

Table 2. Clinical characteristics and analytical results of the sample

| Characteristics                 | All (n=62)          | ACUTE DMSA         |                     |         | CHRONIC DMSA        |                      |         |
|---------------------------------|---------------------|--------------------|---------------------|---------|---------------------|----------------------|---------|
|                                 |                     | Normal (n=25)      | APN (n=35)          | p-value | Normal (n=24)       | RS (n=7)             | p-value |
| Age, months                     | 6.9 (2.5 - 11.3)    | 4 (1.3 - 9.8)      | 9.1 (4.6 - 16.7)    | <0,01   | 7,3 (2,9 - 11,6)    | 48 (10.7 - 71.1)     | <0,01   |
| Age > 6 months                  | 34 (54.8)           | 10 (40)            | 24 (68.6)           | 0,03    | 14 (58,3)           | 7 (100)              | 0,07    |
| Sex, female                     | 34 (54.8)           | 12 (48)            | 22 (62.9)           | 0,3     | 13 (54,2)           | 6 (85.7)             | 0,2     |
| Max. temp, °C                   | 39.1 (38.5 - 39.7)  | 39 (38.3 - 39.8)   | 39.1 (38.5 - 39.8)  | 0,6     | 39,2 (38,5 - 39,8)  | 39,5 (39 - 40)       | 0,1     |
| Fever, hours                    | 42 (24 - 90)        | 24 (12 - 48)       | 48 (24 - 96)        | 0,06    | 48 (24 - 96)        | 48 (24 - 72)         | >0.9    |
| Hospital stay, days             | 4 (3 - 5)           | 3 (3 - 4)          | 4 (3 - 5)           | 0,2     | 4 (3 - 5)           | 6 (5 - 9)            | 0,01    |
| Pathological US                 | 18 (29)             |                    | 18 (51.4)           | <0.001  | 9 (37,5)            | 6 (85.7)             | 0,04    |
| <b>Orina</b>                    |                     |                    |                     |         |                     |                      |         |
| Leucocyturia ≥75/mL             | 56 (90.3)           | 22 (88)            | 32 (94.1)           | 0,6     | 22 (95,7)           | 6 (85.7)             | 0,4     |
| Proteinuria ≥30mg/dL            | 29 (46.8)           | 10 (40)            | 19 (55.9)           | 0,2     | 10 (43,5)           | 7 (100)              | 0,01    |
| Hematuria ≥20/ml                | 32 (51.6)           | 8 (32)             | 23 (67.6)           | <0,01   | 14 (60,9)           | 6 (85.7)             | 0,4     |
| Nitrites                        | 21 (33.9)           | 4 (16)             | 16 (47.1)           | 0,01    | 11 (47,8)           | 2 (28.6)             | 0,4     |
| Sodium, nmol/L                  | 20 (8.3 - 64.8)     | 9.5 (5 - 30.8)     | 25 (17 - 81.5)      | 0,02    | 24 (16 - 87)        | 25 (16 - 104.5)      | 0,9     |
| Potassium, nmol/L               | 23.1 (13.9 - 36.4)  | 14.3 (11.7 - 29)   | 31.4 (20.1 - 37.6)  | 0,04    | 23,6 (16,1 - 35,2)  | 36,2 (29,5 - 55,6)   | 0,07    |
| Creatinine, mg/dL               | 15 (10.3 - 32.8)    | 13 (5 - 25.9)      | 18.5 (13 - 41.3)    | 0,02    | 17 (13 - 26,8)      | 41,4 (11 - 94,1)     | 0,3     |
| eGFR, ml/min/1.72m2             | 75.7 (57.8 - 89.7)  | 80.4 (55.7 - 89.6) | 71.6 (58.5 - 89.5)  | 0,7     | 77,1 (60,1 - 95,2)  | 57,6 (51,3 - 67,7)   | 0,03    |
