STATISTICS 2
WS 2023/24 (Mag. Thomas Forstner)

Course-Number: 366.554

16) In a sample of 21 patients with flu the medicament ANTIFLU cures 18 patients. The expected cure rate is 60%. Is this a statistically significant difference (type I error of 5%)

17) The ordinal ASA physical status classification system (ASA-Score) is a system for assessing the fitness of patients before surgery. In a clinical study the ASA-Score of two treatment groups - with each 28 patients - was measured.

Construct an appropriate and optimal test for verifying, if there is a difference between the two treatment groups (type I error = 5%).

	Group A	**Group B**
normal healthy patient	5	3
patient with mild systemic disease	7	10
patient with severe systemic disease	6	4
patient with severe systemic disease that is a constant threat to life.	4	5
moribund patient who is not expected to survive without the operation	6	6
declared brain-dead patient whose organs are being removed for donor purposes	0	0

18) You want to compare the quality of two different independent assembly lines. A sample of 100 respectively 200 components was taken from each assembly line and examined. The results are presented in the table below.

Construct a suitable statistical test with a type I error of 5% to verify if there is a difference between the two assembly lines.

	assembly line A [frequency]	**assembly line B [frequency]**
no defect	70	150
chip	7	20
bad soldering joint	13	20
bad circuit board	10	10
Total	*100*	*200*