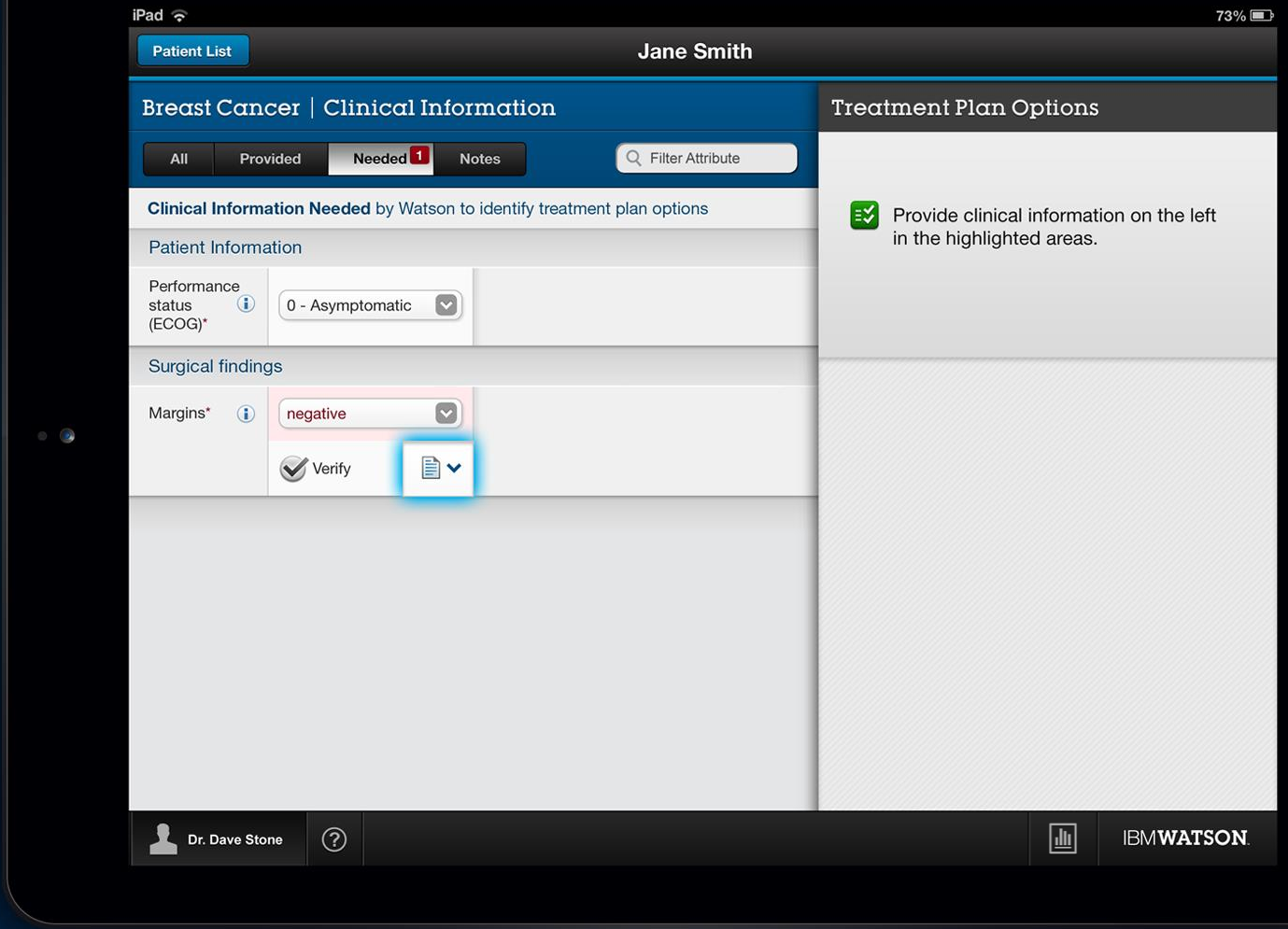

iPad
73%
Patient List
Jane Smith
Breast Cancer | Clinical Information
All
Provided
Needed 2
Notes
Filter Attribute
Clinical Information Needed by Watson to identify treatment plan options
Patient Information
Performance status (ECOG)*
Information Needed
Surgical findings
Margins*
negative
Verify
Treatment Plan Options
Provide clinical information on the left in the highlighted areas.
Dr. Dave Stone
IBMWATSON

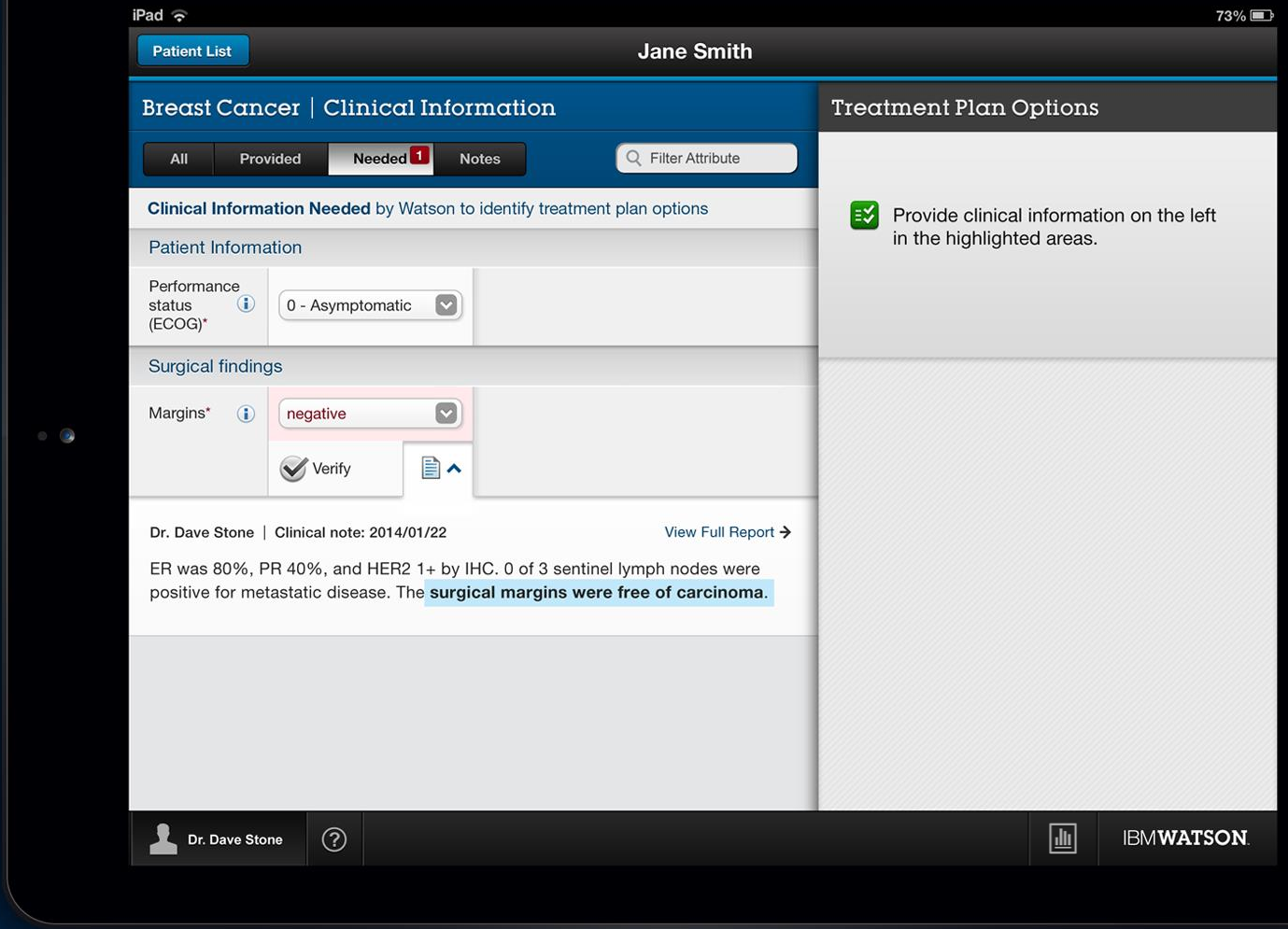

iPad
73%
Patient List
Jane Smith
Breast Cancer | Clinical Information
All
Provided
Needed 2
Notes
Filter Attribute
Clinical Information Needed by Watson to identify treatment plan options
Patient Information
Performance status (ECOG)*
Information Needed
Surgical findings
Margins*
negative
Verify
Treatment Plan Options
Provide clinical information on the left in the highlighted areas.
Dr. Dave Stone
IBMWATSON

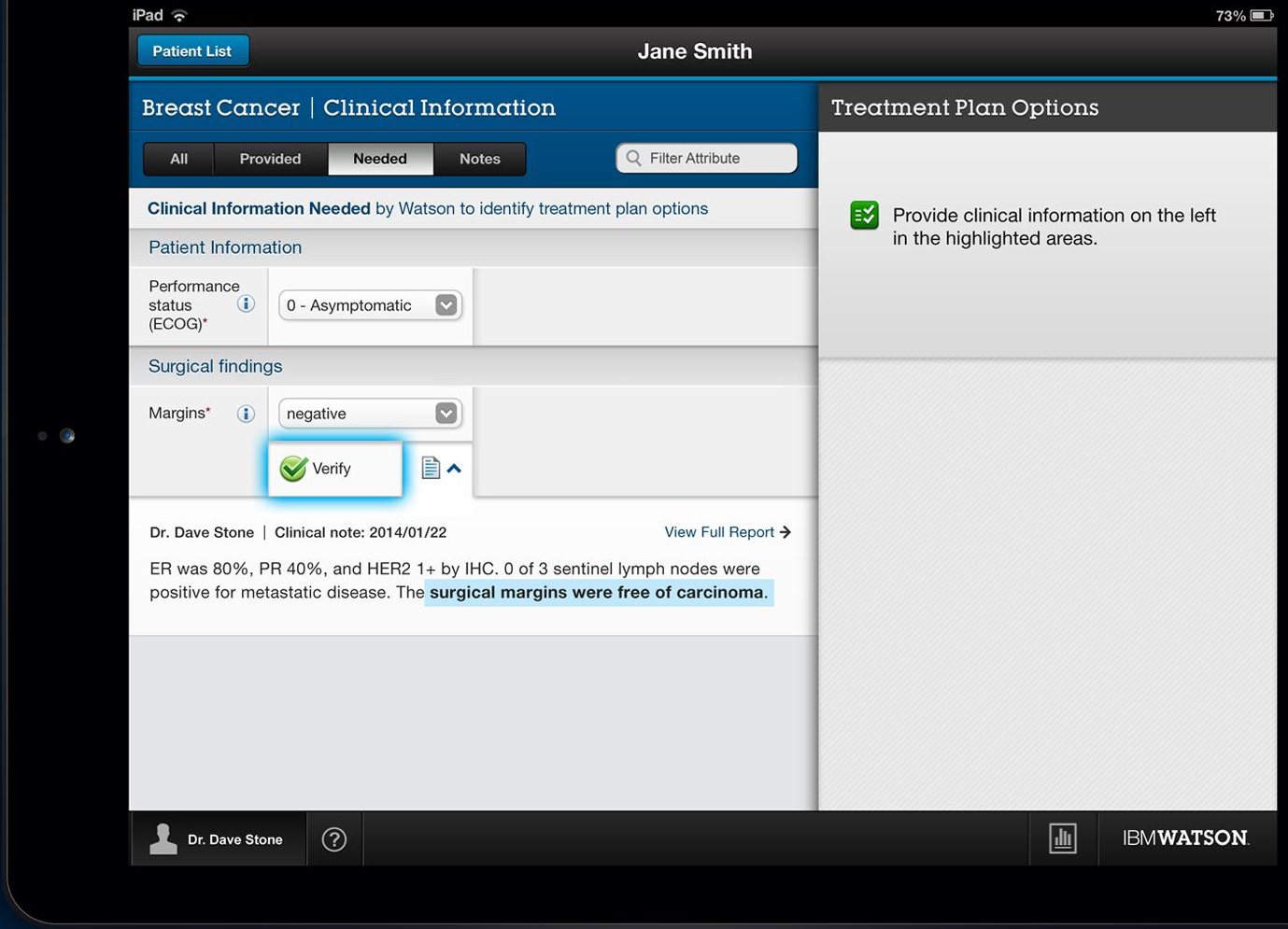

iPad
73%
Patient List
Jane Smith
Breast Cancer | Clinical Information
All
Provided
Needed 2
Notes
Filter Attribute
Clinical Information Needed by Watson to identify treatment plan options
Patient Information
Performance status (ECOG)*
Information Needed
Information Needed
0 - Asymptomatic
1 - Symptomatic, fully ambulatory
2 - Symptomatic, in bed less than 50% of the day
3 - Symptomatic, in bed more than 50% of the day, but not bedridden
4 - Bedridden
Treatment Plan Options
Provide clinical information on the left in the highlighted areas.
Dr. Dave Stone
IBMWATSON

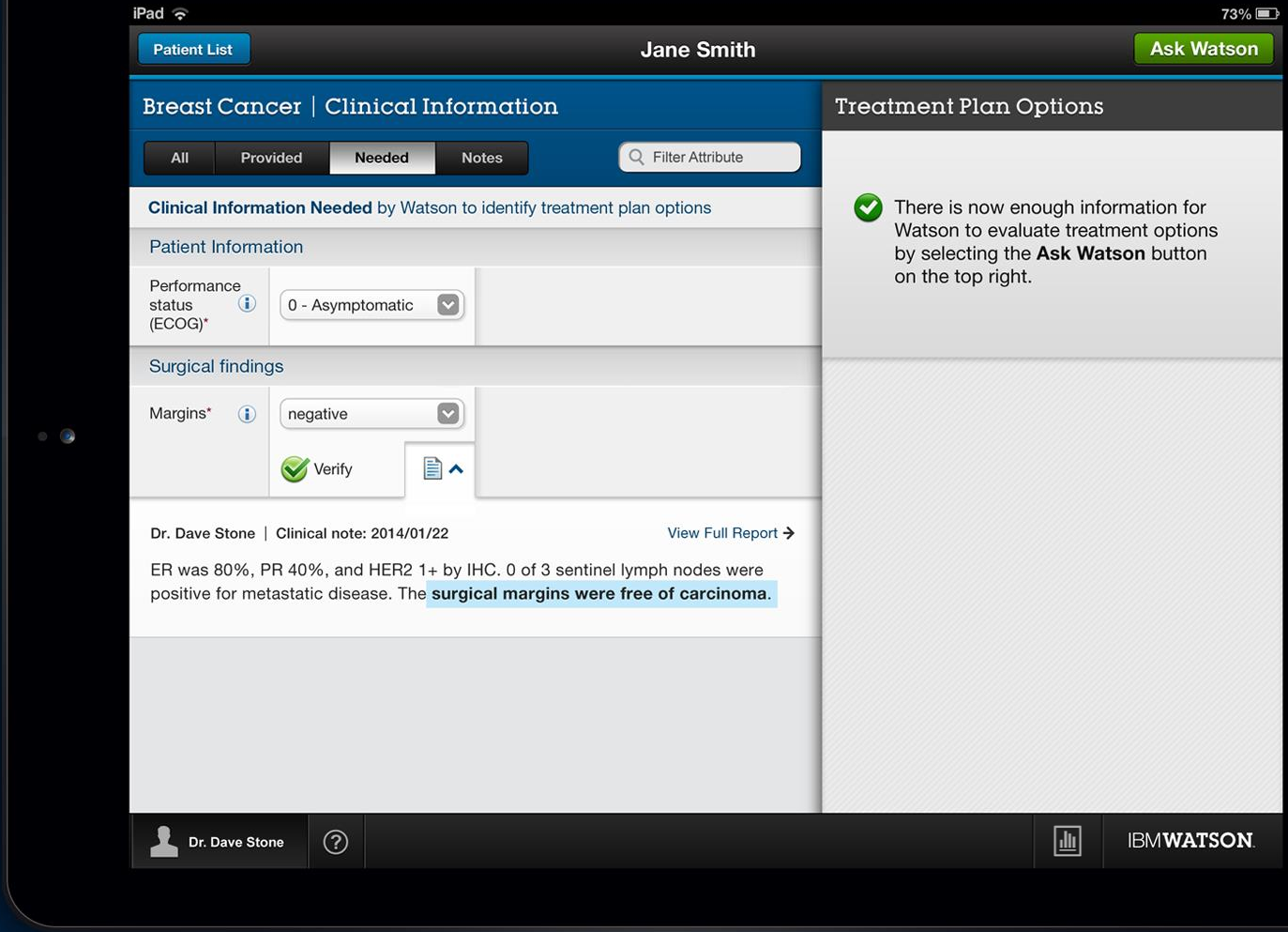

iPad
73%
Patient List
Jane Smith
Breast Cancer | Clinical Information
All
Provided
Needed 2
Notes
Filter Attribute
Clinical Information Needed by Watson to identify treatment plan options
Patient Information
Performance status (ECOG)*
Information Needed
Information Needed
0 - Asymptomatic
1 - Symptomatic, fully ambulatory
2 - Symptomatic, in bed less than 50% of the day
3 - Symptomatic, in bed more than 50% of the day, but not bedridden
4 - Bedridden
Treatment Plan Options
Provide clinical information on the left in the highlighted areas.
Dr. Dave Stone
IBMWATSON

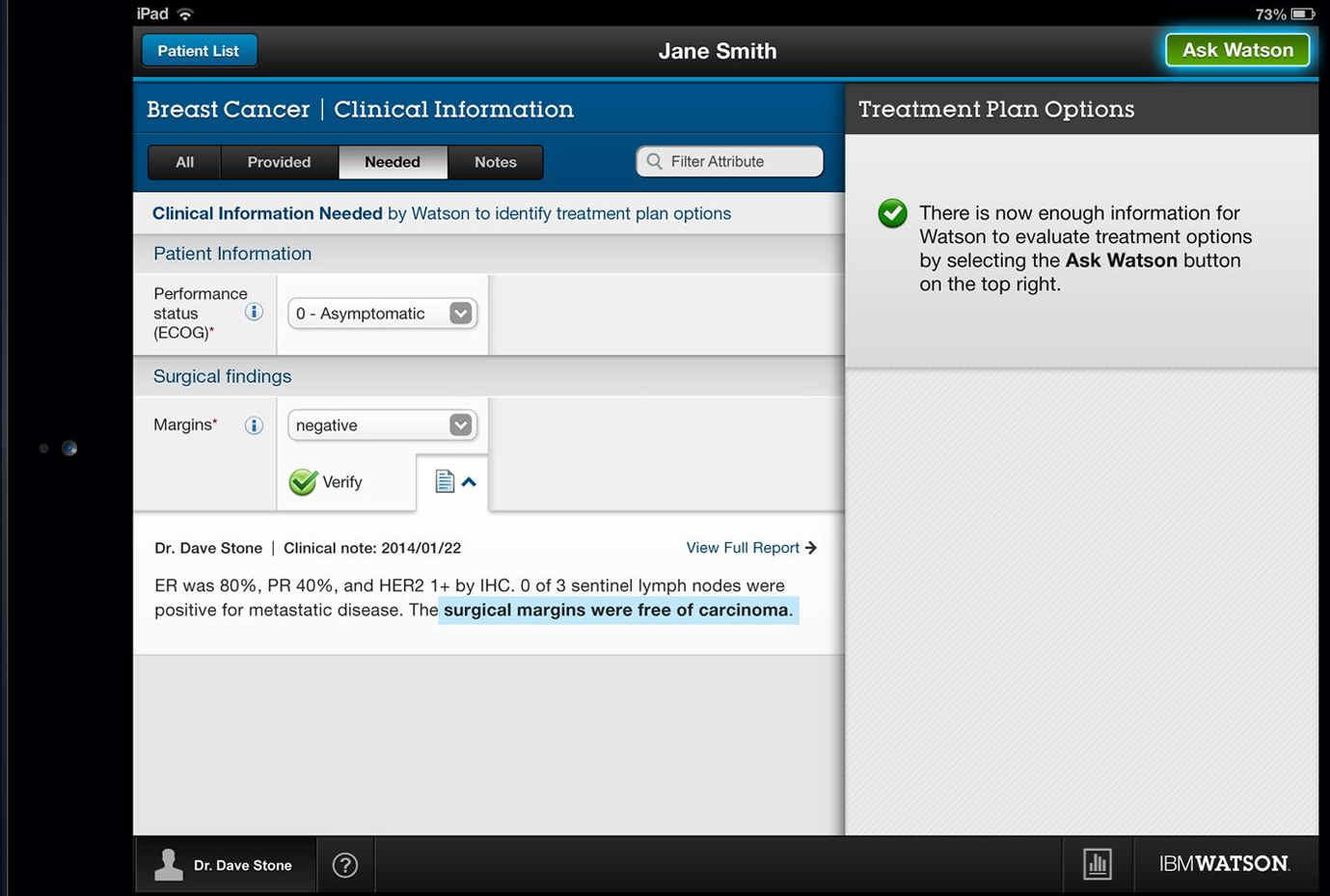

iPad
73%
Patient List
Jane Smith
Breast Cancer | Clinical Information
All
Provided
Needed 1
Notes
Filter Attribute
Clinical Information Needed by Watson to identify treatment plan options
Patient Information
Performance status (ECOG)*
0 - Asymptomatic
Surgical findings
Margins*
negative
Verify
Treatment Plan Options
Provide clinical information on the left in the highlighted areas.
Dr. Dave Stone
IBMWATSON


iPad
73%
Patient List
Jane Smith
Breast Cancer | Clinical Information
All
Provided
Needed 1
Notes
Filter Attribute
Clinical Information Needed by Watson to identify treatment plan options
Patient Information
Performance status (ECOG)*
0 - Asymptomatic
Surgical findings
Margins*
negative
Verify
Treatment Plan Options
Provide clinical information on the left in the highlighted areas.
Dr. Dave Stone
IBMWATSON

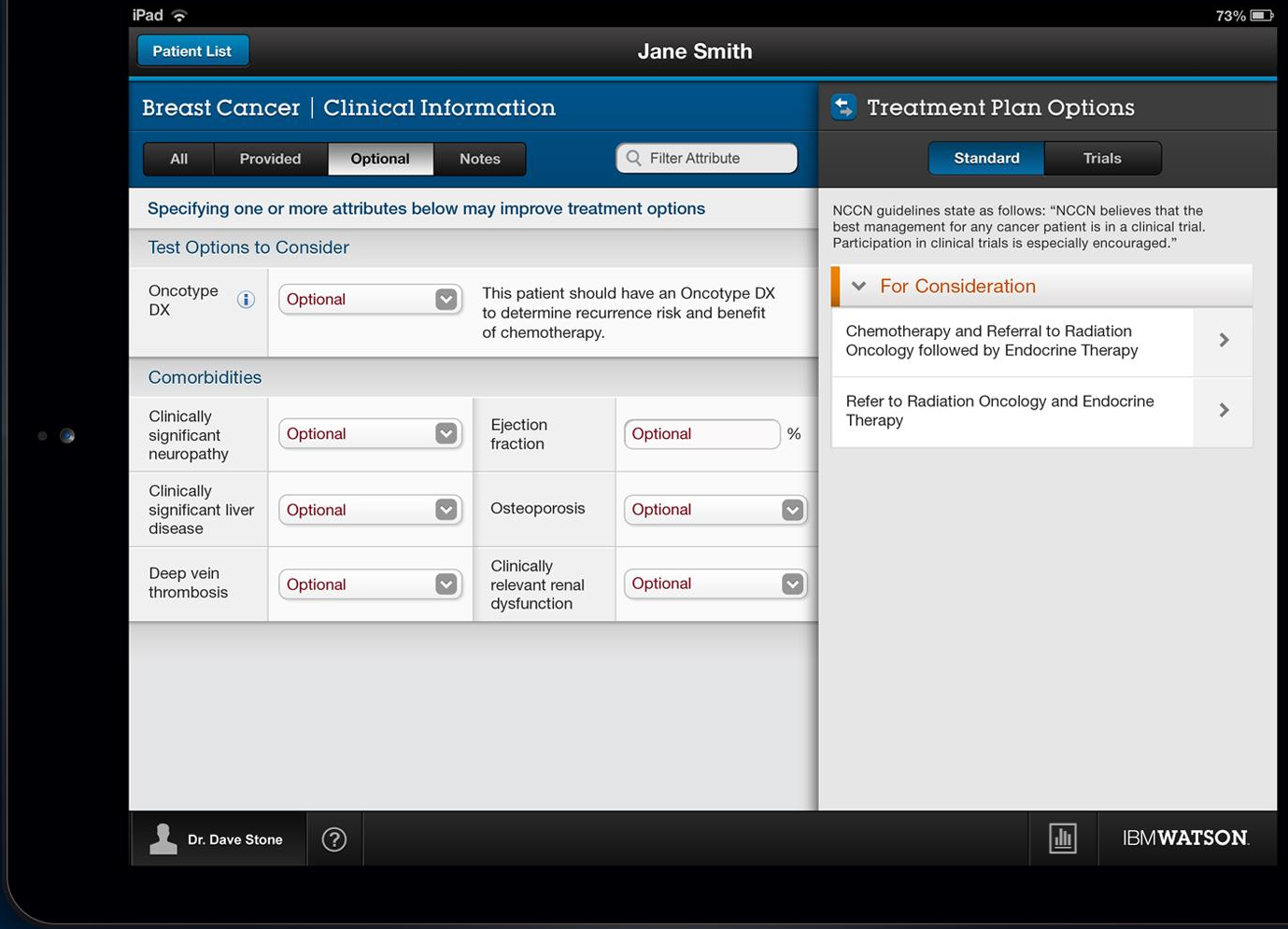

iPad
73%
Patient List
Jane Smith
Breast Cancer | Clinical Information
All
Provided
Needed 1
Notes
Filter Attribute
Clinical Information Needed by Watson to identify treatment plan options
Patient Information
Performance status (ECOG)*
0 - Asymptomatic
Surgical findings
Margins*
negative
Verify
Dr. Dave Stone | Clinical note: 2014/01/22
View Full Report
ER was 80%, PR 40%, and HER2 1+ by IHC. 0 of 3 sentinel lymph nodes were positive for metastatic disease. The surgical margins were free of carcinoma.
Treatment Plan Options
Provide clinical information on the left in the highlighted areas.
Dr. Dave Stone
IBMWATSON