| Pathological eGFR               | 28 (47.5)           | 9 (36)             | 19 (57.6)           | 0,1     | 11 (45,8)           | 6 (85.7)             | <0,01   |
| Pathological FENa               | 9 (15.8)            | 2 (8.7)            | 7 (21.2)            | 0,3     | 6 (25)              | 1 (14.3)             | 0,6     |
| <b>Plasma</b>                   |                     |                    |                     |         |                     |                      |         |
| Sodium, nmol/L                  | 136 (135 - 138)     | 137 (135.3 - 138)  | 136 (134 - 138)     | 0,3     | 137 (135 - 138)     | 136 (134 - 138)      | 0,4     |
| Potassium, nmol/L               | 4.4 (4.1 - 4.8)     | 4.5 (4.1 - 4.8)    | 4.3 (4 - 4.8)       | 0,6     | 4,4 (4,2 - 4,9)     | 3,9 (3,4 - 4,1)      | 0,001   |
| Creatinine, mg/dL               | 0.37 (0.32 - 0.45)  | 0.4 (0.3 - 0.4)    | 0.4 (0.33 - 0.49)   | 0,1     | 0,4 (0,3 - 0,4)     | 0,6 (0,5 - 0,9)      | 0,001   |
| Leucocytes x10 <sup>3</sup> /mL | 17.2 (12.3 - 19.9)  | 12.8 (8.1 - 19)    | 19.1 (14.8 - 21.7)  | <0,01   | 19,2 (15 - 21,6)    | 19,5 (14,4 - 22,9)   | 0,9     |
| <b>Biomarcadores</b>            |                     |                    |                     |         |                     |                      |         |
| CRP, mg/L                       | 72.8 (23.4 - 104.9) | 34 (11.6 - 75.6)   | 95.3 (68 - 160.8)   | <0.001  | 80,5 (50,4 - 108,5) | 261,3 (99,6 - 301,5) | <0,01   |
| PCT, ng/mL                      | 0.37 (0.15 - 2.09)  | 0.21 (0.1 - 0.86)  | 1.09 (0.37 - 12.24) | 0,02    | 0,7 (0,2 - 4,7)     | 34,5 (7,2 - 59,1)    | 0,02    |
| P-MR-proADM, nmol/L             | 0.62 (0.47 - 0.74)  | 0.63 (0.53 - 0.83) | 0.59 (0.45 - 0.72)  | 0,3     | 0,48 (0,43 - 0,63)  | 1,07 (0,66 - 1,59)   | <0,01   |
| P-MR-proADM>0.55 nmol/L         | 34 (54.8)           | 15 (68.2)          | 17 (53.1)           | 0,3     | 7 (31,8)            | 6 (100)              | <0,01   |
| U-MR-proADM, nmol/L             | 0.36 (0.17 - 0.74)  | 0.23 (0.14 - 0.5)  | 0.56 (0.19 - 0.82)  | 0,04    | 0,48 (0,19 - 0,74)  | 2,41 (0,33 - 4,30)   | 0,07    |
| U-MR-proADM /UCr                | 0.37 (0.19 - 0.53)  | 0.37 (0.19 - 0.54) | 0.32 (0.16 - 0.47)  | 0,8     | 0,22 (0,14 - 0,44)  | 0,44 (0,34 - 0,82)   | 0,09    |
| FE MRproADM, %                  | 1.85 (0.73 - 2.73)  | 1.56 (0.5 - 2.64)  | 1.94 (0.97 - 2.73)  | 0,5     | 1,32 (0,65 - 2,79)  | 2,43 (1,42 - 4,45)   | 0,3     |
| MR-proADM U/P                   | 0.53 (0.23 - 1.06)  | 0.35 (0.16 - 0.76) | 0.84 (0.33 - 1.3)   | 0,08    | 0,74 (0,33 - 1,11)  | 0,79 (0,41 - 2,75)   | 0,4     |

Data presented as median (Interquartile Range: P25 – P75) or n (%).

DMSA: 99mTc dimercaptosuccinic acid scintigraphy scan, APN: Acute Pyelonephritis, RS: renal scarring, US: ultrasonography, eGFR: estimated glomerular filtration rate, FENa: Fractional excretion of Sodium, CRP: C-reactive protein, PCT: procalcitonine, P-MR-proADM: Plasmatic midregional-proadrenomedullin, U-MR-proADM: urinary midregional-proadrenomedullin, UCr: urinary creatinine, FE MRproADM: fractional excretion of MR-proADM.