

## URIINI SADEME DIGITAALNE MIKROSKOOPIA

|                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |               |                    |                          |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------------|--------------------|--------------------------|------------------|--------------------------|----------|------------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------------|-------------|-------------|----------------|-------------|--------------------|------|--------|----------|-----------|------|--------------------|------|--------|----------|-----------|------|--------------------|-----|-------|----------|----------|-----|--------------------|-----|------|-------|--------|----|--------------------|-----|--|-----|--------|----|--------------------|-------|--|------------|----------|----|--------------------|-------|--|------------|-------------|-------|--------------------|-----|--|---------|----------|-----|--------------------|-----|--|---------|----------|-----|
| <b>Lühend</b>                                                                                                                                                                                                                                                                                                                                        | <b>U-Sed-digi</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |              |               |                    |                          |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |
| <b>Mõiste</b>                                                                                                                                                                                                                                                                                                                                        | Lisauuring uriini ribaanalüüsile, kui positiivse tulemusega on vähemalt üks järgmistest parameetritest: valk (Pro), leukotsüüdid (Leu), erütrotsüüdid (Ery), nitrit (Nit). Aitab täpsustada patoloogilise protsessi olemust, lokaliseerimist ja hinnata prognoosi. Automatiseeritud digitaalse faaskontrast-mikroskoopiaga tuvastatakse uriinis erütrotsüüdid, leukotsüüdid, lameepiteeli rakud (SEC), mitte-lameepiteeli rakud (NEC), hüaliinsilindrid, patoloogilised silindrid, bakterid ja pärmseened algtasemel.                                |              |               |                    |                          |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |
| <b>Näidustused</b>                                                                                                                                                                                                                                                                                                                                   | <ul style="list-style-type: none"><li>esmane uuring kuseteede ja neerude infektsiooni diagnostikas</li><li>kuseteede ja neerude mitteinfektsioossete haiguste avastamine</li></ul>                                                                                                                                                                                                                                                                                                                                                                   |              |               |                    |                          |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |
| <b>Proovivõtu vahendid</b>                                                                                                                                                                                                                                                                                                                           | <ul style="list-style-type: none"><li>Uriini proovitops ja uriinikatsuti</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |              |               |                    |                          |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |
| <b>Materjali säilivus ja transport</b>                                                                                                                                                                                                                                                                                                               | <ul style="list-style-type: none"><li>Keskjoa uriin (eelistatult hommikune esmane uriin)</li><li>Säilivus:<br/>15–25 °C 2-5 (optimaalne-maksimaalne) tundi<br/>2–8 °C 5 tundi</li><li>Proovivõtul jälgige proovivõtu juhiseid. Eelmisest urineerimisest peab olema möödunud vähemalt 4 tundi. Oluline on õige välissuguelundite pesemine. Kirjutage katsutile proovivõtu kuupäev ja kellaaeg.</li><li>Proovi ei tohi külmutada. Transportida laborisse esimesel võimalusel hiljemalt 4 tunni jooksul.</li></ul>                                      |              |               |                    |                          |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |
| <b>Teostamise aeg ja koht</b>                                                                                                                                                                                                                                                                                                                        | <ul style="list-style-type: none"><li>Argipäeviti, laboratoorse hematoloogia labor, Ravi 18</li><li>Uriini sademe mikroskoopiaks sobiv diagnostiline materjal on eelistatult esmane hommikune keskjoa uriin. Ribaanalüüsile lisatakse uriini sademe mikroskoopia kuni kella 12.00-ni laborisse jõudnud uriiniproovidele.</li></ul>                                                                                                                                                                                                                   |              |               |                    |                          |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |