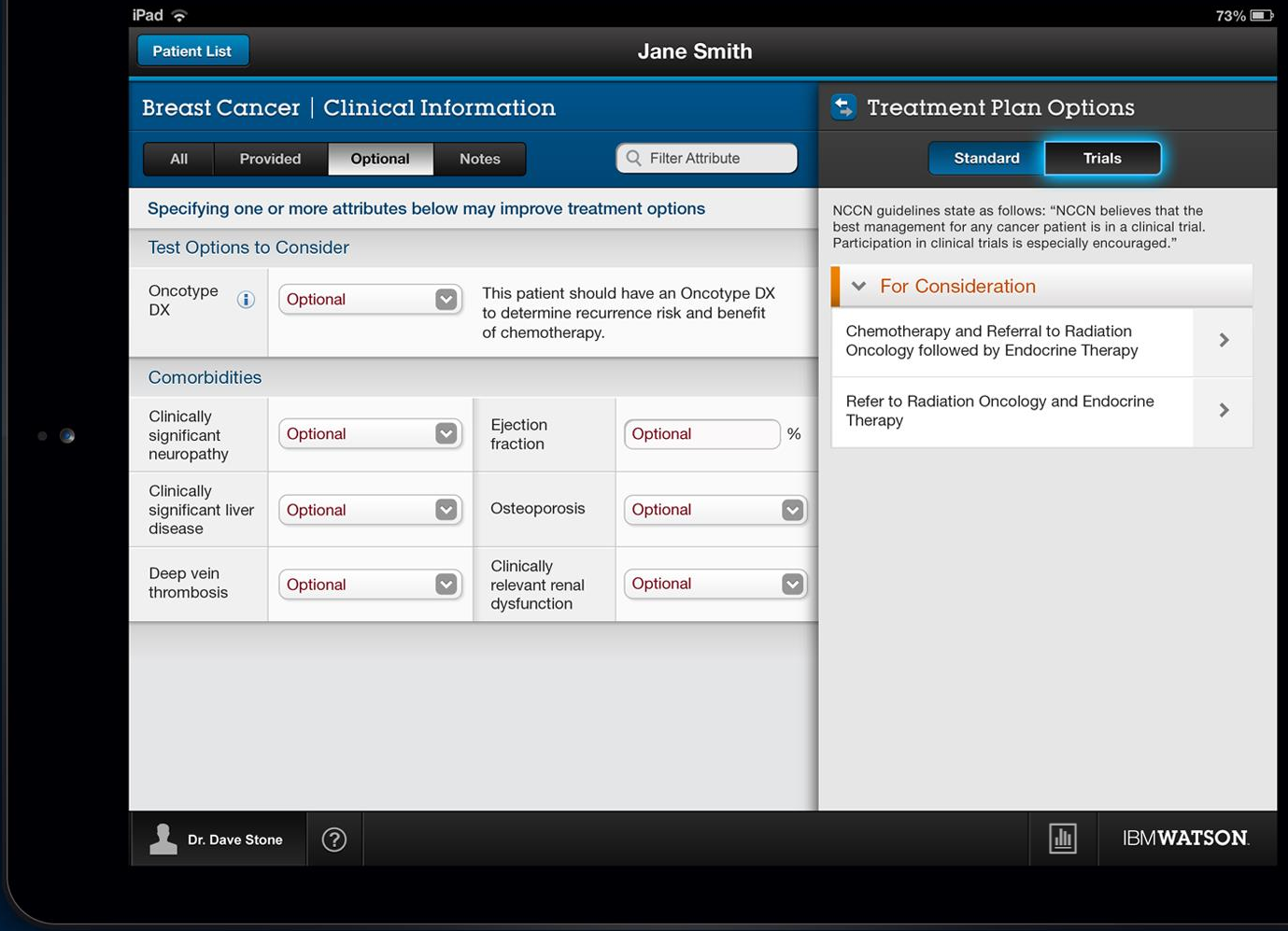

iPad
73%
Patient List
Jane Smith
Breast Cancer | Clinical Information
All
Provided
Needed
Notes
Filter Attribute
Clinical Information Needed by Watson to identify treatment plan options
Patient Information
Performance status (ECOG)*
0 - Asymptomatic
Surgical findings
Margins*
negative
Verify
Dr. Dave Stone | Clinical note: 2014/01/22
View Full Report
ER was 80%, PR 40%, and HER2 1+ by IHC. 0 of 3 sentinel lymph nodes were positive for metastatic disease. The surgical margins were free of carcinoma.
Treatment Plan Options
Provide clinical information on the left in the highlighted areas.
Dr. Dave Stone
IBMWATSON

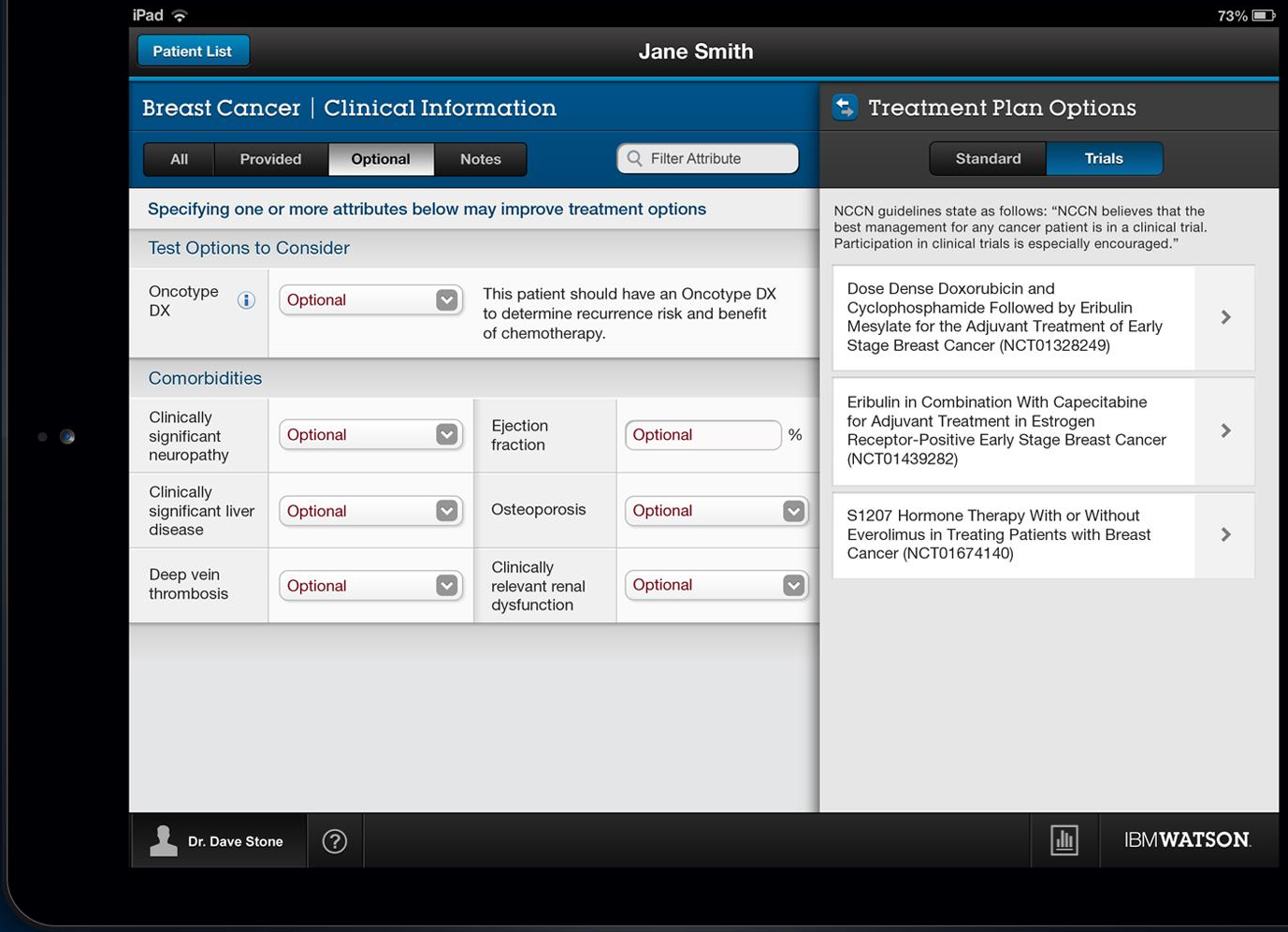

iPad
73%
Patient List
Jane Smith
Ask Watson
Breast Cancer | Clinical Information
All
Provided
Needed
Notes
Filter Attribute
Clinical Information Needed by Watson to identify treatment plan options
Patient Information
Performance status (ECOG)*
0 - Asymptomatic
Surgical findings
Margins*
negative
Verify
Dr. Dave Stone | Clinical note: 2014/01/22
View Full Report
ER was 80%, PR 40%, and HER2 1+ by IHC. 0 of 3 sentinel lymph nodes were positive for metastatic disease. The surgical margins were free of carcinoma.
Treatment Plan Options
There is now enough information for Watson to evaluate treatment options by selecting the Ask Watson button on the top right.
Dr. Dave Stone
IBMWATSON


iPad
73%
Patient List
Jane Smith
Ask Watson
Breast Cancer | Clinical Information
All
Provided
Needed
Notes
Filter Attribute
Clinical Information Needed by Watson to identify treatment plan options
Patient Information
Performance status (ECOG)*
0 - Asymptomatic
Surgical findings
Margins*
negative
Verify
Dr. Dave Stone | Clinical note: 2014/01/22
View Full Report
ER was 80%, PR 40%, and HER2 1+ by IHC. 0 of 3 sentinel lymph nodes were positive for metastatic disease. The surgical margins were free of carcinoma.
Treatment Plan Options
There is now enough information for Watson to evaluate treatment options by selecting the Ask Watson button on the top right.
Dr. Dave Stone
IBMWATSON

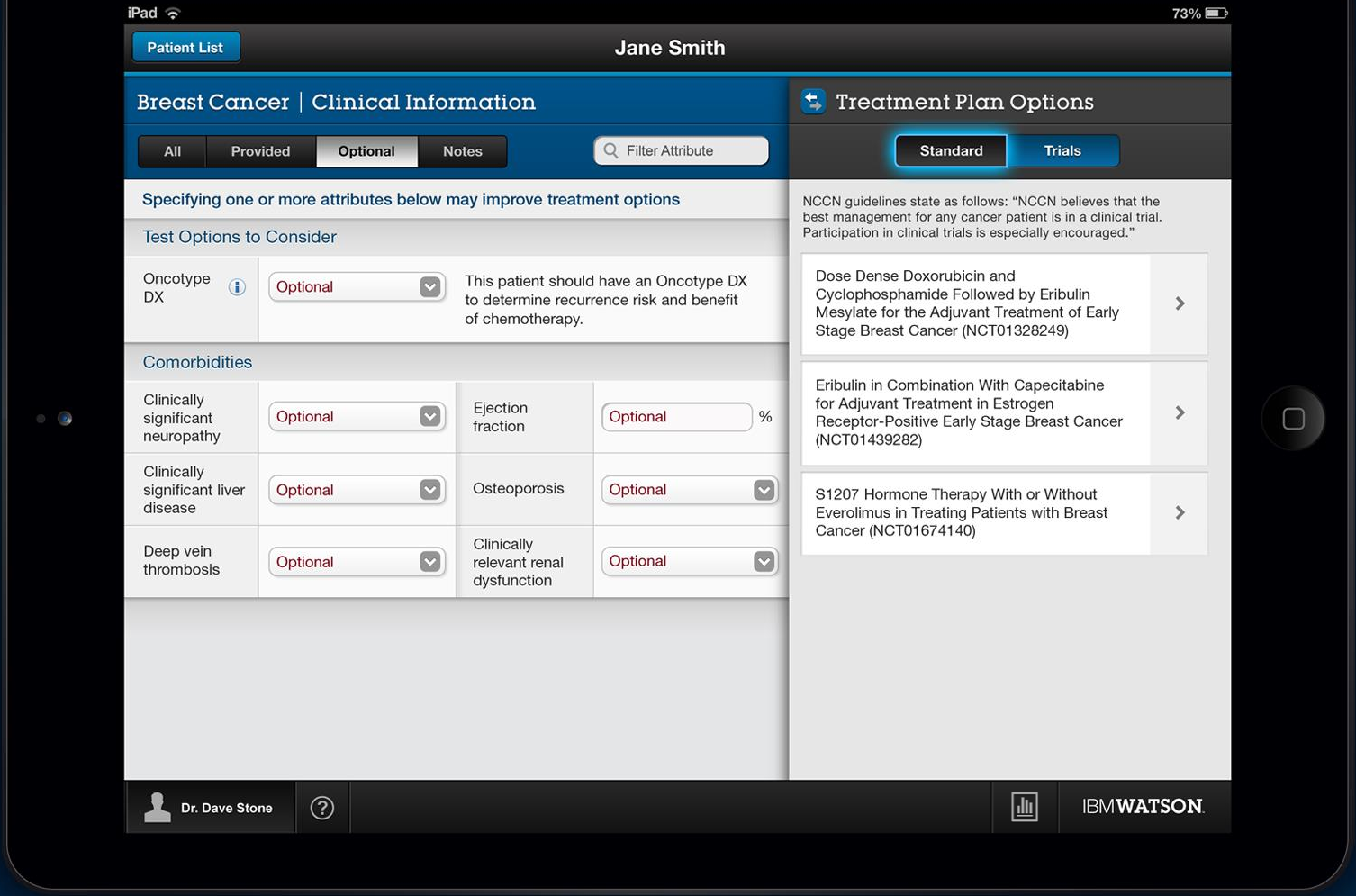

iPad
73%
Watson is processing your request...

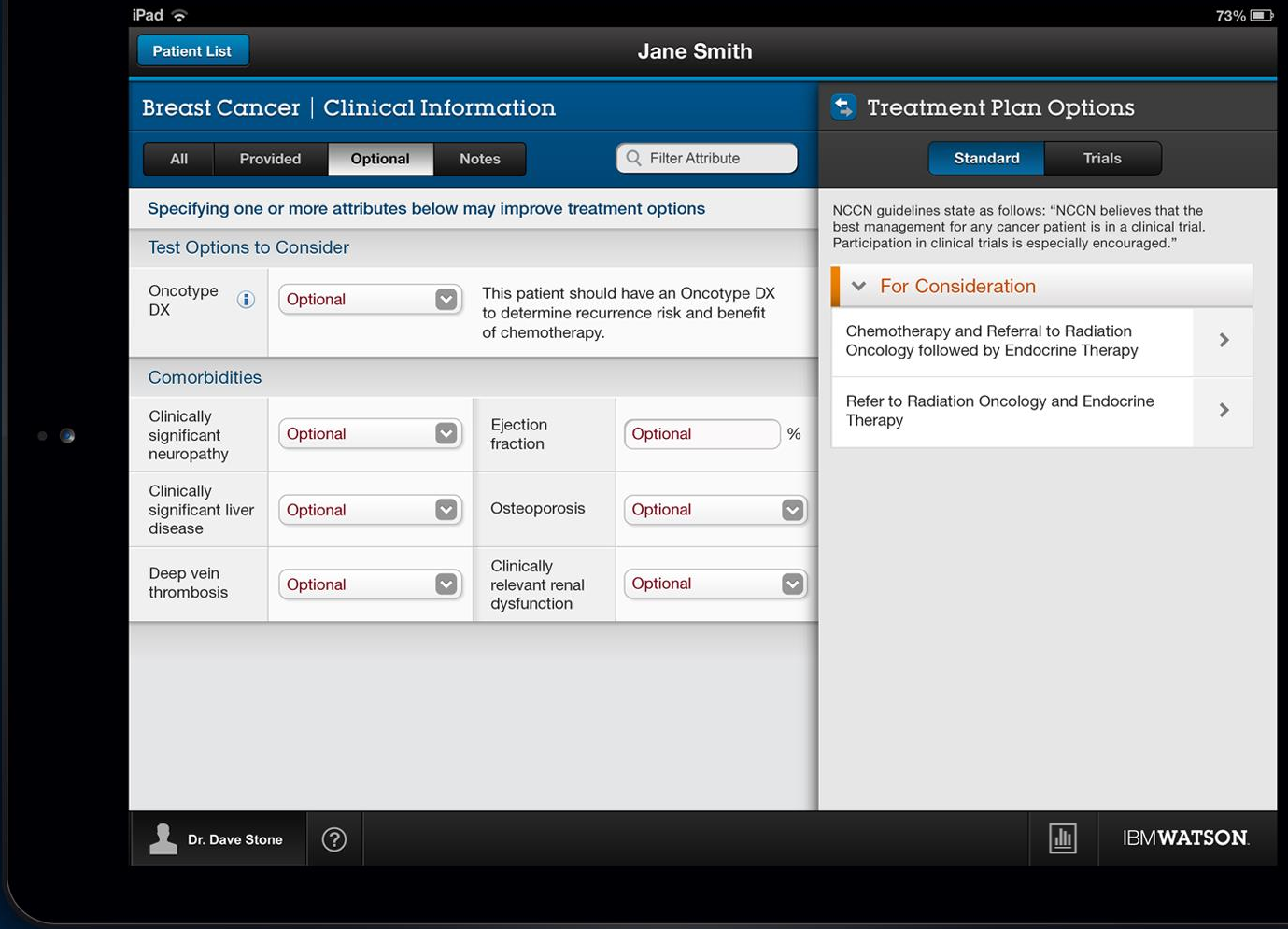

iPad
73%
Patient List
Jane Smith
Breast Cancer | Clinical Information
All
Provided
Optional
Notes
Filter Attribute
Specifying one or more attributes below may improve treatment options
Test Options to Consider
Oncotype DX
Optional
This patient should have an Oncotype DX to determine recurrence risk and benefit of chemotherapy.
Comorbidities
Clinically significant neuropathy
Optional
Ejection fraction
Optional
%
Clinically significant liver disease
Optional
Osteoporosis
Optional
Deep vein thrombosis
Optional
Clinically relevant renal dysfunction
Optional
Treatment Plan Options
Standard
Trials
NCCN guidelines state as follows: “NCCN believes that the best management for any cancer patient is in a clinical trial. Participation in clinical trials is especially encouraged.”
For Consideration
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
Refer to Radiation Oncology and Endocrine Therapy
Dr. Dave Stone
IBMWATSON

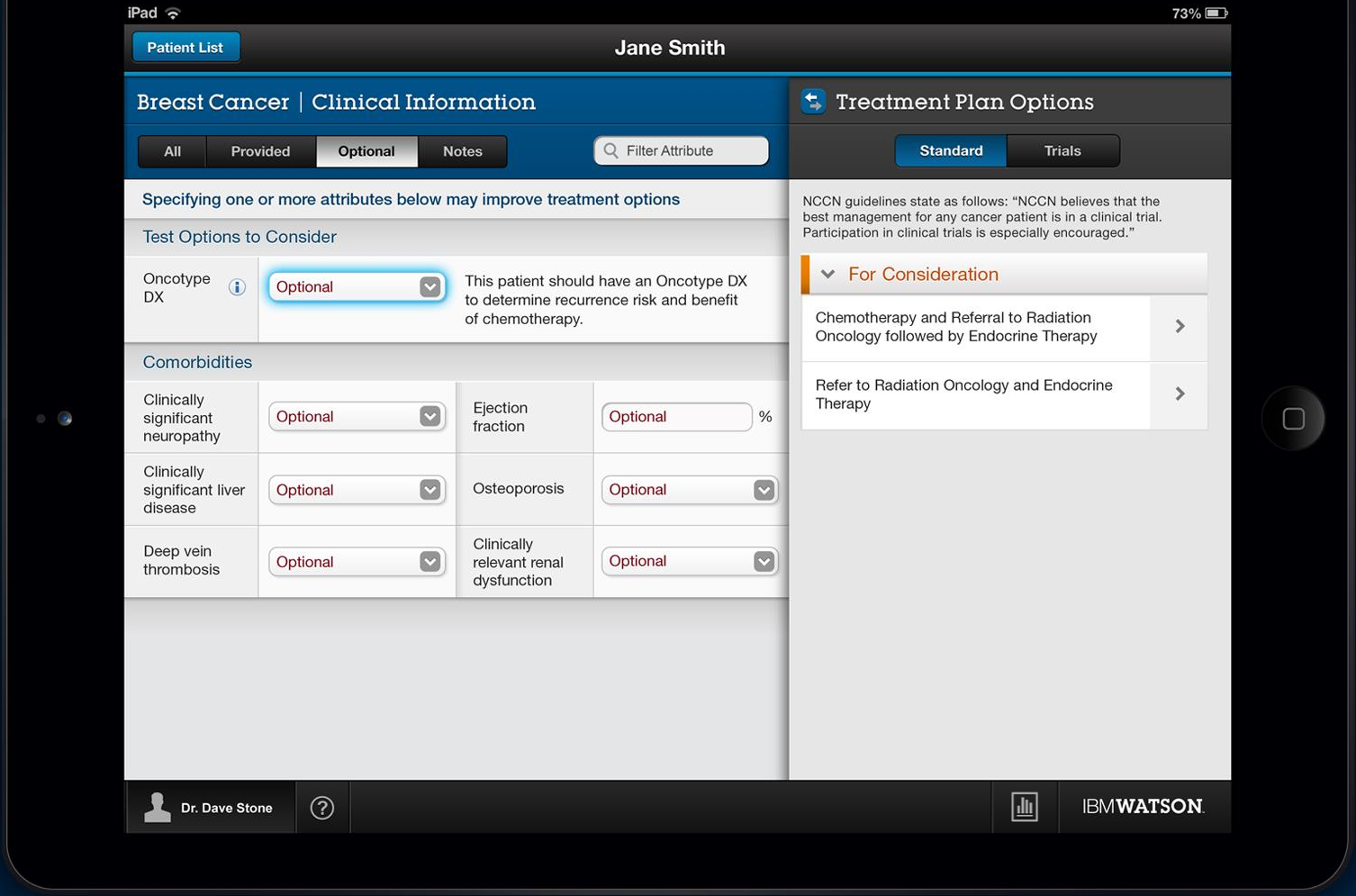

iPad
73%
Patient List
Jane Smith
Breast Cancer | Clinical Information
All
Provided
Optional
Notes
Filter Attribute
Specifying one or more attributes below may improve treatment options
Test Options to Consider
Oncotype DX
Optional
This patient should have an Oncotype DX to determine recurrence risk and benefit of chemotherapy.
Comorbidities
Clinically significant neuropathy
Optional
Ejection fraction
Optional
%
Clinically significant liver disease
Optional
Osteoporosis
Optional
Deep vein thrombosis
Optional
Clinically relevant renal dysfunction
Optional
Treatment Plan Options
Standard
Trials
NCCN guidelines state as follows: “NCCN believes that the best management for any cancer patient is in a clinical trial. Participation in clinical trials is especially encouraged.”
For Consideration
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
Refer to Radiation Oncology and Endocrine Therapy
Dr. Dave Stone
IBMWATSON

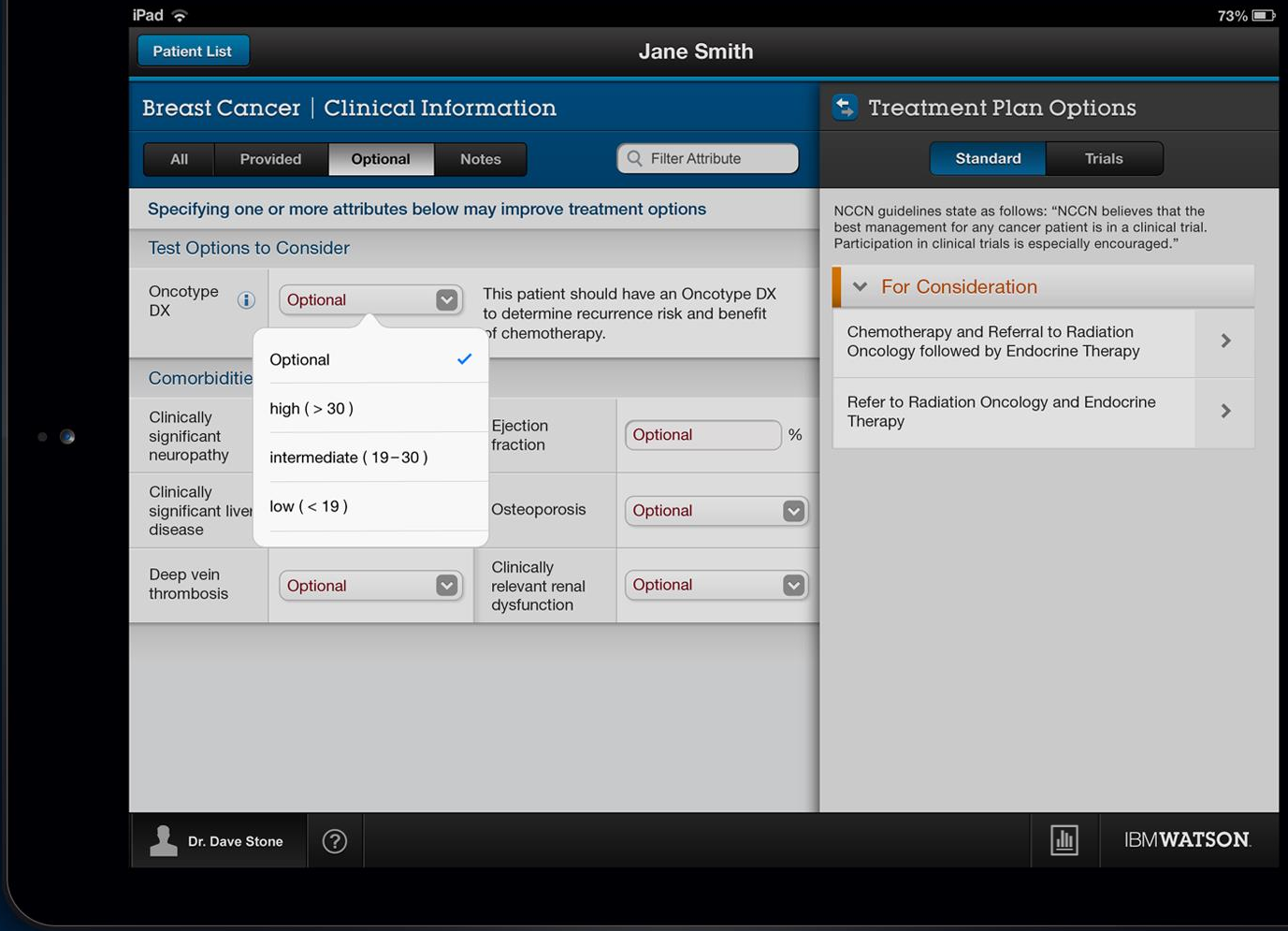

iPad
73%
Patient List
Jane Smith
Breast Cancer | Clinical Information
All
Provided
Optional
Notes
Filter Attribute
Specifying one or more attributes below may improve treatment options
Test Options to Consider
Oncotype DX
Optional
This patient should have an Oncotype DX to determine recurrence risk and benefit of chemotherapy.
Comorbidities
Clinically significant neuropathy
Optional
Ejection fraction
Optional
%
Clinically significant liver disease
Optional
Osteoporosis
Optional
Deep vein thrombosis
Optional
Clinically relevant renal dysfunction
Optional
Treatment Plan Options
Standard
Trials
NCCN guidelines state as follows: “NCCN believes that the best management for any cancer patient is in a clinical trial. Participation in clinical trials is especially encouraged.”
Dose Dense Doxorubicin and Cyclophosphamide Followed by Eribulin Mesylate for the Adjuvant Treatment of Early Stage Breast Cancer (NCT01328249)
Eribulin in Combination With Capecitabine for Adjuvant Treatment in Estrogen Receptor-Positive Early Stage Breast Cancer (NCT01439282)
S1207 Hormone Therapy With or Without Everolimus in Treating Patients with Breast Cancer (NCT01674140)
Dr. Dave Stone
IBMWATSON

