swissnephrokalk Cystinuria

Input fields are shaded orange (mandatory) and green (optional).

			[Crea]-U		Crea/d	
name	Muster, Lily		*mmol/l*	*g/l*	*mmol*	*g*
DOB	*01.01.75*		2,37	0,268	8,73	0,988
date	10.07.15					

mmol/mol Crea	*umol/g Crea*	*mg/g Crea*	*mmol/d*	*mg/d*	*mmol/l*	*mg/l*
378	3342	802	3,30	792	0,90	215
norm < 19	norm < 170	norm < 40	norm < 0.13	norm < 30	target < 1 (at pH>7)	target < 250

To allow all calculations, enter the creatinine conc and the amount of creatinine excreted over 24h (in conventional or SI units).

Input the level or amount of cystine in any one of these units.

Urine Volume

	ml/d	
calc/meas	3684	
necessary >	3300	(to reach [target] at pH>7)

The actual urine volume per 24h is shown. The necessary volume to reach the target concentration of cystine is calculated.

Cystine Binding Thiol Drugs (CBTDs)

	dose		expected effect on cystine excretion *			nec urine vol *
Penicillamine	2000	13,404	-2,95	-708	-89	-2949
Tiopronin	1200	7,353	-1,85	-445	-56	-1853
Captopril	150	0,690	-0,21	-50	-6	-207
	mg/d	mmol/d	mmol/d	mg/d	%	ml/d

*calculations based on limted evidence

Choose the dose for thiol containing drugs. Their effects on cystine excretion and on the necessary urine volume are estimated.

The assumptions for these calculations can be adjusted.

	MW	oral bioavail	absorbed drug binding cystein	dose range
Penicillamine	149,212	55	80	500-2000
Tiopronin	163,19	63	80	400-1200
Captopril	217,29	75	80	150
		%	%	mg/d