

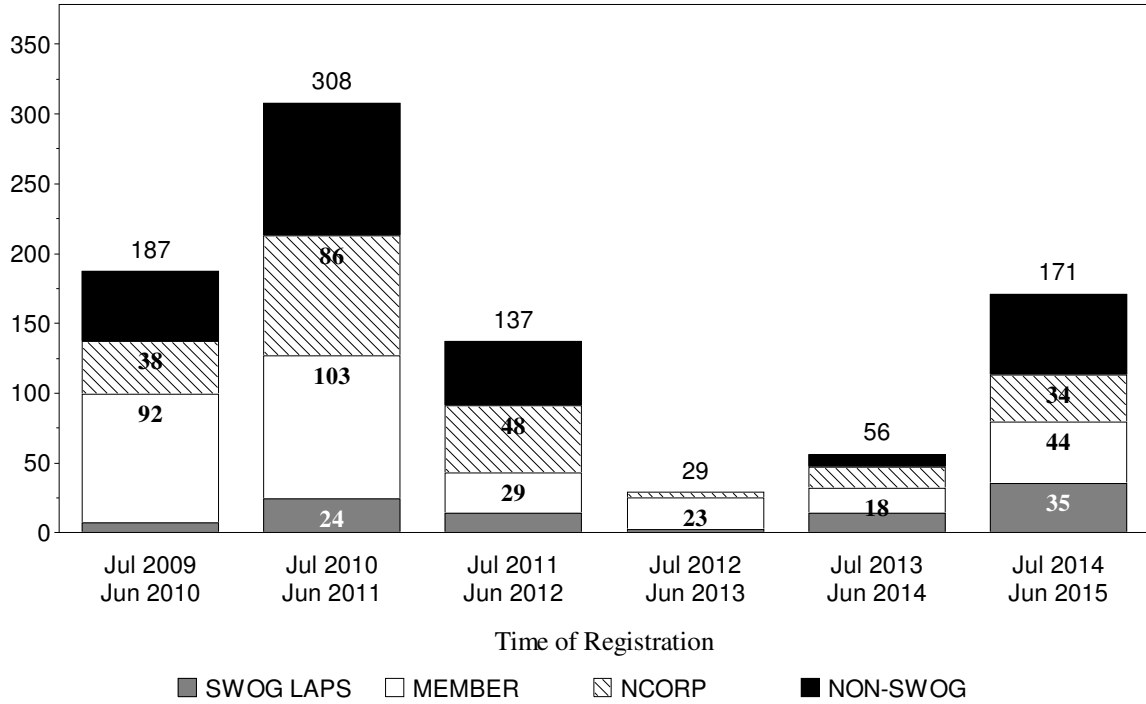
# MYELOMA COMMITTEE

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# Patient Registrations to Studies

By 12 Month Intervals  
**MYELOMA COMMITTEE**



Screening registrations and registrations to Biologic only studies are excluded

## Patient Registrations by Study and Arm

### MYELOMA COMMITTEE

|                                                       | <u>Jan 2015 -<br/>Jun 2015</u> | <u>Jul 2014 -<br/>Dec 2014</u> | <u>Jan 2014 -<br/>Jun 2014</u> | <u>All<br/>Patients</u> |
|-------------------------------------------------------|--------------------------------|--------------------------------|--------------------------------|-------------------------|
| <b>S1211 MM, High Risk, RVD +/- ELO</b>               |                                |                                |                                |                         |
| RVD/Elo Dose Level 1                                  | 0                              | 0                              | 0                              | 8                       |
| RVD                                                   | 19                             | 11                             | 5                              | 38                      |
| RVD/Elo                                               | 15                             | 10                             | 6                              | 32                      |
|                                                       | <u>34</u>                      | <u>21</u>                      | <u>11</u>                      | <u>78</u>               |
| <b>S1304 MM, relapsed/refractory, Carfilzomib+Dex</b> |                                |                                |                                |                         |
| <b>Initial Registration</b>                           |                                |                                |                                |                         |
| Dex+Low Dose Carfilzomib                              | 25                             | 19                             | 11                             | 55                      |
| Dex+High Dose Carfilzomib                             | 27                             | 17                             | 14                             | 58                      |
|                                                       | <u>52</u>                      | <u>36</u>                      | <u>25</u>                      | <u>113</u>              |
| <b>Cross Over</b>                                     |                                |                                |                                |                         |
| Dex+High Dose Carfilzomib                             | 8                              | 5                              | 0                              | 13                      |
| <b>E1A11 MM, frontline, BLD vs CLD*</b>               |                                |                                |                                |                         |
| Total Registrations                                   | 6                              | 13                             | 6                              | 25                      |
| <b>E3A06 AMM, Lenalidomide vs Observation*</b>        |                                |                                |                                |                         |
| Total Registrations                                   | 5                              | 4                              | 5                              | 22                      |

\* For non-SWOG coordinated studies only SWOG registrations are shown.

## S1204 Surveillance

### A Sero-Epidemiologic Survey and Cost-Effectiveness Study of Screening for Human Immunodeficiency Virus (HIV), Hepatitis B Virus (HBV) and Hepatitis C Virus (HCV) Among Newly Diagnosed Cancer Patients

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**Study Chairs:**

S Ramsey, R Loomba, R Chugh, D Hershman, J Hwang

**Date Activated:**

08/29/2013

**Statisticians:**

J Unger, K Arnold

**Data Coordinator:**

M Yee

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**Objectives**

Among newly diagnosed cancer patients presenting to SWOG-affiliated community and academic oncology clinics, estimate the prevalence of human immunodeficiency virus (HIV), hepatitis B (HBV), and hepatitis C (HCV) infection.

Evaluate known sociodemographic, clinical, and behavioral factors that are significantly associated with previously undiagnosed HIV, HBV, and/or HCV infection in a population of people with newly diagnosed cancer.

Among patients who are identified as having HIV, HBV, and/or HCV, evaluate the timing and type of treatments received, both for the viral infections and the cancers.

Evaluate type and rate of cancer treatment-related adverse events in patients with HIV, HBV, and/or HCV infection.

Determine the cost-effectiveness of (1) routine, universal screening and (2) risk factor-directed screening of newly diagnosed cancer patients for HIV, HBV and/or HCV versus current care.

Create a biorepository of stored serum for future translational medicine studies that may include identifying genomic and viral factors that increase the risk of serious adverse effects among participants infected with HIV, HBV, and/or HCV being treated for invasive cancers.

**Patient Population**

Patients must be presenting for evaluation or treatment for the first diagnosis of a new solid or hematologic cancer malignancy. Confirmed diagnosis date must be within 120 days prior to first clinic visit as a newly diagnosed cancer patient at the registering clinic. Patients presenting for "second opinions" of confirmed malignancies are eligible, including those who have started cancer treatment at other facilities. Patients must be registered within 90 days after their first clinic visit. Patients must not have been diagnosed with a malignancy other than the current malignancy within the past five years, with the exception of basal cell or squamous cell skin cancer, in situ cervical cancer, or in situ breast cancer. Patients must have no evidence of disease for a prior malignancy for at least five years prior to randomization except as noted above.