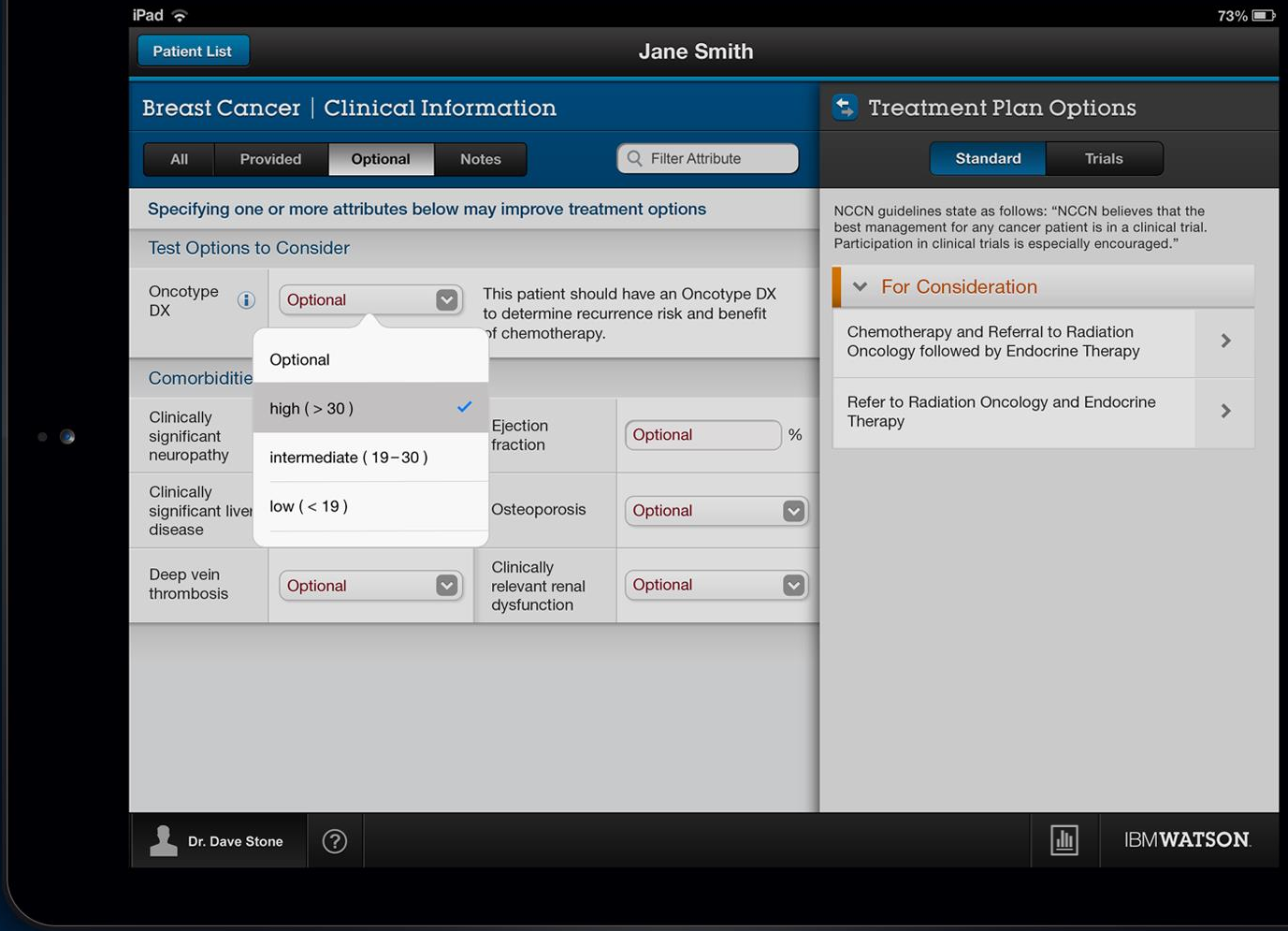
IBMWATSON

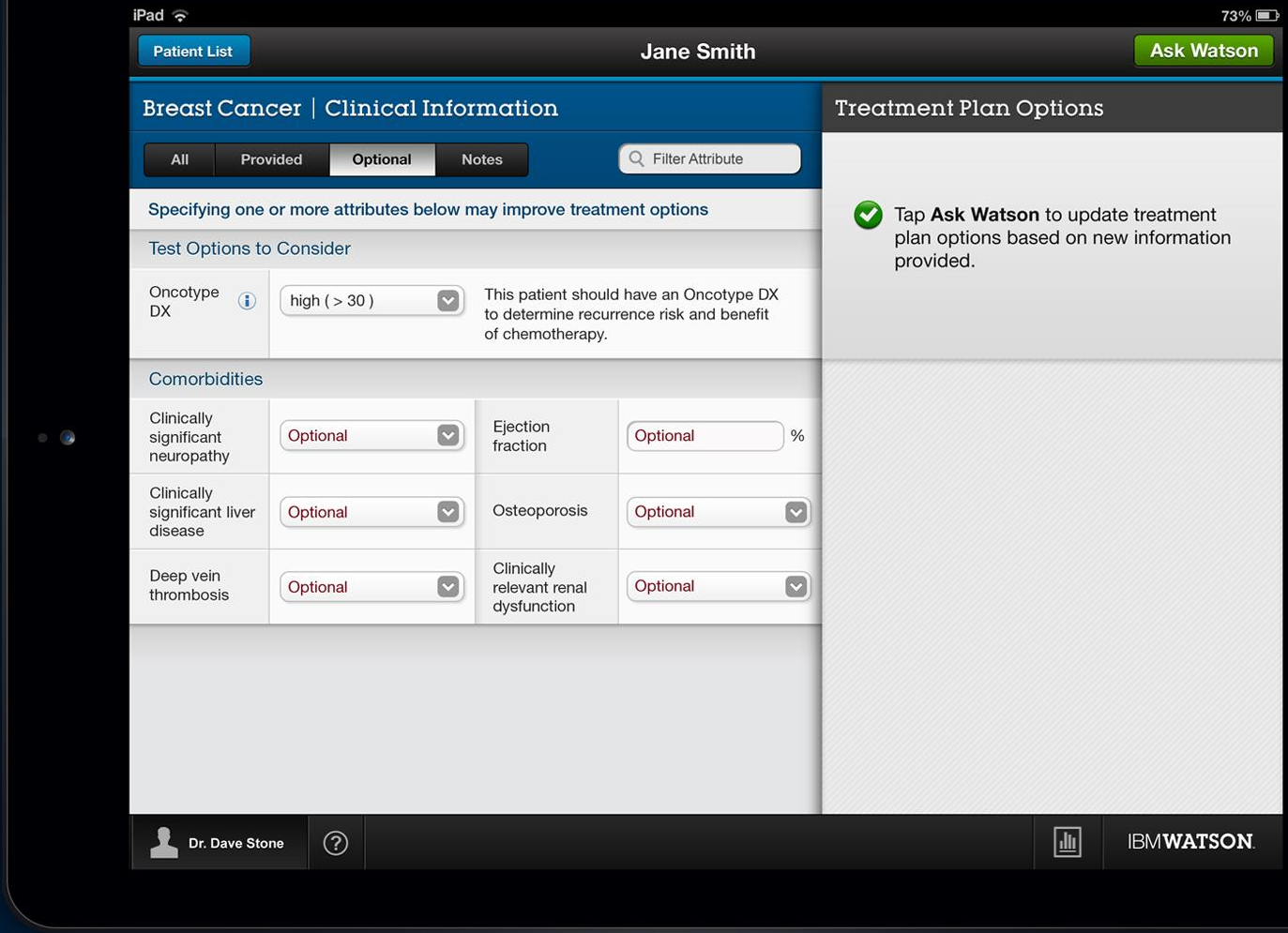

iPad
73%
Patient List
Jane Smith
Breast Cancer | Clinical Information
All
Provided
Optional
Notes
Filter Attribute
Specifying one or more attributes below may improve treatment options
Test Options to Consider
Oncotype DX
Optional
This patient should have an Oncotype DX to determine recurrence risk and benefit of chemotherapy.
Comorbidities
Clinically significant neuropathy
Optional
Ejection fraction
Optional
%
Clinically significant liver disease
Optional
Osteoporosis
Optional
Deep vein thrombosis
Optional
Clinically relevant renal dysfunction
Optional
Treatment Plan Options
Standard
Trials
NCCN guidelines state as follows: “NCCN believes that the best management for any cancer patient is in a clinical trial. Participation in clinical trials is especially encouraged.”
Dose Dense Doxorubicin and Cyclophosphamide Followed by Eribulin Mesylate for the Adjuvant Treatment of Early Stage Breast Cancer (NCT01328249)
Eribulin in Combination With Capecitabine for Adjuvant Treatment in Estrogen Receptor-Positive Early Stage Breast Cancer (NCT01439282)
S1207 Hormone Therapy With or Without Everolimus in Treating Patients with Breast Cancer (NCT01674140)
Dr. Dave Stone
IBMWATSON

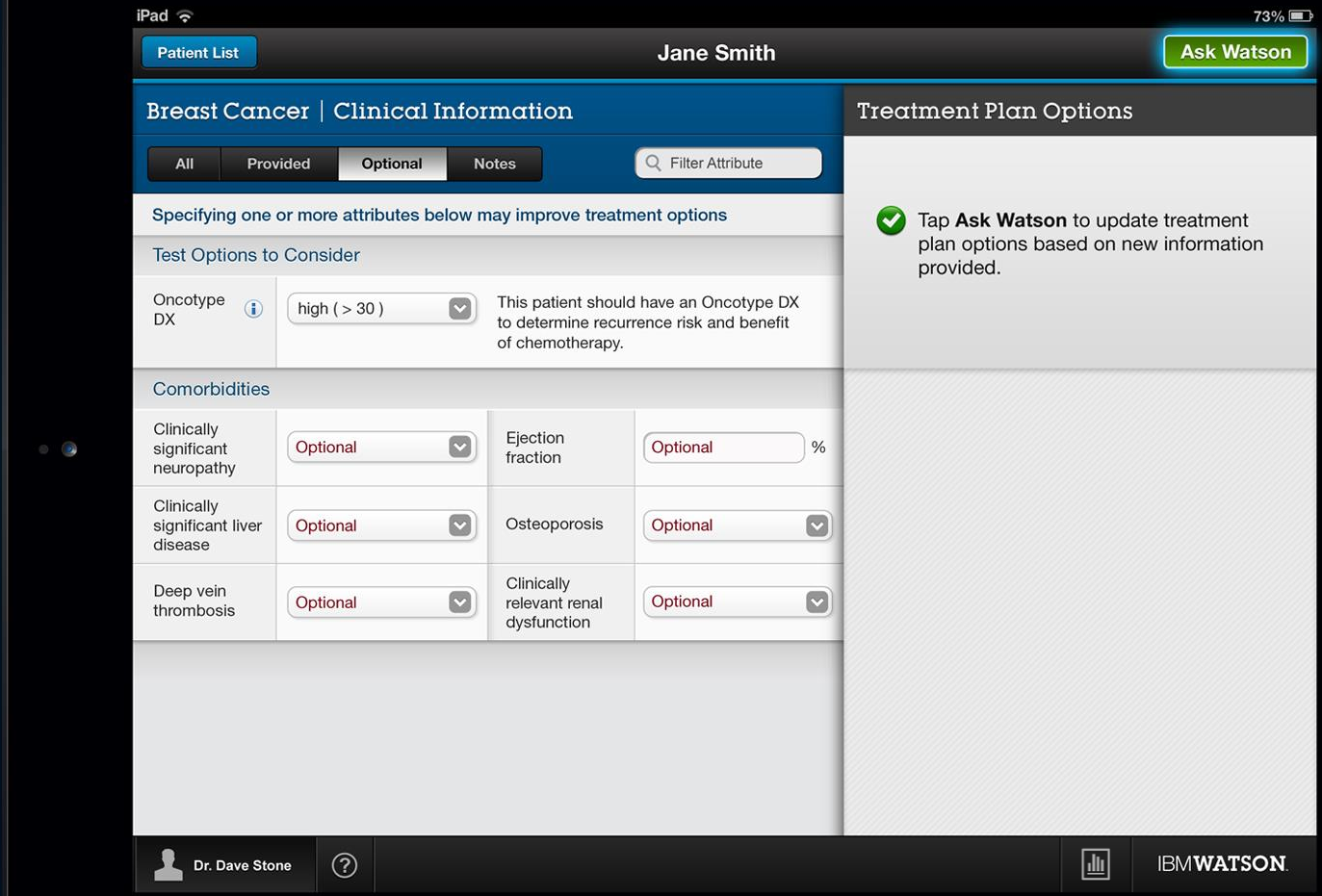

iPad
73%
Patient List
Jane Smith
Breast Cancer | Clinical Information
All
Provided
Optional
Notes
Filter Attribute
Specifying one or more attributes below may improve treatment options
Test Options to Consider
Oncotype DX
Optional
This patient should have an Oncotype DX to determine recurrence risk and benefit of chemotherapy.
Comorbidities
Clinically significant neuropathy
Optional
Ejection fraction
Optional
%
Clinically significant liver disease
Optional
Osteoporosis
Optional
Deep vein thrombosis
Optional
Clinically relevant renal dysfunction
Optional
Treatment Plan Options
Standard
Trials
NCCN guidelines state as follows: “NCCN believes that the best management for any cancer patient is in a clinical trial. Participation in clinical trials is especially encouraged.”
For Consideration
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
Refer to Radiation Oncology and Endocrine Therapy
Dr. Dave Stone
IBMWATSON


iPad
73%
Patient List
Jane Smith
Breast Cancer | Clinical Information
All
Provided
Optional
Notes
Filter Attribute
Specifying one or more attributes below may improve treatment options
Test Options to Consider
Oncotype DX
Optional
This patient should have an Oncotype DX to determine recurrence risk and benefit of chemotherapy.
Comorbidities
Clinically significant neuropathy
Optional
Ejection fraction
Optional
%
Clinically significant liver disease
Optional
Osteoporosis
Optional
Deep vein thrombosis
Optional
Clinically relevant renal dysfunction
Optional
Treatment Plan Options
Standard
Trials
NCCN guidelines state as follows: “NCCN believes that the best management for any cancer patient is in a clinical trial. Participation in clinical trials is especially encouraged.”
For Consideration
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
Refer to Radiation Oncology and Endocrine Therapy
Dr. Dave Stone
IBMWATSON

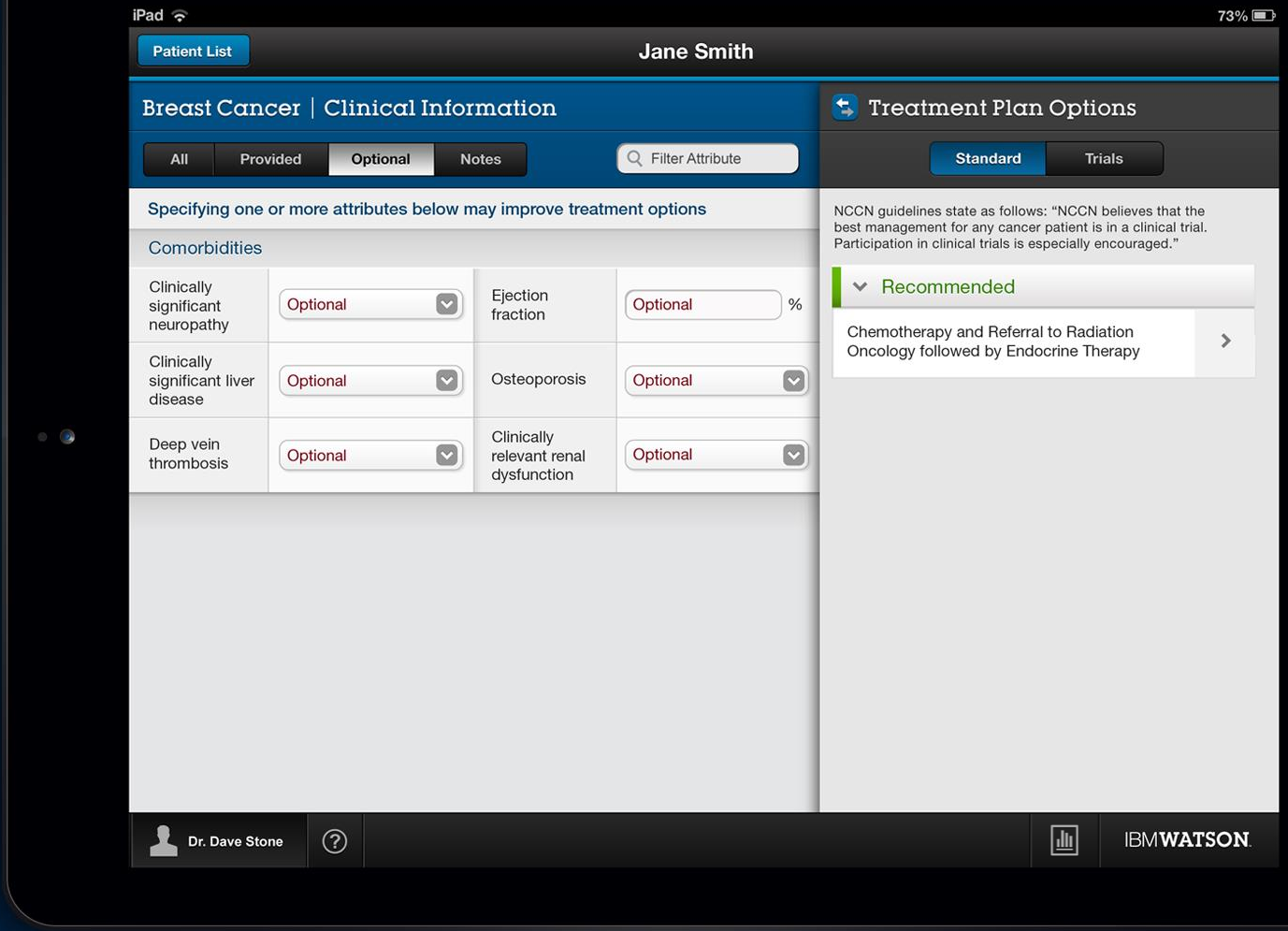

iPad
73%
Patient List
Jane Smith
Breast Cancer | Clinical Information
All
Provided
Optional
Notes
Filter Attribute
Specifying one or more attributes below may improve treatment options
Test Options to Consider
Oncotype DX
Optional
This patient should have an Oncotype DX to determine recurrence risk and benefit of chemotherapy.
Optional
high (> 30)
intermediate (19 – 30)
low (< 19)
Comorbiditie
Clinically significant neuropathy
Ejection fraction
Optional
%
Clinically significant liver disease
Osteoporosis
Optional
Deep vein thrombosis
Optional
Clinically relevant renal dysfunction
Optional
Treatment Plan Options
Standard
Trials
NCCN guidelines state as follows: “NCCN believes that the best management for any cancer patient is in a clinical trial. Participation in clinical trials is especially encouraged.”
For Consideration
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
Refer to Radiation Oncology and Endocrine Therapy
Dr. Dave Stone
IBMWATSON

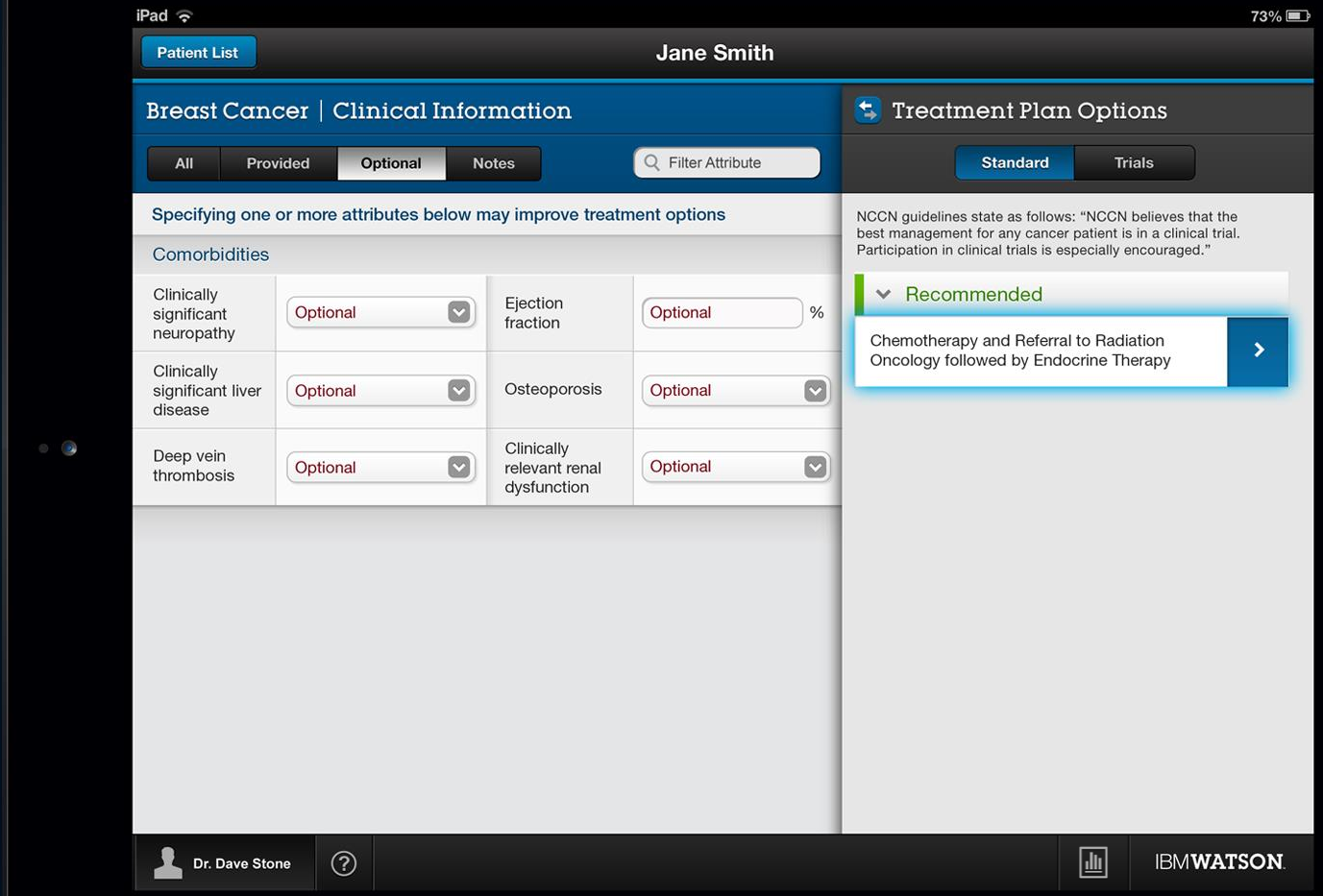

iPad
73%
Patient List
Jane Smith
Breast Cancer | Clinical Information
All
Provided
Optional
Notes
Filter Attribute
Specifying one or more attributes below may improve treatment options
Test Options to Consider
Oncotype DX
Optional
This patient should have an Oncotype DX to determine recurrence risk and benefit of chemotherapy.
Optional
high (> 30)
intermediate (19 – 30)
low (< 19)
Comorbidities
Clinically significant neuropathy
Ejection fraction
Optional
%
Clinically significant liver disease
Osteoporosis
Optional
Deep vein thrombosis
Optional
Clinically relevant renal dysfunction
Optional
Treatment Plan Options
Standard
Trials
NCCN guidelines state as follows: “NCCN believes that the best management for any cancer patient is in a clinical trial. Participation in clinical trials is especially encouraged.”
For Consideration
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
Refer to Radiation Oncology and Endocrine Therapy
Dr. Dave Stone
IBMWATSON

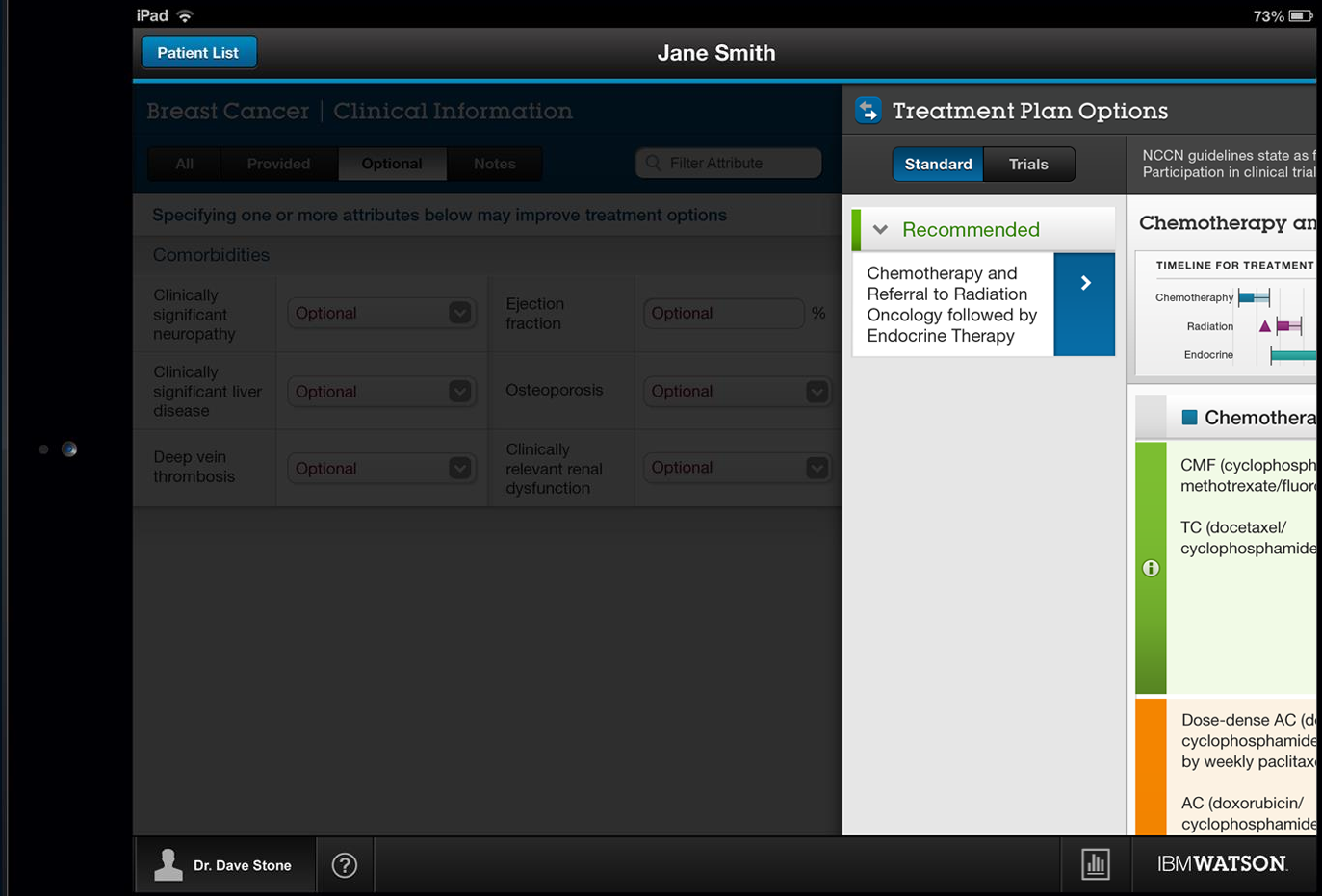

iPad
73%
Patient List
Jane Smith
Ask Watson
Breast Cancer | Clinical Information
All
Provided
Optional
Notes
Filter Attribute
Specifying one or more attributes below may improve treatment options
Test Options to Consider
Oncotype DX
high (> 30)
This patient should have an Oncotype DX to determine recurrence risk and benefit of chemotherapy.
Comorbidities
Clinically significant neuropathy
Optional
Ejection fraction
Optional
%
Clinically significant liver disease
Optional
Osteoporosis
Optional
Deep vein thrombosis
Optional
Clinically relevant renal dysfunction
Optional
Treatment Plan Options
Tap Ask Watson to update treatment plan options based on new information provided.
Dr. Dave Stone
IBMWATSON

