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**Using SAS® Graph to Produce  
Four Graphs per Page**

**Boston Area SAS® Users Group Meeting  
March 28, 2008**

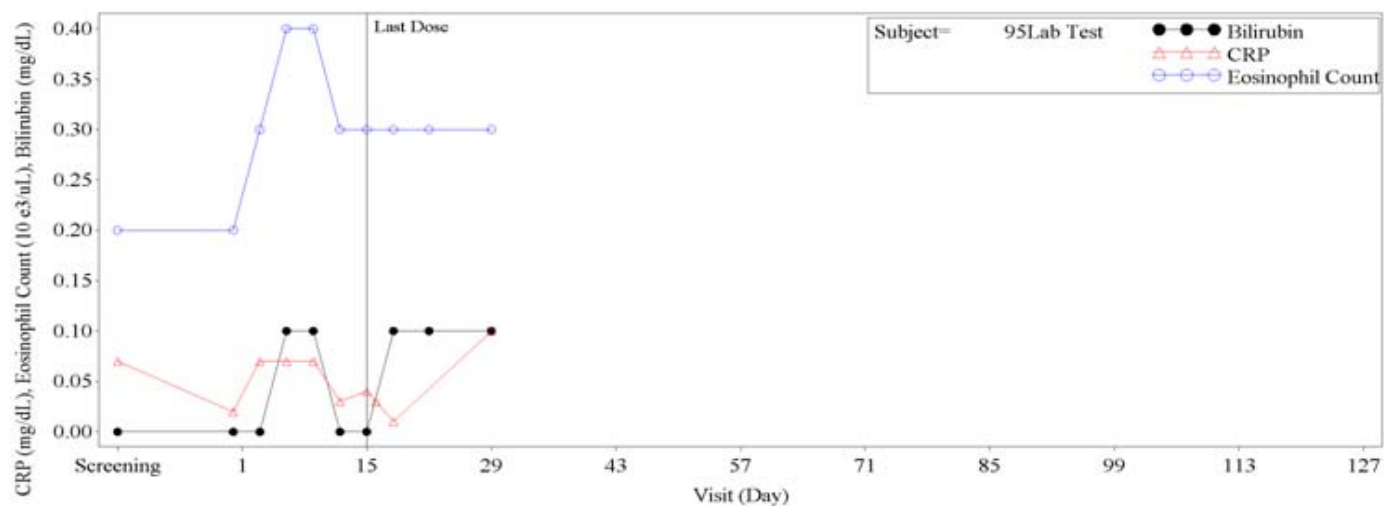
# Outline

- Background
- Original Graphs
- SAS® Code
- Modified Output
- Benefits of Application

# Background – Phase I Studies

- Emphasis on individual or dose cohort experience
- PROC GPLOT - graphs parameter(s) of interest vs. time
- Multiple parameters provide full picture for individual or cohort → Problem: Graph Overcrowding
- Use BY variable to plot one individual/cohort per page → Problem: Sizable Output

DEMO Figure  
Individual ALT, Bilirubin, CRP, CPK and Eosinophil Counts Over Time for Subjects with At Least One Post Dose ALT Elevation



The vertical line represents the last day of dosing for the subject.

# The Basic Gplot Code

```
proc gplot data=alllabs gout=gseg;  
  by usubjid trtcd;  
  where usubjid="&usubjid";  
  plot labright*visitnum=lbtestcd / haxis=axis1 href=&lstdse  
    vaxis=axis2 legend=legend1 name="X&_ngraph";  
run;
```

Define the graphics catalog where output is saved.

Specify the name of each graph

Create a template for replaying output.



