

Multiple Myeloma Comparison to NCCN guidelines

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Data Source: Cancer registry information on multiple myeloma for 1/1/2003 to 12/31/2005. NCCN guidelines.

Reason for Report: To determine if St. Joseph Hospital physicians are following NCCN guidelines.

Findings: During this time period, there were 23 cases of multiple myeloma:

Expired	=9/23 (39.1%)
Age 60 or younger	=4/23 (17.4%)
Age over 60	=19/23 (82.6%)

There were 2 cases of Stage I or smoldering myeloma; 1 patient declined chemotherapy and would only allow Zometa; 1 patient's treatment is unknown and 1 patient was diagnosed with myeloma on autopsy.

The table below shows the distribution of treatments by year for these patients (minus the patient diagnosed at autopsy):

SJH Multiple Myeloma by Treatment

	Stage II/III						Stage I	
	VAD/alone	VAD/transplant	MP	Thalid/dexameth	Dexamethasone	D/D/Velade	Pt refused chemo	observation
2003	1	5						1
2004	3	3	1	1	1		1	
2005				1	1	1		2

The age range for patient's treated with stem cell transplant is 39 to 67. All of these patients are alive as of February 2006. The age range for the rest of the patients is 55 to 85.

Other interesting facts: Below are tables comparing St. Joseph Hospital with other hospitals within the NODB (National Oncology Data Base) submitted by IMPAC Medical Systems.

Survival In Months: St. Joseph Hospital Vs. All Others
C42.1 Cancers with Histology 97323 Abstracted 2000-2004

Overall Observed Survival analysis

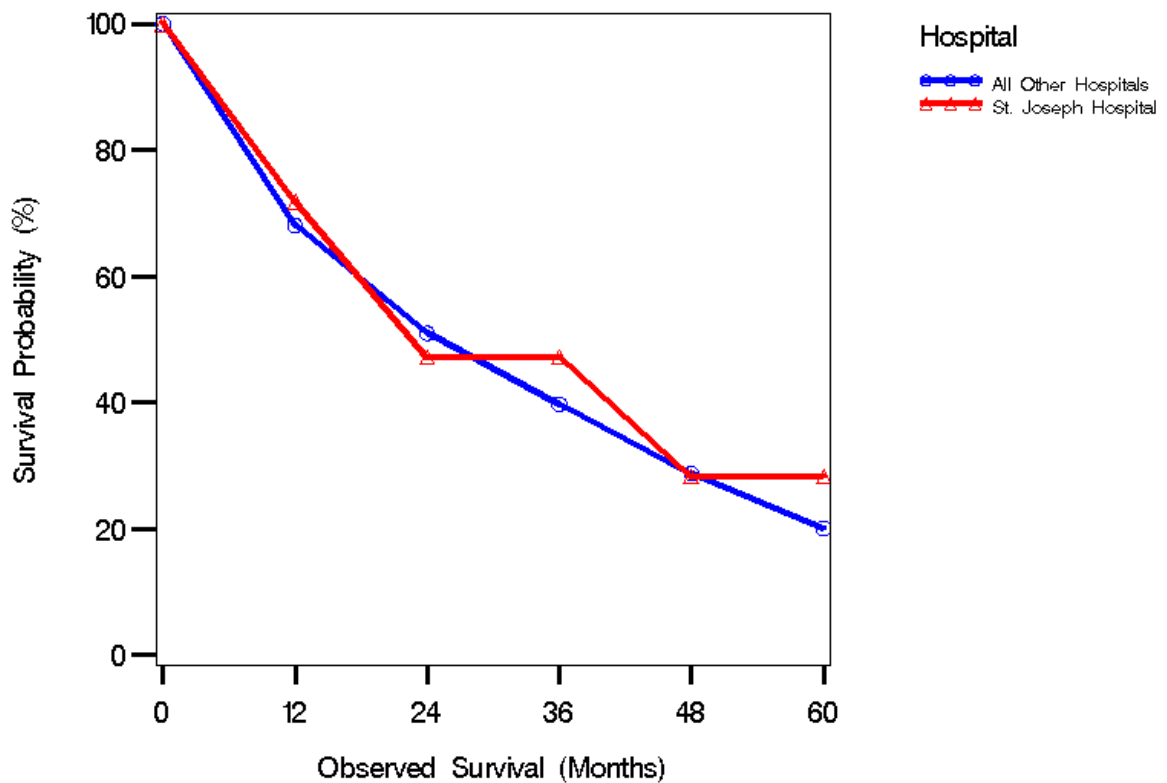
Stratum 1: Hospital = All Other Hospitals							
Life Table Survival Estimates							
Interval		Number Failed	Number Censored	Effective Sample Size	Survival	Failure	Survival Standard Error
[Lower,	Upper)						
0	12	990	577	3104.5	1.0000	0	0
12	24	399	472	1590.0	0.6811	0.3189	0.00836
24	36	176	306	802.0	0.5102	0.4898	0.00970
36	48	105	187	379.5	0.3982	0.6018	0.0106
48	60	40	95	133.5	0.2880	0.7120	0.0119
60	.	6	40	26.0	0.2017	0.7983	0.0142

Stratum 2: Hospital = St. Joseph Hospital							
Life Table Survival Estimates							
Interval		Number Failed	Number Censored	Effective Sample Size	Survival	Failure	Survival Standard Error
[Lower,	Upper)						
0	12	10	5	35.5	1.0000	0	0
12	24	7	5	20.5	0.7183	0.2817	0.0755
24	36	0	5	8.5	0.4730	0.5270	0.0902
36	48	2	2	5.0	0.4730	0.5270	0.0902
48	60	0	1	1.5	0.2838	0.7162	0.1169
60	.	0	1	0.5	0.2838	0.7162	0.1169

Summary of the Number of Censored and Uncensored Values					
Stratum	Hospital	Total	Failed	Censored	Percent Censored
1	All Other Hospitals	3393	1716	1677	49.43
2	St. Joseph Hospital	38	19	19	50.00

Summary of the Number of Censored and Uncensored Values					
Stratum	Hospital	Total	Failed	Censored	Percent Censored
Total		3431	1735	1696	49.43

Overall Observed Survival



Conclusions: A review of the treatment of multiple myeloma in St. Joseph Hospital was undertaken for the most recent three years. During this time, the recommendation for the treatment of myeloma has varied considerably. Observation is considered effective therapy for “smoldering myeloma” and more aggressive myeloma can be treated with a variety of interventions ranging from the traditional Melphelan/Prednisone to paired transplants.

Of the 23 cases of myeloma in this 3-year period, 100% of the patients were treated according to NCCN guidelines. This year VAD therapy was not delivered to any patients, which is consistent with national trends. Other than that, there was no specific

trend in myeloma treatment over the three-year interval. The vast majority of patients are elderly and consistent with national data.

Outcome: Most importantly, the absolute survival at 3 years and at 5 years of seen in the St. Joseph registry was essentially identical to the national survival data for hospitals of our size.

References:

1. National Comprehensive Cancer Network, Inc. Multiple Myeloma treatment guidelines. Available at: www.nccn.com/professionals/physicians_gls/f_guidelines.asp. Assessed February 2006.
2. National Oncology Database of IMPAC Medical systems.