Patients must be 18 years of age or older. Patients must have had their blood drawn for viral status testing for HIV, HBV and HCV or provide

acceptable viral status documentation prior to registration, as defined in the protocol. Note that patients must have blood drawn for testing prior to registration for any of the three viruses not covered by the documentation. Patients are allowed to participate in other clinical trials.

**Accrual Goals**

A total of 3,000 eligible patients will be accrued.

**Summary Statement**

For the current status of this study, please refer to the Cancer Care Delivery chapter.

# S1211 Phase I-II

Coordinating Group: SWOG

## A Randomized Phase I/II Study of Optimal Induction Therapy of Bortezomib, Dexamethasone and Lenalidomide with or without Elotuzumab (NSC-764479) for Newly Diagnosed High Risk Multiple Myeloma

**Participants:**

SWOG, CTSU (Supported by Alliance and ECOG-ACRIN)

**Date Activated:**

10/27/2012

**Study Chairs:**

S Usmani, S Ailawadhi, J Shah, T Zimmerman (Alliance), N Callander (ECOG-ACRIN)

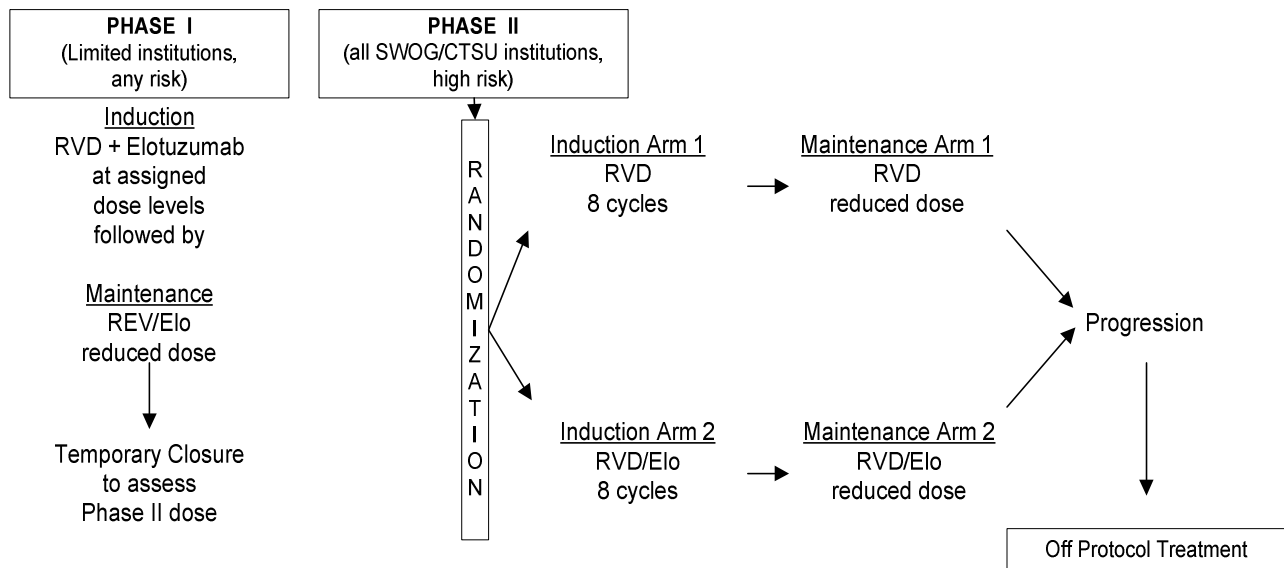
**Statisticians:**

R Sexton, A Hoering

**Data Coordinator:**

J Jardine

### SCHEMA



\*Patients will be enrolled into either the Phase I portion OR the Phase II portion, not both.

## **Objectives**

### **Phase I Run-in**

To determine the appropriate Phase II dose of elotuzumab to use in combination with lenalidomide, bortezomib and dexamethasone for patients with multiple myeloma.

### **Phase II Trial**

To assess whether incorporation of elotuzumab into the treatment algorithm of high risk multiple myeloma will improve progression-free survival.

To estimate the frequency and severity of toxicities of this treatment strategy in this patient population.

### **Patient Population**

Patients must have measurable, newly diagnosed active multiple myeloma. Non-secretory disease is not allowed.

For the Phase II portion, patients must be high risk by high GEP-70 genomic signature, specified FISH features, presence of plasma cell leukemia, or elevated LDH.

Patients on the Phase I portion may not have received any prior chemotherapy. Patients on the Phase II portion may have received one prior cycle of any noninvestigational chemotherapy. Patients may have received prior radiotherapy for symptomatic localized bone lesions or impending spinal cord compression only.

Patients must have adequate marrow, hepatic and renal function and must not have involvement of the central nervous system. Patients must have Zubrod performance status 0-2, must be at least 18 years of age, and must not have POEMS or clinically significant illness.

### **Stratification/Descriptive Factors**

Patients in the Phase II portion of the study will be stratified as follows: primary plasma cell leukemia (PCL) and/or high LDH vs everyone else.

## **Accrual Goals**

### **Phase I Run-In**

Six patients (high or low risk) will be treated with bortezomib, lenalidomide, dexamethasone per protocol and elotuzumab at 10 mg/kg. If one or fewer patients experience a DLT this dose level of elotuzumab will be considered safe and the Phase II portion of the trial will be done using this dose level. If two or more patients experience a DLT, this dose level will be deemed too toxic and an additional six patients will be accrued and treated at a lower dose level of elotuzumab.

### **Phase II Trial**

One hundred eligible patients will be accrued to this trial. An interim analysis for futility is planned after approximately half (32) of the total expected progressions have occurred, at approximately three years and seven months.

### **Summary Statement**

This study opened for accrual on October 27, 2012. As of June 30, 2015, 78 patients had been enrolled to the trial. The Phase I portion of the trial is now complete and Dose Level 1 (10 mg/kg) has been established as the appropriate dose level for the Phase II portion of the trial. Phase I data will be omitted from subsequent reports.

Among the 70 patients enrolled to the Phase II portion of the trial, 38 were randomized to the RVD arm and 32 were randomized to the RVD/Elo arm. Seven patients on the RVD arm and six patients on the RVE/Elo arm are ineligible due to the following reasons: missing, insufficient, or early or late baseline labs (8), prior therapy not completed at least 56 days prior to registration (2), criteria for measurable disease not met (2), and criteria for high risk not met (1). There has been one major protocol deviation: a patient on the RVD/Elo arm withdrew from the study prior to receiving any treatment. This patient is not evaluable for adverse events.

Four of the 27 patients on the RVD arm and three of the 23 patients on the RVD/Elo arm who have been assessed for toxicities have experienced Grade 4 adverse events as maximum degree. The non-hematologic Grade 4 adverse events reported were



thromboembolic event (2) on the RVD arm and infusion-related reaction (1) on the RVD/Elo arm. No treatment-related deaths have been reported.