| <b>Mõõtmismeetod</b>                                                                                                                                                                                                                                                                                                                                 | Automatiseeritud digitaalne faaskontrastmikroskoopia                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |               |                    |                          |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |
| <b>Referentsvahemikud</b>                                                                                                                                                                                                                                                                                                                            | Ühikud: 10 <sup>6</sup> /l (EFLM European Urinalysis Guidline 2023)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |              |               |                    |                          |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |
| <table><tr><td>Parameeter</td></tr><tr><td>Leukotsüüdid</td></tr><tr><td>Erütrotsüüdid</td></tr><tr><td>Lameepiteeli rakud</td></tr><tr><td>Mitte-lameepiteeli rakud</td></tr><tr><td>Hüaliinsilindrid</td></tr><tr><td>Patoloogilised silindrid</td></tr><tr><td>Bakterid</td></tr><tr><td>Pärmseened</td></tr><tr><td>Kristallid</td></tr></table> | Parameeter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Leukotsüüdid | Erütrotsüüdid | Lameepiteeli rakud | Mitte-lameepiteeli rakud | Hüaliinsilindrid | Patoloogilised silindrid | Bakterid | Pärmseened | Kristallid | <table><tr><td>Ühik</td><td>Referentsid</td><td>Piiripealne</td><td>1+, kerge ↑</td><td>2+, mõõdukas ↑</td><td>3+, tugev ↑</td></tr><tr><td>10<sup>6</sup>/l</td><td>≤ 10</td><td>&gt;10-30</td><td>&gt;30 - 75</td><td>&gt;75 - 300</td><td>&gt;300</td></tr><tr><td>10<sup>6</sup>/l</td><td>≤ 10</td><td>&gt;10-30</td><td>&gt;30 - 80</td><td>&gt;80 - 300</td><td>&gt;300</td></tr><tr><td>10<sup>6</sup>/l</td><td>≤ 5</td><td>&gt;5-15</td><td>&gt;15 - 25</td><td>&gt;25 - 75</td><td>&gt;75</td></tr><tr><td>10<sup>6</sup>/l</td><td>≤ 2</td><td>&gt;2-3</td><td>&gt;3- 4</td><td>&gt;4 - 6</td><td>&gt;6</td></tr><tr><td>10<sup>6</sup>/l</td><td>≤ 2</td><td></td><td>3-5</td><td>&gt;5 - 6</td><td>&gt;6</td></tr><tr><td>10<sup>6</sup>/l</td><td>≤ 1,5</td><td></td><td>&gt;1,5 – 2,5</td><td>&gt;2,5 - 4</td><td>&gt;4</td></tr><tr><td>10<sup>6</sup>/l</td><td>≤ 130</td><td></td><td>&gt;130 - 330</td><td>&gt;330 - 1320</td><td>&gt;1320</td></tr><tr><td>10<sup>6</sup>/l</td><td>≤ 3</td><td></td><td>&gt;3 - 10</td><td>&gt;10 - 20</td><td>&gt;20</td></tr><tr><td>10<sup>6</sup>/l</td><td>≤ 6</td><td></td><td>&gt;6 - 18</td><td>&gt;18 - 60</td><td>&gt;60</td></tr></table> | Ühik | Referentsid | Piiripealne | 1+, kerge ↑ | 2+, mõõdukas ↑ | 3+, tugev ↑ | 10 <sup>6</sup> /l | ≤ 10 | >10-30 | >30 - 75 | >75 - 300 | >300 | 10 <sup>6</sup> /l | ≤ 10 | >10-30 | >30 - 80 | >80 - 300 | >300 | 10 <sup>6</sup> /l | ≤ 5 | >5-15 | >15 - 25 | >25 - 75 | >75 | 10 <sup>6</sup> /l | ≤ 2 | >2-3 | >3- 4 | >4 - 6 | >6 | 10 <sup>6</sup> /l | ≤ 2 |  | 3-5 | >5 - 6 | >6 | 10 <sup>6</sup> /l | ≤ 1,5 |  | >1,5 – 2,5 | >2,5 - 4 | >4 | 10 <sup>6</sup> /l | ≤ 130 |  | >130 - 330 | >330 - 1320 | >1320 | 10 <sup>6</sup> /l | ≤ 3 |  | >3 - 10 | >10 - 20 | >20 | 10 <sup>6</sup> /l | ≤ 6 |  | >6 - 18 | >18 - 60 | >60 |
| Parameeter                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |               |                    |                          |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |
| Leukotsüüdid                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |               |                    |                          |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |
| Erütrotsüüdid                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |               |                    |                          |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |
| Lameepiteeli rakud                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |               |                    |                          |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |
| Mitte-lameepiteeli rakud                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |               |                    |                          |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |
| Hüaliinsilindrid                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |               |                    |                          |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |
| Patoloogilised silindrid                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |               |                    |                          |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |
| Bakterid                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |               |                    |                          |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |
| Pärmseened                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |               |                    |                          |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |
