

Table 1: Characteristics of the Cystic fibrosis patients

Characteristics		patients n=35
tobramycin courses, n		352
Age (at the time of tobramycin course), years (SD; range)	14,5 (4,8; 0,3-34,3)	
Sex, female/male	17 / 18	
BMI (at the time of tobramycin course), kg/m ² (SD; range)	17,2 (2,6; 10,4-25,6)	
Dystrophy (Z-score <-2) (at the time of tobramycin course), n of 352 courses (%)	66 (18,8%)	
F508del homozygous, n (%)	17 (48,6%)	
F508del heterozygous, n (%)	12 (34,3%)	
other CF-mutations, n (%)	6 (17,1%)	
Comorbidity		
CF related diabetes, n (%)	11 (31,4%)	
Hearing impairment, n (%)	1 (2,9%)	
Renal disease, n (%)	3 (8,6%)	

a: reference parameter: 35 CF patients or 352 tobramycin courses

b: BMI=Body mass index

Table 2: Details on the tobramycin courses in the CF patient cohort and their renal function

Tobramycin courses/ patient, n (SD; range)	9 (8; 1-34)
Tobramycin trough levels available, n (% of 352 ^a)	278 (79%)
cumulative dosage of tobramycin, g (SD; range)	39,4 (51,8; 5,6-235,8)
cumulative dosage of tobramycin, g/kg ^b (SD; range)	1,1 (1,0; 0,13-4,6)
elevated creatinine level, n (% of 278 ^c)	5 (1,8)
reduced glomerular filtration rate, n (% of 278 ^c)	40 (14,4)

a: 352 tobramycin courses

b: body weight

c: available tobramycin through levels

Table 3: Characteristics of patients with elevated tobramycin trough levels

ID	Age (years)	BMI (Z-Score)	Cumulative tobramycin dose (g/kg)	Tobramycin trough level (mg/l)	Creatinine (mg/dl)	GFR (ml/min/1,73)	Underlying renal comorbidities
1	8,51	-1,16	0,50	1,3	0,46	114,7	
2	19,86	-2,07	1,15	2,9	1,08	98,97	IgA nephritis
2	20,99	-2,12	1,74	2,1	0,89	54,8*	
3	11,92	-0,29	2,49	2,5	0,47	123,9	
4	19,95	-1,42	2,53	4,1	0,79	91,76	chronic kidney failure
4	20,15	-1,50	2,88	2,7	0,93*	88,8*	
4	20,93	-1,59	2,99	2,1	0,97*	84,4*	
4	21,15	-1,87	3,10	1,2	1,11*	71,2*	

a: BMI=Body mass index

b: * pathological values

Table 4: Differences in renal function in patients with elevated versus normal tobramycin trough levels

	Elevated tobramycin trough levels, n	Normal tobramycin trough levels, n	Statistical analysis ^d (RO, CI)
Tobramycin courses	8	270	
Normal creatinine level	5	268	80,4, 10,9; 591,7, p< 0,01
Elevated creatinine level	3	2	
Normal GFR	4	234	6,5, CI 1,6; 27,2, p< 0,01
Reduced GFR	4	36	

a: GFR= glomerular filtration rate

b: OR=odds ratio,

c: CI= confidence interval;

d: statistical analysis with chi-square test