### Registration by Institution

Registrations ending June 30, 2015

| Institutions                           | Total<br>Reg | Institutions                   | Total<br>Reg |
|----------------------------------------|--------------|--------------------------------|--------------|
| ECOG-ACRIN                             | 11           | Wayne State Univ               | 3            |
| Carolinas Med Ctr/San Antonio, U of TX | 8            | Heartland NCORP                | 2            |
| Cleveland Clinic OH                    | 8            | NRG                            | 2            |
| Kansas, U of                           | 8            | So Calif, U of                 | 2            |
| MD Anderson CC                         | 8            | Southeast COR NCORP            | 2            |
| City of Hope Med Ctr                   | 5            | Columbus NCORP                 | 1            |
| Alliance                               | 4            | CRC West MI NCORP              | 1            |
| Michigan CRC NCORP                     | 4            | Loyola University              | 1            |
| Providence Hosp                        | 4            | <b>Total (18 Institutions)</b> | <b>78</b>    |
| Rochester, Univ of                     | 4            |                                |              |

### Registration, Eligibility, and Evaluability

Registrations ending June 30, 2015; Data as of July 21, 2015

|                            | TOTAL | Phase I | RVD | RVD/Elo |
|----------------------------|-------|---------|-----|---------|
| NUMBER REGISTERED          | 78    | 8       | 38  | 32      |
| INELIGIBLE                 | 15    | 2       | 7   | 6       |
| Insufficient Documentation | 10    | 2       | 3   | 5       |
| Irreversible               | 10    | 2       | 3   | 5       |
| ELIGIBLE                   | 63    | 6       | 31  | 26      |
| Analyzeable, Pend. Elig.   | 7     | 0       | 5   | 2       |
| Not Analyzable             | 1     | 1       | 0   | 0       |
| RESPONSE ASSESSMENT        |       |         |     |         |
| Determinable               | 36    | 5       | 16  | 15      |
| Not Determinable           | 1     | 0       | 0   | 1       |
| Too Early                  | 25    | 0       | 15  | 10      |
| ADVERSE EVENT ASSESSMENT   |       |         |     |         |
| Evaluable                  | 55    | 5       | 27  | 23      |
| Not Evaluable              | 1     | 0       | 0   | 1       |
| Too Early                  | 6     | 0       | 4   | 2       |

## Patient Characteristics

Registrations ending June 30, 2015; Data as of July 21, 2015

|                            | Phase I<br>(n=5) |      | RVD<br>(n=31) |     | RVD/Elo<br>(n=26) |     |
|----------------------------|------------------|------|---------------|-----|-------------------|-----|
| <b>AGE</b>                 |                  |      |               |     |                   |     |
| Median                     | 66.9             |      | 63.2          |     | 61.6              |     |
| Minimum                    | 56.1             |      | 36.2          |     | 40.0              |     |
| Maximum                    | 79.3             |      | 83.6          |     | 76.4              |     |
| <b>SEX</b>                 |                  |      |               |     |                   |     |
| Males                      | 2                | 40%  | 17            | 55% | 16                | 62% |
| Females                    | 3                | 60%  | 14            | 45% | 10                | 38% |
| <b>HISPANIC</b>            |                  |      |               |     |                   |     |
| Yes                        | 0                | 0%   | 1             | 3%  | 2                 | 8%  |
| No                         | 5                | 100% | 28            | 90% | 23                | 88% |
| Unknown                    | 0                | 0%   | 2             | 6%  | 1                 | 4%  |
| <b>RACE</b>                |                  |      |               |     |                   |     |
| White                      | 2                | 40%  | 25            | 81% | 19                | 73% |
| Black                      | 1                | 20%  | 6             | 19% | 5                 | 19% |
| Unknown                    | 2                | 40%  | 0             | 0%  | 2                 | 8%  |
| <b>PCL AND/OR HIGH LDH</b> |                  |      |               |     |                   |     |
| Yes                        | 0                | 0%   | 6             | 19% | 4                 | 15% |
| No                         | 5                | 100% | 25            | 81% | 22                | 85% |

## Treatment Summary

Classified by phase

Registrations ending June 30, 2015; Data as of July 21, 2015

|                                    | TOTAL | Phase I | Phase II |
|------------------------------------|-------|---------|----------|
| NUMBER ON PROTOCOL TREATMENT       | 43    | 3       | 40       |
| NUMBER OFF PROTOCOL TREATMENT      | 19    | 2       | 17       |
| <b>REASON OFF TREATMENT</b>        |       |         |          |
| Treatment completed as planned     | 1     | 0       | 1        |
| Adverse Event or side effects      | 7     | 0       | 7        |
| Refusal unrelated to adverse event | 1     | 0       | 1        |
| Progression/relapse                | 5     | 0       | 5        |
| Death                              | 0     | 0       | 0        |
| Other - not protocol specified     | 4     | 2       | 2        |
| Reason under review                | 1     | 0       | 1        |
| MAJOR PROTOCOL DEVIATIONS          | 1     | 0       | 1        |

