MYELOMA COMMITTEE

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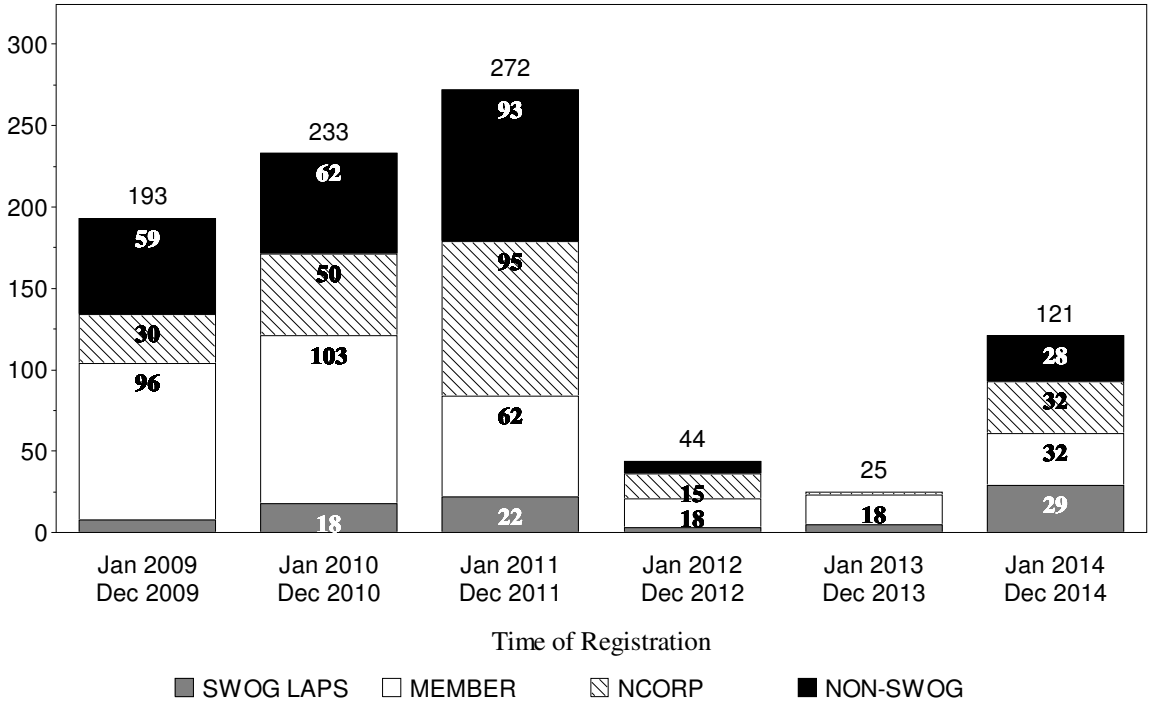
Patient Registrations to Studies

By 12 Month Intervals
MYELOMA COMMITTEE



Screening registrations and registrations to Biologic only studies are excluded

Patient Registrations by Study and Arm

MYELOMA COMMITTEE

	Jul 2014 Dec 2014	Jan 2014 Jun 2014	Jul 2013 Dec 2013	All Patients
S1211 MM, High Risk, RVD+/-ELO				
RVD/Elo Dose Level 1	0	0	4	8
RVD	11	5	3	19
RVD/Elo	10	6	1	17
	21	11	8	44
S1304 MM, relapsed/refractory, CAR+DEX				
Initial Registration				
Dex + Low Dose Carfilzomib	19	11	0	30
Dex + High Dose Carfilzomib	17	14	0	31
	36	25	0	61
Cross Over				
Dex + High Dose Carfilzomib	5	0	0	5
CTN0702 Single v Tandem Autologous transplant*				
Total Registrations	0	0	1	54
E1A11 MM, frontline, BLD vs CLD*				
Total Registrations	13	6	0	19
E3A06 AMM, frontline, Lenalidomide vs Observation*				
Total Registrations	4	5	0	17

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

S0777 Phase III

Coordinating Group: SWOG

A Phase III Trial of CC-5013 (Lenalidomide) and Low Dose Dexamethasone (LLD) versus Bortezomib, Lenalidomide, and Low Dose Dexamethasone (BLLD) for Induction, in Patients with Previously Untreated Multiple Myeloma Without an Intent for Immediate Autologous Stem Cell Transplant

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Participants:
SWOG, CTSU (Supported by ECOG-ACRIN)

Date Activated:
04/01/2008

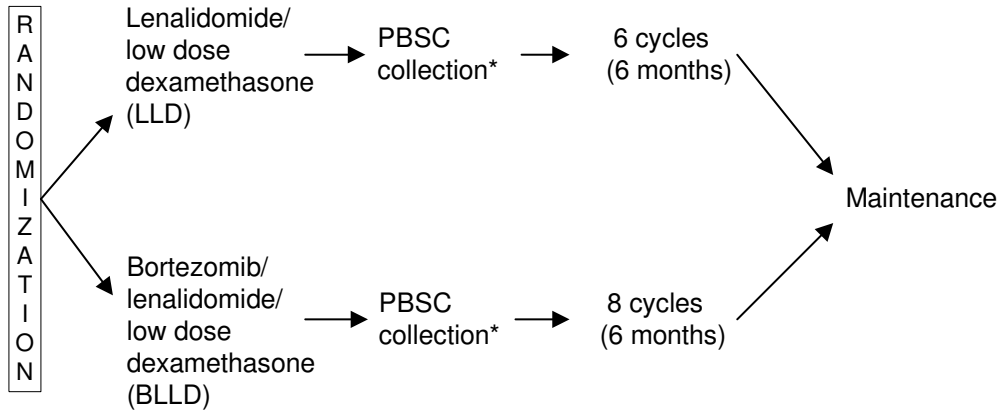
Study Chairs:
B Durie, B Barlogie, M Abidi

Date Closed:
02/02/2012

Statisticians:
A Hoering, R Sexton

Data Coordinator:
T Maher

SCHEMA



* According to institutional guidelines (based on "intent to transplant")

Objectives

To compare progression-free survival in patients with newly diagnosed myeloma treated with lenalidomide plus low dose dexamethasone (LLD) versus bortezomib plus lenalidomide and low dose dexamethasone (BLLD).

To assess response to this regimen, using the new international response criteria.

To bank specimens for future translational medicine research.

To follow patients to assess overall survival and other long-term outcomes, stratified by intent to transplant at progression.

To verify the reported benefit of bortezomib in promoting bone repair/healing by comparing and contrasting the bone healing as determined by achievement of MRI-CR in patients receiving this regimen.

To evaluate custom and genome-wide single nucleotide polymorphisms in correlation with biology, prognosis and outcome for each treatment regimen.

Patient Population

Patients must have newly diagnosed multiple myeloma (MM) with measurable M-protein. Patients with non-secretory MM will be eligible only if the baseline serum Freelite is elevated.

