

Robustness: Conditionally robust
Operational range: Present
Feature correctability: Correctable

Figure 1 consists of three subplots illustrating the relationship between Gaussian-interpolated voxel size (S) and feature value.

- Original:** The left plot shows the original feature value (rescaled) versus S (mm). The data points are connected by lines, showing a sharp peak at $S \approx 3.4$ mm. The correlation coefficient is $r_{rm} : 0.237 [0.207, 0.266]$.
- Robust regression best-fit:** The middle plot shows the feature value (rescaled) versus S (mm). A robust regression best-fit curve is shown, which is a smooth, slightly increasing curve. The equation for the fit is $f(S_{voxel}) = 0.001209 \cdot S_{voxel}^2 + 0.0002046$.
- After correction:** The right plot shows the corrected rescaled feature value versus S (mm). The data points are connected by lines, showing a much flatter relationship with a small peak at $S \approx 3.4$ mm. The correlation coefficient is $r_{rm} : 0.084 [0.052, 0.115]$.

The figure displays two side-by-side scatter plots comparing feature values across patient rankings. The x-axis for both plots is 'Patient ranking (lowest to highest tumour volume)', ranging from 0 to approximately 150. The y-axis for the left plot is 'Feature value (rescaled)', ranging from 0.00 to 1.00. The y-axis for the right plot is 'Corrected rescaled feature value', also ranging from 0.00 to 1.00. A legend on the right indicates 'Interpolated voxel size, S (mm)' with a color scale from 1.0 (purple) to 3.5 (teal). In the 'Original' plot, feature values are high (near 1.0) for low patient rankings and drop sharply to near 0.00 as ranking increases. In the 'After correction' plot, the feature values are consistently lower, starting around 0.65 for the lowest ranking and dropping to near 0.00 by ranking 50. The color of the points in both plots corresponds to the interpolated voxel size, with higher values (teal/green) generally appearing at lower patient rankings.

Wilcoxon test : $p \leq 0.001$

Percentage coefficient of variation (%CV)

Features

- Corrected
- Original

65.24

9.16

Patient ranking (lowest to highest tumour volume)