## Number of Patients with a Given Type and Grade of Adverse Event

Classified by arm

Phase II patients only

Adverse Events Unlikely or Not Related to Treatment Excluded

Adverse Events with No Entries for Grades 3 to 5 Have Been Suppressed

Registrations ending June 30, 2015; Data as of July 21, 2015

| ADVERSE EVENTS                      | RVD<br>(n=27)<br>Grade |          |           |          |          |          | RVD/Elo<br>(n=23)<br>Grade |          |          |           |          |          |
|-------------------------------------|------------------------|----------|-----------|----------|----------|----------|----------------------------|----------|----------|-----------|----------|----------|
|                                     | 0                      | 1        | 2         | 3        | 4        | 5        | 0                          | 1        | 2        | 3         | 4        | 5        |
| ALT increased                       | 24                     | 3        | 0         | 0        | 0        | 0        | 19                         | 3        | 0        | 1         | 0        | 0        |
| AST increased                       | 25                     | 2        | 0         | 0        | 0        | 0        | 21                         | 1        | 0        | 1         | 0        | 0        |
| Anemia                              | 15                     | 2        | 8         | 2        | 0        | 0        | 16                         | 3        | 3        | 1         | 0        | 0        |
| Bone pain                           | 27                     | 0        | 0         | 0        | 0        | 0        | 21                         | 0        | 1        | 1         | 0        | 0        |
| Diarrhea                            | 20                     | 4        | 0         | 3        | 0        | 0        | 18                         | 4        | 0        | 1         | 0        | 0        |
| Dyspnea                             | 22                     | 3        | 2         | 0        | 0        | 0        | 20                         | 1        | 1        | 1         | 0        | 0        |
| Edema limbs                         | 18                     | 6        | 2         | 1        | 0        | 0        | 12                         | 8        | 3        | 0         | 0        | 0        |
| Encephalopathy                      | 26                     | 0        | 0         | 1        | 0        | 0        | 23                         | 0        | 0        | 0         | 0        | 0        |
| Fall                                | 25                     | 1        | 0         | 1        | 0        | 0        | 23                         | 0        | 0        | 0         | 0        | 0        |
| Fatigue                             | 15                     | 4        | 6         | 2        | 0        | 0        | 9                          | 9        | 3        | 2         | 0        | 0        |
| Fracture                            | 27                     | 0        | 0         | 0        | 0        | 0        | 22                         | 0        | 0        | 1         | 0        | 0        |
| Generalized muscle weakness         | 24                     | 1        | 2         | 0        | 0        | 0        | 15                         | 5        | 2        | 1         | 0        | 0        |
| Hyperglycemia                       | 26                     | 0        | 0         | 1        | 0        | 0        | 17                         | 3        | 2        | 1         | 0        | 0        |
| Hyperkalemia                        | 25                     | 1        | 0         | 1        | 0        | 0        | 21                         | 1        | 1        | 0         | 0        | 0        |
| Hypokalemia                         | 24                     | 2        | 1         | 0        | 0        | 0        | 20                         | 0        | 1        | 2         | 0        | 0        |
| Hyponatremia                        | 25                     | 0        | 0         | 2        | 0        | 0        | 19                         | 4        | 0        | 0         | 0        | 0        |
| Infections/infestations-Other       | 25                     | 0        | 1         | 1        | 0        | 0        | 23                         | 0        | 0        | 0         | 0        | 0        |
| Infusion related reaction           | 27                     | 0        | 0         | 0        | 0        | 0        | 21                         | 0        | 0        | 1         | 1        | 0        |
| Insomnia                            | 23                     | 4        | 0         | 0        | 0        | 0        | 15                         | 4        | 3        | 1         | 0        | 0        |
| Lymphocyte count decreased          | 18                     | 3        | 3         | 2        | 1        | 0        | 14                         | 2        | 3        | 4         | 0        | 0        |
| Muscle weakness lower limb          | 25                     | 0        | 1         | 1        | 0        | 0        | 21                         | 1        | 1        | 0         | 0        | 0        |
| Neutrophil count decreased          | 17                     | 2        | 3         | 4        | 1        | 0        | 18                         | 3        | 1        | 1         | 0        | 0        |
| Peripheral motor neuropathy         | 27                     | 0        | 0         | 0        | 0        | 0        | 17                         | 2        | 2        | 2         | 0        | 0        |
| Peripheral sensory neuropathy       | 15                     | 10       | 1         | 1        | 0        | 0        | 8                          | 8        | 6        | 1         | 0        | 0        |
| Platelet count decreased            | 16                     | 6        | 1         | 3        | 1        | 0        | 11                         | 6        | 1        | 3         | 2        | 0        |
| Rash maculo-papular                 | 23                     | 3        | 1         | 0        | 0        | 0        | 19                         | 2        | 1        | 1         | 0        | 0        |
| Resp/thoracic/mediastinal ds        | 27                     | 0        | 0         | 0        | 0        | 0        | 22                         | 0        | 0        | 1         | 0        | 0        |
| Skin infection                      | 26                     | 1        | 0         | 0        | 0        | 0        | 22                         | 0        | 0        | 1         | 0        | 0        |
| Thromboembolic event                | 25                     | 0        | 0         | 0        | 2        | 0        | 22                         | 0        | 1        | 0         | 0        | 0        |
| Urinary tract infection             | 26                     | 0        | 0         | 1        | 0        | 0        | 23                         | 0        | 0        | 0         | 0        | 0        |
| White blood cell decreased          | 19                     | 1        | 5         | 1        | 1        | 0        | 17                         | 3        | 2        | 1         | 0        | 0        |
| <b>MAX. GRADE ANY ADVERSE EVENT</b> | <b>1</b>               | <b>1</b> | <b>13</b> | <b>8</b> | <b>4</b> | <b>0</b> | <b>1</b>                   | <b>1</b> | <b>7</b> | <b>11</b> | <b>3</b> | <b>0</b> |

## S1304 Phase II

Coordinating Group: SWOG

### A Phase II Randomized Study Comparing Two Doses of Carfilzomib (NSC-756640) with Dexamethasone for Multiple Myeloma Patients with Relapsed or Refractory Disease

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**Participants:**

SWOG, CTSU (Supported by Alliance and ECOG-ACRIN)

**Date Activated:**

10/18/2013

**Study Chairs:**

S Ailawadhi, M Abidi, S Lentzsch, P Voorhees (Alliance), A Cohen (ECOG-ACRIN)

**Statisticians:**

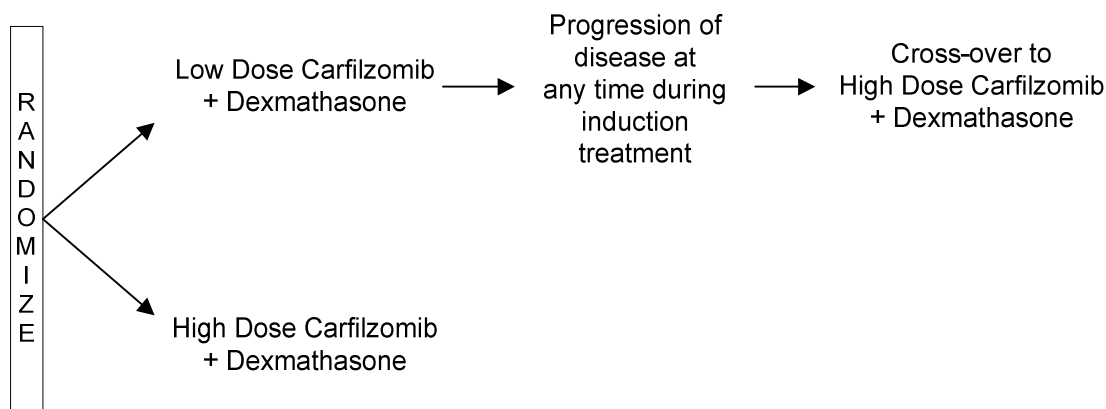
R Sexton, A Hoering

**Data Coordinator:**

J Jardine

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#### SCHEMA



**Objectives**

To evaluate and compare progression free survival of two different doses of carfilzomib with dexamethasone in multiple myeloma (MM) patients with relapsed or refractory disease.

To evaluate and compare response rates for each arm.

To evaluate response rates for patients that relapse on low dose carfilzomib and subsequently cross-over to high dose carfilzomib.

To evaluate the safety of this combination for this patient population.

To evaluate overall survival.

To explore the molecular variability in MM cells obtained from extramedullary bone marrow relapse sites.

To explore the role of PET scanning in assessing disease burden and as a tool to assess treatment response.

To explore changes in left ventricular ejection fraction in patients with relapsed or refractory multiple myeloma treated with low dose carfilzomib or high dose carfilzomib plus dexamethasone.

### **Patient Population**

Patients must have a confirmed diagnosis of symptomatic myeloma and must be relapsed or refractory. Patients must have measurable disease, must have had a least one, but no more than six prior regimens of therapy for the disease, may not have received any prior carfilzomib and must not be receiving any other concurrent investigational therapy. Patients with non-secretory MM or known amyloidosis are ineligible.

Patients must discontinue specified therapies within 28 days prior to registration.

Patients must be 18 years of age. Patients must have a complete physical, PET scan, ECHO, EKG, and a skeletal survey. Patients must have a Zubrod performance status between 0 and 2, must not have any clinically significant illness or any significant neuropathies, and must have adequate liver and marrow function and creatinine clearance.

### **Stratification/Descriptive Factors**

Patients will be stratified by the following factors: (1) one to three prior therapies vs four to six prior therapies; and (2) refractory to bortezomib vs not refractory to bortezomib.

### **Accrual Goals**

A total of 126 eligible patients will be enrolled. One interim analysis is planned for when one half of the total expected events have occurred, at approximately one year and eight months.