Patients must have received no prior chemotherapy, and no prior radiotherapy to a large area of the pelvis, for this disease. Prior steroid treatment is allowed provided treatment was not more than two weeks in duration.

Patients must have adequate bone marrow function and a Zubrod performance status of 0-2. Zubrod performance status of 3 is acceptable if there is documentation from the treating physician that the patient's multiple myeloma is the central cause of the disability.

Stratification/Descriptive Factors

Patient randomization will be stratified by the following factors: (1) ISS Stage: I vs II vs III; and (2) intent to transplant at relapse: yes vs no.

Accrual Goals

A total of 440 eligible patients will be accrued to this trial. Two formal interim analyses are planned after 1/3 (92) and 2/3 (184) of the total expected progressions have occurred. The first interim analysis will be at approximately 36 months (three years), after approximately 75% of patients have been accrued. The second interim analysis will be at approximately 54 months (4 and a half years), after all patients have been accrued.

Summary Statement

This study opened for accrual on April 1, 2008, and closed to accrual on February 2, 2012, after 525 patients had been enrolled. Fifty patients, 29 randomized to LLD and 21 randomized to BLLD, are currently ineligible for the following reasons: missing, insufficient or early or late baseline labs (39); not meeting requirements of measurable disease (6); inadequate marrow function (1); inadequate creatinine clearance (1); prior malignancy (1); prior therapy (1); and more than 2 weeks of prior steroid therapy (1). Two patients (one on each arm) did not start treatment per physician's discretion, one patient on the LLD arm chose to be treated off study prior to starting treatment, two patients on the LLD arm were hospitalized before starting treatment, and one patient on the BLLD arm died on the day of first scheduled treatment prior to receiving any treatment. These six patients are not evaluable for adverse events. Thirty-seven patients, 23 on the BLLD arm and 14 on the LLD arm, were removed from study prior to the first disease assessment and are not assessable for response.

There have been five treatment-related deaths on the study, four of whom were on the BLLD arm (one patient died due to multi-organ failure and also experienced a number of Grade 4 adverse events, one patient died due to colitis, one patient died due to lung infection, and the fourth patient experienced Grade 5 hyperglycemia and was also reported as "Death, NOS") and one of whom was on the LLD arm (this patient died due to CNS ischemia). Fifty-two of the 228 patients assessed for toxicity on the LLD arm and 55 of the 241 patients assessed on the BLLD arm experienced Grade 4 adverse events as maximum degree. The most common non-hematologic Grade 4 adverse events on the LLD arm were metabolic (12 patients), vascular (5); metabolic (10), lung (6) and vascular (4) were most common on the BLLD arm.

Registration by Institution

Institutions	Total Reg	Institutions	Total Reg
ECOG-ACRIN	158	Dayton NCORP	6
Alliance	67	Kansas City NCORP	6
Southeast CCC NCORP	34	Montana NCORP	6
Cleveland Clinic OH	20	Providence Hosp	6
Michigan CRC NCORP	19	St Jude Medical Ctr/Irvine, U of CA	6
Wichita NCORP	17	NRG	5
Baylor College	15	St Luke's-Roosevelt/Columbia University	5
Hawaii MU-NCORP	13	CTSU-nos	4
Rochester, Univ of	13	MD Anderson	4
Kaiser Vallejo NCORP	12	Tennessee, U of	4
Nevada CRF NCORP	12	Weissman Cancer Ctr/H Lee Moffitt CC	4
Wayne State Univ	12	Prov Portland MC/PCRC NCORP	3
Heartland NCORP	8	Stormont-Vail Health/Kansas, U of	3
Sinai Hospital/San Antonio, U of TX	8	Arizona MC, U of	2
Upstate Carolina	8	Arkansas, U of	2
New Mexico MU-NCORP	7	Mississippi, Univ of	2
St Joseph Med Ctr/PCRC NCORP	7	West Michigan NCORP	2
St Louis CCOP	7	All Other Institutions	12
Colorado, U of	6	**Total (48 Institutions)**	**525**

Registration, Eligibility, and Evaluability

Data as of March 9, 2015

	TOTAL	Lenalidomide /Dex	Bortezomib /Lenalidomide /Dex
NUMBER REGISTERED	525	261	264
INELIGIBLE	50	29	21
Insufficient Documentation	39	25	14
Irreversible	39	25	14
ELIGIBLE	475	232	243
RESPONSE ASSESSMENT			
Determinable	438	218	220
Not Determinable	37	14	23
ADVERSE EVENT ASSESSMENT			
Evaluable	469	228	241
Not Evaluable	6	4	2

Patient Characteristics

Data as of March 9, 2015

	Lenalidomide /Dex (n=232)		Bortezomib /Lenalidomide /Dex (n=243)	
AGE				
Median	63.6		63.3	
Minimum	28.9		35.4	
Maximum	87.4		86.0	
SEX				
Males	123	53%	153	63%
Females	109	47%	90	37%
HISPANIC				
Yes	15	6%	22	9%
No	205	88%	210	86%
Unknown	12	5%	11	5%
RACE				
White	184	79%	192	79%
Black	34	15%	32	13%
Asian	4	2%	7	3%
Pacific Islander	3	1%	2	1%
Native American	1	0%	2	1%
Unknown	6	3%	8	3%
ISS STAGE				
I	60	26%	71	29%
II	92	40%	93	38%
III	80	34%	79	33%
TRANSPLANT INTENT				
Yes	158	68%	169	70%
No	74	32%	74	30%

Treatment Summary

Data as of March 9, 2015

	Total
NUMBER ON PROTOCOL TREATMENT	80
NUMBER OFF PROTOCOL TREATMENT	395
REASON OFF TREATMENT	
Adverse Event or side effects	131
Refusal unrelated to adverse event	25
Progression/relapse	134
Death	16
Other - not protocol specified	87
Reason under review	2
MAJOR PROTOCOL DEVIATIONS	6

