

Online Supplement

Table S-1: Genetic diagnoses in 212 children with hereditary SRNS.

| Causative gene | N (%) |
|------------------------------|--------------|
| <i>NPHS2</i> | 103 (48.6) |
| <i>WT1</i> | 43 (20.3) |
| <i>SMARCAL1</i> | 14 (6.6) |
| <i>PLCE1</i> | 11 (5.2) |
| <i>INF2</i> | 7 (3.3) |
| <i>ADCK4</i> | 6 (2.8) |
| <i>LMX1B</i> | 5 (2.4) |
| <i>NPHS1</i> | 4 (1.9) |
| <i>MYO1E</i> | 4 (1.9) |
| <i>LAMB2</i> | 3 (1.4) |
| <i>COQ6</i> | 2 (0.9) |
| <i>PTPRO</i> | 2 (0.9) |
| <i>COL4A5</i> | 2 (0.9) |
| <i>COQ2</i> | 1 (0.5) |
| <i>TRPC6</i> | 1 (0.5) |
| <i>COL4A3</i> | 1 (0.5) |
| <i>CLCN5</i> | 1 (0.5) |
| <i>tRNA^{LEU}</i> | 1 (0.5) |
| duplication at chromosome 6p | 1 (0.5) |
| All | 212 |

Table S-2: Characteristics of patients with hereditary SRNS and reported responsiveness to intensified immunosuppression (IIS).

| Gene | Mutation | Age at disease onset (yrs) | Serum albumin at disease onset (g/l) | Histo-pathology | First year response to IIS | Immuno-suppression (\pm oral Pred.) | RAS Antagonist | Follow-up (yrs) | Remission status at last observation | Status at last observation |
|--------------|---|----------------------------|--------------------------------------|-----------------|----------------------------|--|---------------------|-----------------|--------------------------------------|----------------------------|
| <i>WT1</i> | c.1351T>C p.(Phe451Leu) previously referred as p.F383L | 3.2 | 32.0 | FSGS | Complete rem. | CSA, Pred.pulses | - | 12.0 | No rem. | CKD 2 |
| <i>NPHS2</i> | c.[365G>C],[851C>T] p.[(Trp122Ser)];[(Ala284Val)] | 5.4 | 28.0 | MCGN | Complete rem. | CSA | Enalapril, Losartan | 4.8 | No rem. | Peritoneal dialysis |
| <i>NPHS2</i> | c.[868G>A],[868G>A] p.[(Val290Met)];[(Val290Met)] | 7.9 | 30.0 | MCGN | Partial rem. | CSA | Enalapril | 1.5 | Partial rem. | CKD 1 |
| <i>NPHS2</i> | c.[249del],[538G>A] p.[(Leu84Trpfs*15)];[(Val180Met)] | 3.9 | 37.0 | MesPGN | Partial rem. | CSA | - | 2.5 | Partial rem. | CKD 1 |
| <i>NPHS2</i> | c.[419delG],[506T>C] p.[(Gly140Aspfs*41)];[(Leu169Pro)] | 1.0 | | FSGS | Partial rem. | CSA, Pred.pulses | - | 0.2 | Partial rem. | - |
| <i>NPHS2</i> | c.[353C>T];[(353C>T)] p.[Pro118Leu(,);Pro118Leu] | 1.3 | 29.0 | FSGS | Partial rem. | Pred.pulses | Ramipril | 4.3 | No rem. | CKD 1 |
| <i>WT1</i> | c.1432+4C>T previously referred as IVS9+4C>T | 8.0 | 29.0 | FSGS | Partial rem. | CSA, Pred.pulses | Enalapril | 5.6 | No rem. | CKD 3 |
| <i>WT1</i> | c.1372C>T p.(Arg458*) previously referred as p.390X | 15.3 | 25.0 | FSGS | Partial rem. | CSA | - | 2.7 | No rem. | CKD 4 |
| <i>COQ6</i> | c.[1058C>T];[(1058C>T)] p.[Ala353Asp(,);Ala353Asp] | 7.0 | 28.0 | unknown | Partial rem. | CSA | - | 3.1 | No rem. | CKD 5 |
| <i>WT1</i> | c.1432+5G>A previously referred as IVS9+5G>A | 8.1 | 37.0 | FSGS | Partial rem. | CSA | Enalapril | 8.6 | No rem. | CKD 5 |