### **Summary Statement**

This study was activated on October 18, 2013. As of June 30, 2015, 113 patients, 55 randomized to low dose carfilzomib (LDC) and 58 randomized to high dose carfilzomib (HDC), had been enrolled to the trial. Seven patients randomized to LDC and 12 patients randomized to HDC were ineligible for the following reasons: missing, insufficient, early or late baseline labs (14), multiple myeloma diagnosis not confirmed (3), criteria for measurable disease not met (1), prior therapy completed less than 28 days prior to registration (1). There has been one major protocol deviation: a patient randomized to HDC withdrew from the study prior to receiving protocol treatment. This patient is not evaluable for adverse events.

Three treatment-related deaths have been reported: two patients, one on each arm, died due to sepsis, and one patient on the LDC arm died due to causes not otherwise specified (Death NOS). Four of the 42 patients assessed for toxicity on the LDC arm and three of the 42 patients assessed for toxicity on the HDC arm experienced Grade 4 adverse events as maximum grade. The non-hematologic Grade 4 adverse events observed were cardiac arrest (1), increased creatinine (1), respiratory failure (1), and restrictive cardiomyopathy (1) on the LDC arm and acute respiratory distress syndrome (1), acute kidney injury (1), hypocalcemia (1) and stroke (1) on the HDC arm.

Fourteen patients had registered to the Crossover HDC arm (C-HDC), three of whom were ineligible for the following reasons: missing, insufficient, early or late baseline labs (1), patient did not progress on initial study treatment (1), crossover occurred less than 14 days after last dose of initial study treatment (1).

Among the 6 patients assessed for toxicity on C-HDC arm, 3 patients experienced Grade 4 adverse events, including the following non-hematologic adverse events: atrial flutter (1), lung infection (1), and sepsis (1).

**Registration by Institution**  
Registrations ending June 30, 2015

| <b>Institutions</b>              | <b>Total<br/>Reg</b> | <b>Institutions</b>                       | <b>Total<br/>Reg</b> |
|----------------------------------|----------------------|-------------------------------------------|----------------------|
| Alliance                         | 26                   | Heartland NCORP                           | 2                    |
| ECOG-ACRIN                       | 17                   | KaiserPermanenteSCAL/Kaiser Vallejo NCORP | 2                    |
| So Calif, U of                   | 15                   | Yale University                           | 2                    |
| MD Anderson CC                   | 7                    | Boston MC MBCCOP                          | 1                    |
| NRG                              | 7                    | Boston Medical Ctr                        | 1                    |
| Michigan CRC NCORP               | 6                    | Lahey Hosp & Med Ctr                      | 1                    |
| Kaiser Vallejo NCORP             | 5                    | Montana NCORP                             | 1                    |
| Florida, Univ of/Yale University | 4                    | Nevada CRF NCORP                          | 1                    |
| Loyola University                | 4                    | Northwest NCORP                           | 1                    |
| Providence Hosp                  | 3                    | Oklahoma, Univ of                         | 1                    |
| Southeast COR NCORP              | 3                    | Ozarks NCORP                              | 1                    |
| Davis, U of CA                   | 2                    | <b>Total (23 Institutions)</b>            | <b>113</b>           |

**Registration, Eligibility, and Evaluability**

Classified by arm

Registrations ending June 30, 2015; Data as of July 21, 2015

|                            | <b>TOTAL</b> | <b>Dex+Low Dose<br/>Carfilzomib</b> | <b>Dex+High Dose<br/>Carfilzomib</b> |
|----------------------------|--------------|-------------------------------------|--------------------------------------|
| NUMBER REGISTERED          | 113          | 55                                  | 58                                   |
| INELIGIBLE                 | 19           | 7                                   | 12                                   |
| Insufficient Documentation | 14           | 6                                   | 8                                    |
| Irreversible               | 14           | 6                                   | 8                                    |
| ELIGIBLE                   | 94           | 48                                  | 46                                   |
| Analyzable, Pend. Elig.    | 14           | 7                                   | 7                                    |
| RESPONSE ASSESSMENT        |              |                                     |                                      |
| Determinable               | 48           | 25                                  | 23                                   |
| Not Determinable           | 6            | 2                                   | 4                                    |
| Too Early                  | 40           | 21                                  | 19                                   |
| ADVERSE EVENT ASSESSMENT   |              |                                     |                                      |
| Evaluable                  | 84           | 42                                  | 42                                   |
| Not Evaluable              | 1            | 0                                   | 1                                    |
| Too Early                  | 9            | 6                                   | 3                                    |

## Patient Characteristics

Classified by arm

Registrations ending June 30, 2015; Data as of July 21, 2015

|                                     | Dex+Low Dose<br>Carfilzomib<br>(n=48) |     | Dex+High Dose<br>Carfilzomib<br>(n=46) |     |
|-------------------------------------|---------------------------------------|-----|----------------------------------------|-----|
| <b>AGE</b>                          |                                       |     |                                        |     |
| Median                              | 64.7                                  |     | 66.4                                   |     |
| Minimum                             | 43.4                                  |     | 46.9                                   |     |
| Maximum                             | 90.0                                  |     | 81.9                                   |     |
| <b>SEX</b>                          |                                       |     |                                        |     |
| Males                               | 24                                    | 50% | 28                                     | 61% |
| Females                             | 24                                    | 50% | 18                                     | 39% |
| <b>HISPANIC</b>                     |                                       |     |                                        |     |
| Yes                                 | 8                                     | 17% | 7                                      | 15% |
| No                                  | 36                                    | 75% | 33                                     | 72% |
| Unknown                             | 4                                     | 8%  | 6                                      | 13% |
| <b>RACE</b>                         |                                       |     |                                        |     |
| White                               | 37                                    | 77% | 33                                     | 72% |
| Black                               | 10                                    | 21% | 10                                     | 22% |
| Asian                               | 1                                     | 2%  | 1                                      | 2%  |
| Unknown                             | 0                                     | 0%  | 2                                      | 4%  |
| <b>PRIOR THERAPIES</b>              |                                       |     |                                        |     |
| 1-3                                 | 38                                    | 79% | 36                                     | 78% |
| 4-6                                 | 10                                    | 21% | 10                                     | 22% |
| <b>REFRACTORY TO<br/>BORTEZOMIB</b> |                                       |     |                                        |     |
| Yes                                 | 22                                    | 46% | 23                                     | 50% |
| No                                  | 26                                    | 54% | 23                                     | 50% |

## Treatment Summary

Registrations ending June 30, 2015; Data as of July 21, 2015

|                                    | <b>Total</b> |
|------------------------------------|--------------|
| NUMBER ON PROTOCOL TREATMENT       | 40           |
| NUMBER OFF PROTOCOL TREATMENT      | 54           |
| REASON OFF TREATMENT               |              |
| Treatment completed as planned     | 5            |
| Adverse Event or side effects      | 14           |
| Refusal unrelated to adverse event | 2            |
| Progression/relapse                | 23           |
| Death                              | 2            |
| Other - not protocol specified     | 5            |
| Reason under review                | 3            |
| MAJOR PROTOCOL DEVIATIONS          | 1            |

