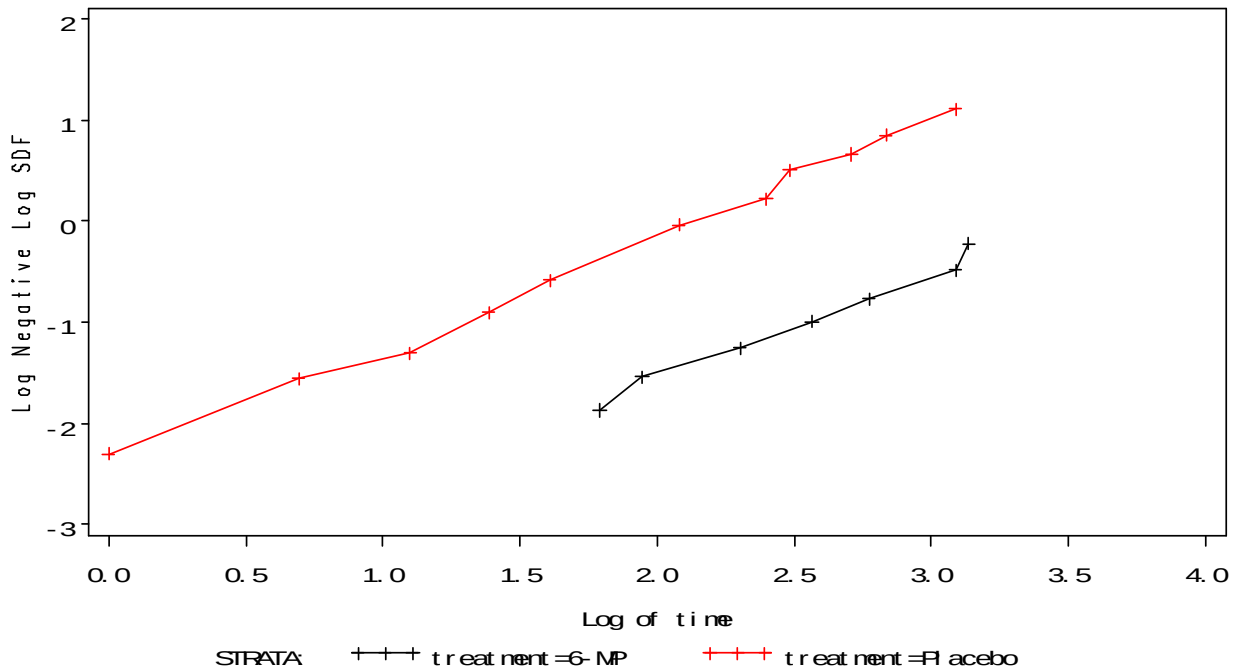


Leukemia Addendum – 3/2/2010

```
proc lifetest plots=(lls);  
  time time*uncensored(0);  
  strata treatment;  
run;
```

LLS Plot – parallelism confirms PH requirement/assumption (p.239)



CPH Model Fit

```
proc phreg;  
  model time*uncensored(0)=trt6MP; ** Dummy for 6-MP treatment **;  
run;
```

The PHREG Procedure

Model Information

Data Set	WORK.ONE
Dependent Variable	time
Censoring Variable	uncensored
Censoring Value(s)	0
Ties Handling	BRESLOW
Number of Observations Read	42
Number of Observations Used	42

Summary of the Number of Event and Censored Values						
Total	Event	Censored	Percent Censored			
42	30	12	28.57			
Convergence Status						
Convergence criterion (GCONV=1E-8) satisfied.						
Model Fit Statistics						
	Without Covariates	With Covariates				
Criterion						
-2 LOG L	187.970	172.759				
AIC	187.970	174.759				
SBC	187.970	176.160				
Testing Global Null Hypothesis: BETA=0						
Test	Chi-Square	DF	Pr > ChiSq			
Likelihood Ratio	15.2109	1	<.0001			
Score	15.9305	1	<.0001			
Wald	13.5783	1	0.0002			
Analysis of Maximum Likelihood Estimates						
Variable	DF	Parameter Estimate	Standard Error	Chi-Square	Pr > ChiSq	Hazard Ratio
trt6MP	1	-1.50919	0.40956	13.5783	0.0002	0.221

Interpretation of Hazard Ratio: The hazard of relapse for the 6-MP treatment = 0.221 times the hazard of relapse for the Placebo. Equivalently, the hazard of relapse for the Placebo treatment = 4.523 (= 1/0.221) times the hazard of relapse for the 6-MP treatment. (The above assumes that the CPH model fits these data.)