The reference transcripts for mutation description are: *COQ6* - NM_182480.2; *NPHS2* - NM_014625.2; *WT1* - NM_024426.4;

Figure S-1: Renal survival by response to intensified immunosuppression (IIS), irrespective of genetic findings and familial disease occurrence. Patient group with unknown treatment response is included.

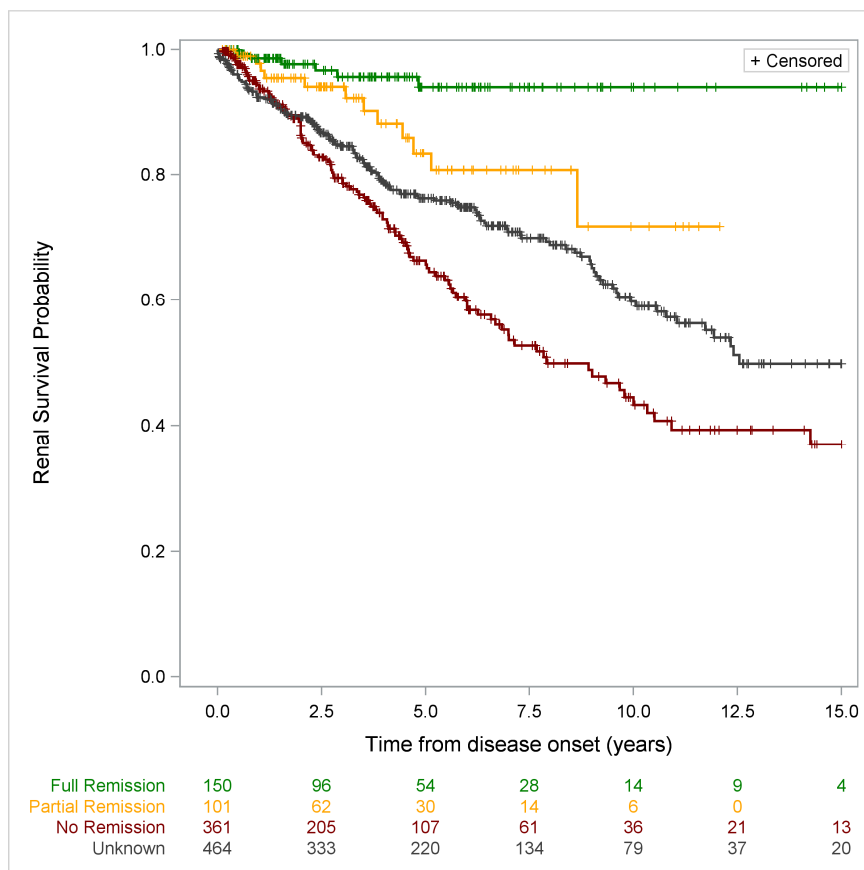


Figure S-2: Renal survival by initial treatment response, genetic findings and familial disease occurrence. Patient groups with sporadic disease occurrence and unknown treatment response are included.