## Number of Patients with a Given Type and Grade of Adverse Event

Classified by arm

Adverse Events Unlikely or Not Related to Treatment Excluded

Adverse Events with No Entries for Grades 3 to 5 Have Been Suppressed

Registrations ending June 30, 2015; Data as of July 21, 2015

| ADVERSE EVENTS              | Dex+Low Dose Carfilzomib<br>(n=42)<br>Grade |   |    |   |   |   | Dex+High Dose Carfilzomib<br>(n=42)<br>Grade |    |   |             |                |           |
|-----------------------------|---------------------------------------------|---|----|---|---|---|----------------------------------------------|----|---|-------------|----------------|-----------|
|                             | 0                                           | 1 | 2  | 3 | 4 | 5 | 0                                            | 1  | 2 | 3           | 4              | 5         |
| ARDS                        | 42                                          | 0 | 0  | 0 | 0 | 0 | 39                                           | 0  | 0 | 2           | 1              | 0         |
| Abdominal pain              | 40                                          | 1 | 1  | 0 | 0 | 0 | 39                                           | 2  | 0 | 1           | 0              | 0         |
| Acute kidney injury         | 41                                          | 0 | 0  | 1 | 0 | 0 | 40                                           | 0  | 1 | 0           | 1              | 0         |
| Anemia                      | 28                                          | 4 | 4  | 5 | 1 | 0 | 23                                           | 6  | 7 | 6           | 0              | 0         |
| Anorexia                    | 37                                          | 2 | 3  | 0 | 0 | 0 | 35                                           | 4  | 2 | 1           | 0              | 0         |
| Blurred vision              | 39                                          | 2 | 0  | 1 | 0 | 0 | 36                                           | 6  | 0 | 0           | 0              | 0         |
| Cardiac arrest              | 41                                          | 0 | 0  | 0 | 1 | 0 | 42                                           | 0  | 0 | 0           | 0              | 0         |
| Chest pain - cardiac        | 41                                          | 0 | 0  | 1 | 0 | 0 | 42                                           | 0  | 0 | 0           | 0              | 0         |
| Confusion                   | 42                                          | 0 | 0  | 0 | 0 | 0 | 41                                           | 0  | 0 | 1           | 0              | 0         |
| Creatinine increased        | 37                                          | 0 | 3  | 1 | 1 | 0 | 39                                           | 1  | 1 | 1           | 0              | 0         |
| Death NOS                   | 42                                          | 0 | 0  | 0 | 0 | 0 | 40                                           | 0  | 0 | 0           | 0              | 2         |
| Dehydration                 | 40                                          | 0 | 1  | 1 | 0 | 0 | 40                                           | 0  | 2 | 0           | 0              | 0         |
| Delusions                   | 42                                          | 0 | 0  | 0 | 0 | 0 | 41                                           | 0  | 0 | 1           | 0              | 0         |
| Diarrhea                    | 35                                          | 6 | 1  | 0 | 0 | 0 | 33                                           | 3  | 5 | 1           | 0              | 0         |
| Dyspnea                     | 34                                          | 3 | 4  | 1 | 0 | 0 | 30                                           | 7  | 2 | 3           | 0              | 0         |
| Edema limbs                 | 35                                          | 3 | 3  | 1 | 0 | 0 | 38                                           | 3  | 1 | 0           | 0              | 0         |
| Ejection fraction decreased | 40                                          | 0 | 0  | 2 | 0 | 0 | 42                                           | 0  | 0 | 0           | 0              | 0         |
| Fatigue                     | 24                                          | 6 | 12 | 0 | 0 | 0 | 22                                           | 13 | 4 | 3           | 0              | 0         |
| Febrile neutropenia         | 42                                          | 0 | 0  | 0 | 0 | 0 | 41                                           | 0  | 0 | 1           | 0              | 0         |
| <b>OCTOBER 7 - 10, 2015</b> |                                             |   |    |   |   |   |                                              |    |   |             |                |           |
|                             |                                             |   |    |   |   |   |                                              |    |   | <b>SWOG</b> |                |           |
|                             |                                             |   |    |   |   |   |                                              |    |   |             | <b>MYELOMA</b> | <b>16</b> |



| ADVERSE EVENTS                      | Dex+Low Dose Carfilzomib<br>(n=42)<br>Grade |           |           |           |          |          | Dex+High Dose Carfilzomib<br>(n=42)<br>Grade |          |           |           |          |          |
|-------------------------------------|---------------------------------------------|-----------|-----------|-----------|----------|----------|----------------------------------------------|----------|-----------|-----------|----------|----------|
|                                     | 0                                           | 1         | 2         | 3         | 4        | 5        | 0                                            | 1        | 2         | 3         | 4        | 5        |
|                                     | Glaucoma                                    | 41        | 0         | 0         | 1        | 0        | 0                                            | 42       | 0         | 0         | 0        | 0        |
| Heart failure                       | 41                                          | 0         | 1         | 0         | 0        | 0        | 40                                           | 0        | 0         | 2         | 0        | 0        |
| Hyperglycemia                       | 38                                          | 3         | 1         | 0         | 0        | 0        | 34                                           | 6        | 0         | 2         | 0        | 0        |
| Hypertension                        | 36                                          | 3         | 1         | 2         | 0        | 0        | 37                                           | 1        | 3         | 1         | 0        | 0        |
| Hypocalcemia                        | 41                                          | 0         | 1         | 0         | 0        | 0        | 39                                           | 0        | 2         | 0         | 1        | 0        |
| Hypokalemia                         | 37                                          | 4         | 0         | 1         | 0        | 0        | 40                                           | 2        | 0         | 0         | 0        | 0        |
| Hyponatremia                        | 41                                          | 1         | 0         | 0         | 0        | 0        | 39                                           | 1        | 0         | 2         | 0        | 0        |
| Hypotension                         | 41                                          | 0         | 0         | 1         | 0        | 0        | 41                                           | 1        | 0         | 0         | 0        | 0        |
| Hypoxia                             | 42                                          | 0         | 0         | 0         | 0        | 0        | 41                                           | 0        | 0         | 1         | 0        | 0        |
| Infections/infestations-Other       | 40                                          | 0         | 1         | 1         | 0        | 0        | 39                                           | 0        | 2         | 1         | 0        | 0        |
| Investigations-Other, specify       | 41                                          | 0         | 0         | 1         | 0        | 0        | 42                                           | 0        | 0         | 0         | 0        | 0        |
| LV systolic dysfunction             | 41                                          | 0         | 0         | 1         | 0        | 0        | 42                                           | 0        | 0         | 0         | 0        | 0        |
| Lung infection                      | 41                                          | 0         | 0         | 1         | 0        | 0        | 38                                           | 0        | 0         | 4         | 0        | 0        |
| Lymphocyte count decreased          | 34                                          | 4         | 2         | 2         | 0        | 0        | 34                                           | 3        | 2         | 3         | 0        | 0        |
| Lymphocyte count increased          | 41                                          | 0         | 0         | 1         | 0        | 0        | 42                                           | 0        | 0         | 0         | 0        | 0        |
| Nausea                              | 31                                          | 7         | 3         | 1         | 0        | 0        | 33                                           | 8        | 1         | 0         | 0        | 0        |
| Neutrophil count decreased          | 37                                          | 5         | 0         | 0         | 0        | 0        | 36                                           | 4        | 1         | 0         | 1        | 0        |
| Platelet count decreased            | 27                                          | 10        | 2         | 1         | 2        | 0        | 23                                           | 7        | 3         | 7         | 2        | 0        |
| Respiratory failure                 | 41                                          | 0         | 0         | 0         | 1        | 0        | 42                                           | 0        | 0         | 0         | 0        | 0        |
| Restrictive cardiomyopathy          | 40                                          | 0         | 0         | 1         | 1        | 0        | 42                                           | 0        | 0         | 0         | 0        | 0        |
| Sepsis                              | 41                                          | 0         | 0         | 0         | 0        | 1        | 41                                           | 0        | 0         | 0         | 0        | 1        |
| Stroke                              | 42                                          | 0         | 0         | 0         | 0        | 0        | 41                                           | 0        | 0         | 0         | 1        | 0        |
| Vomiting                            | 34                                          | 4         | 3         | 1         | 0        | 0        | 40                                           | 1        | 1         | 0         | 0        | 0        |
| White blood cell decreased          | 33                                          | 6         | 3         | 0         | 0        | 0        | 28                                           | 7        | 5         | 2         | 0        | 0        |
| <b>MAX. GRADE ANY ADVERSE EVENT</b> | <b>3</b>                                    | <b>10</b> | <b>12</b> | <b>12</b> | <b>4</b> | <b>1</b> | <b>4</b>                                     | <b>8</b> | <b>10</b> | <b>15</b> | <b>3</b> | <b>2</b> |