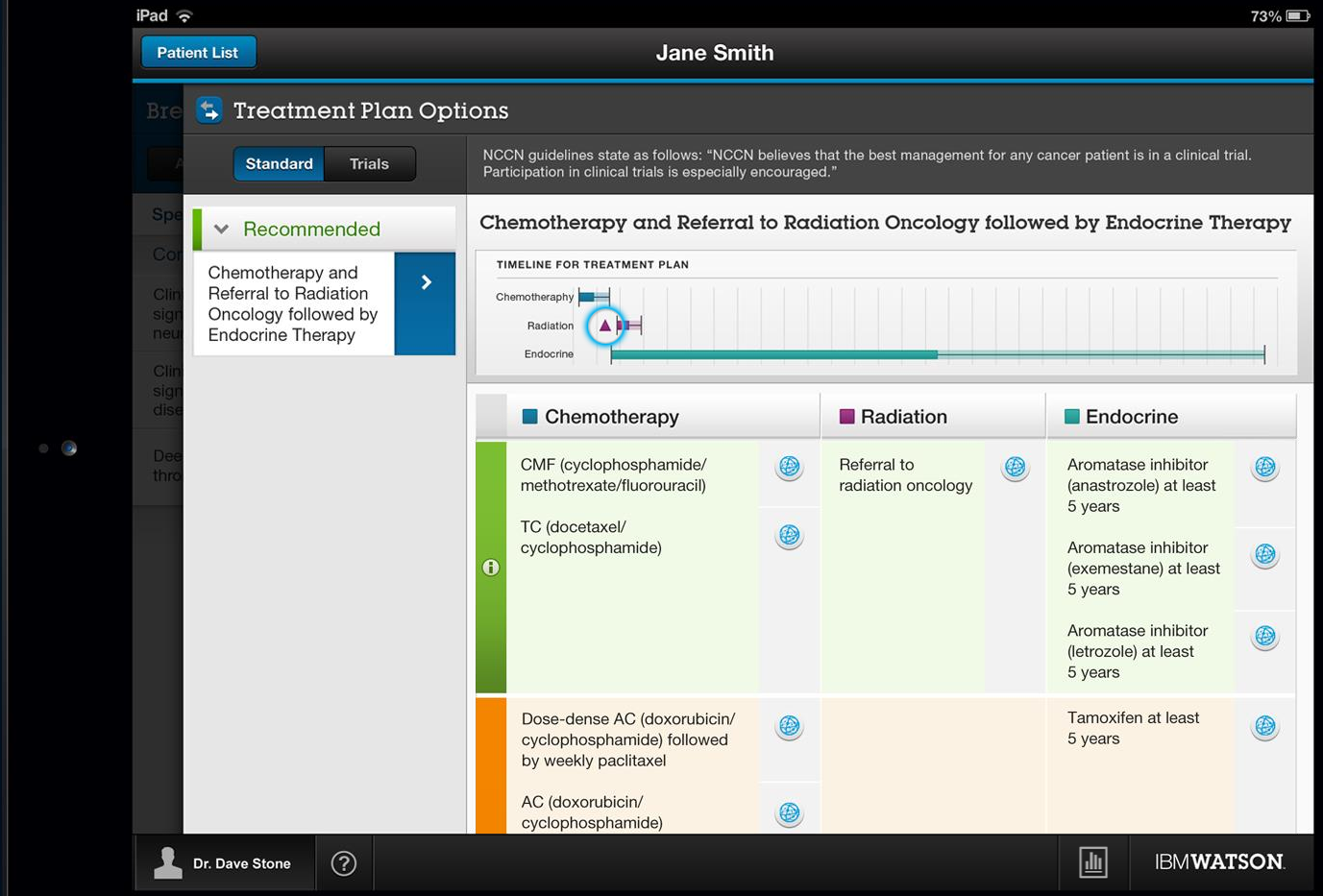

iPad
73%
Patient List
Jane Smith
Ask Watson
Breast Cancer | Clinical Information
All
Provided
Optional
Notes
Filter Attribute
Specifying one or more attributes below may improve treatment options
Test Options to Consider
Oncotype DX
high (> 30)
This patient should have an Oncotype DX to determine recurrence risk and benefit of chemotherapy.
Comorbidities
Clinically significant neuropathy
Optional
Ejection fraction
Optional
%
Clinically significant liver disease
Optional
Osteoporosis
Optional
Deep vein thrombosis
Optional
Clinically relevant renal dysfunction
Optional
Treatment Plan Options
Tap Ask Watson to update treatment plan options based on new information provided.
Dr. Dave Stone
IBMWATSON

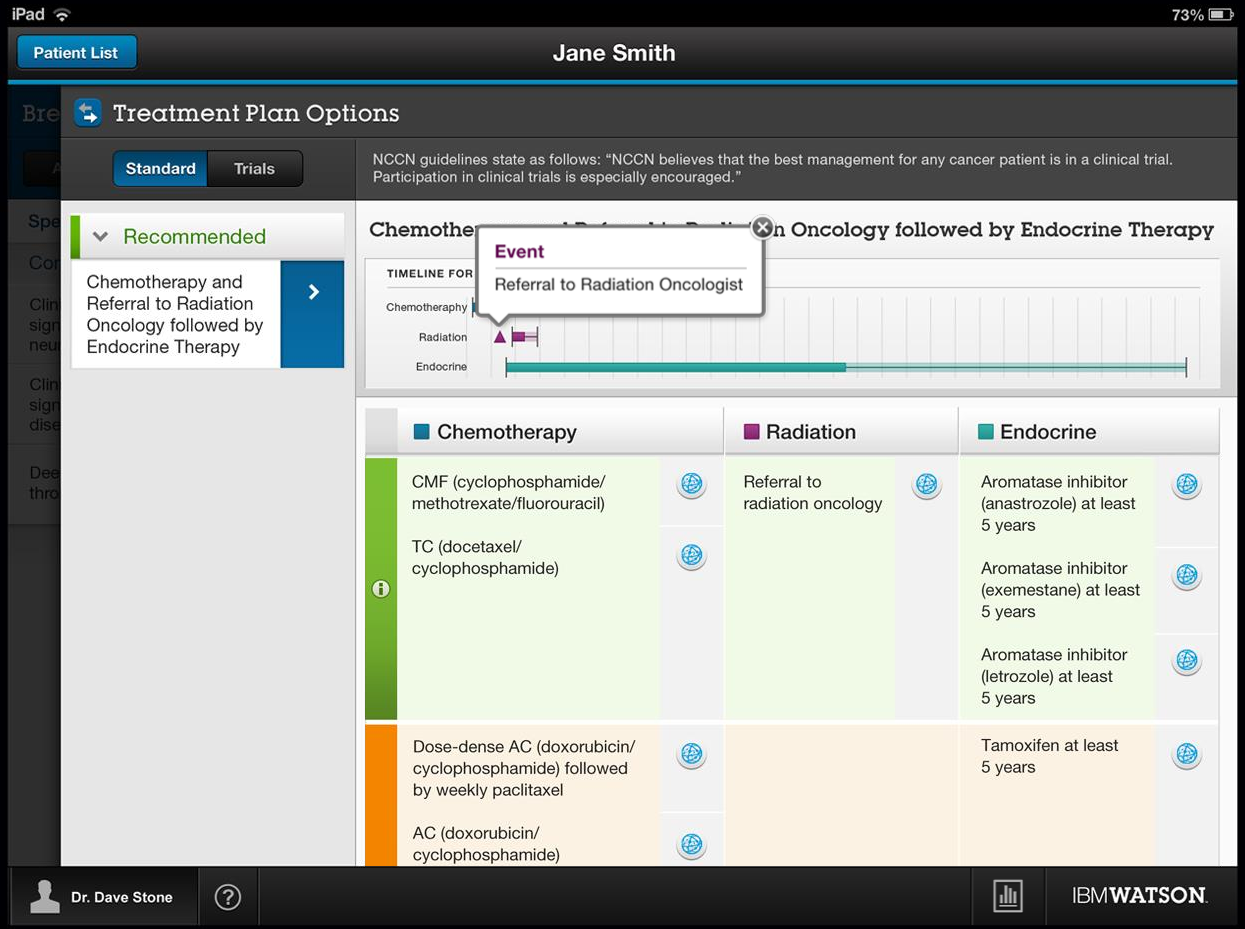

iPad
73%
Watson is processing your request...

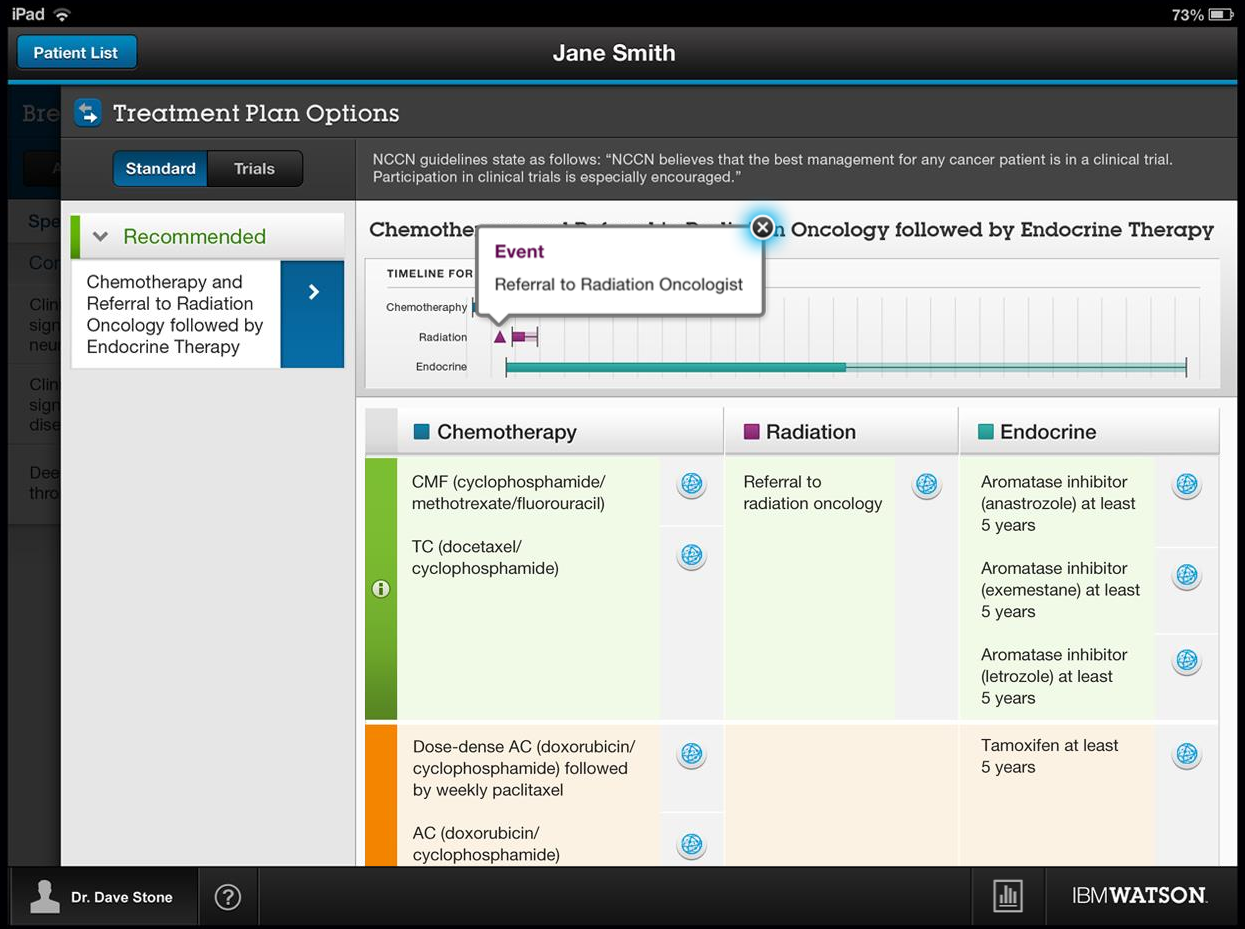

iPad
73%
Patient List
Jane Smith
Breast Cancer | Clinical Information
All
Provided
Optional
Notes
Filter Attribute
Specifying one or more attributes below may improve treatment options
Comorbidities
Clinically significant neuropathy
Optional
Ejection fraction
Optional
%
Clinically significant liver disease
Optional
Osteoporosis
Optional
Deep vein thrombosis
Optional
Clinically relevant renal dysfunction
Optional
Treatment Plan Options
Standard
Trials
NCCN guidelines state as follows: “NCCN believes that the best management for any cancer patient is in a clinical trial. Participation in clinical trials is especially encouraged.”
Recommended
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
Dr. Dave Stone
IBMWATSON

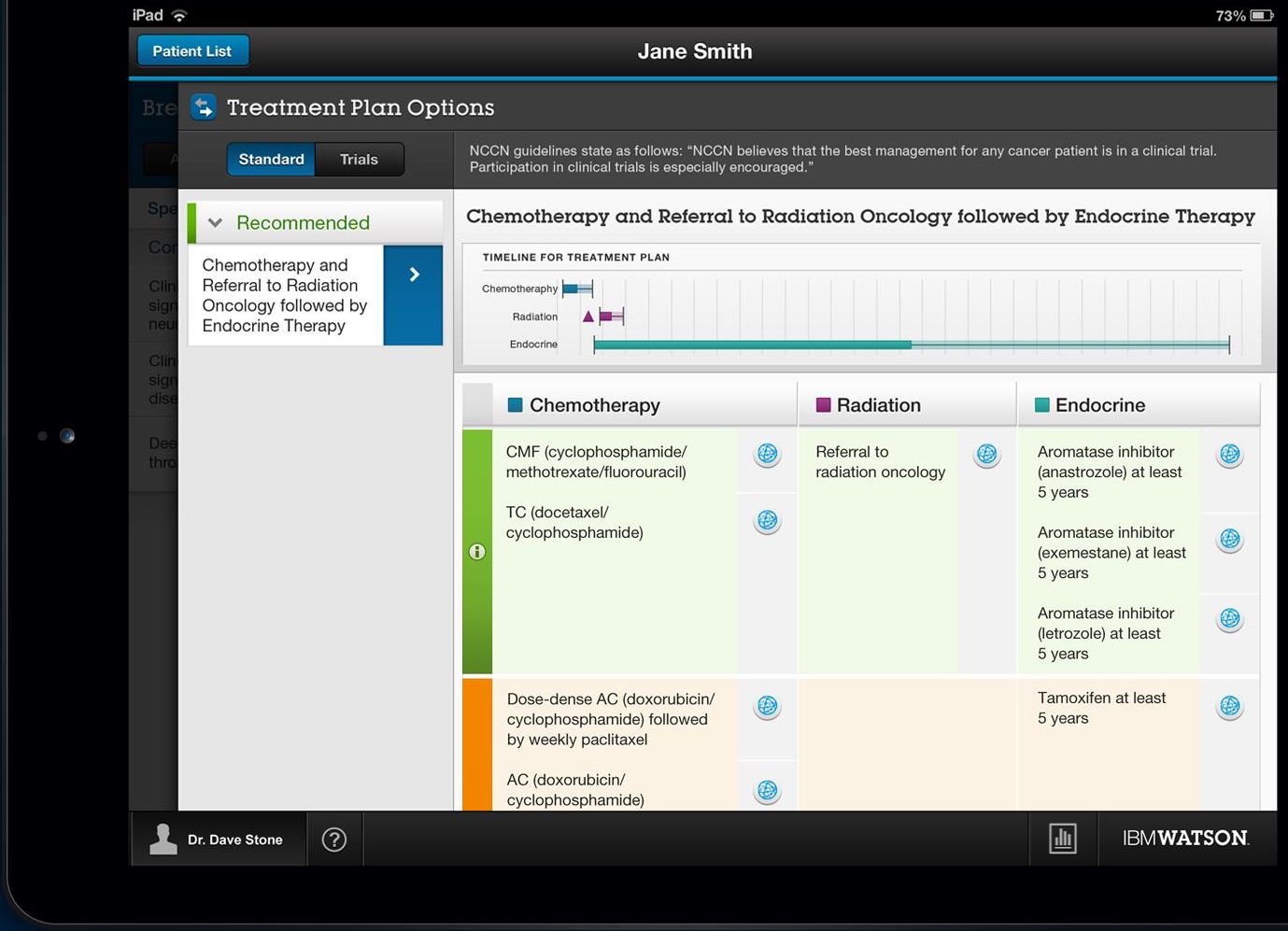

iPad
73%
Patient List
Jane Smith
Breast Cancer | Clinical Information
All
Provided
Optional
Notes
Filter Attribute
Specifying one or more attributes below may improve treatment options
Comorbidities
Clinically significant neuropathy
Optional
Ejection fraction
Optional
%
Clinically significant liver disease
Optional
Osteoporosis
Optional
Deep vein thrombosis
Optional
Clinically relevant renal dysfunction
Optional
Treatment Plan Options
Standard
Trials
NCCN guidelines state as follows: "NCCN believes that the best management for any cancer patient is in a clinical trial. Participation in clinical trials is especially encouraged."
Recommended
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
Dr. Dave Stone
IBMWATSON

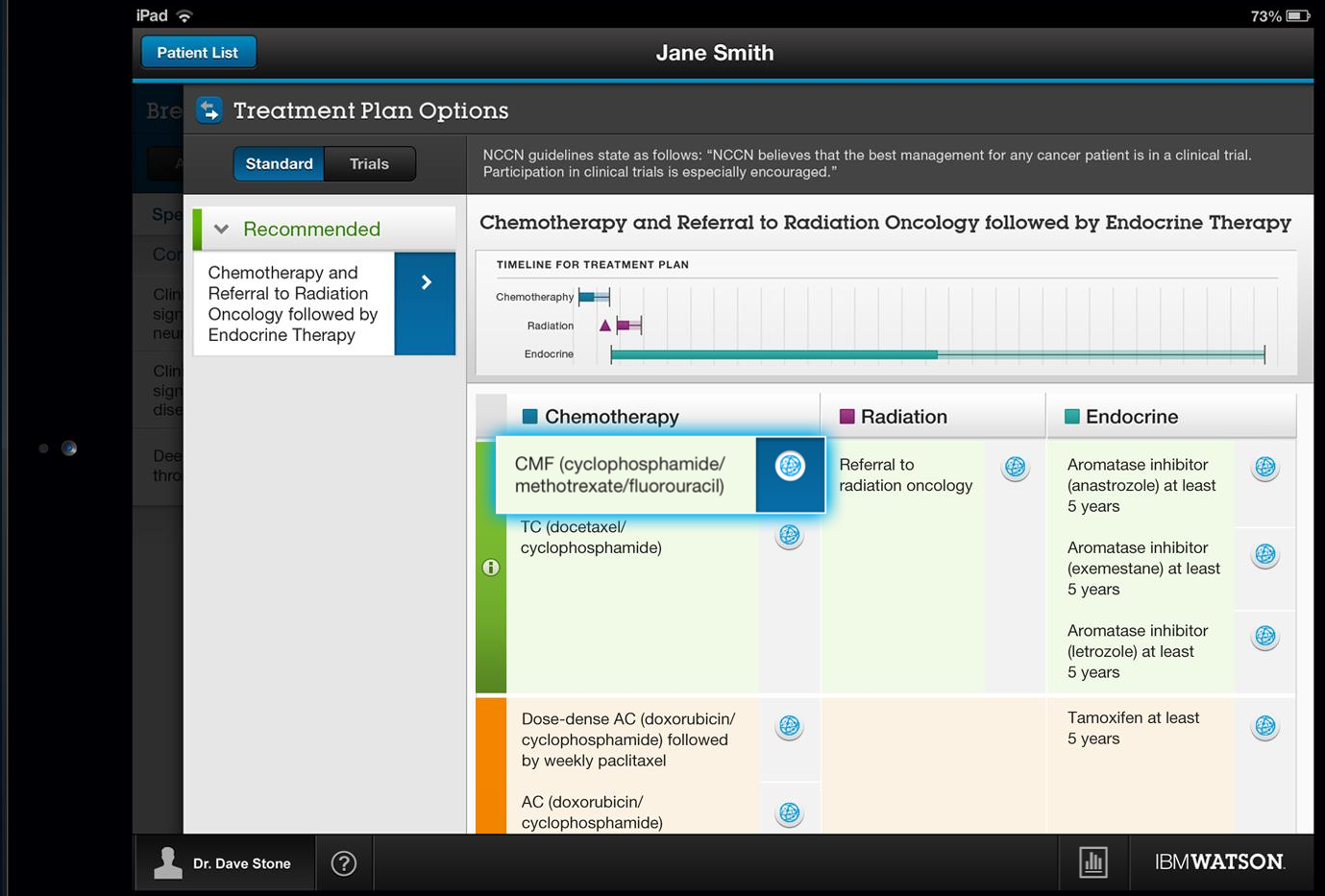

iPad
73%
Patient List
Jane Smith
Breast Cancer | Clinical Information
All
Provided
Optional
Notes
Filter Attribute
Specifying one or more attributes below may improve treatment options
Comorbidities
Clinically significant neuropathy
Optional
Ejection fraction
Optional
%
Clinically significant liver disease
Optional
Osteoporosis
Optional
Deep vein thrombosis
Optional
Clinically relevant renal dysfunction
Optional
Treatment Plan Options
Standard
Trials
NCCN guidelines state as f
Participation in clinical trial
Recommended
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
Chemotherapy an
TIMELINE FOR TREATMENT
Chemotherapy
Radiation
Endocrine
Chemothera
CMF (cyclophosph
methotrexate/fluor
TC (docetaxel/
cyclophosphamide
Dose-dense AC (d
cyclophosphamide
by weekly paclitax
AC (doxorubicin/
cyclophosphamide
Dr. Dave Stone
IBMWATSON


iPad
73%
Patient List
Jane Smith
Treatment Plan Options
Standard
Trials
NCCN guidelines state as follows: "NCCN believes that the best management for any cancer patient is in a clinical trial. Participation in clinical trials is especially encouraged."
Recommended
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
TIMELINE FOR TREATMENT PLAN
Chemotherapy
Radiation
Endocrine
Chemotherapy
Radiation
Endocrine
CMF (cyclophosphamide/ methotrexate/fluorouracil)
TC (docetaxel/ cyclophosphamide)
Referral to radiation oncology
Aromatase inhibitor (anastrozole) at least 5 years
Aromatase inhibitor (exemestane) at least 5 years
Aromatase inhibitor (letrozole) at least 5 years
Dose-dense AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
AC (doxorubicin/ cyclophosphamide)
Tamoxifen at least 5 years
Dr. Dave Stone
IBMWATSON


iPad
73%
Patient List
Jane Smith
Treatment Plan Options
Standard
Trials
NCCN guidelines state as follows: "NCCN believes that the best management for any cancer patient is in a clinical trial. Participation in clinical trials is especially encouraged."
Recommended
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
Oncology followed by Endocrine Therapy
Event
Referral to Radiation Oncologist
TIMELINE FOR
Chemotherapy
Radiation
Endocrine
Chemotherapy
Radiation
Endocrine
CMF (cyclophosphamide/ methotrexate/fluorouracil)
TC (docetaxel/ cyclophosphamide)
Referral to radiation oncology
Aromatase inhibitor (anastrozole) at least 5 years
Aromatase inhibitor (exemestane) at least 5 years
Aromatase inhibitor (letrozole) at least 5 years
Dose-dense AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
AC (doxorubicin/ cyclophosphamide)
Tamoxifen at least 5 years
Dr. Dave Stone
IBMWATSON

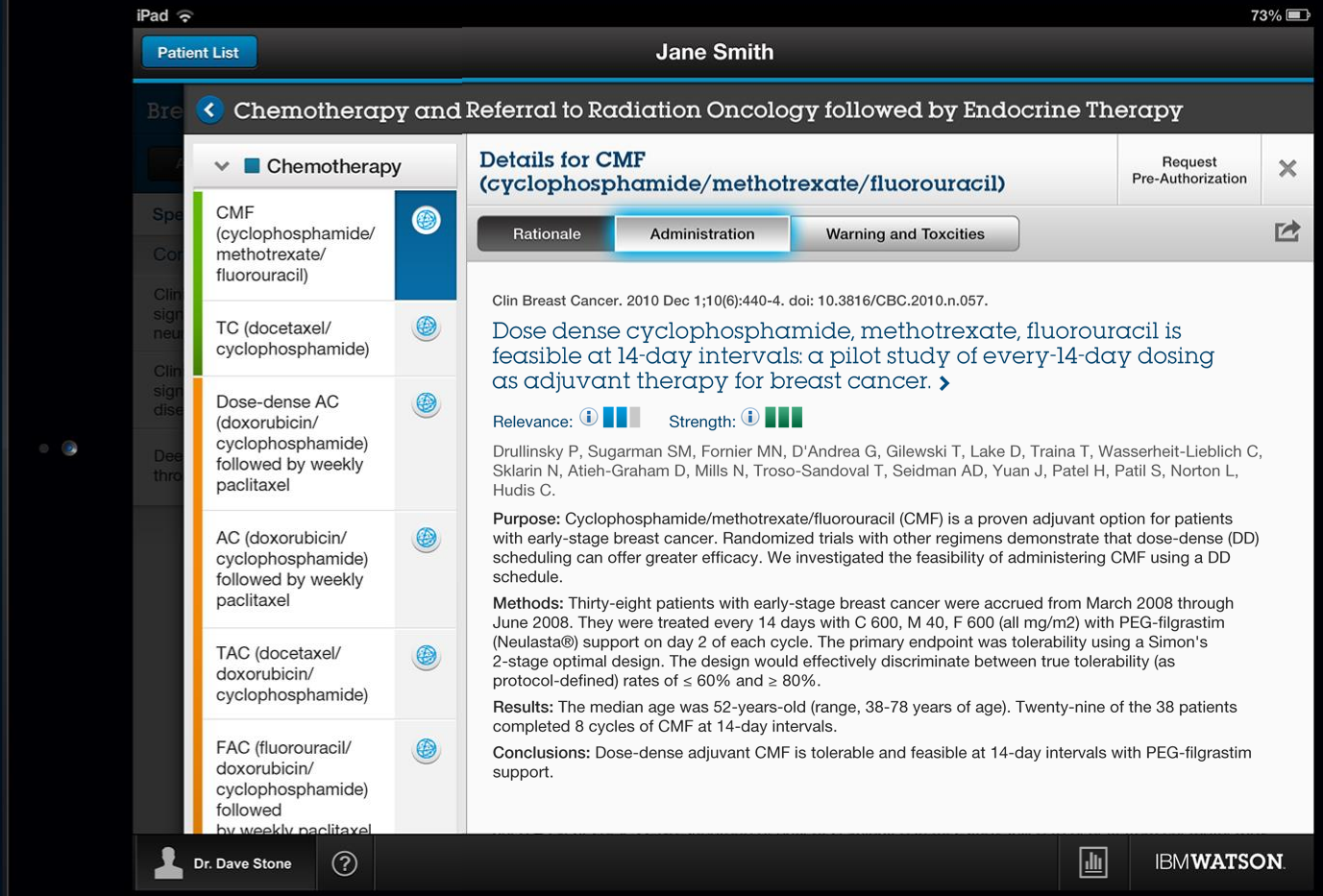

iPad
73%
Patient List
Jane Smith
Treatment Plan Options
Standard
Trials
NCCN guidelines state as follows: "NCCN believes that the best management for any cancer patient is in a clinical trial. Participation in clinical trials is especially encouraged."
Recommended
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
Oncology followed by Endocrine Therapy
Event
Referral to Radiation Oncologist
TIMELINE FOR
Chemotherapy
Radiation
Endocrine
Chemotherapy
Radiation
Endocrine
CMF (cyclophosphamide/ methotrexate/fluorouracil)
TC (docetaxel/ cyclophosphamide)
Referral to radiation oncology
Aromatase inhibitor (anastrozole) at least 5 years
Aromatase inhibitor (exemestane) at least 5 years
Aromatase inhibitor (letrozole) at least 5 years
Dose-dense AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
AC (doxorubicin/ cyclophosphamide)
Tamoxifen at least 5 years
Dr. Dave Stone
IBMWATSON

