Urinary stone disease is not so rare in children. The aim of this study was to assess the demographic, clinical and biological characteristics, as well as outcome, of urinary stone disease among Croatian children. We reviewed medical records of 76 children from various parts of Croatia who were diagnosed with urinary stone disease from 2002–2011. The average age (mean) were 9 yr 7 mo (range 0.13–16.83 yr) and included 33 (43.42%) males and 43 (56.58%) females. Urinary stone disease remained of idiopathic origin. Urine saturation (EQUIL 2) were increased in 12 (15.79%) children, urine volume less than average in 12 (15.79%). For most of the children we recommended increased fluid intake and balanced food nutrition, citrate were administered in 20 (26.32%), thiazides in 10 (13.15%) and aldactone in average in 12 (15.79%). For most of the children we recommended increased fluid intake and balanced food nutrition, citrate were administered in 20 (26.32%), thiazides in 10 (13.15%) and aldactone in average in 12 (15.79%).

Conclusion Urinary IL-8 can be used as a promising diagnostic marker for VUR. Also, it is appropriate to measure serum b-FGF in sera of those with reflux to determine if renal parenchymal damage (scarring) is present and of which grade.