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

Adverse Events Unlikely or Not Related to Treatment Excluded

Data as of March 9, 2015

	Lenalidomide/Dex (n=228) Grade						Bortezomib/Lenalidomide /Dex (n=241) Grade					
ADVERSE EVENT	**0**	**1**	**2**	**3**	**4**	**5**	**0**	**1**	**2**	**3**	**4**	**5**
Airway Obstruction	228	0	0	0	0	0	240	0	1	0	0	0
Allergy/immunology	212	12	4	0	0	0	228	7	4	2	0	0
Cardiac Arrhythmia	225	3	0	0	0	0	238	2	1	0	0	0
Cardiac General	197	12	11	8	0	0	192	13	18	18	0	0
Clotting	225	0	0	3	0	0	235	0	0	6	0	0
Conduction Abnormality	227	0	0	1	0	0	241	0	0	0	0	0
Death	228	0	0	0	0	0	239	0	0	0	0	2
Dermatologic/Skin	137	62	21	8	0	0	143	51	40	6	1	0
Ear	210	1	17	0	0	0	232	1	8	0	0	0
Ear Infection, Gr. 0-2 ANC	227	0	1	0	0	0	239	0	2	0	0	0
Ear Infection, Unk ANC	228	0	0	0	0	0	240	0	1	0	0	0
Endocrine	209	10	9	0	0	0	224	5	12	0	0	0
Eye	188	20	8	12	0	0	182	37	16	6	0	0
Eye Infection, Gr. 0-2 ANC	227	0	1	0	0	0	241	0	0	0	0	0
Eye Infection, Gr. 3-4 ANC	227	0	1	0	0	0	241	0	0	0	0	0
Eye Infection, Unk ANC	228	0	0	0	0	0	239	0	2	0	0	0
Eye Pain	228	0	0	0	0	0	239	2	0	0	0	0
Flu-Like Symptoms	48	63	81	36	0	0	48	60	87	45	1	0
GI Hemorrhage	227	1	0	0	0	0	231	2	1	7	0	0
GI Infection, Gr. 0-2 ANC	219	0	9	0	0	0	237	0	2	2	0	0
GI Infection, Gr. 3-4 ANC	227	0	0	0	1	0	240	0	1	0	0	0
GI Infection, Unk ANC	228	0	0	0	0	0	239	0	1	1	0	0
GI Obstruction	228	0	0	0	0	0	240	0	0	1	0	0
GI Pain	214	10	2	2	0	0	209	11	13	8	0	0

	Lenalidomide/Dex (n=228)						Bortezomib/Lenalidomide /Dex (n=241)					
	Grade						Grade					
ADVERSE EVENT	**0**	**1**	**2**	**3**	**4**	**5**	**0**	**1**	**2**	**3**	**4**	**5**
GI Perforation	228	0	0	0	0	0	240	0	0	1	0	0
GI Ulcer	228	0	0	0	0	0	240	0	1	0	0	0
GU	214	2	3	8	1	0	224	8	3	5	1	0
GU Hemorrhage	226	1	1	0	0	0	240	0	1	0	0	0
GU Infection, Gr. 0-2 ANC	220	0	5	3	0	0	233	0	3	4	1	0
GU Infection, Gr. 3-4 ANC	224	0	2	2	0	0	239	0	1	1	0	0
GU Infection, Unk ANC	227	0	1	0	0	0	237	0	1	2	1	0
GU Pain	228	0	0	0	0	0	240	1	0	0	0	0
Gastrointestinal	64	83	64	17	0	0	41	67	81	48	3	1
Hematologic	48	25	52	68	35	0	51	26	50	73	41	0
Hemorrhage	225	2	1	0	0	0	237	2	1	1	0	0
Hepatobiliary/Pancreas	226	0	0	2	0	0	239	0	0	2	0	0
Infection	216	1	3	7	1	0	225	3	4	7	2	0
Infection, Gr. 0-2 ANC	228	0	0	0	0	0	236	0	1	1	3	0
Infection, Gr. 3-4 ANC	227	0	0	0	1	0	241	0	0	0	0	0
Infection, Unk ANC	227	0	0	0	1	0	239	0	0	0	2	0
Lung	153	42	24	8	1	0	151	54	15	15	6	0
Lung Hemorrhage	220	8	0	0	0	0	237	4	0	0	0	0
Lung Infection, Gr. 0-2 ANC	210	0	9	9	0	0	217	0	14	10	0	0
Lung Infection, Gr. 3-4 ANC	223	0	0	5	0	0	238	0	0	2	0	1
Lung Infection, Unk ANC	215	0	4	9	0	0	230	0	4	6	1	0
Lung Pain	224	3	1	0	0	0	229	6	3	3	0	0
Lymphatics	152	56	18	2	0	0	147	65	24	5	0	0
Metabolic/Laboratory	55	56	54	51	12	0	68	50	59	53	10	1
Mood Alteration	181	27	16	4	0	0	196	22	19	3	1	0
Mucositis, Clinical	211	11	5	1	0	0	225	12	4	0	0	0
Mucositis, Functional	218	8	2	0	0	0	228	10	3	0	0	0
Muscle Weakness	182	18	17	10	1	0	184	21	16	19	1	0
Musculoskel. Infect., Gr. 0-2	227	0	0	1	0	0	238	0	2	1	0	0
Musculoskel. Infect., Gr. 3-4	228	0	0	0	0	0	240	0	0	1	0	0
Musculoskeletal Infection, Unk	227	0	0	1	0	0	240	0	0	1	0	0
Musculoskeletal Pain	160	38	23	7	0	0	150	44	33	14	0	0
Musculoskeletal/Soft Tissue	203	14	6	5	0	0	213	8	15	5	0	0
Neurologic	94	82	31	17	3	1	52	46	66	74	3	0
Neurologic Infection, Gr. 0-2	227	0	0	1	0	0	241	0	0	0	0	0
Neurologic Infection, Unk ANC	227	0	0	1	0	0	241	0	0	0	0	0
Neurologic Pain	208	16	3	1	0	0	208	23	6	4	0	0
Neuropathy, Cranial	227	1	0	0	0	0	240	0	1	0	0	0
Pain	216	9	3	0	0	0	216	13	7	5	0	0
RT Dermatitis	227	0	0	1	0	0	241	0	0	0	0	0
Secondary Malignancy	225	0	0	2	1	0	239	0	0	1	1	0
Sexual/Repro. Infect., Gr. 0-2	227	0	1	0	0	0	239	0	2	0	0	0
Sexual/Reproductive Function	226	0	1	1	0	0	239	1	1	0	0	0
Sexual/Reproductive Pain	226	2	0	0	0	0	237	3	0	1	0	0
Skin Infection, Gr. 0-2 ANC	221	0	4	3	0	0	234	0	6	1	0	0
Skin Infection, Gr. 3-4 ANC	227	0	0	1	0	0	241	0	0	0	0	0
Skin Infection, Unk ANC	227	0	1	0	0	0	238	0	0	3	0	0
Skin Pain	227	1	0	0	0	0	236	5	0	0	0	0
Supraventricular Arrhythmia	219	3	3	3	0	0	233	4	2	2	0	0
Syndromes	226	0	0	2	0	0	236	1	2	2	0	0
Vascular	203	0	4	16	5	0	211	1	7	18	4	0

	Lenalidomide/Dex (n=228)						Bortezomib/Lenalidomide /Dex (n=241)					
	Grade						Grade					
ADVERSE EVENT	**0**	**1**	**2**	**3**	**4**	**5**	**0**	**1**	**2**	**3**	**4**	**5**
Vein Injury	228	0	0	0	0	0	240	1	0	0	0	0
Ventricular Arrhythmia	228	0	0	0	0	0	240	1	0	0	0	0
MAX. GRADE ANY ADVERSE EVENT	12	7	39	117	52	1	8	6	29	139	55	4

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

Statisticians:
J Unger, K Arnold

Data Coordinator:
M Yee

Date Activated:
08/29/2013

Date Closed*:
12/15/2014

*Temporary Closure

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 cancer malignancy (including hematologic). Confirmed pathologic diagnosis must be within 120 days of registration. Patients presenting for "second opinions" of confirmed malignancies are eligible, including those who have started cancer treatment at other facilities. Individuals are ineligible if they 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. Individuals are eligible if they have had no evidence of disease for a prior malignancy, except as noted above, for at least five years prior to randomization.