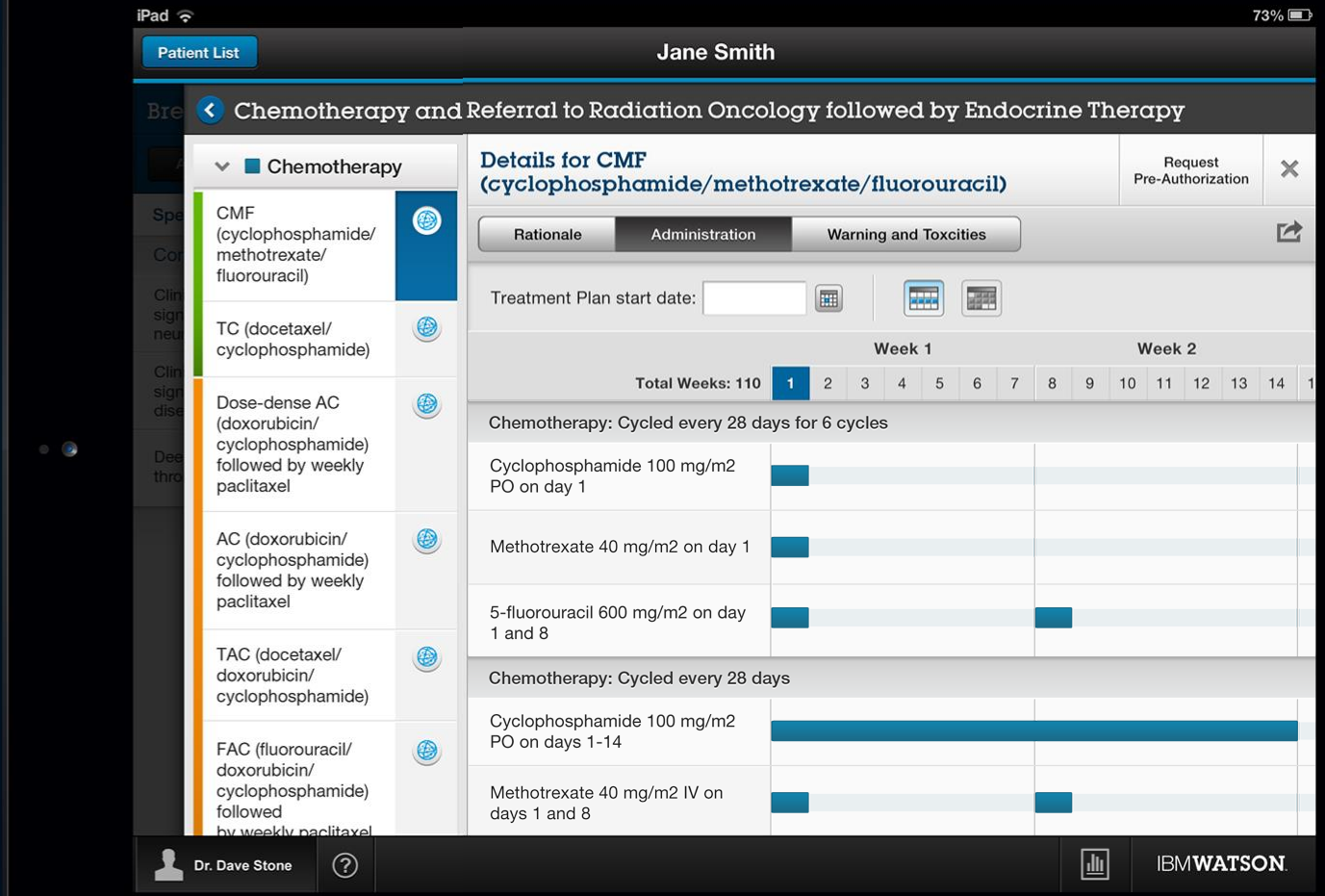

iPad
73%
Patient List
Jane Smith
Treatment Plan Options
Standard
Trials
NCCN guidelines state as follows: "NCCN believes that the best management for any cancer patient is in a clinical trial. Participation in clinical trials is especially encouraged."
Recommended
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
TIMELINE FOR TREATMENT PLAN
Chemotherapy
Radiation
Endocrine
Chemotherapy
Radiation
Endocrine
CMF (cyclophosphamide/ methotrexate/fluorouracil)
TC (docetaxel/ cyclophosphamide)
Referral to radiation oncology
Aromatase inhibitor (anastrozole) at least 5 years
Aromatase inhibitor (exemestane) at least 5 years
Aromatase inhibitor (letrozole) at least 5 years
Dose-dense AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
AC (doxorubicin/ cyclophosphamide)
Tamoxifen at least 5 years
Dr. Dave Stone
IBMWATSON

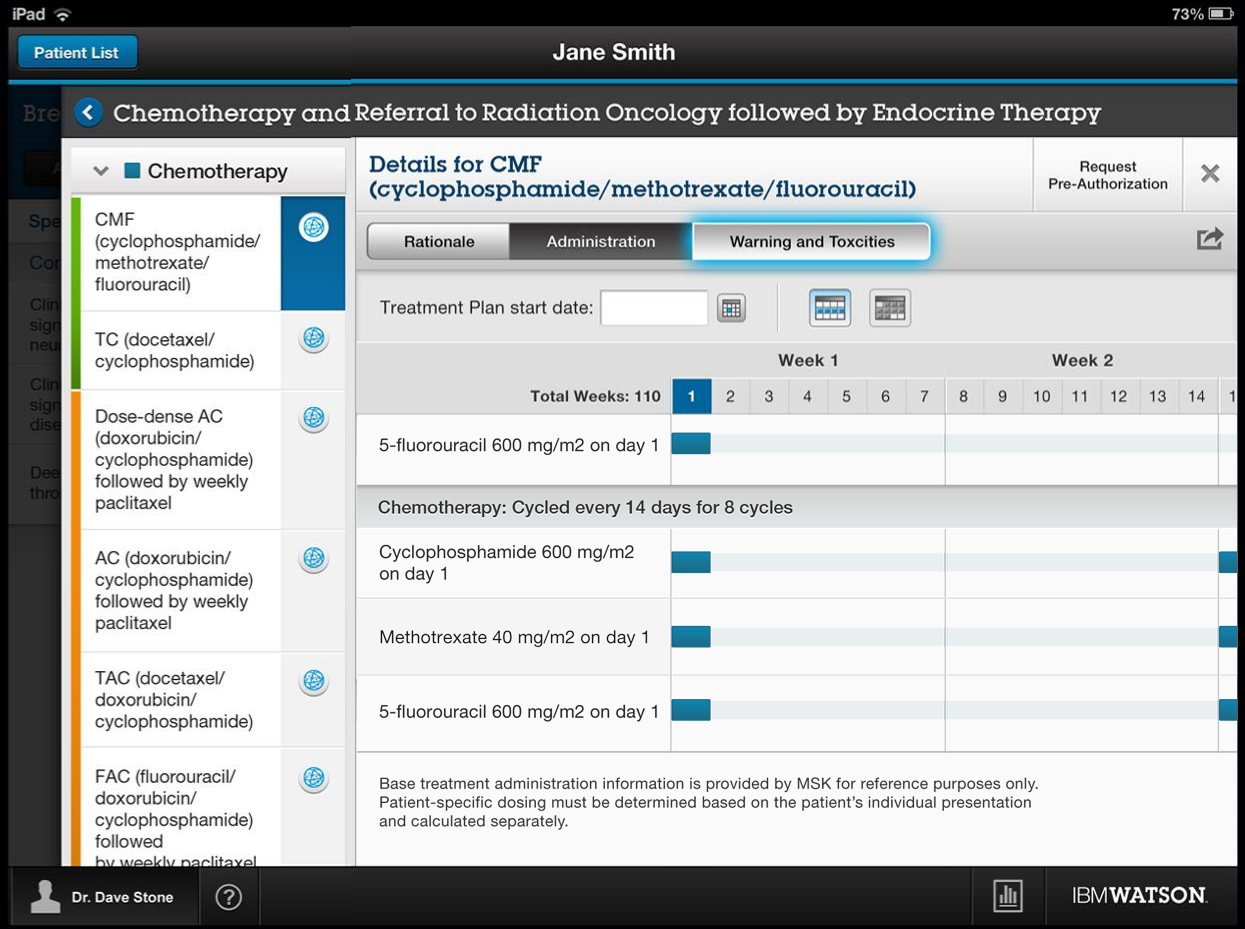

iPad
73%
Patient List
Jane Smith
Treatment Plan Options
Standard
Trials
NCCN guidelines state as follows: "NCCN believes that the best management for any cancer patient is in a clinical trial. Participation in clinical trials is especially encouraged."
Recommended
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
TIMELINE FOR TREATMENT PLAN
Chemotherapy
Radiation
Endocrine
Chemotherapy
Radiation
Endocrine
CMF (cyclophosphamide/ methotrexate/fluorouracil)
TC (docetaxel/ cyclophosphamide)
Dose-dense AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
AC (doxorubicin/ cyclophosphamide)
Referral to radiation oncology
Aromatase inhibitor (anastrozole) at least 5 years
Aromatase inhibitor (exemestane) at least 5 years
Aromatase inhibitor (letrozole) at least 5 years
Tamoxifen at least 5 years
Dr. Dave Stone
IBMWATSON

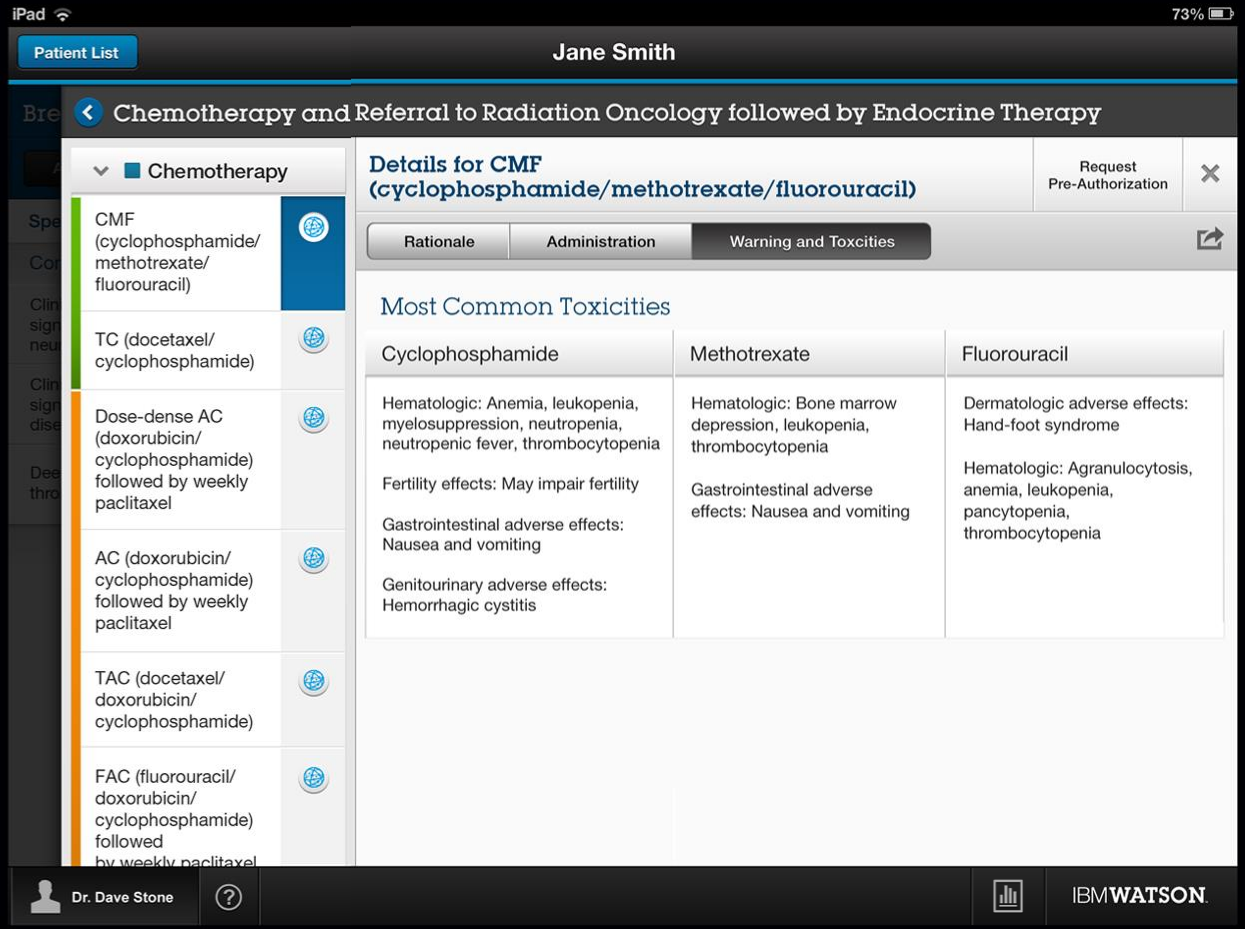

iPad
73%
Patient List
Jane Smith
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
Chemotherapy
CMF (cyclophosphamide/ methotrexate/ fluorouracil)
TC (docetaxel/ cyclophosphamide)
Dose-dense AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
TAC (docetaxel/ doxorubicin/ cyclophosphamide)
FAC (fluorouracil/ doxorubicin/ cyclophosphamide) followed
Details for CMF (cyclophosphamide/methotrexate/fluorouracil)
Request Pre-Authorization
Rationale
Administration
Warning and Toxcities
J Natl Cancer Inst. 1997 Nov 19;89(22):1673-82.
Tamoxifen and chemotherapy for lymph node-negative, estrogen receptor-positive breast cancer.
Relevance:
Strength:
Fisher B, Dignam J, Wolmark N, DeCillis A, Emir B, Wickerham DL, Bryant J, Dimitrov NV, Abramson N, Atkins JN, Shibata H, Deschenes L, Margolese RG.
Purpose: The B-20 study of the National Surgical Adjuvant Breast and Bowel Project (NSABP) was conducted to determine whether chemotherapy plus tamoxifen would be of greater benefit than tamoxifen alone in the treatment of patients with axillary lymph node-negative, estrogen receptor-positive breast cancer.
Methods: Eligible patients (n = 2306) were randomly assigned to one of three treatment groups following surgery. A total of 771 patients with follow-up data received tamoxifen alone; 767 received methotrexate, fluorouracil, and tamoxifen (MFT); and 768 received cyclophosphamide, methotrexate, fluorouracil, and tamoxifen (CMFT). The Kaplan-Meier method was used to estimate disease-free survival, distant disease-free survival, and survival. Reported P values are two-sided.
Results: Through 5 years of follow-up, chemotherapy plus tamoxifen resulted in significantly better disease-free survival than tamoxifen alone (90% for MFT versus 85% for tamoxifen [P = .01]; 89% for CMFT versus 85% for tamoxifen [P = .001]). A similar benefit was observed in both distant disease-free survival (92% for MFT versus 87% for tamoxifen [P = .008]; 91% for CMFT versus 87% for tamoxifen [P = .006]) and survival (97% for MFT versus 94% for tamoxifen [P = .05]; 96% for CMFT versus 94% for tamoxifen [P = .03]). Compared with tamoxifen alone, MFT and CMFT reduced the risk of ipsilateral breast tumor recurrence after lumpectomy and the risk of recurrence at other local, regional, and distant sites. Risk of treatment failure was reduced after both types of chemotherapy, regardless of tumor size, tumor estrogen or progesterone receptor level, or patient age; however, the reduction was greatest in patients
Dr. Dave Stone
IBMWATSON

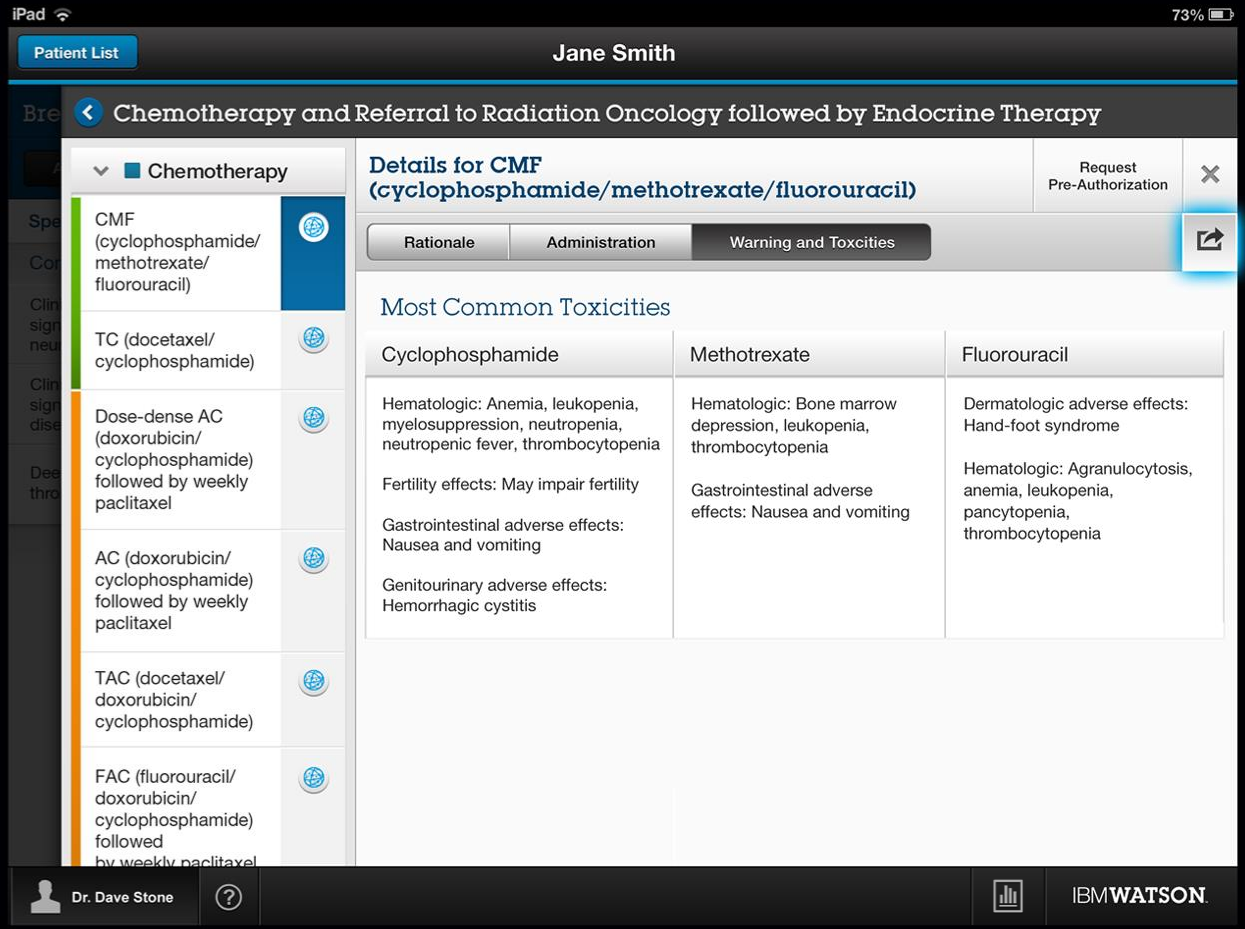

iPad
73%
Patient List
Jane Smith
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
Chemotherapy
CMF (cyclophosphamide/ methotrexate/ fluorouracil)
TC (docetaxel/ cyclophosphamide)
Dose-dense AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
TAC (docetaxel/ doxorubicin/ cyclophosphamide)
FAC (fluorouracil/ doxorubicin/ cyclophosphamide) followed
Details for CMF (cyclophosphamide/methotrexate/fluorouracil)
Request Pre-Authorization
Rationale
Administration
Warning and Toxcities
J Natl Cancer Inst. 1997 Nov 19;89(22):1673-82.
Tamoxifen and chemotherapy for lymph node-negative, estrogen receptor-positive breast cancer.
Relevance:
Strength:
Fisher B, Dignam J, Wolmark N, DeCillis A, Emir B, Wickerham DL, Bryant J, Dimitrov NV, Abramson N, Atkins JN, Shibata H, Deschenes L, Margolese RG.
Purpose: The B-20 study of the National Surgical Adjuvant Breast and Bowel Project (NSABP) was conducted to determine whether chemotherapy plus tamoxifen would be of greater benefit than tamoxifen alone in the treatment of patients with axillary lymph node-negative, estrogen receptor-positive breast cancer.
Methods: Eligible patients (n = 2306) were randomly assigned to one of three treatment groups following surgery. A total of 771 patients with follow-up data received tamoxifen alone; 767 received methotrexate, fluorouracil, and tamoxifen (MFT); and 768 received cyclophosphamide, methotrexate, fluorouracil, and tamoxifen (CMFT). The Kaplan-Meier method was used to estimate disease-free survival, distant disease-free survival, and survival. Reported P values are two-sided.
Results: Through 5 years of follow-up, chemotherapy plus tamoxifen resulted in significantly better disease-free survival than tamoxifen alone (90% for MFT versus 85% for tamoxifen [P = .01]; 89% for CMFT versus 85% for tamoxifen [P = .001]). A similar benefit was observed in both distant disease-free survival (92% for MFT versus 87% for tamoxifen [P = .008]; 91% for CMFT versus 87% for tamoxifen [P = .006]) and survival (97% for MFT versus 94% for tamoxifen [P = .05]; 96% for CMFT versus 94% for tamoxifen [P = .03]). Compared with tamoxifen alone, MFT and CMFT reduced the risk of ipsilateral breast tumor recurrence after lumpectomy and the risk of recurrence at other local, regional, and distant sites. Risk of treatment failure was reduced after both types of chemotherapy, regardless of tumor size, tumor estrogen or progesterone receptor level, or patient age; however, the reduction was greatest in patients
Dr. Dave Stone
IBMWATSON

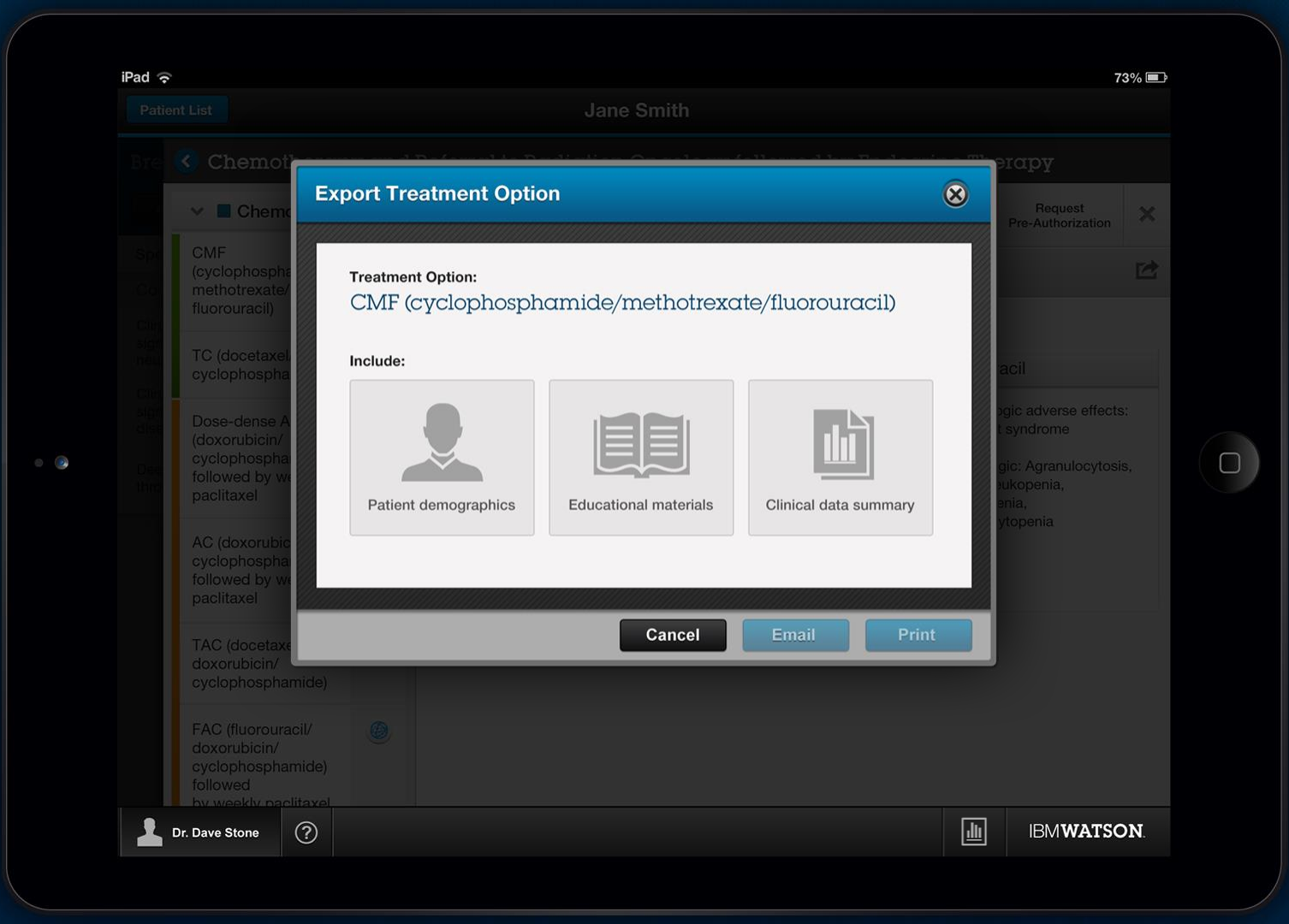

iPad
73%
Patient List
Jane Smith
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
Chemotherapy
CMF (cyclophosphamide/ methotrexate/ fluorouracil)
TC (docetaxel/ cyclophosphamide)
Dose-dense AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
TAC (docetaxel/ doxorubicin/ cyclophosphamide)
FAC (fluorouracil/ doxorubicin/ cyclophosphamide) followed
Details for CMF (cyclophosphamide/methotrexate/fluorouracil)
Request Pre-Authorization
Rationale
Administration
Warning and Toxcities
Clin Breast Cancer. 2010 Dec 1;10(6):440-4. doi: 10.3816/CBC.2010.n.057.
Dose dense cyclophosphamide, methotrexate, fluorouracil is feasible at 14-day intervals: a pilot study of every-14-day dosing as adjuvant therapy for breast cancer.
Relevance:
Strength:
Drullinsky P, Sugarman SM, Fornier MN, D'Andrea G, Gilewski T, Lake D, Traina T, Wasserheit-Lieblich C, Sklarin N, Atieh-Graham D, Mills N, Troso-Sandoval T, Seidman AD, Yuan J, Patel H, Patil S, Norton L, Hudis C.
Purpose: Cyclophosphamide/methotrexate/fluorouracil (CMF) is a proven adjuvant option for patients with early-stage breast cancer. Randomized trials with other regimens demonstrate that dose-dense (DD) scheduling can offer greater efficacy. We investigated the feasibility of administering CMF using a DD schedule.
Methods: Thirty-eight patients with early-stage breast cancer were accrued from March 2008 through June 2008. They were treated every 14 days with C 600, M 40, F 600 (all mg/m2) with PEG-filgrastim (Neulasta®) support on day 2 of each cycle. The primary endpoint was tolerability using a Simon's 2-stage optimal design. The design would effectively discriminate between true tolerability (as protocol-defined) rates of ≤ 60% and ≥ 80%.
Results: The median age was 52-years-old (range, 38-78 years of age). Twenty-nine of the 38 patients completed 8 cycles of CMF at 14-day intervals.
Conclusions: Dose-dense adjuvant CMF is tolerable and feasible at 14-day intervals with PEG-filgrastim support.
Dr. Dave Stone
IBMWATSON