| Kristallid                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |               |                    |                          |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |
| Ühik                                                                                                                                                                                                                                                                                                                                                 | Referentsid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Piiripealne  | 1+, kerge ↑   | 2+, mõõdukas ↑     | 3+, tugev ↑              |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |
| 10 <sup>6</sup> /l                                                                                                                                                                                                                                                                                                                                   | ≤ 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | >10-30       | >30 - 75      | >75 - 300          | >300                     |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |
| 10 <sup>6</sup> /l                                                                                                                                                                                                                                                                                                                                   | ≤ 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | >10-30       | >30 - 80      | >80 - 300          | >300                     |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |
| 10 <sup>6</sup> /l                                                                                                                                                                                                                                                                                                                                   | ≤ 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | >5-15        | >15 - 25      | >25 - 75           | >75                      |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |
| 10 <sup>6</sup> /l                                                                                                                                                                                                                                                                                                                                   | ≤ 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | >2-3         | >3- 4         | >4 - 6             | >6                       |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |
| 10 <sup>6</sup> /l                                                                                                                                                                                                                                                                                                                                   | ≤ 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |              | 3-5           | >5 - 6             | >6                       |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |
| 10 <sup>6</sup> /l                                                                                                                                                                                                                                                                                                                                   | ≤ 1,5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              | >1,5 – 2,5    | >2,5 - 4           | >4                       |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |
| 10 <sup>6</sup> /l                                                                                                                                                                                                                                                                                                                                   | ≤ 130                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              | >130 - 330    | >330 - 1320        | >1320                    |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |
| 10 <sup>6</sup> /l                                                                                                                                                                                                                                                                                                                                   | ≤ 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |              | >3 - 10       | >10 - 20           | >20                      |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |
| 10 <sup>6</sup> /l                                                                                                                                                                                                                                                                                                                                   | ≤ 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |              | >6 - 18       | >18 - 60           | >60                      |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |
