**SAS Code for Proc hplogistic**

**data** A;

do drugclass = **1** to **8**;

do y = **1** to **5**;

input freq @@;

output;

end;

end;

label y='Frequency of Use';

datalines;

16 27 6 9 1

4 1 16 35 3

6 10 20 22 1

25 25 7 1 0

12 22 16 7 2

6 4 14 27 7

8 17 18 13 3

5 5 17 28 3

;

**proc** **hplogistic** data=A;

freq freq;

class drugclass(ref='8') / param=ref ;

model y=drugclass / cl;

title 'Antimicrobial class preference';

**run**;

**proc** **transpose** data=A out=tran;

by drugclass; var freq;

**run**;

**data** a; set tran;

const=**0.5**;

c1=log((sum(of col1-col1)+const)/(sum(of col2-col9)+const));

c2=log((sum(of col1-col2)+const)/(sum(of col3-col9)+const));

c3=log((sum(of col1-col3)+const)/(sum(of col4-col9)+const));

c4=log((sum(of col1-col4)+const)/(sum(of col5-col9)+const));

**run**;

**proc** **sgplot**;

series y=c1 x=drugclass;

series y=c2 x=drugclass;

series y=c3 x=drugclass;

series y=c4 x=drugclass;

yaxis values=(-**5** to **5**);

**run**;