

Supplemental Material: Development of Normalised Quantitative Measures of Lumbar Disc Degeneration

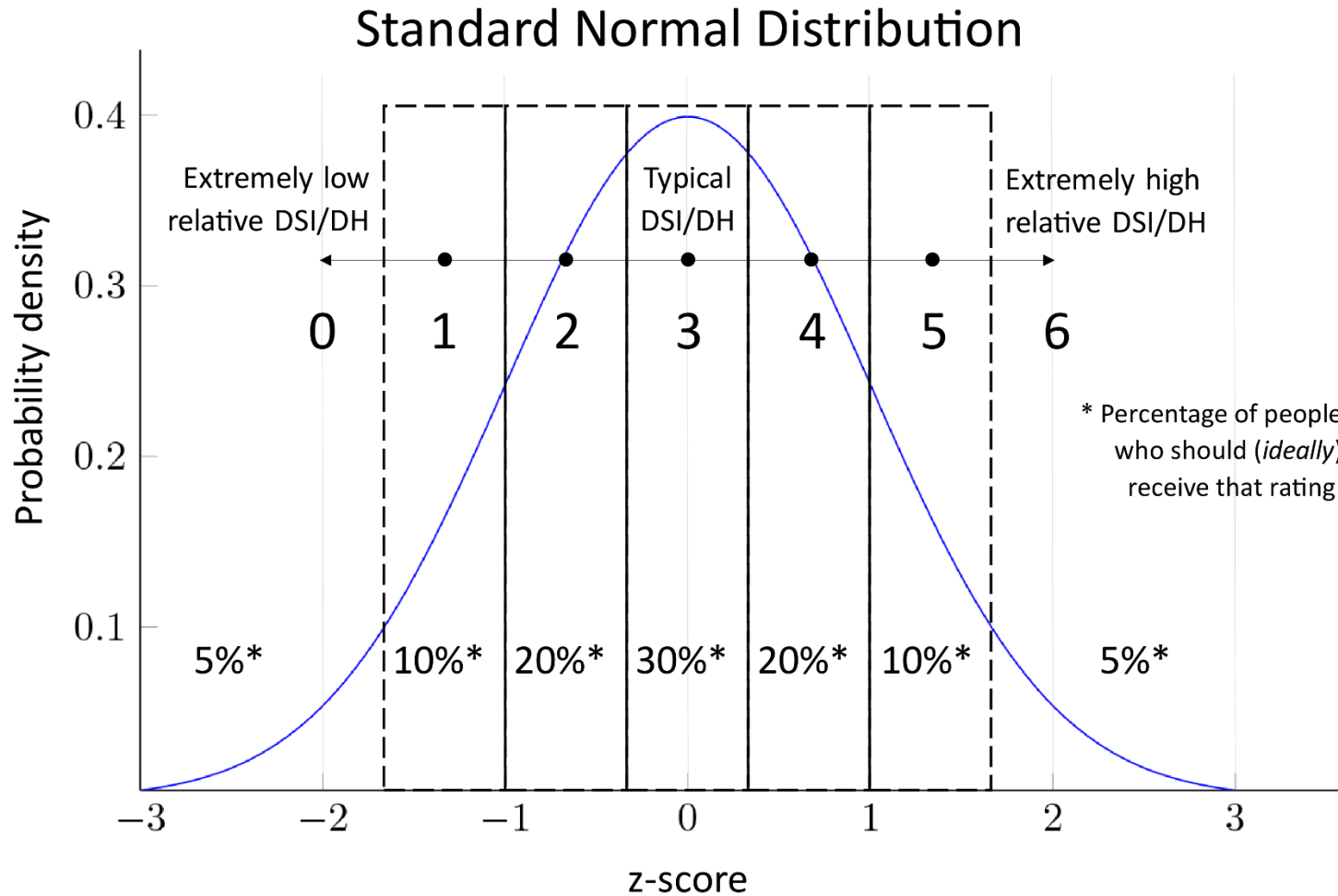


Figure S1. Graphical definition for the Radiologist's Normalised Measures.

**Table S1. Written definitions for the Radiologist's Normalised Measures.**

<b>Measure</b>	<b>Radiologist's Normalised DSI<sup>1</sup></b>	<b>Radiologist's Normalised DH<sup>2</sup></b>
6	Extremely high relative to typical DSI	Extremely high relative to typical DH
5	Much higher than typical DSI	Much higher than typical DH
4	Moderately higher than typical DSI	Moderately higher than typical DH
3	Typical DSI	Typical DH
2	Moderately lower than typical DSI	Moderately lower than typical DH
1	Much lower than typical DSI	Much lower than typical DH
0	Extremely low relative to typical DSI	Extremely low relative to typical DH

<sup>1</sup> “Typical DSI” is relative to surrounding intensities, age, sex, and disc level. <sup>2</sup> “Typical DH” is relative to vertebral/lumbar height, age, sex, and disc level.

**Table S2. Results from the ICC reliability tests of the MRI Data.**

<b>MRI Measurement</b>	<b>ICC (n=25)</b>	<b>95% CI</b>
Mean disc signal intensity	1.00	[0.99,1.00]
Mean CSF signal intensity	0.98	[0.95,0.99]
Mean spinal cord signal intensity	0.99	[0.99,1.00]
Anterior disc height	0.98	[0.95,0.99]
Middle disc height	0.96	[0.87,0.98]
Posterior disc height	0.90	[0.79,0.96]
Anterior vertebral body height	0.97	[0.89,0.99]
Middle vertebral body height	0.98	[0.95,0.99]
Posterior vertebral body height	0.95	[0.88,0.98]
Anterior L1-L4 height	0.99	[0.99,1.00]
Middle L1-L4 height	0.99	[0.98,1.00]
Posterior L1-L4 height	0.99	[0.98,1.00]
Anterior L4-S1 height	0.97	[0.93,0.99]
Middle L4-S1 height	0.96	[0.91,0.98]
Posterior L4-S1 height	0.95	[0.88,0.98]

ICC := intraclass correlation coefficient; 95% CI := 95% confidence interval. All

measurements were taken using a midsagittal view.