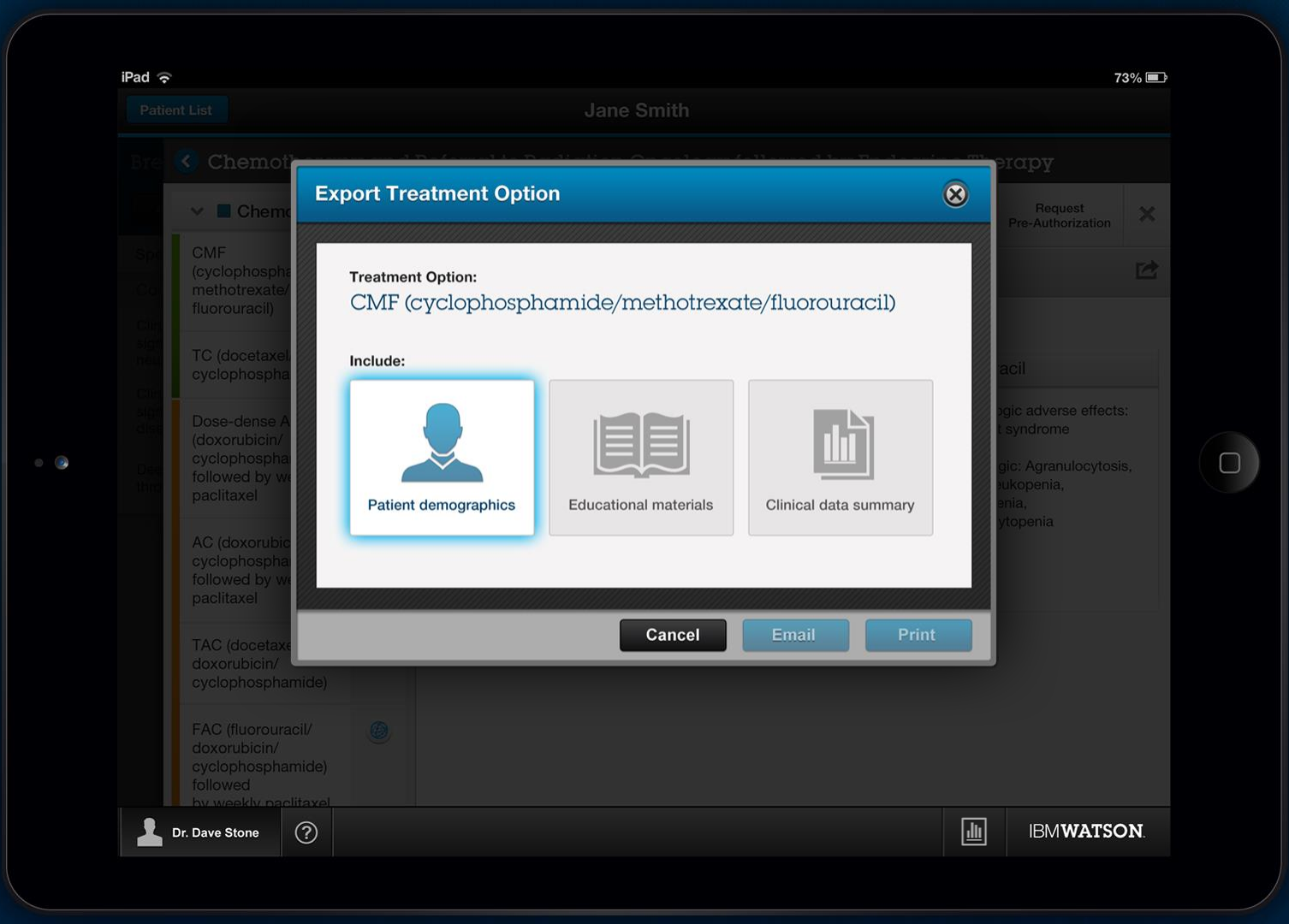

iPad
73%
Patient List
Jane Smith
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
Chemotherapy
CMF (cyclophosphamide/ methotrexate/ fluorouracil)
TC (docetaxel/ cyclophosphamide)
Dose-dense AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
TAC (docetaxel/ doxorubicin/ cyclophosphamide)
FAC (fluorouracil/ doxorubicin/ cyclophosphamide) followed
Details for CMF (cyclophosphamide/methotrexate/fluorouracil)
Request Pre-Authorization
Rationale
Administration
Warning and Toxcities
Treatment Plan start date:
Week 1
Week 2
Total Weeks: 110
1 2 3 4 5 6 7 8 9 10 11 12 13 14
Chemotherapy: Cycled every 28 days for 6 cycles
Cyclophosphamide 100 mg/m2 PO on day 1
Methotrexate 40 mg/m2 on day 1
5-fluorouracil 600 mg/m2 on day 1 and 8
Chemotherapy: Cycled every 28 days
Cyclophosphamide 100 mg/m2 PO on days 1-14
Methotrexate 40 mg/m2 IV on days 1 and 8
Dr. Dave Stone
IBMWATSON


iPad
73%
Patient List
Jane Smith
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
Chemotherapy
CMF (cyclophosphamide/ methotrexate/ fluorouracil)
TC (docetaxel/ cyclophosphamide)
Dose-dense AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
TAC (docetaxel/ doxorubicin/ cyclophosphamide)
FAC (fluorouracil/ doxorubicin/ cyclophosphamide) followed
Details for CMF (cyclophosphamide/methotrexate/fluorouracil)
Request Pre-Authorization
Rationale
Administration
Warning and Toxcities
Treatment Plan start date:
Week 1
Week 2
Total Weeks: 110
1 2 3 4 5 6 7 8 9 10 11 12 13 14
5-fluorouracil 600 mg/m2 on day 1
Chemotherapy: Cycled every 14 days for 8 cycles
Cyclophosphamide 600 mg/m2 on day 1
Methotrexate 40 mg/m2 on day 1
5-fluorouracil 600 mg/m2 on day 1
Base treatment administration information is provided by MSK for reference purposes only. Patient-specific dosing must be determined based on the patient's individual presentation and calculated separately.
Dr. Dave Stone
IBMWATSON

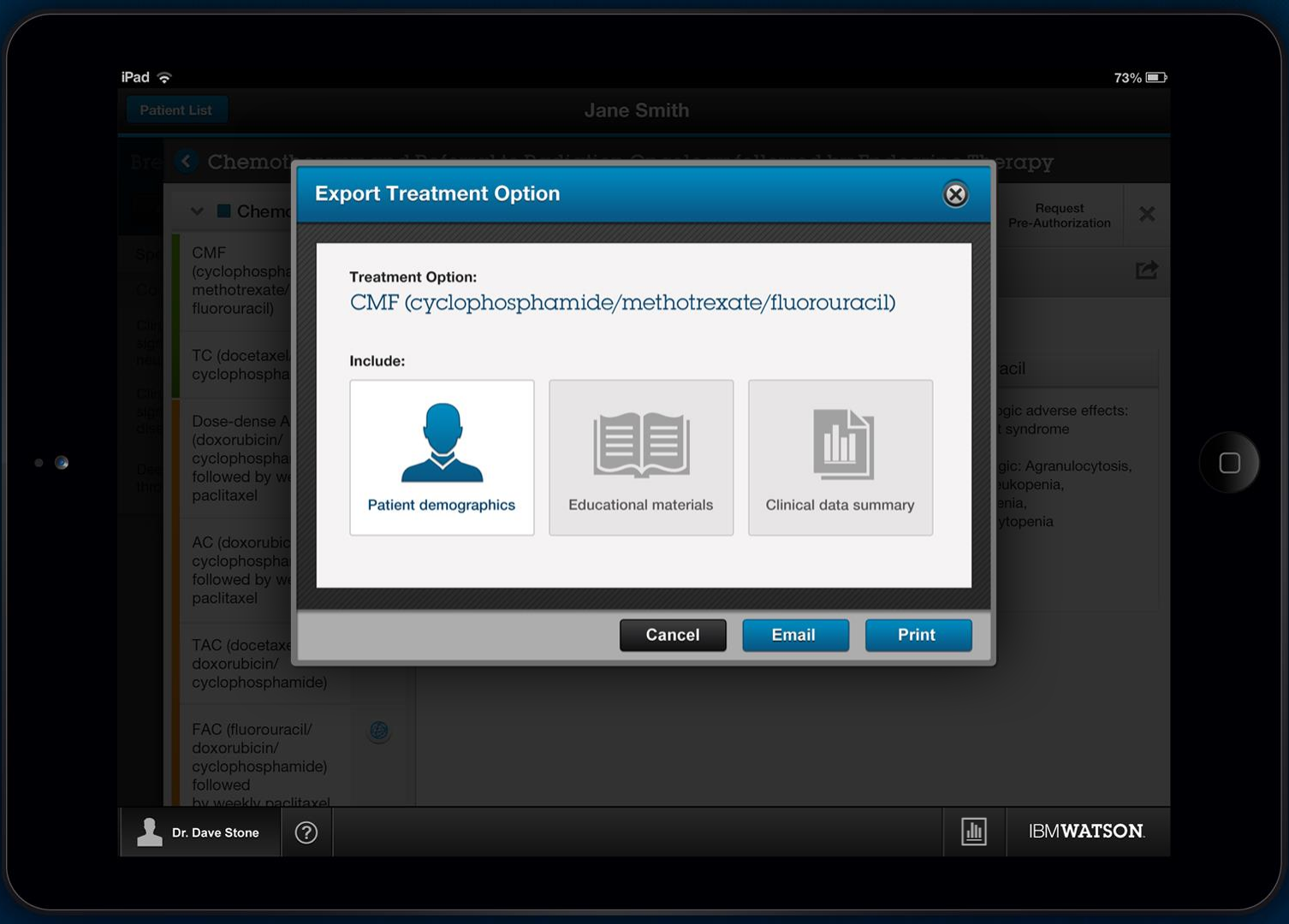

iPad
73%
Patient List
Jane Smith
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
Chemotherapy
CMF (cyclophosphamide/ methotrexate/ fluorouracil)
TC (docetaxel/ cyclophosphamide)
Dose-dense AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
TAC (docetaxel/ doxorubicin/ cyclophosphamide)
FAC (fluorouracil/ doxorubicin/ cyclophosphamide) followed
Details for CMF (cyclophosphamide/methotrexate/fluorouracil)
Request Pre-Authorization
Rationale
Administration
Warning and Toxcities
Most Common Toxicities
Cyclophosphamide
Hematologic: Anemia, leukopenia, myelosuppression, neutropenia, neutropenic fever, thrombocytopenia
Fertility effects: May impair fertility
Gastrointestinal adverse effects: Nausea and vomiting
Genitourinary adverse effects: Hemorrhagic cystitis
Methotrexate
Hematologic: Bone marrow depression, leukopenia, thrombocytopenia
Gastrointestinal adverse effects: Nausea and vomiting
Fluorouracil
Dermatologic adverse effects: Hand-foot syndrome
Hematologic: Agranulocytosis, anemia, leukopenia, pancytopenia, thrombocytopenia
Dr. Dave Stone
IBMWATSON


iPad
73%
Patient List
Jane Smith
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
Chemotherapy
CMF (cyclophosphamide/ methotrexate/ fluorouracil)
TC (docetaxel/ cyclophosphamide)
Dose-dense AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
TAC (docetaxel/ doxorubicin/ cyclophosphamide)
FAC (fluorouracil/ doxorubicin/ cyclophosphamide) followed
Details for CMF (cyclophosphamide/methotrexate/fluorouracil)
Request Pre-Authorization
Rationale
Administration
Warning and Toxcities
Most Common Toxicities
Cyclophosphamide
Hematologic: Anemia, leukopenia, myelosuppression, neutropenia, neutropenic fever, thrombocytopenia
Fertility effects: May impair fertility
Gastrointestinal adverse effects: Nausea and vomiting
Genitourinary adverse effects: Hemorrhagic cystitis
Methotrexate
Hematologic: Bone marrow depression, leukopenia, thrombocytopenia
Gastrointestinal adverse effects: Nausea and vomiting
Fluorouracil
Dermatologic adverse effects: Hand-foot syndrome
Hematologic: Agranulocytosis, anemia, leukopenia, pancytopenia, thrombocytopenia
Dr. Dave Stone
IBMWATSON

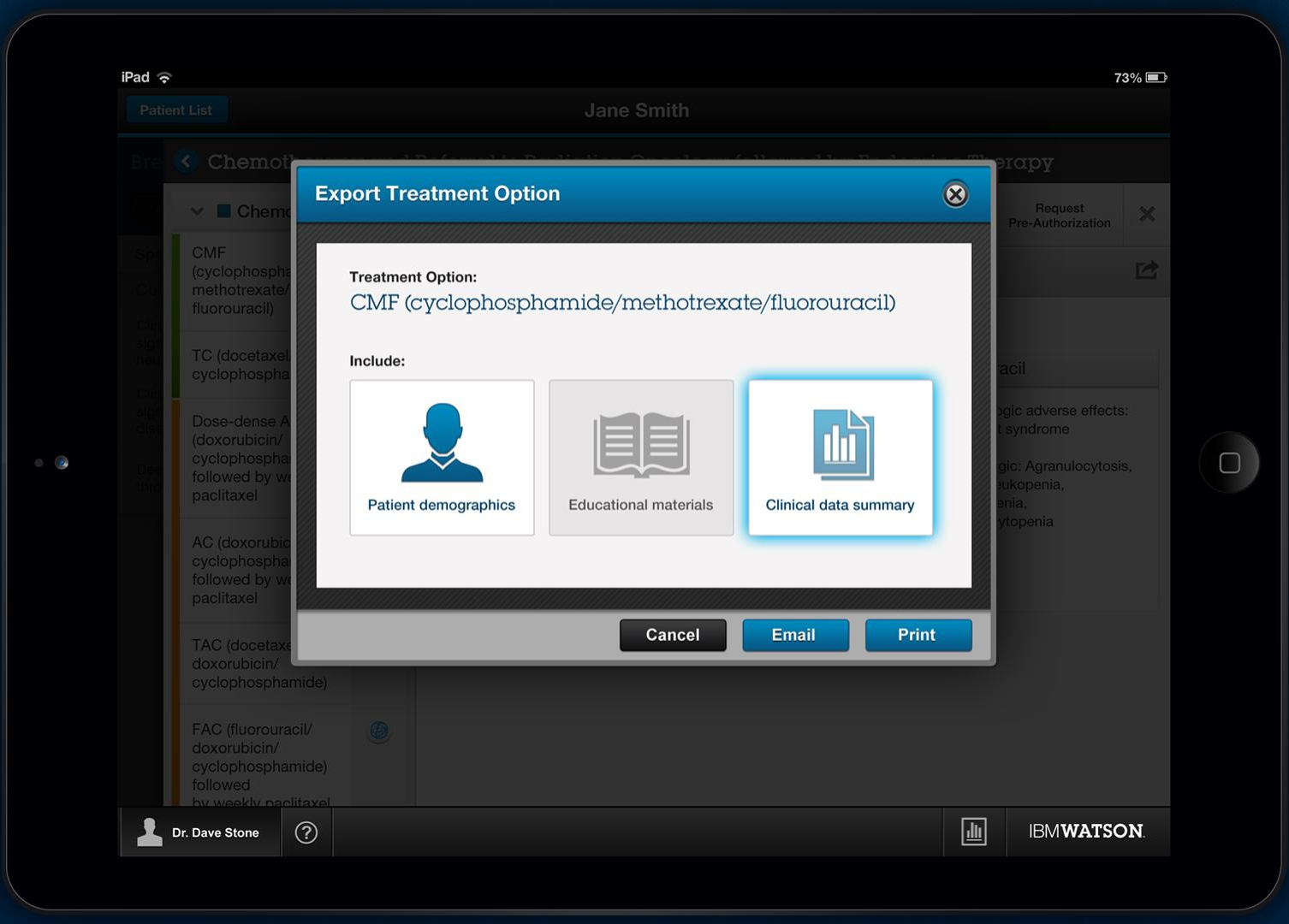

iPad
73%
Patient List
Jane Smith
Export Treatment Option
Treatment Option:
CMF (cyclophosphamide/methotrexate/fluorouracil)
Include:
Patient demographics
Educational materials
Clinical data summary
Cancel
Email
Print
Request Pre-Authorization
Dr. Dave Stone
IBMWATSON

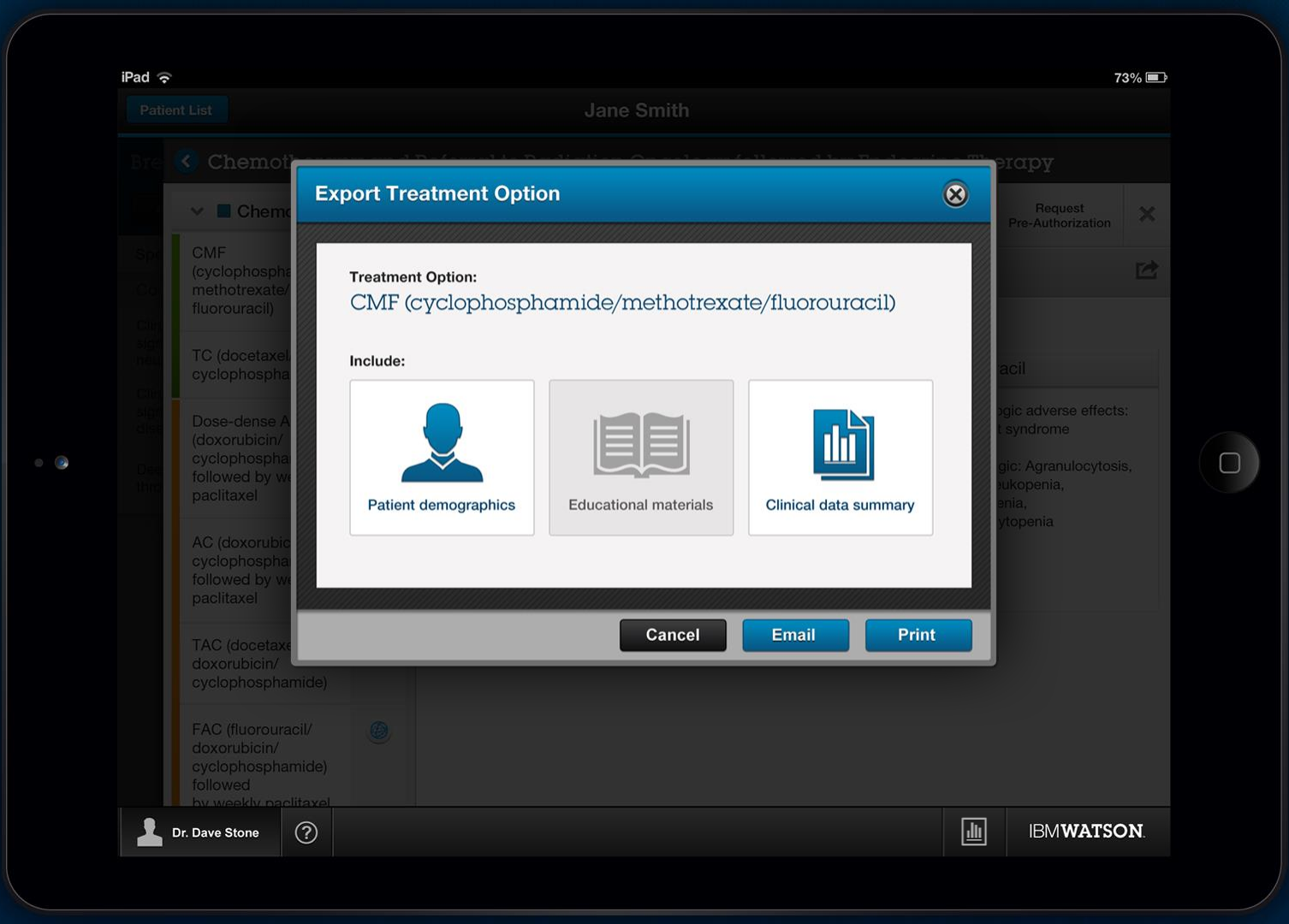

iPad
73%
Patient List
Jane Smith
Export Treatment Option
Treatment Option:
CMF (cyclophosphamide/methotrexate/fluorouracil)
Include:
Patient demographics
Educational materials
Clinical data summary
Cancel
Email
Print
Request Pre-Authorization
Dr. Dave Stone
IBMWATSON

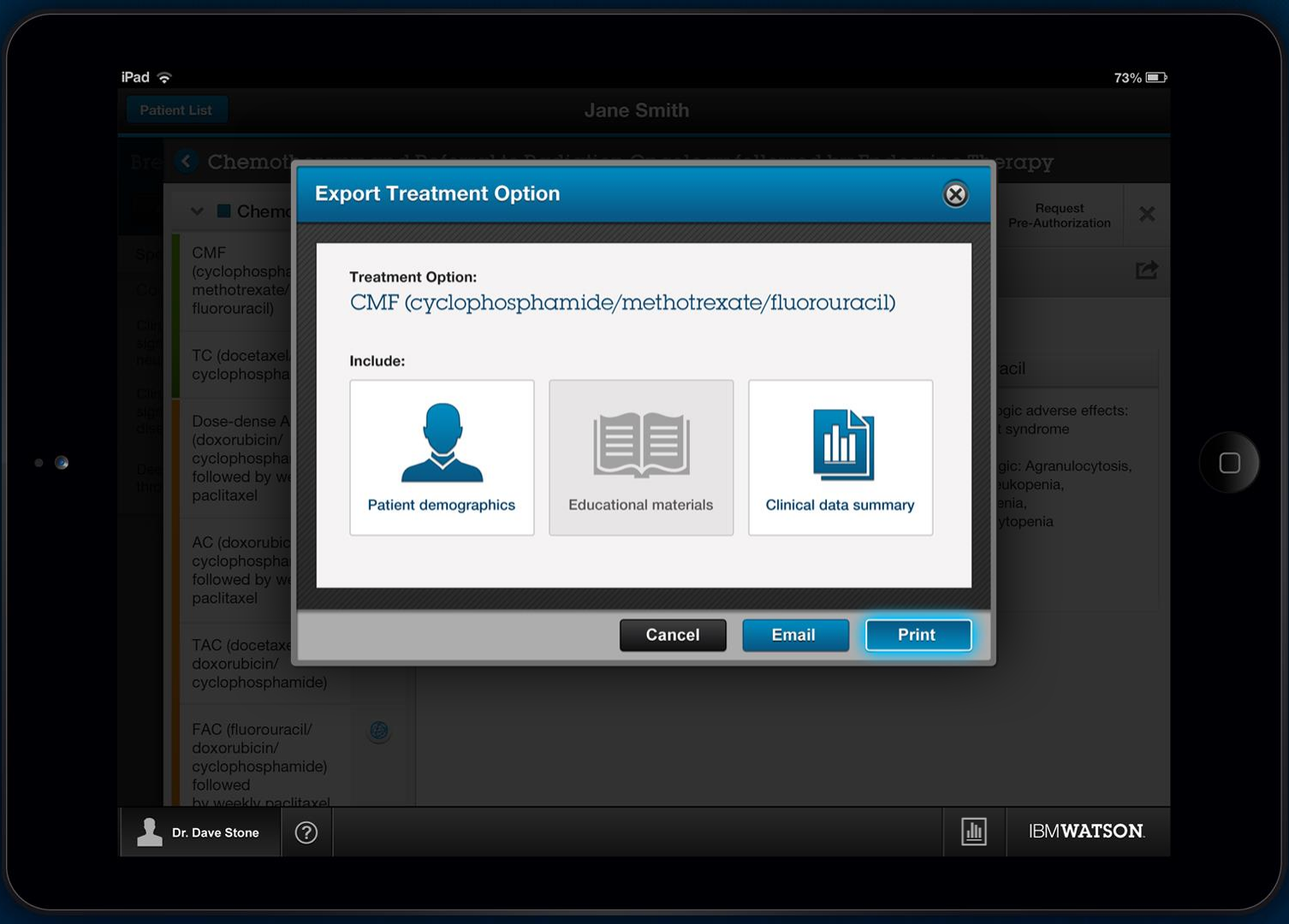
IBMWATSON


iPad
73%
Patient List
Jane Smith
Export Treatment Option
Treatment Option:
CMF (cyclophosphamide/methotrexate/fluorouracil)
Include:
Patient demographics
Educational materials
Clinical data summary
Cancel
Email
Print
Request Pre-Authorization
Dr. Dave Stone
IBMWATSON

IBMWATSON


iPad
73%
Patient List
Jane Smith
Export Treatment Option
Treatment Option:
CMF (cyclophosphamide/methotrexate/fluorouracil)
Include:
Patient demographics
Educational materials
Clinical data summary
Cancel
Email
Print
Request Pre-Authorization
Dr. Dave Stone
IBMWATSON


iPad
73%
Patient List
Jane Smith
Export Treatment Option
Treatment Option:
CMF (cyclophosphamide/methotrexate/fluorouracil)
Include:
Patient demographics
Educational materials
Clinical data summary
Cancel
Email
Print
Request Pre-Authorization
CMF (cyclophospha methotrexate/ fluorouracil)
TC (docetaxel cyclophospha
Dose-dense A (doxorubicin/ cyclophospha followed by w paclitaxel
AC (doxorubic cyclophospha followed by w paclitaxel
TAC (docetaxe doxorubicin/ cyclophosphamide)
FAC (fluorouracil/ doxorubicin/ cyclophosphamide) followed
Dr. Dave Stone
IBMWATSON


iPad
73%
Patient List
Jane Smith
Export Treatment Option
Treatment Option:
CMF (cyclophosphamide/methotrexate/fluorouracil)
Include:
Patient demographics
Educational materials
Clinical data summary
Cancel
Email
Print
Request Pre-Authorization
Dr. Dave Stone
IBMWATSON

