The calculated test statistic = 0.0486 with a p-value = 0.8256 therefore we do not reject the null hypothesis of no association between Factor X and treatment because the p-value >> 0.10. Since we assumed that 30% of the population has Factor X and our study population has roughly 30% (29/100) who have Factor X (i.e. in stratum 1) and we have removed the second criteria for confounding i.e. there will be no association between Factor X (stratum) and Treatment (result) so then If we observe a difference in outcome between the two groups then we can reasonably assume it is due to the effect of treatment.

```sas
PROC PLAN seed=20832856;
    FACTORS stratum=2 ORDERED block=10 ORDERED result=8 RANDOM / NOPRINT;
    OUTPUT OUT=myblock result NVALS=(0 0 0 0 1 1 1 1) RANDOM;
RUN;

DATA DATA first29;
    SET myblock (OBS=29);
    subject=_n_;
    RETAIN Cresult 0;
    IF result=1 THEN Cresult=Cresult+0.5; ELSE Cresult=Cresult-0.5;
RUN;

DATA DATA second71;
    SET myblock (OBS=71);
    WHERE stratum=2;
    subject=_n_;
    RETAIN Cresult 0;
    IF result=1 THEN Cresult=Cresult+0.5; ELSE Cresult=Cresult-0.5;
RUN;

DATA DATA combined;
    SET first29 second71;
    subject=_n_;
RUN;

PROC FREQ data=combined;
TABLE result*stratum / NOROW NOCOL NOPERCENT CHISQ; /*result = treatment, stratum=factorX*/
RUN;
```

The FREQ Procedure

Frequency	Table of stratum by result		

	result		
stratum	**0**	**1**	**Total**
1	14	15	29
2	36	35	71
Total	50	50	100

Statistics for Table of stratum by result

Statistic	DF	Value	Prob
Chi-Square	1	0.0486	0.8256
Likelihood Ratio Chi-Square	1	0.0486	0.8256
Continuity Adj. Chi-Square	1	0.0000	1.0000
Mantel-Haenszel Chi-Square	1	0.0481	0.8264
Phi Coefficient		-0.0220	
Contingency Coefficient		0.0220	
Cramer's V		-0.0220	

Fisher's Exact Test	
Cell (1,1) Frequency (F)	14
Left-sided Pr <= F	0.5000
Right-sided Pr >= F	0.6701
Table Probability (P)	0.1701
Two-sided Pr <= P	1.0000

Sample Size = 100