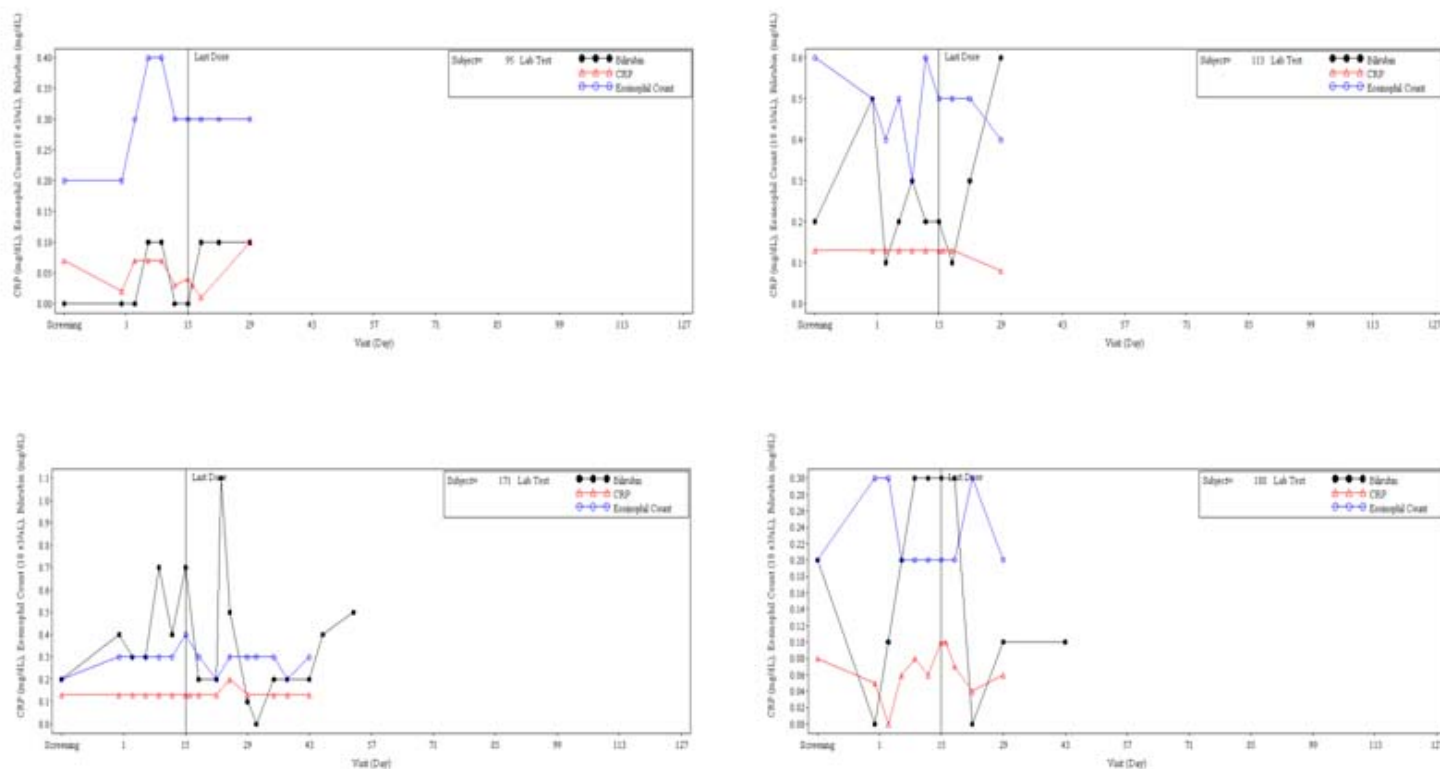
```
proc greplay tc=tempcat nofs;  
  tdef allfour ←  
  1/ llx=0 lly=50 ulx=0 uly=100 lrx=50 lry=50 urx=50 ury=100  
  2/ llx=50 lly=50 ulx=50 uly=100 lrx=100 lry=50 urx=100 ury=100  
  3/ llx=0 lly=0 ulx=0 uly=50 lrx=50 lry=0 urx=50 ury=50  
  4/ llx=50 lly=0 ulx=50 uly=50 lrx=100 lry=0 urx=100 ury=50;
```

Obtain graphs from the graphics catalog and use the template to lay out on page



```
proc greplay igout=gseg tc=tempcat nofs;  
  template allfour; ←  
  treplay 1:X&gr1 2:X&gr2 3:X&gr3 4:X&gr4;  
quit;
```

DEMO Figure  
Individual ALT, Bilirubin, CRP, CPK and Eosinophil Counts Over Time for Subjects with At Least One Post Dose ALT Elevation



The vertical line represents the last day of dosing for the subject.

# Benefits of Application

- Facilitates comparison of multiple plots
- Improves ability to detect trend across plots
- Makes review of output more manageable
- Decreases volume of output
- Reduces use of paper

# Questions?

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