Mucin Project.

This study considers patients who have had a surgical repair to their bladder. This involves part of the bladder wall being replaced with a small part of intestine. The wall of the intestine produces more mucous than the healthy bladder wall, so patients with repaired bladders have problems due to viscous urine caused by unusually high amounts of mucous being excreted by the repaired bladder wall.

The study looked at the role of two drugs, aspirin and ranitidine, both of which might be able to reduce the level of mucous production in the intestinal wall.

Each patient was studied on four occasions. On each occasion the patient received an aspirin or an aspirin placebo and a ranitidine tablet or a ranitidine placebo.

The design is described in the R workspace through variables Patient, Period, Rx, Aspirin and Ranitidine. For the last two variables, a 1 indicates the active tablet was given and a 0 means a placebo was administered. The variable Rx records which of the four possible treatment combinations was administered on a given occasion. The variable Period indicates which the four occasions on which the patient was treated with Rx.

The outcome measured was an assessment of the amount of mucin per ml of urine. This is given in y.