Patients must be 18 years of age or older. Patients must have had their blood drawn for testing for HIV, HBV and HCV prior to registration. Patients who have had HIV, HBV and/or HCV testing within 60 days prior to registration and who do not wish to be

retested are eligible, provided supporting documents can be obtained confirming viral test results for all three viruses. Patients who are viral positive for either HIV, HBV, and/or HCV and who do not wish to be retested are eligible, provided documentation of viral load within 120 days prior to registration can be obtained. Note that these patients must be tested for or provide current viral load for all three viruses to be eligible. All documentation must be obtained prior to registration. Patients are allowed to participate in other clinical trials.

Cancer Control Credits

No cancer control credits are awarded for this study.

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

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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

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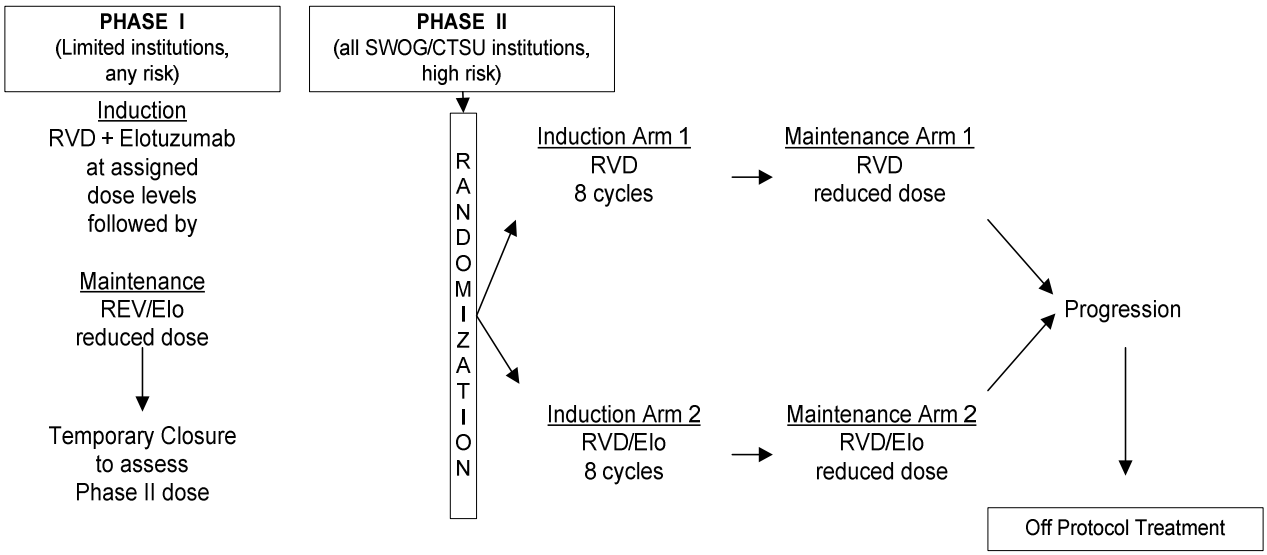

*Patients will be enrolled into either the Phase I portion OR the Phase II portion, not both.

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 December 31, 2014, 44 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.

Among the 36 patients enrolled to the Phase II portion of the trial, 19 were randomized to the RVD arm and 17 were randomized to the RVD/Elo arm. Two patients on the RVD arm and two patients on the RVE/Elo arm are ineligible due to the following reasons: missing, insufficient, or early or late baseline labs (2), prior therapy not completed at least 56 days prior to registration (1), and patient did not meet criteria for high risk (1). There has been one major protocol deviation: a patient on the RVD/Elo arm withdrew consent prior to receiving any treatment. This patient is not evaluable for adverse events.

Two of the 14 patients on the RVD arm and one of the 12 patients on the RVD/Elo arm who have been assessed for toxicities have experienced Grade 4 adverse events as maximum degree. No treatment-related deaths have been reported.

Registration by Institution

Registrations ending December 31, 2014

Institutions	Total Reg	Institutions	Total Reg
Carolinas Med Ctr/San Antonio, U of TX	6	So Calif, U of	2
Cleveland Clinic OH	6	Alliance	1
Kansas, U of	5	Loyola University	1
MD Anderson	5	NRG	1
City of Hope Med Ctr	4	Providence Hosp	1
ECOG-ACRIN	4	Southeast CCC NCORP	1
Heartland NCORP	2	Wayne State Univ	1
Michigan CRC NCORP	2	**Total (16 Institutions)**	**44**
Rochester, Univ of	2		

Registration, Eligibility, and Evaluability

Registrations ending December 31, 2014; Data as of January 30, 2015

	TOTAL	RVD/Elo Dose Level 1	RVD	RVD/Elo
NUMBER REGISTERED	44	8	19	17
INELIGIBLE	4	0	2	2
Insufficient Documentation	2	0	0	2
Irreversible	2	0	0	2
ELIGIBLE	40	8	17	15
Analyzable, Pend. Elig.	4	0	3	1
Not Analyzable	2	2	0	0
RESPONSE ASSESSMENT				
Determinable	26	6	10	10
Not Determinable	1	0	0	1
Too Early	11	0	7	4
ADVERSE EVENT ASSESSMENT				
Evaluable	32	6	14	12
Not Evaluable	1	0	0	1
Too Early	5	0	3	2

Patient Characteristics

Registrations ending December 31, 2014; Data as of January 30, 2015

	RVD/Elo Dose Level 1 (n=6)		RVD (n=17)		RVD/Elo (n=15)	
AGE						
Median	67.3		60.8		62.8	
Minimum	56.1		36.2		40.0	
Maximum	79.3		82.6		73.3	
SEX						
Males	3	50%	7	41%	10	67%
Females	3	50%	10	59%	5	33%
HISPANIC						
Yes	1	17%	2	12%	2	13%
No	5	83%	15	88%	12	80%
Unknown	0	0%	0	0%	1	7%
RACE						
White	3	50%	11	65%	12	80%
Black	1	17%	5	29%	1	7%
Unknown	2	33%	1	6%	2	13%
PCL AND/OR HIGH LDH						
Yes	1	17%	4	24%	2	13%
No	5	83%	13	76%	13	87%