Jane Smith

Treatment plan for diagnosis: Breast Cancer

Gender: Female DOB: 11/15/1949 MRN: 05863

Clinical Information

Patient information

Age: 65
Menopausal status: postmenopausal

Performance status (ECOG): 0 - Asymptomatic

Staging

M Category: M0
pN Category: N0

pT Category: T1c

Prior treatments

Prior surgical resection: lumpectomy

Lymph nodes evaluated: yes

Tumor characteristics

Histology: ductal
Estrogen receptor status: positive
HER2 status: negative
Oncotype DX: high (> 30)

Grade: poorly differentiated
Progesterone receptor status: positive
Lymphovascular invasion: negative

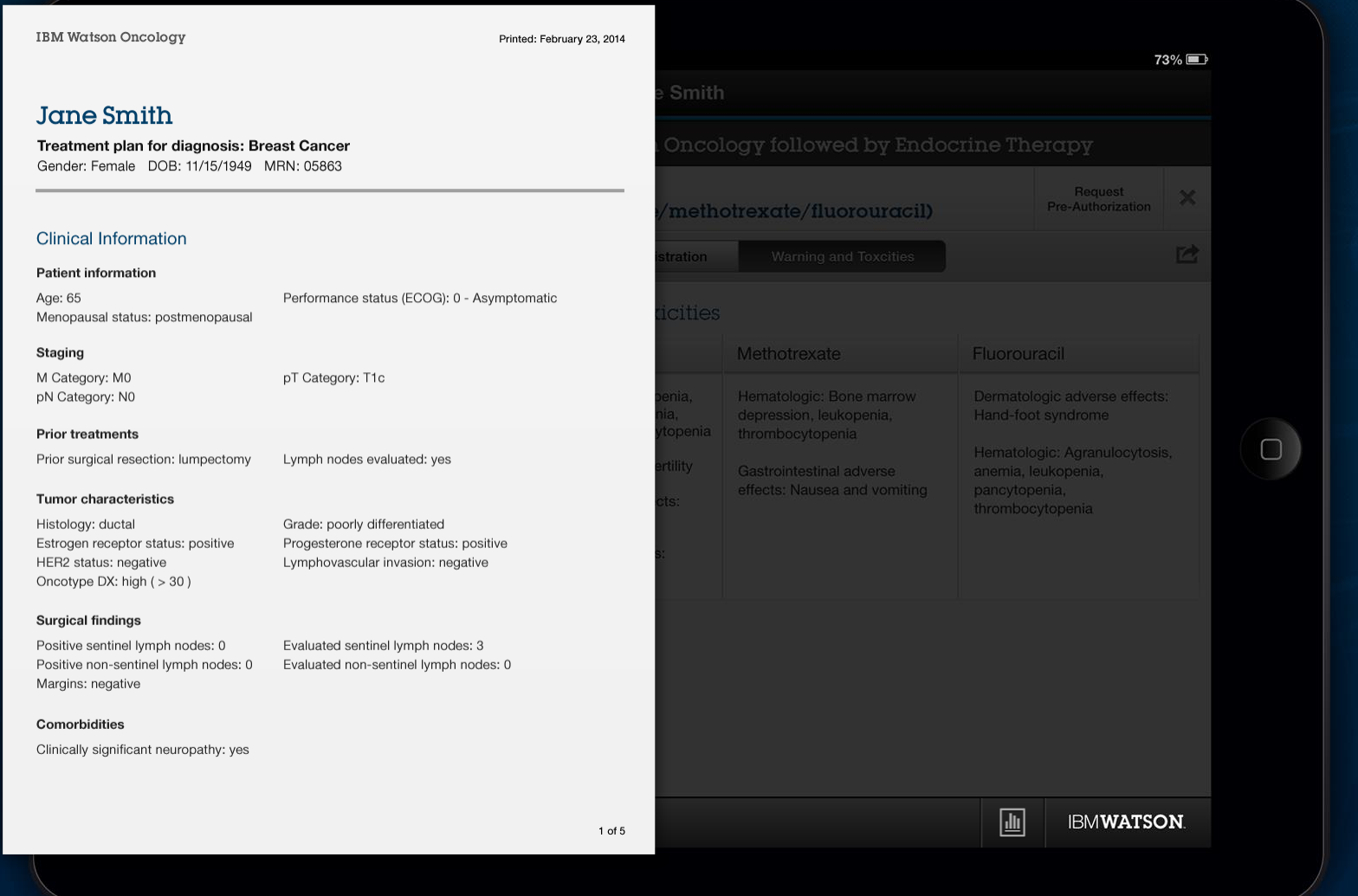
Surgical findings

Positive sentinel lymph nodes: 0
Positive non-sentinel lymph nodes: 0
Margins: negative

Evaluated sentinel lymph nodes: 3
Evaluated non-sentinel lymph nodes: 0

Comorbidities

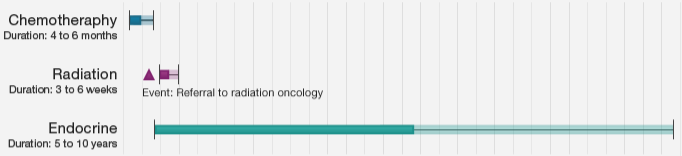
Clinically significant neuropathy: yes



CMF (cyclophosphamide/methotrexate/fluorouracil)

Timeline for Treatment Plan

Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy



Rationale

J Natl Cancer Inst. 1997 Nov 19;89(22):1673-82.

Tamoxifen and chemotherapy for lymph node-negative, estrogen receptor-positive breast cancer.

Fisher B, Dignam J, Wolmark N, DeCillis A, Emir B, Wickerham DL, Bryant J, Dimitrov NV, Abramson N, Atkins JN, Shibata H, Deschenes L, Margolese RG.

Purpose: The B-20 study of the National Surgical Adjuvant Breast and Bowel Project (NSABP) was conducted to determine whether chemotherapy plus tamoxifen would be of greater benefit than tamoxifen alone in the treatment of patients with axillary lymph node-negative, estrogen receptor-positive breast cancer.

Methods: Eligible patients (n = 2306) were randomly assigned to one of three treatment groups following surgery. A total of 771 patients with follow-up data received tamoxifen alone; 767 received methotrexate, fluorouracil, and tamoxifen (MFT); and 768 received cyclophosphamide, methotrexate, fluorouracil, and tamoxifen (CMFT). The Kaplan-Meier method was used to estimate disease-free survival, distant disease-free survival, and survival. Reported P values are two-sided.

Results: Through 5 years of follow-up, chemotherapy plus tamoxifen resulted in significantly better disease-free survival than tamoxifen alone (90% for MFT versus 85% for tamoxifen [P = .01]; 89% for CMFT versus 85% for tamoxifen [P = .001]). A similar benefit was observed in both distant disease-free survival (92% for MFT versus 87% for tamoxifen [P = .008]; 91% for CMFT versus 87% for tamoxifen [P = .006]) and survival (97% for MFT versus 94% for tamoxifen [P = .05]; 96% for CMFT versus 94% for tamoxifen [P = .03]). Compared with tamoxifen alone, MFT and CMFT reduced the risk of ipsilateral breast tumor recurrence after lumpectomy and the risk of recurrence at other local, regional, and distant sites. Risk of treatment failure was reduced after both types of chemotherapy, regardless of tumor size, tumor estrogen or progesterone receptor level, or patient age; however, the reduction was greatest in patients aged 49 years or less. No subgroup of patients evaluated in this study failed to benefit from chemotherapy.

Conclusions: Findings from this and other NSABP studies indicate that patients with breast cancer who meet NSABP protocol criteria, regardless of age, lymph node status, tumor size, or estrogen receptor status, are candidates for chemotherapy.

CMF (cyclophosphamide/methotrexate/fluorouracil)

Rationale

J Clin Oncol. 2006 Aug 10;24(23):3726-34. Epub 2006 May 23.

Gene expression and benefit of chemotherapy in women with node-negative, estrogen receptor-positive breast cancer.

Paik S, Tang G, Shak S, Kim C, Baker J, Kim W, Cronin M, Baehner FL, Watson D, Bryant J, Costantino JP, Geyer CE Jr, Wickerham DL, Wolmark N.

Purpose: The 21-gene recurrence score (RS) assay quantifies the likelihood of distant recurrence in women with estrogen receptor-positive, lymph node-negative breast cancer treated with adjuvant tamoxifen. The relationship between the RS and chemotherapy benefit is not known.

Methods: The RS was measured in tumors from the tamoxifen-treated and tamoxifen plus chemotherapy-treated patients in the National Surgical Adjuvant Breast and Bowel Project (NSABP) B20 trial. Cox proportional hazards models were utilized to test for interaction between chemotherapy treatment and the RS.

Results: A total of 651 patients were assessable (227 randomly assigned to tamoxifen and 424 randomly assigned to tamoxifen plus chemotherapy). The test for interaction between chemotherapy treatment and RS was statistically significant (P = .038). Patients with high-RS (> or = 31) tumors (ie, high risk of recurrence) had a large benefit from chemotherapy (relative risk, 0.26; 95% CI, 0.13 to 0.53; absolute decrease in 10-year distant recurrence rate: mean, 27.6%; SE, 8.0%). Patients with low-RS (< 18) tumors derived minimal, if any, benefit from chemotherapy treatment (relative risk, 1.31; 95% CI, 0.46 to 3.78; absolute decrease in distant recurrence rate at 10 years: mean, -1.1%; SE, 2.2%). Patients with intermediate-RS tumors did not appear to have a large benefit, but the uncertainty in the estimate can not exclude a clinically important benefit.

Conclusions: The RS assay not only quantifies the likelihood of breast cancer recurrence in women with node-negative, estrogen receptor-positive breast cancer, but also predicts the magnitude of chemotherapy benefit.

Clin Breast Cancer. 2010 Dec 1;10(6):440-4. doi: 10.3816/CBC.2010.n.057.

Dose dense cyclophosphamide, methotrexate, fluorouracil is feasible at 14-day intervals: a pilot study of every-14-day dosing as adjuvant therapy for breast cancer.

Drullinsky P, Sugarman SM, Fornier MN, D'Andrea G, Gilewski T, Lake D, Traina T, Wasserheit-Lieblich C, Sklarin N, Atieh-Graham D, Mills N, Troso-Sandoval T, Seidman AD, Yuan J, Patel H, Patil S, Norton L, Hudis C.

Purpose: Cyclophosphamide/methotrexate/fluorouracil (CMF) is a proven adjuvant option for patients with early-stage breast cancer. Randomized trials with other regimens demonstrate that dose-dense (DD) scheduling can offer greater efficacy. We investigated the feasibility of administering CMF using a DD schedule.

Methods: Thirty-eight patients with early-stage breast cancer were accrued from March 2008 through June 2008. They were treated every 14 days with C 600, M 40, F 600 (all mg/m2) with PEG-filgrastim (Neulasta®) support on day 2 of each cycle. The primary endpoint was tolerability using a Simon's 2-stage optimal design. The design would effectively discriminate between true tolerability (as protocol-defined) rates of ≤ 60% and ≥ 80%.

Results: The median age was 52-years-old (range, 38-78 years of age). Twenty-nine of the 38 patients completed 8 cycles of CMF at 14-day intervals.

Conclusions: Dose-dense adjuvant CMF is tolerable and feasible at 14-day intervals with PEG-filgrastim support.

CMF (cyclophosphamide/methotrexate/fluorouracil)

Administration

Treatment: Chemotherapy

Cycled every 28 days for 6 cycles

- Cyclophosphamide 100 mg/m2 PO on day 1
- Methotrexate 40 mg/m2 on day 1
- 5-fluorouracil 600 mg/m2 on day 1 and 8

Treatment: Chemotherapy

Cycled every 28 days

- Cyclophosphamide 100 mg/m2 PO on days 1-14
- Methotrexate 40 mg/m2 IV on days 1 and 8
- 5-fluorouracil 600 mg/m2 IV on days 1 and 8

Treatment: Chemotherapy

Cycled every 21 days

- Cyclophosphamide 600 mg/m2 IV on day 1
- Methotrexate 40 mg/m2 IV on day 1
- 5-fluorouracil 600 mg/m2 IV on day 1

Treatment: Chemotherapy

Cycled every 21 days for 8 cycles

- Cyclophosphamide 600 mg/m2 on day 1
- Methotrexate 40 mg/m2 on day 1
- 5-fluorouracil 600 mg/m2 on day 1

Treatment: Chemotherapy

Cycled every 14 days for 8 cycles

- Cyclophosphamide 600 mg/m2 on day 1
- Methotrexate 40 mg/m2 on day 1
- 5-fluorouracil 600 mg/m2 on day 1

Base treatment administration information is provided by MSK for reference purposes only. Patient-specific dosing must be determined based on the patient's individual presentation and calculated separately.

Jane Smith

Treatment plan for
Gender: Female DO

Clinical Informati

Patient information

Age: 65
Menopausal status: po

Staging

M Category: M0
pN Category: N0

Prior treatments

Prior surgical resection

Tumor characteristic

Histology: ductal
Estrogen receptor stat
HER2 status: negative
Oncotype DX: high (>

Surgical findings

Positive sentinel lymph
Positive non-sentinel ly
Margins: negative

Comorbidities

Clinically significant ne

CMF (cyclophos

Timeline for Trea

Chemotherapy and F

Chemotherapy
Duration: 4 to 6 months

Radiation
Duration: 3 to 6 weeks

Endocrine
Duration: 5 to 10 years

Rationale

J Natl Cancer Inst. 1997 Nov

Tamoxifen and chem cancer.

Fisher B, Dignam J, Wolmark Deschenes L, Margolese RG.

Purpose: The B-20 study determine whether chem treatment of patients with

Methods: Eligible patient A total of 771 patients wit tamoxifen (MFT); and 768 Kaplan-Meier method wa Reported P values are tw

Results: Through 5 years survival than tamoxifen al tamoxifen [P = .001]). A s 87% for tamoxifen [P = .0 versus 94% for tamoxifen alone, MFT and CMFT re recurrence at other local, chemotherapy, regardless the reduction was greates to benefit from chemothe

Conclusions: Findings fr NSABP protocol criteria, candidates for chemother

CMF (cyclophosph

Rationale

J Clin Oncol. 2006 Aug 10;24(23)

Gene expression and b receptor-positive breas

Paik S, Tang G, Shak S, Kim C, E DL, Wolmark N.

Purpose: The 21-gene recu estrogen receptor-positive, between the RS and chemo

Methods: The RS was meas patients in the National Surg models were utilized to test

Results: A total of 651 patie assigned to tamoxifen plus statistically significant (P = . benefit from chemotherapy recurrence rate: mean, 27.6 chemotherapy treatment (re 10 years: mean, -1.1%; SE, but the uncertainty in the es

Conclusions: The RS assay node-negative, estrogen rec benefit.

Clin Breast Cancer. 2010 Dec 1;

Dose dense cyclophos pilot study of every-14-

Drullinsky P, Sugarman SM, Forn Mills N, Troso-Sandoval T, Seidm

Purpose: Cyclophosphamid early-stage breast cancer. R can offer greater efficacy. W

Methods: Thirty-eight patie They were treated every 14 day 2 of each cycle. The pri would effectively discriminat

Results: The median age wa 8 cycles of CMF at 14-day i

Conclusions: Dose-dense a

CMF (cyclophospha

Administration

Treatment: Chemothera
Cycled every 28 days for
- Cyclophosphamide 100
- Methotrexate 40 mg/m2
- 5-fluorouracil 600 mg/m

Treatment: Chemothera
Cycled every 28 days
- Cyclophosphamide 100
- Methotrexate 40 mg/m2
- 5-fluorouracil 600 mg/m

Treatment: Chemothera
Cycled every 21 days
- Cyclophosphamide 600
- Methotrexate 40 mg/m2
- 5-fluorouracil 600 mg/m

Treatment: Chemothera
Cycled every 21 days for
- Cyclophosphamide 600
- Methotrexate 40 mg/m2
- 5-fluorouracil 600 mg/m

Treatment: Chemothera
Cycled every 14 days for
- Cyclophosphamide 600
- Methotrexate 40 mg/m2
- 5-fluorouracil 600 mg/m

Base treatment administration
Patient-specific dosing must b
and calculated separately.

CMF (cyclophosphamide/methotrexate/fluorouracil)

Warning and Toxcities

Most Common Toxicities

Cyclophosphamide	Methotrexate	Fluorouracil
Hematologic: Anemia, leukopenia, myelosuppression, neutropenia, neutropenic fever, thrombocytopenia Fertility effects: May impair fertility Gastrointestinal adverse effects: Nausea and vomiting Genitourinary adverse effects: Hemorrhagic cystitis	Hematologic: Bone marrow depression, leukopenia, thrombocytopenia Gastrointestinal adverse effects: Nausea and vomiting	Dermatologic adverse effects: Hand-foot syndrome Hematologic: Agranulocytosis, anemia, leukopenia, pancytopenia, thrombocytopenia

IBMWATSON

IBM Watson Oncolo

Jane Smith

Treatment plan for
Gender: Female DO

Clinical Informati

Patient information

Age: 65
Menopausal status: po

Staging

M Category: M0
pN Category: N0

Prior treatments

Prior surgical resection

Tumor characteristic

Histology: ductal
Estrogen receptor stat
HER2 status: negative
Oncotype DX: high (>

Surgical findings

Positive sentinel lymph
Positive non-sentinel ly
Margins: negative

Comorbidities

Clinically significant ne

IBM Watson Oncolo

CMF (cyclophos

Timeline for Trea

Chemotherapy and F

Chemotheraphy
Duration: 4 to 6 months

Radiation
Duration: 3 to 6 weeks

Endocrine
Duration: 5 to 10 years

Rationale

J Natl Cancer Inst. 1997 Nov

Tamoxifen and chem cancer.

Fisher B, Dignam J, Wolmark Deschenes L, Margolese RG.

Purpose: The B-20 study determine whether chemo treatment of patients with

Methods: Eligible patient A total of 771 patients wit tamoxifen (MFT); and 768 Kaplan-Meier method wa Reported P values are tw

Results: Through 5 years survival than tamoxifen al tamoxifen [P = .001]). A s 87% for tamoxifen [P = .0 versus 94% for tamoxifen alone, MFT and CMFT re recurrence at other local, chemotherapy, regardless the reduction was greates to benefit from chemothe

Conclusions: Findings fr NSABP protocol criteria, candidates for chemother

---

IBM Watson Oncolog

CMF (cyclophosph

Rationale

J Clin Oncol. 2006 Aug 10;24(23)

Gene expression and b receptor-positive breas

node-negative, estrogen rec benefit.

Clin Breast Cancer. 2010 Dec 1;

Dose dense cyclophos pilot study of every-14-

Drullinsky P, Sugarman SM, Form Mills N, Troso-Sandoval T, Seidm

Purpose: Cyclophosphamid early-stage breast cancer. R can offer greater efficacy. W

Methods: Thirty-eight patie They were treated every 14 day 2 of each cycle. The pri would effectively discriminat

Results: The median age wa 8 cycles of CMF at 14-day i

Conclusions: Dose-dense a

IBM Watson Oncology

CMF (cyclophospha

Administration

Treatment: Chemothera
Cycled every 28 days for

• Methotrexate 40 mg/m2
• 5-fluorouracil 600 mg/m

Treatment: Chemothera
Cycled every 21 days for
• Cyclophosphamide 600
• Methotrexate 40 mg/m2
• 5-fluorouracil 600 mg/m

Treatment: Chemothera
Cycled every 14 days for
• Cyclophosphamide 600
• Methotrexate 40 mg/m2
• 5-fluorouracil 600 mg/m

Base treatment administration
Patient-specific dosing must b
and calculated separately.

IBM Watson Oncology

Printed: February 23, 2014

CMF (cyclophosphamide/methotrexate/fluorouracil)

Warning and Toxcities

Most Common Toxicities

te	Fluorouracil
: Bone marrow leukopenia, penia	Dermatologic adverse effects: Hand-foot syndrome
inal adverse sea and	Hematologic: Agranulocytosis, anemia, leukopenia, pancytopenia, thrombocytopenia

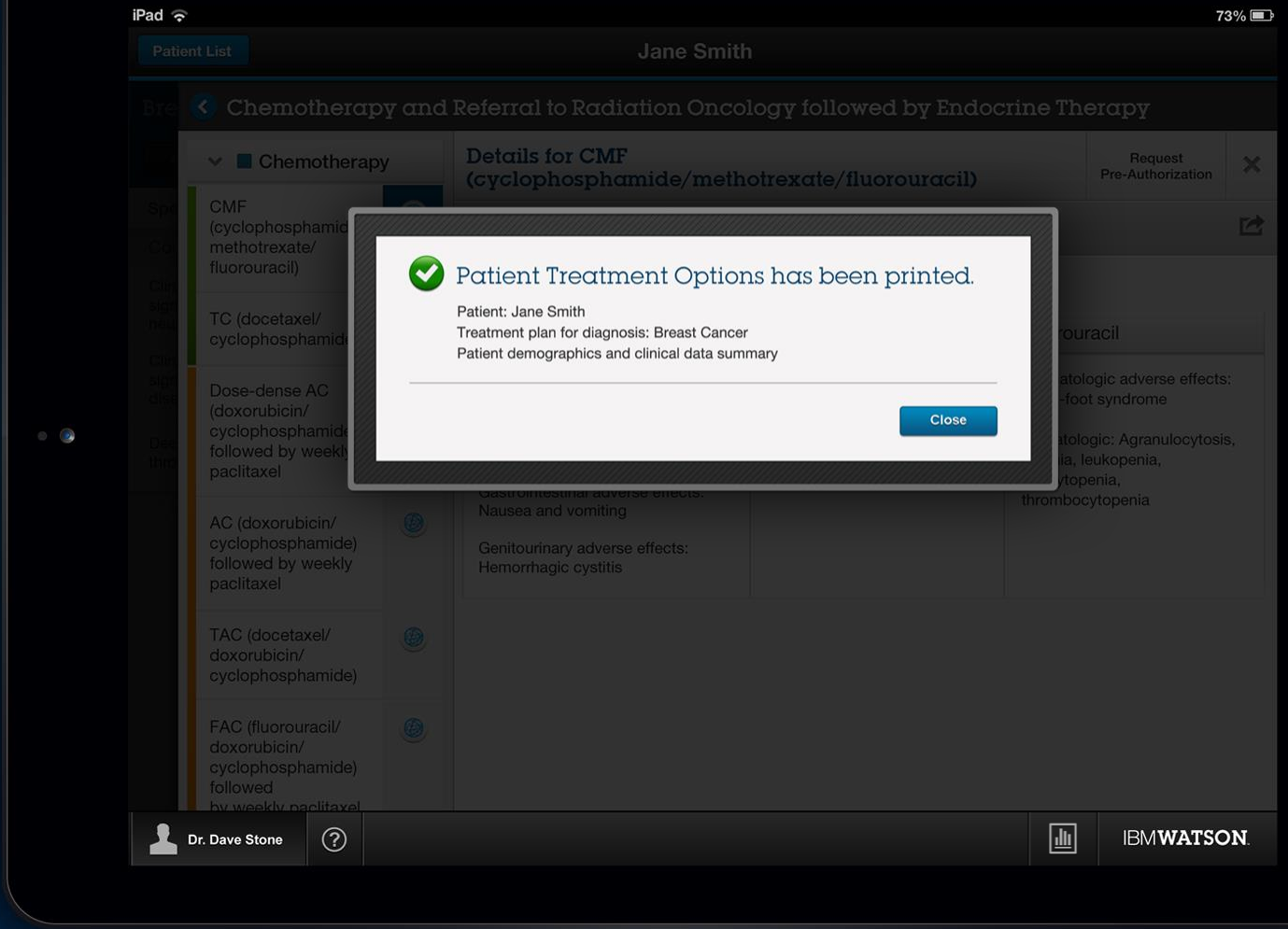
---

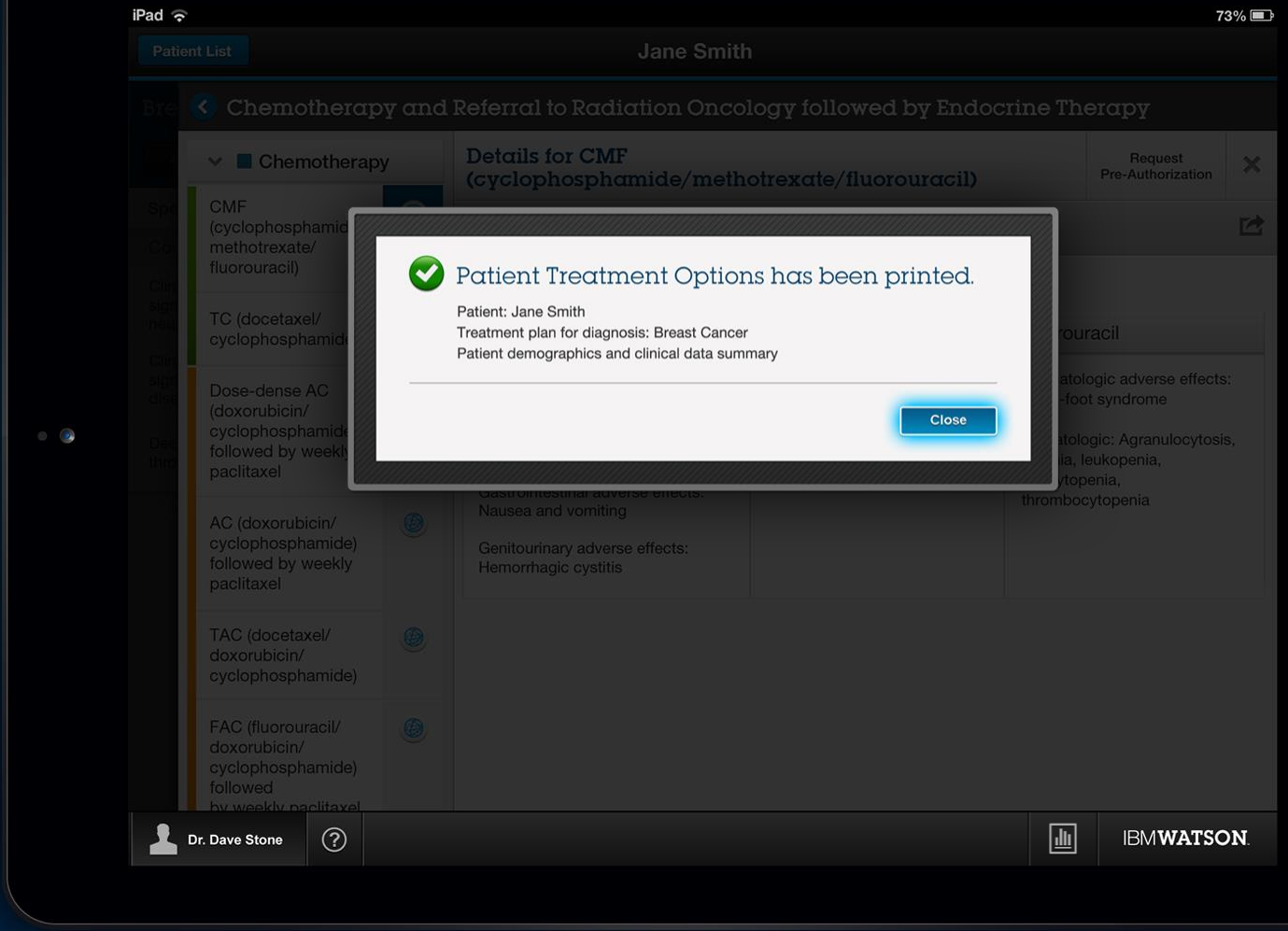
Patient Treatment Options has been printed.

