

A group of seven patients of rheumatic heart disease with distention of abdomen due to ascites, affecting breathing capacity were treated. Can we say that treatment has improved breathing capacity? Data is in file Rheumatic.csv

Maximum breathing capacity (L/min for 7 patients)	1	2	3	4	5	6	7
Before Treatment	102	89	32	82	36	56	79
After Treatment	132	116	50	82	61	64	92

Before After Diff = Before - After
 d_i $D < 0 \Rightarrow \text{Improvement}$
 Hypo : Improvement yes or no? $D \geq 0 \Rightarrow \text{No Improvement}$
 Question
 $H_0: \text{No Improv}$ $H_1: \text{Improv.}$ Lower-tailed
 $D \geq 0$ $D < 0$

Test Statistic = -4.176554325821337
 P - Value = 0.0029179069531987257

$< 0.05 \therefore$ We reject H_0 at 5% level of significance