Treatment Summary

Classified by phase

Registrations ending December 31, 2014; Data as of January 30, 2015

	TOTAL	Phase I	Phase II
NUMBER ON PROTOCOL TREATMENT	26	3	23
NUMBER OFF PROTOCOL TREATMENT	12	3	9
REASON OFF TREATMENT			
Treatment completed as planned	0	0	0
Adverse Event or side effects	2	0	2
Refusal unrelated to adverse event	1	0	1
Progression/relapse	4	1	3
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

Phase II patients only

Classified by arm

Adverse Events Unlikely or Not Related to Treatment Excluded

Registrations ending December 31, 2014; Data as of January 30, 2015

	RVD (n=14) Grade						RVD/Elo (n=12) Grade					
ADVERSE EVENT	**0**	**1**	**2**	**3**	**4**	**5**	**0**	**1**	**2**	**3**	**4**	**5**
ALT increased	13	1	0	0	0	0	10	2	0	0	0	0
AST increased	12	2	0	0	0	0	11	1	0	0	0	0
Abdominal distension	14	0	0	0	0	0	11	0	1	0	0	0
Abdominal pain	13	1	0	0	0	0	12	0	0	0	0	0
Agitation	14	0	0	0	0	0	10	1	1	0	0	0
Alkaline phosphatase increased	12	2	0	0	0	0	10	2	0	0	0	0
Alopecia	14	0	0	0	0	0	11	0	1	0	0	0
Anemia	10	0	4	0	0	0	9	1	1	1	0	0
Anorexia	11	3	0	0	0	0	9	2	1	0	0	0
Anxiety	14	0	0	0	0	0	10	1	1	0	0	0
Arthralgia	12	0	2	0	0	0	11	0	1	0	0	0
Ataxia	14	0	0	0	0	0	11	0	1	0	0	0
Back pain	12	0	2	0	0	0	8	3	1	0	0	0
Bloating	14	0	0	0	0	0	10	0	2	0	0	0
Blurred vision	12	2	0	0	0	0	9	2	1	0	0	0
Bone pain	14	0	0	0	0	0	11	0	1	0	0	0
Cholesterol high	14	0	0	0	0	0	11	1	0	0	0	0
Chronic kidney disease	14	0	0	0	0	0	11	0	1	0	0	0
Confusion	14	0	0	0	0	0	11	1	0	0	0	0
Constipation	7	3	4	0	0	0	7	3	2	0	0	0
Cough	14	0	0	0	0	0	11	1	0	0	0	0
Creatinine increased	14	0	0	0	0	0	10	2	0	0	0	0
Dehydration	14	0	0	0	0	0	11	0	1	0	0	0
Depression	14	0	0	0	0	0	11	1	0	0	0	0
Diarrhea	10	3	0	1	0	0	9	2	0	1	0	0
Dizziness	9	5	0	0	0	0	7	4	1	0	0	0
Dry mouth	14	0	0	0	0	0	11	1	0	0	0	0
Dysgeusia	11	3	0	0	0	0	11	1	0	0	0	0
Dyspepsia	12	1	1	0	0	0	12	0	0	0	0	0
Dysphagia	14	0	0	0	0	0	10	2	0	0	0	0
Dyspnea	13	0	1	0	0	0	9	2	1	0	0	0
ECG QT corrected int prolong	14	0	0	0	0	0	11	1	0	0	0	0
Edema face	13	1	0	0	0	0	11	1	0	0	0	0
Edema limbs	10	3	1	0	0	0	6	5	1	0	0	0
Edema trunk	13	0	1	0	0	0	12	0	0	0	0	0
Erythema multiforme	14	0	0	0	0	0	9	3	0	0	0	0
Eye infection	13	0	1	0	0	0	12	0	0	0	0	0
Fatigue	8	2	4	0	0	0	4	4	3	1	0	0
Fever	14	0	0	0	0	0	11	1	0	0	0	0
Flashing lights	14	0	0	0	0	0	11	1	0	0	0	0
Flatulence	14	0	0	0	0	0	11	1	0	0	0	0
Flu like symptoms	14	0	0	0	0	0	11	0	1	0	0	0
Flushing	14	0	0	0	0	0	11	1	0	0	0	0

	RVD (n=14)						RVD/Elo (n=12)					
	Grade						Grade					
ADVERSE EVENT	**0**	**1**	**2**	**3**	**4**	**5**	**0**	**1**	**2**	**3**	**4**	**5**
Fracture	14	0	0	0	0	0	11	0	0	1	0	0
GERD	12	1	1	0	0	0	11	0	1	0	0	0
Gait disturbance	14	0	0	0	0	0	11	1	0	0	0	0
Generalized muscle weakness	14	0	0	0	0	0	7	3	2	0	0	0
Headache	12	0	2	0	0	0	9	3	0	0	0	0
Hot flashes	13	1	0	0	0	0	11	1	0	0	0	0
Hypercalcemia	14	0	0	0	0	0	11	1	0	0	0	0
Hyperglycemia	14	0	0	0	0	0	9	1	2	0	0	0
Hyperkalemia	14	0	0	0	0	0	10	1	1	0	0	0
Hypermagnesemia	14	0	0	0	0	0	11	1	0	0	0	0
Hypernatremia	13	1	0	0	0	0	12	0	0	0	0	0
Hypertension	12	0	2	0	0	0	11	0	1	0	0	0
Hypoalbuminemia	13	1	0	0	0	0	10	2	0	0	0	0
Hypocalcemia	13	1	0	0	0	0	8	3	1	0	0	0
Hypoglycemia	13	0	1	0	0	0	11	1	0	0	0	0
Hypokalemia	10	2	2	0	0	0	9	0	1	2	0	0
Hypomagnesemia	13	1	0	0	0	0	12	0	0	0	0	0
Hyponatremia	13	0	0	1	0	0	10	2	0	0	0	0
Hypotension	14	0	0	0	0	0	9	0	3	0	0	0
Infections/infestations-Other	13	0	1	0	0	0	11	0	0	1	0	0
Injection site reaction	14	0	0	0	0	0	10	2	0	0	0	0
Insomnia	12	2	0	0	0	0	8	2	1	1	0	0
Irritability	14	0	0	0	0	0	11	1	0	0	0	0
Lymphocyte count decreased	9	3	1	1	0	0	7	0	2	3	0	0
Malaise	14	0	0	0	0	0	11	0	1	0	0	0
Memory impairment	14	0	0	0	0	0	11	1	0	0	0	0
Mucositis oral	13	1	0	0	0	0	11	0	1	0	0	0
Myalgia	14	0	0	0	0	0	10	1	1	0	0	0
Nausea	11	1	2	0	0	0	9	0	3	0	0	0
Neutrophil count decreased	9	1	2	2	0	0	8	3	1	0	0	0
Non-cardiac chest pain	14	0	0	0	0	0	10	1	1	0	0	0
Pain	14	0	0	0	0	0	10	0	2	0	0	0
Pain in extremity	11	2	1	0	0	0	11	0	1	0	0	0
Paresthesia	14	0	0	0	0	0	11	1	0	0	0	0
Peripheral motor neuropathy	14	0	0	0	0	0	9	1	1	1	0	0
Peripheral sensory neuropathy	6	5	2	1	0	0	4	4	3	1	0	0
Platelet count decreased	9	3	0	1	1	0	5	5	1	0	1	0
Proteinuria	13	1	0	0	0	0	10	2	0	0	0	0
Pruritus	14	0	0	0	0	0	11	1	0	0	0	0
Rash acneiform	14	0	0	0	0	0	11	1	0	0	0	0
Rash maculo-papular	11	1	2	0	0	0	10	1	1	0	0	0
Sinus bradycardia	14	0	0	0	0	0	11	1	0	0	0	0
Skin infection	14	0	0	0	0	0	11	0	0	1	0	0
Skin/subq tissue ds-Other	13	0	1	0	0	0	12	0	0	0	0	0
Soft tissue infection	14	0	0	0	0	0	11	0	1	0	0	0
Sore throat	13	1	0	0	0	0	12	0	0	0	0	0
Thromboembolic event	13	0	0	0	1	0	11	0	1	0	0	0
Tremor	13	1	0	0	0	0	11	1	0	0	0	0
Vasc disorders-Other, spec	14	0	0	0	0	0	11	0	1	0	0	0
Vomiting	13	0	1	0	0	0	10	1	1	0	0	0
Weight gain	13	0	1	0	0	0	11	1	0	0	0	0