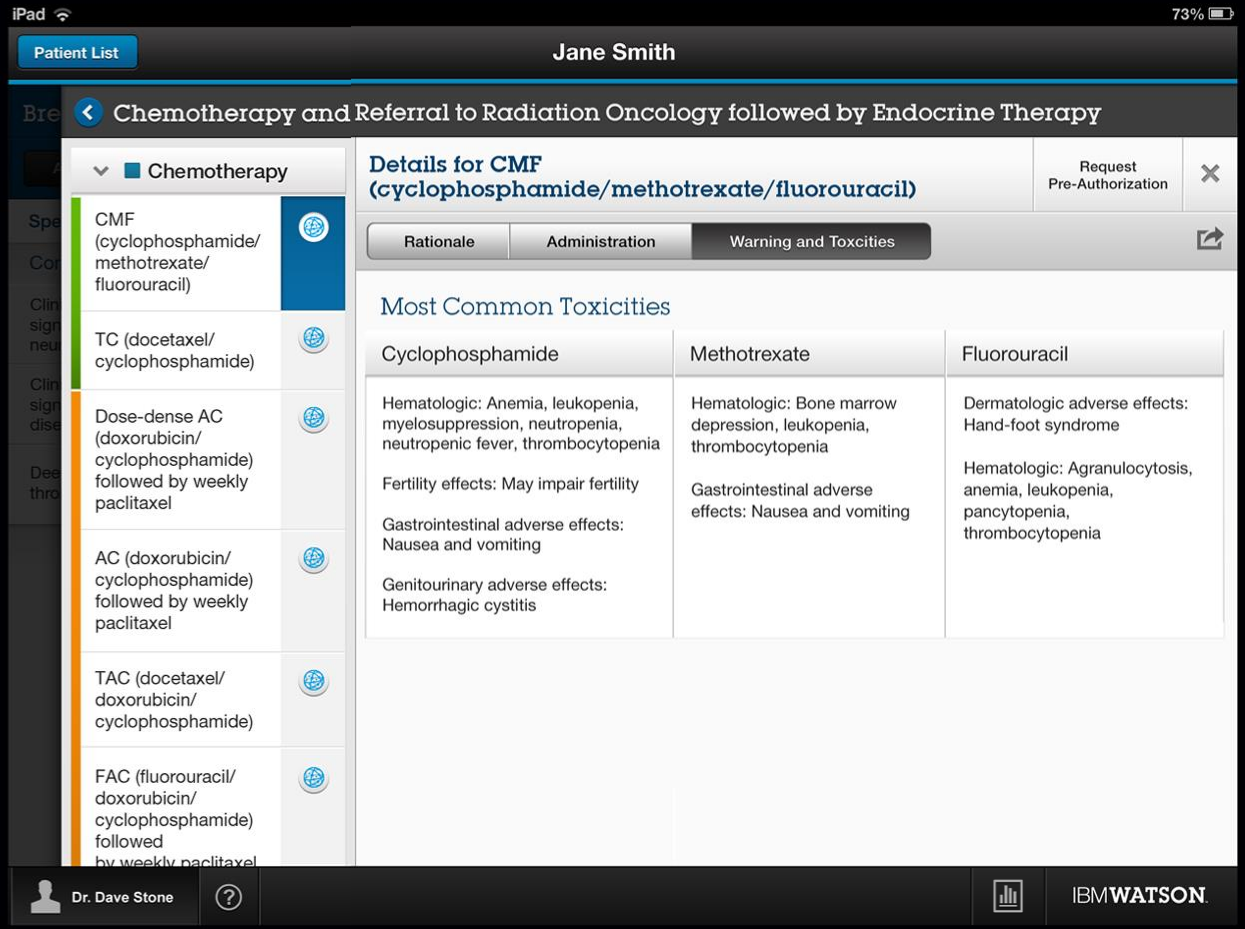
Patient: Jane Smith
Treatment plan for diagnosis: Breast Cancer
Patient demographics and clinical data summary

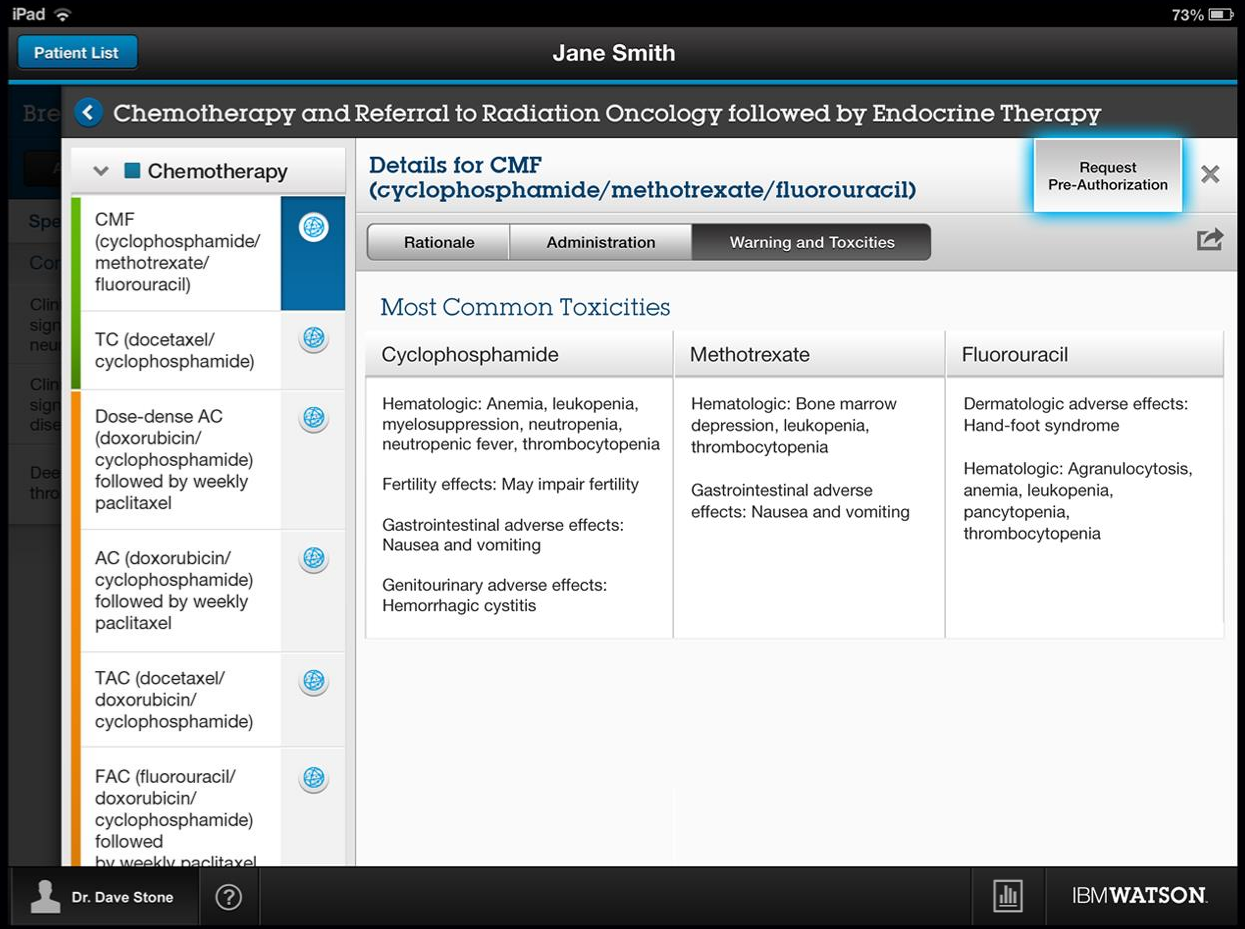
Close

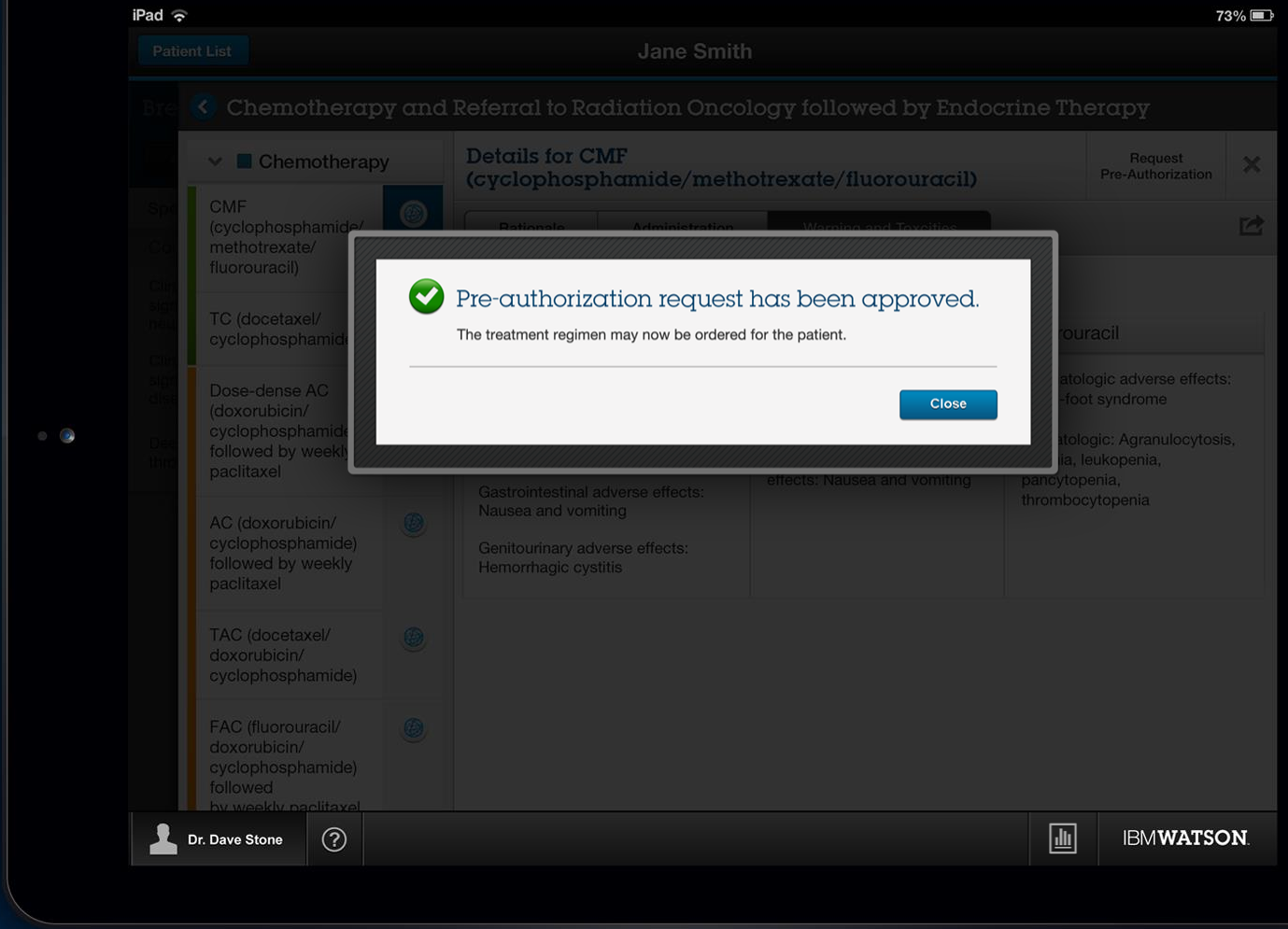
IBMWATSON

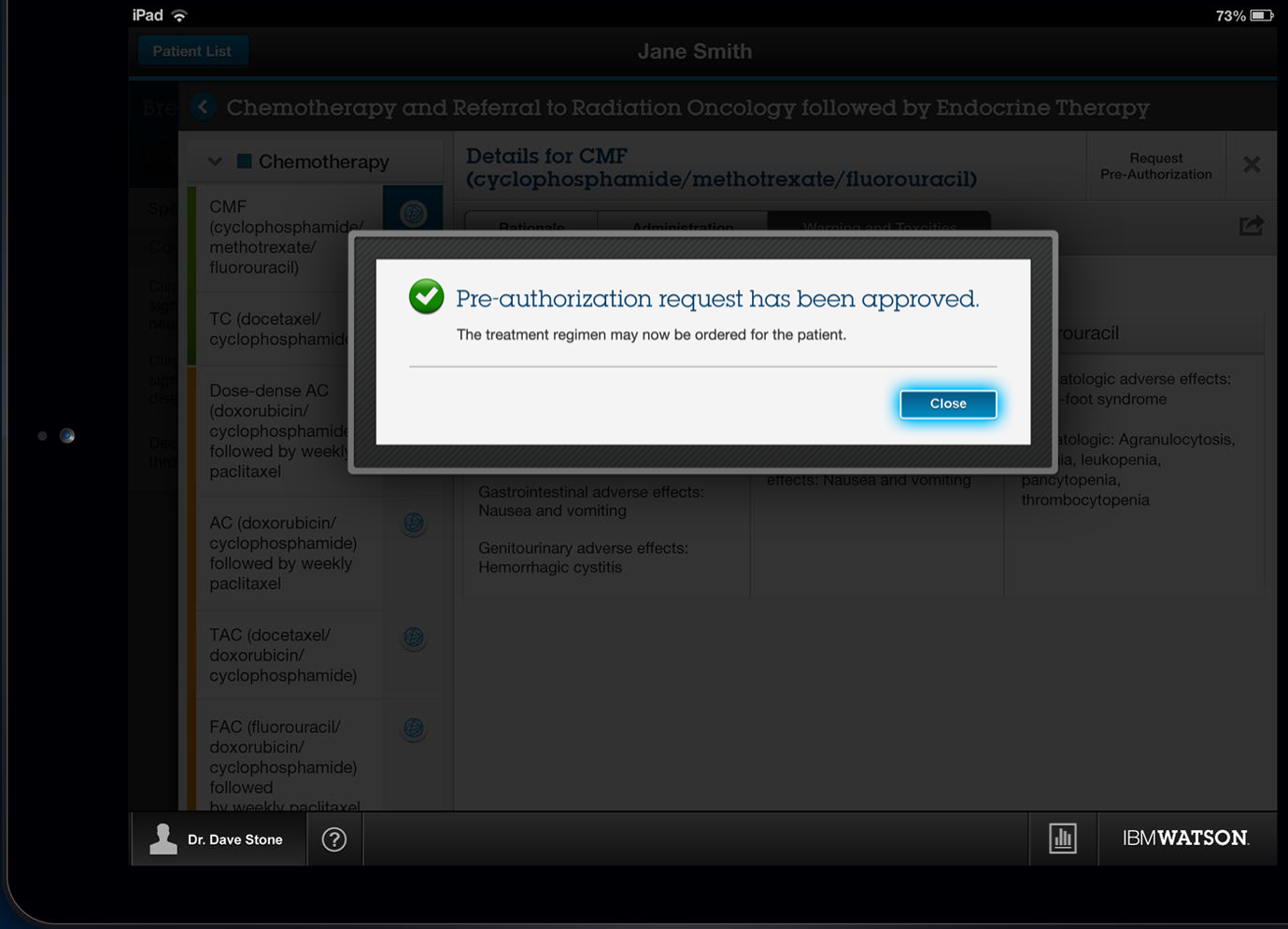

iPad
73%
Patient List
Jane Smith
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
Chemotherapy
CMF (cyclophosphamide/ methotrexate/ fluorouracil)
TC (docetaxel/ cyclophosphamide)
Dose-dense AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
TAC (docetaxel/ doxorubicin/ cyclophosphamide)
FAC (fluorouracil/ doxorubicin/ cyclophosphamide) followed
Details for CMF (cyclophosphamide/methotrexate/fluorouracil)
Request Pre-Authorization
Nausea and vomiting
Genitourinary adverse effects:
Hemorrhagic cystitis
thrombocytopenia
Patient Treatment Options has been printed.
Patient: Jane Smith
Treatment plan for diagnosis: Breast Cancer
Patient demographics and clinical data summary
Close
Dr. Dave Stone
IBMWATSON

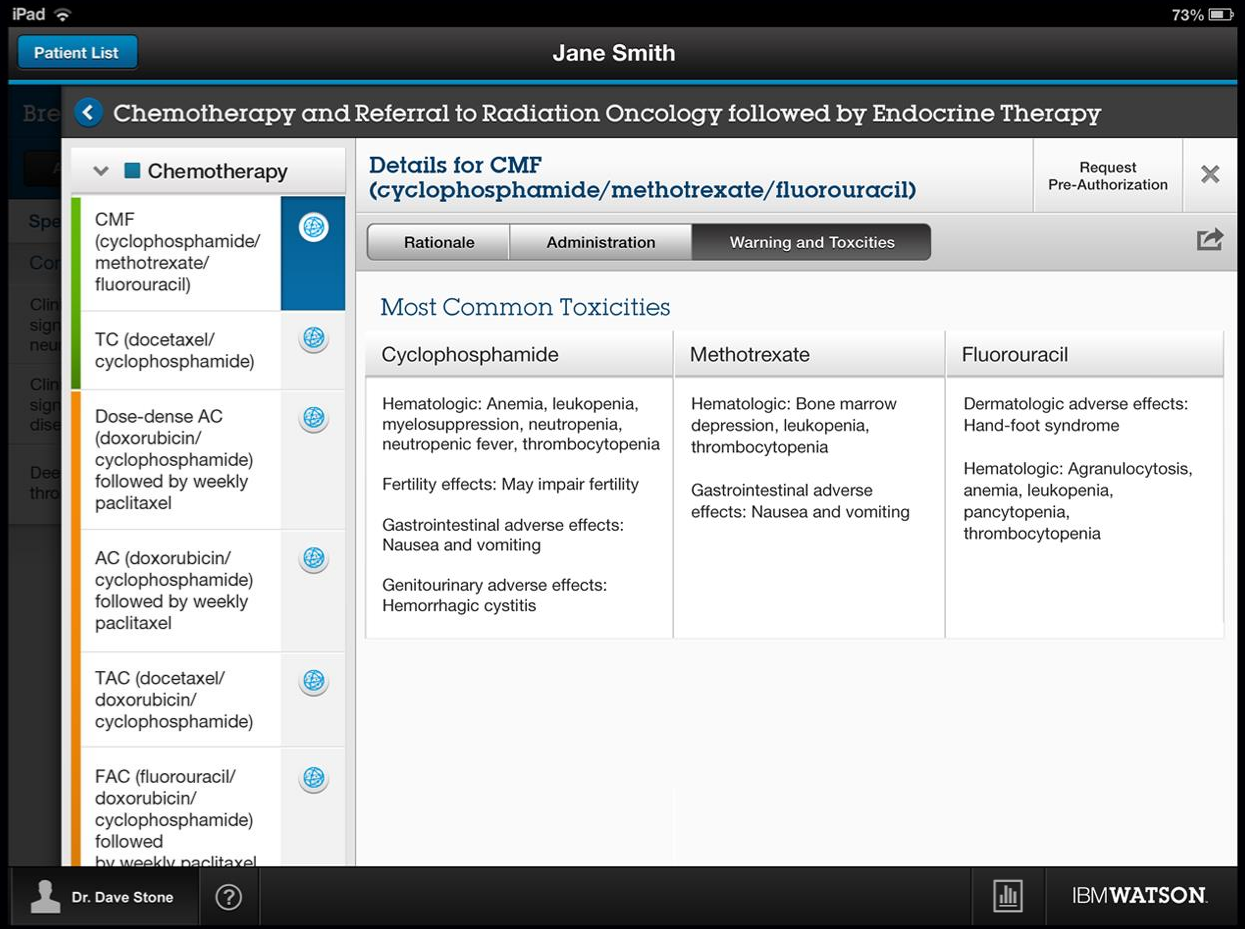

iPad
73%
Patient List
Jane Smith
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
Chemotherapy
CMF (cyclophosphamide/ methotrexate/ fluorouracil)
TC (docetaxel/ cyclophosphamide)
Dose-dense AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
TAC (docetaxel/ doxorubicin/ cyclophosphamide)
FAC (fluorouracil/ doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
Details for CMF (cyclophosphamide/methotrexate/fluorouracil)
Request Pre-Authorization
Nausea and vomiting
Genitourinary adverse effects:
Hemorrhagic cystitis
thrombocytopenia
Patient Treatment Options has been printed.
Patient: Jane Smith
Treatment plan for diagnosis: Breast Cancer
Patient demographics and clinical data summary
Close
Dr. Dave Stone
IBMWATSON


iPad
73%
Patient List
Jane Smith
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
Chemotherapy
CMF (cyclophosphamide/ methotrexate/ fluorouracil)
TC (docetaxel/ cyclophosphamide)
Dose-dense AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
TAC (docetaxel/ doxorubicin/ cyclophosphamide)
FAC (fluorouracil/ doxorubicin/ cyclophosphamide) followed
Details for CMF (cyclophosphamide/methotrexate/fluorouracil)
Request Pre-Authorization
Rationale
Administration
Warning and Toxcities
Most Common Toxicities
Cyclophosphamide
Hematologic: Anemia, leukopenia, myelosuppression, neutropenia, neutropenic fever, thrombocytopenia
Fertility effects: May impair fertility
Gastrointestinal adverse effects: Nausea and vomiting
Genitourinary adverse effects: Hemorrhagic cystitis
Methotrexate
Hematologic: Bone marrow depression, leukopenia, thrombocytopenia
Gastrointestinal adverse effects: Nausea and vomiting
Fluorouracil
Dermatologic adverse effects: Hand-foot syndrome
Hematologic: Agranulocytosis, anemia, leukopenia, pancytopenia, thrombocytopenia
Dr. Dave Stone
IBMWATSON


iPad
73%
Patient List
Jane Smith
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
Chemotherapy
CMF (cyclophosphamide/ methotrexate/ fluorouracil)
TC (docetaxel/ cyclophosphamide)
Dose-dense AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
TAC (docetaxel/ doxorubicin/ cyclophosphamide)
FAC (fluorouracil/ doxorubicin/ cyclophosphamide) followed
Details for CMF (cyclophosphamide/methotrexate/fluorouracil)
Request Pre-Authorization
Rationale
Administration
Warning and Toxcities
Most Common Toxicities
Cyclophosphamide
Hematologic: Anemia, leukopenia, myelosuppression, neutropenia, neutropenic fever, thrombocytopenia
Fertility effects: May impair fertility
Gastrointestinal adverse effects: Nausea and vomiting
Genitourinary adverse effects: Hemorrhagic cystitis
Methotrexate
Hematologic: Bone marrow depression, leukopenia, thrombocytopenia
Gastrointestinal adverse effects: Nausea and vomiting
Fluorouracil
Dermatologic adverse effects: Hand-foot syndrome
Hematologic: Agranulocytosis, anemia, leukopenia, pancytopenia, thrombocytopenia
Dr. Dave Stone
IBMWATSON


iPad
73%
Patient List
Jane Smith
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
Chemotherapy
CMF (cyclophosphamide/ methotrexate/ fluorouracil)
TC (docetaxel/ cyclophosphamid
Dose-dense AC (doxorubicin/ cyclophosphamide followed by weekly paclitaxel
AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
TAC (docetaxel/ doxorubicin/ cyclophosphamide)
FAC (fluorouracil/ doxorubicin/ cyclophosphamide) followed
Details for CMF (cyclophosphamide/methotrexate/fluorouracil)
Request Pre-Authorization
Rationale
Administration
Warning and Toxicities
Gastrointestinal adverse effects: Nausea and vomiting
Genitourinary adverse effects: Hemorrhagic cystitis
effects: Nausea and vomiting
ouracil
atologic adverse effects:
-foot syndrome
atologic: Agranulocytosis,
ia, leukopenia,
pancytopenia,
thrombocytopenia
Pre-authorization request has been approved.
The treatment regimen may now be ordered for the patient.
Close
Dr. Dave Stone
IBMWATSON


iPad
73%
Patient List
Jane Smith
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
Chemotherapy
CMF (cyclophosphamide/ methotrexate/ fluorouracil)
TC (docetaxel/ cyclophosphamid
Dose-dense AC (doxorubicin/ cyclophosphamide followed by weekly paclitaxel
AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
TAC (docetaxel/ doxorubicin/ cyclophosphamide)
FAC (fluorouracil/ doxorubicin/ cyclophosphamide) followed
Details for CMF (cyclophosphamide/methotrexate/fluorouracil)
Request Pre-Authorization
Rationale
Administration
Warning and Toxicities
Gastrointestinal adverse effects: Nausea and vomiting
Genitourinary adverse effects: Hemorrhagic cystitis
effects: Nausea and vomiting
ouracil
atologic adverse effects:
-foot syndrome
atologic: Agranulocytosis,
ia, leukopenia,
pancytopenia,
thrombocytopenia
Pre-authorization request has been approved.
The treatment regimen may now be ordered for the patient.
Close
Dr. Dave Stone
IBMWATSON


iPad
73%
Patient List
Jane Smith
Chemotherapy and Referral to Radiation Oncology followed by Endocrine Therapy
Chemotherapy
CMF (cyclophosphamide/ methotrexate/ fluorouracil)
TC (docetaxel/ cyclophosphamide)
Dose-dense AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
AC (doxorubicin/ cyclophosphamide) followed by weekly paclitaxel
TAC (docetaxel/ doxorubicin/ cyclophosphamide)
FAC (fluorouracil/ doxorubicin/ cyclophosphamide) followed
Details for CMF (cyclophosphamide/methotrexate/fluorouracil)
Request Pre-Authorization
Rationale
Administration
Warning and Toxcities
Most Common Toxicities
Cyclophosphamide
Hematologic: Anemia, leukopenia, myelosuppression, neutropenia, neutropenic fever, thrombocytopenia
Fertility effects: May impair fertility
Gastrointestinal adverse effects: Nausea and vomiting
Genitourinary adverse effects: Hemorrhagic cystitis
Methotrexate
Hematologic: Bone marrow depression, leukopenia, thrombocytopenia
Gastrointestinal adverse effects: Nausea and vomiting
Fluorouracil
Dermatologic adverse effects: Hand-foot syndrome
Hematologic: Agranulocytosis, anemia, leukopenia, pancytopenia, thrombocytopenia
Dr. Dave Stone
IBMWATSON

Putting IBM Watson to Work in Healthcare

A new class of industry specific analytical solutions.

IBM

IBM WATSON