## Registration, Eligibility, and Evaluability

Cross Over

Registrations ending June 30, 2015; Data as of July 21, 2015

|                            | <u>Crossover</u> |
|----------------------------|------------------|
| NUMBER REGISTERED          | 14               |
| INELIGIBLE                 | 3                |
| Insufficient Documentation | 1                |
| Irreversible               | 1                |
| ELIGIBLE                   | 11               |
| Analyzable, Pend. Elig.    | 4                |
| RESPONSE ASSESSMENT        |                  |
| Determinable               | 2                |
| Not Determinable           | 2                |
| Too Early                  | 7                |
| ADVERSE EVENT ASSESSMENT   |                  |
| Evaluable                  | 6                |
| Too Early                  | 5                |

## Patient Characteristics

Cross Over

Registrations ending June 30, 2015; Data as of July 21, 2015

|          | <b>Crossover</b> |     |
|----------|------------------|-----|
|          | <b>(n=11)</b>    |     |
| AGE      |                  |     |
| Median   | 65.2             |     |
| Minimum  | 53.0             |     |
| Maximum  | 73.7             |     |
| SEX      |                  |     |
| Males    | 7                | 64% |
| Females  | 4                | 36% |
| HISPANIC |                  |     |
| Yes      | 1                | 9%  |
| No       | 9                | 82% |
| Unknown  | 1                | 9%  |
| RACE     |                  |     |
| White    | 8                | 73% |
| Black    | 3                | 27% |

## Treatment Summary

Cross Over

Registrations ending June 30, 2015; Data as of July 21, 2015

|                                    | <b>Crossover</b> |
|------------------------------------|------------------|
| NUMBER ON PROTOCOL TREATMENT       | 6                |
| NUMBER OFF PROTOCOL TREATMENT      | 5                |
| REASON OFF TREATMENT               |                  |
| Treatment completed as planned     | 0                |
| Adverse Event or side effects      | 4                |
| Refusal unrelated to adverse event | 0                |
| Progression/relapse                | 1                |
| Death                              | 0                |
| Other - not protocol specified     | 0                |
| Reason under review                | 0                |
| MAJOR PROTOCOL DEVIATIONS          | 0                |

## Number of Patients with a Given Type and Grade of Adverse Event

Cross Over

Adverse Events Unlikely or Not Related to Treatment Excluded

Registrations ending June 30, 2015; Data as of July 21, 2015

| <b>ADVERSE EVENTS</b>               | <b>Crossover<br/>(n=6)<br/>Grade</b> |          |          |          |          |          |
|-------------------------------------|--------------------------------------|----------|----------|----------|----------|----------|
|                                     | <b>0</b>                             | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| Alkaline phosphatase increased      | 5                                    | 1        | 0        | 0        | 0        | 0        |
| Anemia                              | 1                                    | 2        | 0        | 3        | 0        | 0        |
| Atrial flutter                      | 5                                    | 0        | 0        | 0        | 1        | 0        |
| Creatinine increased                | 5                                    | 1        | 0        | 0        | 0        | 0        |
| Dyspnea                             | 4                                    | 2        | 0        | 0        | 0        | 0        |
| Fatigue                             | 3                                    | 3        | 0        | 0        | 0        | 0        |
| Generalized muscle weakness         | 5                                    | 0        | 1        | 0        | 0        | 0        |
| Lung infection                      | 5                                    | 0        | 0        | 0        | 1        | 0        |
| Lymphocyte count decreased          | 4                                    | 1        | 0        | 1        | 0        | 0        |
| Nausea                              | 4                                    | 2        | 0        | 0        | 0        | 0        |
| Platelet count decreased            | 3                                    | 0        | 1        | 1        | 1        | 0        |
| Sepsis                              | 5                                    | 0        | 0        | 0        | 1        | 0        |
| Supraventricular tachycardia        | 5                                    | 0        | 0        | 1        | 0        | 0        |
| White blood cell decreased          | 4                                    | 2        | 0        | 0        | 0        | 0        |
| <b>MAX. GRADE ANY ADVERSE EVENT</b> | <b>0</b>                             | <b>1</b> | <b>0</b> | <b>2</b> | <b>3</b> | <b>0</b> |

# E1A11 Phase III SWOG Supported CTSU Study

Coordinating Group: ECOG-ACRIN

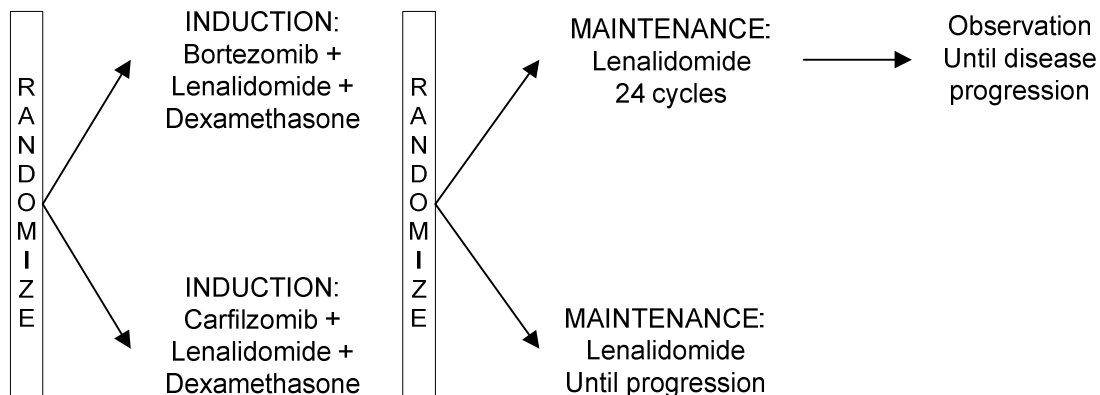
## Randomized Phase III Trial of Bortezomib, LENalidomide and Dexamethasone (VRd) Versus Carfilzomib, Lenalidomide and Dexamethasone (CRd) Followed by Limited or Indefinite DURation Lenalidomide MaintenANCE in Patients with Newly Diagnosed Symptomatic Multiple Myeloma (ENDURANCE)

**Participants:**  
ECOG-ACRIN, CTSU

**Date Activated:**  
11/22/2013

**Study Chairs:**  
S Kumar (ECOG-ACRIN), A Cohen (ECOG-ACRIN), J Zonder (SWOG)

### SCHEMA



### Objectives

To compare overall survival with the two different lenalidomide maintenance strategies

To compare the progression-free survival and safety of each lenalidomide maintenance approach

To compare the progression-free survival between induction treatments

To compare rates of response, duration of response, time to progression, overall survival, and safety of the induction therapies

### Patient Population

Patients must have been diagnosed with symptomatic standard-risk multiple myeloma within the last 90 days and have measurable or evaluable disease.

