

# Arthritis - Cumulative Logit Model

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A simple data frame for the arthritis data is created with the numbers given for the individual cells.

```
arthritis <- data.frame(drug=c(rep("new agent", 24+37+21+19+6),  
rep("active control", 11+51+22+21+7)),  
assessment=c(rep(1,24), rep(2,37), rep(3,21), rep(4,19), rep(5,6), rep(1,11),  
rep(2,51), rep(3,22), rep(4,21), rep(5,7)))
```

```
library(VGAM)
```

Now a cumulative model is fitted.

```
cumart <- vglm(assessment ~ drug, family=cumulative(parallel=TRUE, link="logit"),  
data=arthritis)
```

```
summary(cumart)
```