

Supplementary Table 1. Variables identified according to the leave-one cross validation LASSO regression and stepwise multivariate logistics regression. The 1-SE criteria were chosen to build a concise model. LASSO: Least absolute shrinkage and selection operator regression; GFR: glomerular filtration rate; BMI: Body mass index.

Variables identified by LASSO	Intercept	GFR of treated kidney (ml/min)	Stone volume (cm <sup>3</sup> )	BMI (kg/m <sup>2</sup> )	Age (years)	Lower calyx stone (Yes)
LASSO coefficients ( $\lambda=0.0416$ )	-0.887	-0.025	0.141	0.025	0.005	0.095
Logistics coefficients	-2.854	-0.048	0.377	0.095	0.018	0.589