| <b>Tõlgendus</b>                                                                                                                                                                                                                                                                                                                                     | Mikroskoopia tulemusi tõlgendatakse koos kliinilise pildi ja teiste uuringute tulemustega. <ul style="list-style-type: none"><li>kuseteede või neerude infektsioonid.<br/>Kuseteede infektsiooni tõenäosus on suur, kui leukotsüütide arv on 100 E<sup>6</sup>/l või suurem. Kuseteede infektsiooni korral suureneb ka bakterite arv uriinis.</li><li>Leukotsüütide arvu kerge tõus võib olla seotud proovivõtu tehniliste probleemidega, põletikuga</li></ul> Segavad tegurid: Ei ole järgitud proovivõtu juhiseid, uriini saastumine tupeeritisega |              |               |                    |                          |                  |                          |          |            |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |             |             |             |                |             |                    |      |        |          |           |      |                    |      |        |          |           |      |                    |     |       |          |          |     |                    |     |      |       |        |    |                    |     |  |     |        |    |                    |       |  |            |          |    |                    |       |  |            |             |       |                    |     |  |         |          |     |                    |     |  |         |          |     |



IDA-TALLINNA KESKHAIGLA

|                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Erütrotsüüdid↑</b>                      | <ul style="list-style-type: none"><li>▪ urogenitaaltrakti põletikud (prostatiiit, endometriit, uretriit, tsüstiit, püelonefriit jt.)</li><li>▪ põie- ja neerukivid</li><li>▪ neeruhaigused (glomerulonefriit, neerutsüstid jt)</li><li>▪ urogenitaaltrakti maliigsed kasvaja</li><li>▪ neerude ja kuseteede traumad</li><li>▪ hüübimishäired, antiagregant-, antikoagulantravi</li></ul> <p>Segavad tegurid: menstruatsioon, urotrakti traumaatilised protseduurid (katetriseerimine, intensiivne genitaalide pesemine jm), intensiivne füüsiline koormus (treening)</p> |
| <b>Lameepiteeli rakud↑<br/>(SEC)</b>       | <p>Lameepiteeli rakud pärinevad välistelt suguelunditelt või kusestist.</p> <ul style="list-style-type: none"><li>▪ Lameepiteeli rakkude arvu suurenemise kõige sagedasem põhjus on ebaõige uriiniproovi kogumine või proovi saastumine. Erandiks on siin rasedad, kellel on lameepiteeli irdumine suurem.</li><li>▪ füüsiline trauma/ärritus (kateetri paigaldamine või kuseteede vigastus, intensiivne seks ) võib põhjustada lameepiteelirakkude suurenemist eraldumise.</li></ul>                                                                                    |
| <b>Mitte-lameepiteeli rakud↑<br/>(NEC)</b> | <p>Mitte-lameepiteeli rakud on transitoorse epiteeli ja tubulaarse epiteeli rakud.</p> <ul style="list-style-type: none"><li>▪ Transitoorse epiteeli rakud pärinevad neeruvaagnast, kusejuhadest, põiest, kusiti ülemisest 2/3 (meestel). Viitavad neeruvälisele ehk kusejuha või põie patoloogiale.</li><li>▪ Tubulaarse epiteeli rakud pärinevad neerutorukestest, kogumistorukestest. Võivad esineda mitmesuguste ägedate ja krooniliste neeruhaiguste korral.</li></ul>                                                                                              |
| <b>Hüaliinsilindrid</b>                    | <p>Hüaliinsilindrid tekivad neerude distaalsetes tuubulustes TammHorsfelli valgust.</p> <ul style="list-style-type: none"><li>▪ tervel inimesel võivad esineda üksikud hüaliinsilindrid</li><li>▪ füsioloogilised põhjused: dehüdratsioon, diureetikumide tarvitamine intensiivne füüsiline koormus, palavik, kõrge keskkonna temperatuur</li><li>▪ neeruinfektsioonid, krooniline neeruhaigus, diabeetiline nefropaatia, südamepuudulikkus</li></ul>                                                                                                                    |
| <b>Patoloogilised silindrid</b>            | <p>Patoloogilised silindrid on: granulaar-, erütrotsütaar-, leukotsütaar-, tubulaarepiteel-, vahajad, rasv-, bakteriaalsilindrid.</p> <ul style="list-style-type: none"><li>▪ Patoloogiliste silindrite leid viitab neerukahjustusele</li></ul>                                                                                                                                                                                                                                                                                                                          |
| <b>Bakterid</b>                            | <p>Tulemuste tõlgendamisel tuleb arvesse võtta, et urotrakt ei ole steriilne, vaid põies esineb indigeene mikrobiota – urobioom. Lisaks võib uriin kontamineeruda ureetra ja välissuguelundite mikrobiotaga. Oluline on järgida proovivõtu juhiseid.</p> <ul style="list-style-type: none"><li>▪ Kuseteede bakteriaalse infektsiooni korral suureneb uriinis bakterite ja leukotsüütide hulk.</li></ul>                                                                                                                                                                  |
| <b>Hinnakirja koodid</b>                   | 66208                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Kirjandus</b>                           | <ol style="list-style-type: none"><li>1. EFLM European Urinalysis Guideline 2023</li><li>2. UriSed 3 PRO User manual, sw4.6</li><li>3. Brunzel NA (2004) Fundamentals of urine and body fluid analysis, 2nd Edition, Saunders (An Imprint of Elsevier): 188 –226</li><li>4. ELMÜ: Uroinfektsioonide (UTI) laboratoorse diagnostika juhised 2024</li></ol>                                                                                                                                                                                                                |