	RVD (n=14)						RVD/Elo (n=12)					
	Grade						Grade					
ADVERSE EVENT	**0**	**1**	**2**	**3**	**4**	**5**	**0**	**1**	**2**	**3**	**4**	**5**
Weight loss	13	1	0	0	0	0	11	1	0	0	0	0
White blood cell decreased	9	1	3	1	0	0	9	0	2	1	0	0
MAX. GRADE ANY ADVERSE EVENT	1	2	6	3	2	0	0	0	5	6	1	0

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)

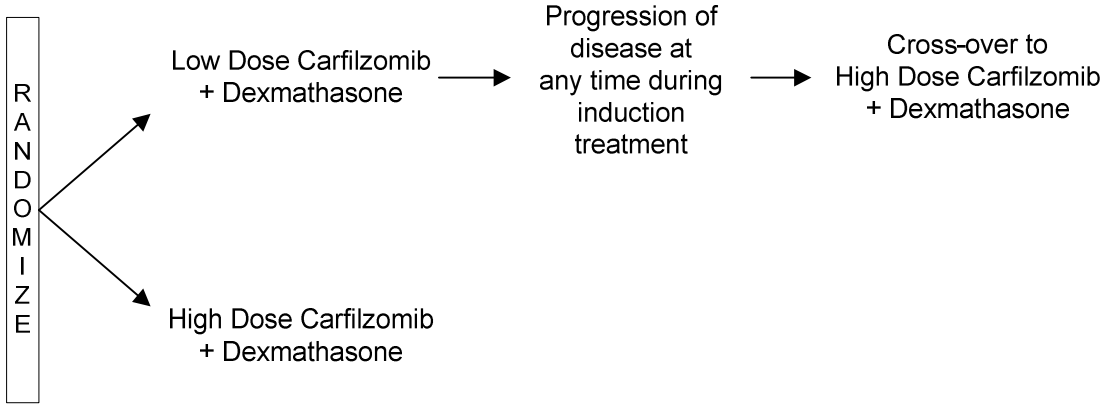
Date Activated:
10/18/2013

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

Statisticians:
R Sexton, A Hoering

Data Coordinator:
J Jardine

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

The study was activated on October 18, 2013. As of December 31, 2014, 61 patients, 30 randomized to low dose carfilzomib (LDC) and 31 randomized to high dose carfilzomib (HDC), had been enrolled to the trial. Four patients randomized to LDC and five patients randomized to HDC were ineligible for the following reasons: missing, insufficient, early or late baseline labs (6), not meeting requirements for measurable disease (2), and not having completed prior therapy 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.

One treatment-related death has been reported: a patient on the LDC arm died due to sepsis. Two of the 23 patients assessed for toxicity on the LDC arm and two of the 21 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), and respiratory failure (1) on the LDC arm and increased ALT (1) and increased AST (1) on the HDC arm.

Registration by Institution

Registrations ending December 31, 2014

Institutions	Total Reg	Institutions	Total Reg
Alliance	11	NRG	2
ECOG-ACRIN	9	Boston MC MBCCOP	1
So Calif, U of	8	Heartland NCORP	1
MD Anderson	7	Kaiser NCORP	1
Michigan CRC NCORP	4	KaiserPermanenteSCAL/Kaiser NCORP	1
Loyola University	3	Montana NCORP	1
Providence Hosp	3	Nevada CRF NCORP	1
Southeast CCC NCORP	3	Yale University	1
Davis, U of CA	2	**Total (18 Institutions)**	**61**
Florida, Univ of/Yale University	2		

Registration, Eligibility, and Evaluability

Classified by arm

Registrations ending December 31, 2014; Data as of February 2, 2015

	TOTAL	Dex+Low Dose Carfilzomib	Dex+High Dose Carfilzomib
NUMBER REGISTERED	61	30	31
INELIGIBLE	9	4	5
Insufficient Documentation	6	3	3
Irreversible	6	3	3
ELIGIBLE	52	26	26
Analyzable, Pend. Elig.	6	2	4
RESPONSE ASSESSMENT			
Determinable	22	12	10
Not Determinable	3	1	2
Too Early	27	13	14
ADVERSE EVENT ASSESSMENT			
Evaluable	44	23	21
Not Evaluable	1	0	1
Too Early	7	3	4

Patient Characteristics

Classified by arm

Registrations ending December 31, 2014; Data as of February 2, 2015

	Dex+Low Dose Carfilzomib (n=26)		Dex+High Dose Carfilzomib (n=26)	
AGE				
Median	65.5		63.3	
Minimum	49.5		46.9	
Maximum	90.0		78.6	
SEX				
Males	12	46%	16	62%
Females	14	54%	10	38%
HISPANIC				
Yes	3	12%	6	23%
No	23	88%	17	65%
Unknown	0	0%	3	12%
RACE				
White	20	77%	18	69%
Black	5	19%	6	23%
Asian	1	4%	0	0%
Unknown	0	0%	2	8%
PRIOR THERAPIES				
1-3	21	81%	18	69%
4-6	5	19%	8	31%
REFRACTORY TO BORTEZOMIB				
Yes	12	46%	13	50%
No	14	54%	13	50%

Treatment Summary

Registrations ending December 31, 2014; Data as of February 2, 2015

	Total
NUMBER ON PROTOCOL TREATMENT	33
NUMBER OFF PROTOCOL TREATMENT	19
REASON OFF TREATMENT	
Treatment completed as planned	0
Adverse Event or side effects	4
Refusal unrelated to adverse event	1
Progression/relapse	9
Death	1
Other - not protocol specified	3
Reason under review	1
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