Patients must not have received lenalidomide, bortezomib, or carfilzomib for the treatment of symptomatic myeloma.

Patients must be at least 18 years of age with an ECOG performance status of 0-2, although 3 is allowed if it is secondary to pain. Patients must have adequate hepatic, renal and hematologic function. Prior malignancies are allowed if treated with curative intent that does not require active therapy. Glucocorticoid use is restricted following registration. Patients must use effective contraception.

**Stratification/Descriptive Factors**

At registration to induction therapy, patient randomization will be stratified by intent to stem cell transplant at progression: yes vs no. At registration to maintenance therapy, patient randomization will be stratified by induction treatment: Arm A vs Arm B.

**Accrual Goals**

Seven hundred fifty-six patients will be accrued to this study.

**Summary Statement**

ECOG-ACRIN reported that 222 patients had registered to this study as of June 30, 2015, including 25 from SWOG institutions. The complete Spring 2015 summary of this study from ECOG-ACRIN is available on the SWOG web site.

**Registration by Institution**

Registrations ending June 30, 2015

| <b>Institutions</b>                        | <b>Total<br/>Reg</b> | <b>Institutions</b>                 | <b>Total<br/>Reg</b> |
|--------------------------------------------|----------------------|-------------------------------------|----------------------|
| Beaumont NCORP                             | 3                    | Hawaii MU-NCORP                     | 1                    |
| Kaiser Permanente COL/Kaiser Vallejo NCORP | 3                    | Kaiser Vallejo NCORP                | 1                    |
| Montana NCORP                              | 3                    | Ozarks NCORP                        | 1                    |
| Providence Hosp                            | 3                    | Sacred Heart Hosp/Arkansas, U of    | 1                    |
| Wayne State Univ                           | 3                    | Southeast COR NCORP                 | 1                    |
| Sutter Cancer RC                           | 2                    | St Jude Medical Ctr/Irvine, U of CA | 1                    |
| Baylor College                             | 1                    | <b>Total (14 Institutions)</b>      | <b>25</b>            |
| Dayton NCORP                               | 1                    |                                     |                      |

# E3A06 Phase III SWOG Supported CTSU Study

Coordinating Group: ECOG-ACRIN

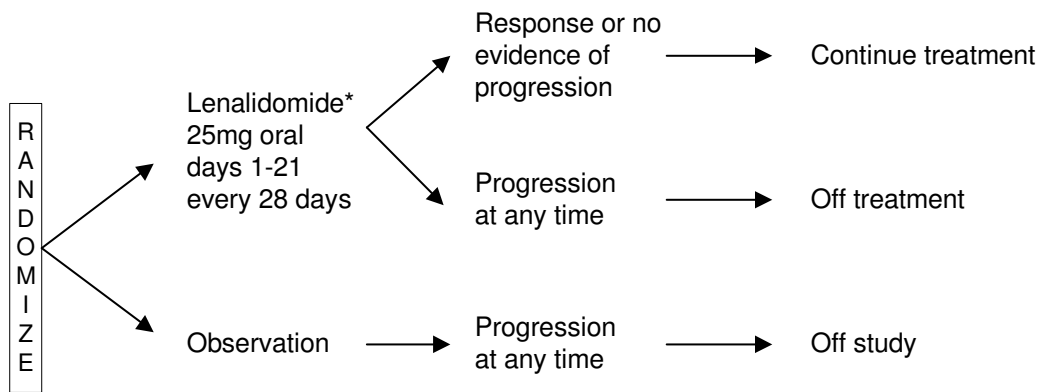
## Randomized Phase III Trial of Lenalidomide versus Observation Alone in Patients with Asymptomatic Smoldering Multiple Myeloma

**Participants:**  
ECOG-ACRIN, CTSU

**Date Activated:**  
02/01/2011

**Study Chairs:**  
S Lonial (ECOG-ACRIN), M Dhodapkar (SWOG)

### SCHEMA



\*Mobilize stem cells following 4 cycles of therapy

### Objectives

To compare progression-free survival (where failure is defined as death or the development of symptomatic multiple myeloma requiring therapy) between patients treated with lenalidomide versus observation alone in asymptomatic, smoldering/indolent multiple myeloma.

To compare the response rate, time to progression, one-year progression-free survival rate, duration of response, and overall survival between patients randomized to receive lenalidomide therapy versus observation alone for early-stage multiple myeloma.

To study the effects of lenalidomide on laboratory markers of immune function, evaluate the effect of IgH translocations, and gene expression profiling as predictors of response and risk of progression, and to study the prognostic value of MRI-detected asymptomatic bone disease on outcome.

To evaluate immune function as measured by SOX-2 and correlate to progression-free survival.

### Patient Population

Patients must have previously untreated asymptomatic MM diagnosed within one year prior to registration. Patients with smoldering multiple

myeloma (SMM) are eligible. Patients with MGUS are not eligible.

Patients must have received no prior therapy for myeloma or SMM. Prior radiation therapy for the treatment of solitary plasmacytoma is permitted, but more than three months must have elapsed from the last day of radiation.

Patients must be 18 years of age or older. Patients must have an ECOG performance status between 0 and 2 and must not have Grade 2 or higher peripheral neuropathy or active, uncontrolled infection. Patients must not have baseline bone lesions or plasmacytomas.

**Accrual Goals**

Three hundred thirty-six patients will be randomized with equal allocation to lenalidomide versus observation.

**Summary Statement**

ECOG-ACRIN reported that 137 patients had registered to this study as of June 30, 2015, including 22 from SWOG institutions. The complete Spring 2015 summary of this study from ECOG-ACRIN is available on the SWOG web site.

**Registration by Institution**

Registrations ending June 30, 2015

| <b>Institutions</b> | <b>Total<br/>Reg</b> | <b>Institutions</b>           | <b>Total<br/>Reg</b> |
|---------------------|----------------------|-------------------------------|----------------------|
| Kansas, U of        | 9                    | Prov Portland MC/PCRC NCORP   | 1                    |
| Greenville NCORP    | 6                    | Providence Hosp               | 1                    |
| Irvine, U of CA     | 1                    | Tennessee, U of               | 1                    |
| Montana NCORP       | 1                    | Tulane Univ MBCCOP            | 1                    |
| Ozarks NCORP        | 1                    | <b>Total (9 Institutions)</b> | <b>22</b>            |