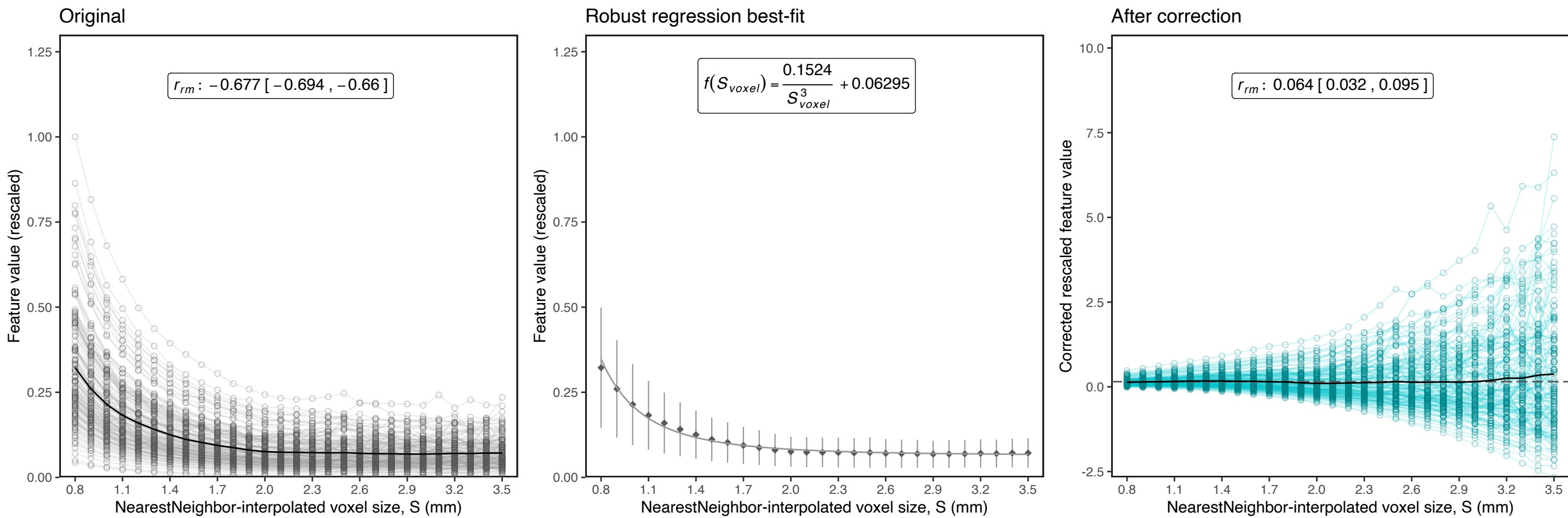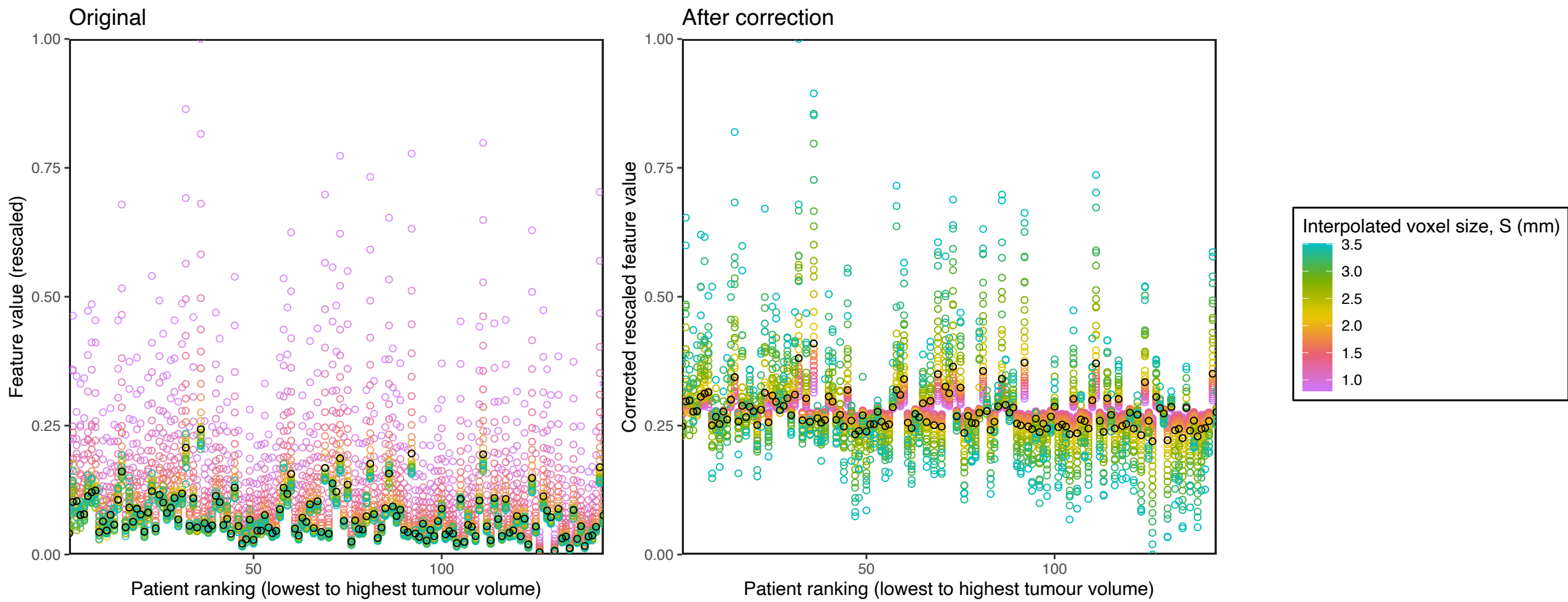# gIrlm LongRunHighGrayLevelEmphasis

Robustness: Conditionally robust
Operational range: Present
Feature correctability: Moderately correctable

Regression modelling to correct features

Original

$r_{rm}: -0.677 [-0.694, -0.66]$

Robust regression best-fit

$$f(S_{voxel}) = \frac{0.1524}{S_{voxel}^3} + 0.06295$$

After correction

$r_{rm}: 0.064 [0.032, 0.095]$

Feature response to NearestNeighbor interpolation resampling width for each patient, before and after correction

Original

After correction

Interpolated voxel size, S (mm)
3.5 / 3.0 / 2.5 / 2.0 / 1.5 / 1.0

Feature value dispersions per patient, before and after correction

Wilcoxon test : $p \leq 0.001$

62.23

15.03

Features
Corrected
Original