Registrations ending December 31, 2014; Data as of February 2, 2015

	Dex+Low Dose Carfilzomib (n=23)						Dex+High Dose Carfilzomib (n=21)					
	Grade						Grade					
ADVERSE EVENT	**0**	**1**	**2**	**3**	**4**	**5**	**0**	**1**	**2**	**3**	**4**	**5**
ALT increased	22	1	0	0	0	0	20	0	0	0	1	0
AST increased	21	2	0	0	0	0	20	0	0	0	1	0
Abdominal pain	21	1	1	0	0	0	19	1	0	1	0	0
Acute kidney injury	22	0	0	1	0	0	20	0	1	0	0	0
Alopecia	22	1	0	0	0	0	21	0	0	0	0	0
Anemia	13	2	4	3	1	0	12	1	6	2	0	0
Anorexia	19	2	2	0	0	0	19	1	0	1	0	0
Anxiety	23	0	0	0	0	0	20	1	0	0	0	0
Arthralgia	23	0	0	0	0	0	17	4	0	0	0	0
Back pain	22	0	1	0	0	0	20	0	1	0	0	0
Blood bilirubin increased	22	1	0	0	0	0	20	1	0	0	0	0
Blurred vision	20	2	0	1	0	0	16	5	0	0	0	0
Bone pain	23	0	0	0	0	0	20	1	0	0	0	0
Bruising	23	0	0	0	0	0	19	2	0	0	0	0
Cardiac arrest	22	0	0	0	1	0	21	0	0	0	0	0
Cardiac disorder-Other, spec	22	1	0	0	0	0	21	0	0	0	0	0
Cardiac troponin I increased	22	1	0	0	0	0	21	0	0	0	0	0
Chest pain - cardiac	22	0	0	1	0	0	21	0	0	0	0	0
Chills	23	0	0	0	0	0	20	1	0	0	0	0
Confusion	23	0	0	0	0	0	20	0	0	1	0	0
Constipation	21	2	0	0	0	0	16	5	0	0	0	0
Cough	23	0	0	0	0	0	19	2	0	0	0	0

	Dex+Low Dose Carfilzomib (n=23)						Dex+High Dose Carfilzomib (n=21)					
	Grade						Grade					
ADVERSE EVENT	**0**	**1**	**2**	**3**	**4**	**5**	**0**	**1**	**2**	**3**	**4**	**5**
Creatinine increased	18	0	3	1	1	0	20	1	0	0	0	0
Dehydration	22	0	0	1	0	0	21	0	0	0	0	0
Delusions	23	0	0	0	0	0	20	0	0	1	0	0
Depression	23	0	0	0	0	0	20	1	0	0	0	0
Diarrhea	18	5	0	0	0	0	17	1	3	0	0	0
Dizziness	21	2	0	0	0	0	20	1	0	0	0	0
Dry eye	22	1	0	0	0	0	21	0	0	0	0	0
Dysgeusia	23	0	0	0	0	0	20	1	0	0	0	0
Dyspepsia	23	0	0	0	0	0	20	1	0	0	0	0
Dyspnea	15	4	4	0	0	0	15	5	1	0	0	0
Edema face	22	1	0	0	0	0	20	1	0	0	0	0
Edema limbs	19	2	1	1	0	0	19	2	0	0	0	0
Ejection fraction decreased	21	0	0	2	0	0	21	0	0	0	0	0
Fatigue	11	2	10	0	0	0	11	5	3	2	0	0
Fecal incontinence	23	0	0	0	0	0	20	1	0	0	0	0
Fever	22	1	0	0	0	0	18	2	1	0	0	0
Flushing	21	2	0	0	0	0	21	0	0	0	0	0
Generalized muscle weakness	20	1	2	0	0	0	20	1	0	0	0	0
Glaucoma	22	0	0	1	0	0	21	0	0	0	0	0
Glucose intolerance	22	1	0	0	0	0	20	1	0	0	0	0
Headache	21	2	0	0	0	0	17	3	1	0	0	0
Heart failure	22	0	1	0	0	0	21	0	0	0	0	0
Hemoglobin increased	22	1	0	0	0	0	21	0	0	0	0	0
Hypercalcemia	23	0	0	0	0	0	20	1	0	0	0	0
Hyperglycemia	21	2	0	0	0	0	19	2	0	0	0	0
Hyperkalemia	21	2	0	0	0	0	21	0	0	0	0	0
Hypermagnesemia	22	1	0	0	0	0	21	0	0	0	0	0
Hypertension	19	3	1	0	0	0	17	1	2	1	0	0
Hyperuricemia	20	3	0	0	0	0	21	0	0	0	0	0
Hypoalbuminemia	20	1	2	0	0	0	19	1	1	0	0	0
Hypocalcemia	22	0	1	0	0	0	19	0	2	0	0	0
Hypoglycemia	23	0	0	0	0	0	20	0	0	1	0	0
Hypokalemia	19	3	0	1	0	0	19	2	0	0	0	0
Hypomagnesemia	21	2	0	0	0	0	20	1	0	0	0	0
Hyponatremia	22	1	0	0	0	0	20	1	0	0	0	0
Hypophosphatemia	22	0	1	0	0	0	20	0	1	0	0	0
Hypotension	22	0	0	1	0	0	21	0	0	0	0	0
Infections/infestations-Other	21	0	1	1	0	0	19	0	2	0	0	0
Injection site reaction	23	0	0	0	0	0	20	1	0	0	0	0
Insomnia	20	2	1	0	0	0	19	1	1	0	0	0
Irritability	22	1	0	0	0	0	21	0	0	0	0	0
LV systolic dysfunction	22	0	0	1	0	0	21	0	0	0	0	0
Lung infection	22	0	0	1	0	0	20	0	0	1	0	0
Lymphocyte count decreased	17	2	2	2	0	0	18	0	1	2	0	0
Lymphocyte count increased	22	0	0	1	0	0	21	0	0	0	0	0
MS/connective tissue disorder	22	0	1	0	0	0	21	0	0	0	0	0
Memory impairment	22	1	0	0	0	0	21	0	0	0	0	0
Metab/nutrition disorders-Oth	22	1	0	0	0	0	20	1	0	0	0	0
Mucositis oral	20	0	3	0	0	0	19	2	0	0	0	0
Muscle weakness upper limb	23	0	0	0	0	0	20	1	0	0	0	0
Myalgia	23	0	0	0	0	0	19	2	0	0	0	0

