**Table 1: Comparison of samples of RBC, WBC and epithelial cells between manual microscopy and Automated Urine analysers (URiSCAN Super+ YD Diagnostics and Sysmex UC-3500 -UF 5000 Urine Chemistry Analyzer)**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **Sysmex UC-3500 -UF 5000** | | | | **URiSCAN Super+ YD Diagnostics** | | | |
|  | **RBC** | | | | | | | | |
| **Microscopy** |  | **0-5** | **6-10** | **11-20** | **>20** | **0-5** | **6-10** | **11-20** | **>20** |
| **0-5** | 43 | 7 | 1 | 5 | 41 | 3 | 3 | 9 |
| **6-10** | 12 | 10 | 3 | 7 | 19 | 7 | 1 | 5 |
| **11-20** | 1 | 1 | 9 | 5 | 4 | 2 | 6 | 4 |
| **>20** | 0 | 6 | 1 | 14 | 1 | 2 | 0 | 18 |
| **WBC** | | | | | | | | |
| **0-5** | 28 | 2 | 3 | 3 | 28 | 4 | 0 | 4 |
| **6-10** | 18 | 5 | 2 | 7 | 14 | 11 | 2 | 5 |
| **11-20** | 5 | 2 | 5 | 7 | 13 | 2 | 3 | 1 |
| **>20** | 3 | 0 | 2 | 33 | 2 | 3 | 1 | 32 |
| **Epithelial cell** | | | | | Cannot be assessed | | | |
| **0-5** | 75 | 1 | 0 | 0 |
| **6-10** | 32 | 5 | 0 | 0 |
| **11-20** | 4 | 1 | 7 | 0 |

**Table 2: Degree of concordance between both Urine analyser (URiSCAN Super+ YD Diagnostics and Sysmex UC-3500 -UF 5000 Urine Chemistry Analyzer )and Urine microscopy**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Sysmex UC-3500 -UF 5000 vs Microscopy** | | **URiSCAN Super+ YD Diagnostics vs Microcopy** | | **Sysmex UC-3500 -UF 5000 vs URiSCAN Super+ YD Diagnostics** | |
|  | **Kappa (95% CI)** | **P value** | **Kappa (95% CI)** |  | **Kappa (95% CI)** | **P value** |
| **RBC** | 0.616  (0.490 -.743) | <.001 | 0.533  (0.383 - 0.682) | <.001 | 0.448  (0.298 - 0.598) | <.001 |
| **WBC** | 0.649  (0.531 - 0.767) | <.001 | 0.602  (0.474 - 0.730) | <.001 | 0.620  (0.498 - 0.743) | <.001 |
| **Crystal** | 0.288  (0.029 - 0.548) | <.001 | 0.169  (-0.072 - 0.409) | .017 | 0.304  (-0.046 - 0.653) | <.001 |
| **Sugar** | Cannot be assessed | | | | 0.956  (0.918 - 0.994) | <.001 |
| **Protein** | 0.861  (0.790 - 0.932) | <.001 |
| **Ketone** | 0.936  (0.830 - 1.042) | <.001 |
| **Epithelial cell** | 0.498  (0.313 - 0.682) | <.001 | Cannot be assessed | | | |
| **Transitional cell** | 0.127  (0.062 - 0.193) | .004 |
| **Cast** | 0.123  (0.022 - 0.224) | .031 |
| **Fungi** | 0.139  (-0.022 - 0.301) | .048 |
| **Bacteria** | 0.033  (0.003 - 0.063) | .102 |

**Use this to Interpret the strength of the agreement**

|  |  |
| --- | --- |
| **Kappa value** | **Interpretation** |
| <0.20 | Poor agreement |
| 0.21-0.40 | Fair Agreement |
| 0.41-0.60 | Moderate agreement |
| 0.61-0.80 | Good agreement |
| 0.81-1.00 | Very good agreement |