**Table 1. The results of reproducibility analysis for 3D and 2D tumor segmentation depending on the phase of CT procedure**

|  |  |  |
| --- | --- | --- |
| **CT procedures (n = 52)** | **ICC values [95% CI]** | |
| **3D segmentation** | **2D segmentation** |
| Cortico-medullary phase | 0.961 [0.946–0.971] | 0.058 [-0.282 – 0.309] |
| Nephrographic phase | 0.969 [0.958–0.977] | 0.057 [-0.288 – 0.31] |

CI, confidence interval; CT, computed tomography; N, number of assessments

**Table 2. The results of reproducibility analysis for 3D and 2D tumor segmentation depending on the tumor size in the axial slice**

|  |  |  |
| --- | --- | --- |
| **Group** | **ICC values [95% CI]** | |
| **3D segmentation** | **2D segmentation** |
| Tumor size ≥ 4 cm (n = 29) | 0.949 [0.932–0.962] | 0.037 [-0.282 – 0.279] |
| Tumor size < 4 cm (n = 23) | 0.983 [0.977–0.988] | 0.926 [0.897–0.947] |

CI, confidence interval; N, number of assessments

**Table 3. The results of statistical analysis of the reproducibility of the first order texture indices for 3D segmentation**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CT procedures (n = 52)** | **ICC value [95% CI]** | | | | | |
| **Texture indices** | | | | |  |
| **Mean** | **Skewness** | **Kurtosis** | **Entropy** | **Energy** |  |
| Cortico-medullary phase | Edge filter | 0.95 [0.913–0.971] | 0.93 [0.877–0.96] | 0.921 [0.863–0.955] | 0.984 [0.973–0.991] | 0.983 [0.97–0.99] |
| Periodic filter | 0.962 [0.934–0.978] | 0.937 [0.891–0.964] | 0.92 [0.86–0.954] | 0.973 [0.953–0.984] | 0.969 [0.946–0.982] |
| Reflect filter | 0.962 [0.934–0.979] | 0.961 [0.932–0.977] | 0.924 [0.867–0.956] | 0.987 [0.977–0.993] | 0.989 [0.98–0.993] |
| Nephrographic phase | Edge filter | 0.897 [0.816–0.941] | 0.862 [0.759–0.921] | 0.599 [0.304–0.769] | 0.952 [0.916–0.972] | 0.94 [0.895–0.965] |
| Periodic filter | 0.845 [0.728–0.911] | 0.798 [0.648–0.884] | 0.4 [-0.04 – 0.655] | 0.976 [0.957–0.986] | 0.976 [0.957–0.986] |
| Reflect filter | 0.922 [0.861–0.956] | 0.91 [0.843–0.948] | 0.684 [0.453–0.818] | 0.987 [0.978–0.993] | 0.991 [0.984–0.995] |

CI, confidence interval; CT, computed tomography; N, number of assessments

**Table 4. The results of statistical analysis of the reproducibility of the first order texture indices for 2D segmentation**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CT procedures (n = 52)** | **ICC value [95% CI]** | | | | | |
| **Texture indices** | | | | |  |
| **Mean** | **Skewness** | **Kurtosis** | **Entropy** | **Energy** |  |
| Cortico-medullary phase | Edge filter | 0.781 [0.617–0.874] | 0.841 [0.722–0.909] | 0.705 [0.484–0.831] | 0.91 [0.843–0.948] | 0.881 [0.793–0.932] |
| Periodic filter | 0.629 [0.354–0.787] | 0.705 [0.483–0.831] | 0.871 [0.776–0.926] | 0.917 [0.855–0.952] | 0.934 [0.885–0.962] |
| Reflect filter | 0.731 [0.532–0.845] | 0.741 [0.548–0.852] | 0.826 [0.697–0.9] | 0.923 [0.867–0.956] | 0.935 [0.887–0.963] |
| Nephrographic phase | Edge filter | 0.868 [0.772–0.924] | 0.473 [0.098–0.694] | 0.563 [0.247–0.748] | 0.824 [0.693–0.899] | 0.82 [0.687–0.897] |
| Periodic filter | 0.099 [-0.566 – 0.482] | 0.557 [0.224–0.747] | 0.405 [-0.031 – 0.658] | 0.871 [0.776–0.926] | 0.849 [0.738–0.913] |
| Reflect filter | 0.025 [-0.705 – 0.441] | 0.353 [-0.094 – 0.622] | 0.509 [0.155–0.716] | 0.883 [0.796–0.933] | 0.878 [0.787–0.93] |

CI, confidence interval; CT, computed tomography; N, number of assessments

**Table 5. The results of statistical analysis of the reproducibility of the first order texture indices for 3D and 2D segmentation depending on the tumor size  
in the axial slice**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **First order texture indices** | **ICC value [95% CI]** | | | | |
| **Tumor size ≥ 4 cm (n = 29)** | |  | **Tumor size < 4 cm (n = 23)** | |
| **2D segmentation** | **3D segmentation** | | **2D segmentation** | **3D segmentation** |
| Mean | 0.768 [0.68–0.83] | 0.905 [0.845–0.938] | | 0.122 [-0.224 – 0.371] | 0.949 [0.929–0.964] |
| Skewness | 0.667 [0.551–0.754] | 0.768 [0.687–0.828] | | 0.542 [0.358–0.673] | 0.944 [0.921–0.96] |
| Kurtosis | 0.837 [0.776–0.881] | 0.178 [-0.098 – 0.387] | | 0.467 [0.258–0.618] | 0.97 [0.958–0.978] |
| Entropy | 0.911 [0.88–0.934] | 0.984 [0.978–0.988] | | 0.895 [0.854–0.925] | 0.978 [0.97–0.985] |
| Energy | 0.94 [0.919–0.955] | 0.987 [0.982–0.991] | | 0.839 [0.775–0.885] | 0.962 [0.947–0.973] |

CI, confidence interval; N, number of assessments