	Dex+Low Dose Carfilzomib (n=23)						Dex+High Dose Carfilzomib (n=21)					
	Grade						Grade					
ADVERSE EVENT	**0**	**1**	**2**	**3**	**4**	**5**	**0**	**1**	**2**	**3**	**4**	**5**
Nausea	18	3	1	1	0	0	17	4	0	0	0	0
Neutrophil count decreased	20	3	0	0	0	0	17	2	1	0	1	0
Pain in extremity	23	0	0	0	0	0	20	1	0	0	0	0
Paresthesia	22	1	0	0	0	0	20	1	0	0	0	0
Peripheral sensory neuropathy	22	1	0	0	0	0	17	3	1	0	0	0
Personality change	23	0	0	0	0	0	20	1	0	0	0	0
Phlebitis	22	0	1	0	0	0	21	0	0	0	0	0
Platelet count decreased	15	7	0	0	1	0	16	2	0	3	0	0
Proteinuria	22	1	0	0	0	0	21	0	0	0	0	0
Rash maculo-papular	22	1	0	0	0	0	21	0	0	0	0	0
Respiratory failure	22	0	0	0	1	0	21	0	0	0	0	0
Restrictive cardiomyopathy	22	0	0	1	0	0	21	0	0	0	0	0
Sepsis	22	0	0	0	0	1	21	0	0	0	0	0
Somnolence	22	1	0	0	0	0	21	0	0	0	0	0
Stomach pain	22	1	0	0	0	0	21	0	0	0	0	0
Upper respiratory infection	22	0	1	0	0	0	21	0	0	0	0	0
Vomiting	17	2	3	1	0	0	20	1	0	0	0	0
Weight gain	22	1	0	0	0	0	20	1	0	0	0	0
Weight loss	23	0	0	0	0	0	20	1	0	0	0	0
White blood cell decreased	19	3	1	0	0	0	13	4	3	1	0	0
MAX. GRADE ANY ADVERSE EVENT	0	5	8	7	2	1	2	3	5	9	2	0

E1A11 Phase III SWOG Supported CTSU Study

Coordinating Group: ECOG-ACRIN

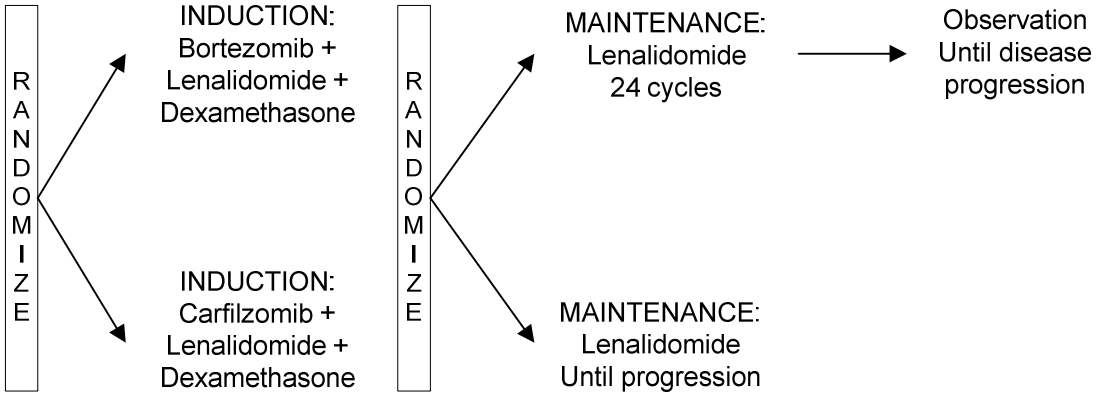
Randomized Phase III Trial of Bortezomib, LENalidomide and Dexamethasone (VRd) Versus Carfilzomib, Lenalidomide and Dexamethasone (CRd) Followed by Limited or Indefinite DURation Lenalidomide MaintenANCE in Patients with Newly Diagnosed Symptomatic Multiple Myeloma (ENDURANCE)

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. Gluticorticoid 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.

Cancer Control Credits
The NCI Division of Cancer Prevention has assigned up to 0.4 cancer control credits per registration to this study, based on submission of data forms.

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

Summary Statement
ECOG-ACRIN reported that 135 patients had registered to this study as of December 31, 2014, including 19 from SWOG institutions. The complete Spring 2014 summary of this study from ECOG-ACRIN is available on the SWOG web site.

Registration by Institution

Registrations ending December 31, 2014

Institutions	Total Reg	Institutions	Total Reg
Beaumont NCORP	3	Sacred Heart Med Onc/Arkansas, U of	1
KaiserPermanenteCOL/Kaiser NCORP	3	Southeast CCC NCORP	1
Montana NCORP	3	St Jude Medical Ctr/Irvine, U of CA	1
Providence Hosp	3	Sutter Cancer RC	1
Wayne State Univ	2	**Total (10 Institutions)**	**19**
Ozarks Reg 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

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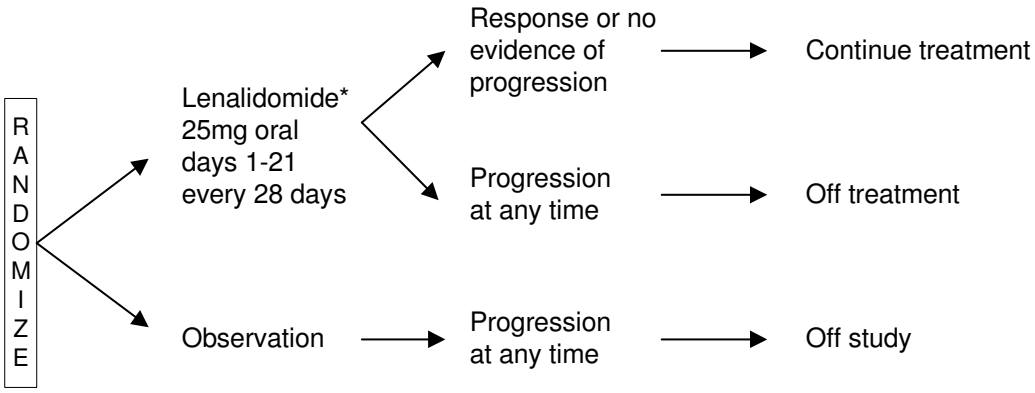
Participants:
ECOG-ACRIN, CTSU

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.

Cancer Control Credits

The NCI Division of Cancer Prevention has assigned up to 0.4 cancer control credits per registration to this study, based on submission of data forms.

Accrual Goals

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

Summary Statement

ECOG-ACRIN reported that 110 patients had registered to this study as of December 31, 2014, including 17 from SWOG institutions. The complete Spring 2014 summary of this study from ECOG-ACRIN is available on the SWOG web site.

Registration by Institution

Registrations ending December 31, 2014

Institutions	Total Reg	Institutions	Total Reg
Greenville NCORP	6	Prov Portland MC/PCRC NCORP	1
Kansas, U of	4	Providence Hosp	1
Irvine, U of CA	1	Tennessee, U of	1
Montana NCORP	1	Tulane Univ MBCCOP	1
Ozarks Reg NCORP	1	**Total (9 Institutions)**	**17**