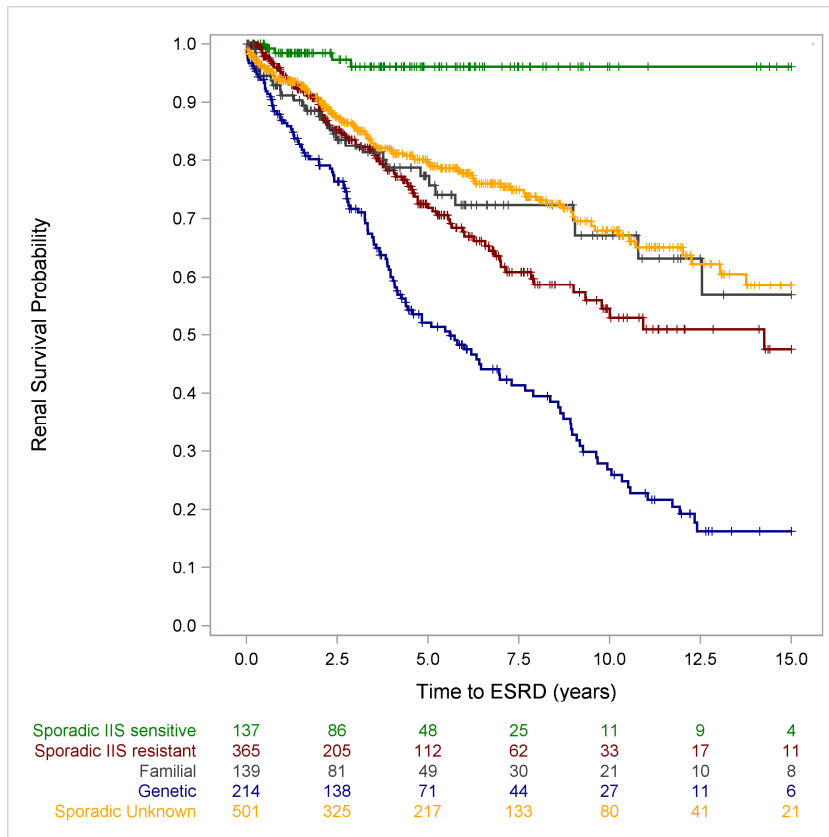


Figure S-3: Renal survival by major genetic entities in 212 children with hereditary SRNS.

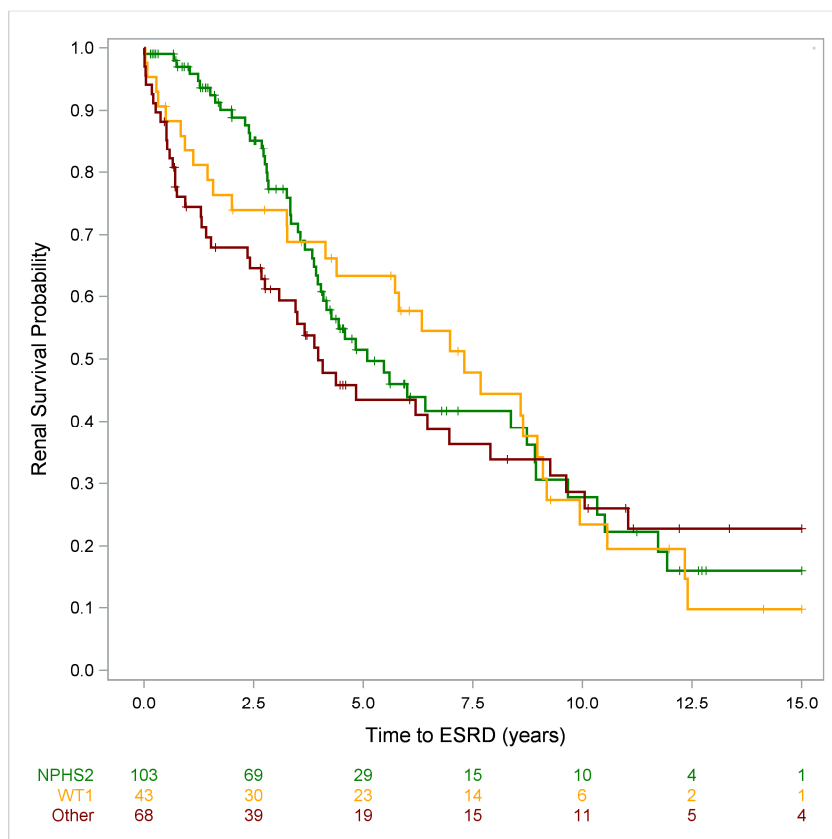


Figure S-4: Renal survival by underlying histopathological diagnoses in 1155 children with performed kidney biopsy.

