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9. Supplementary Material

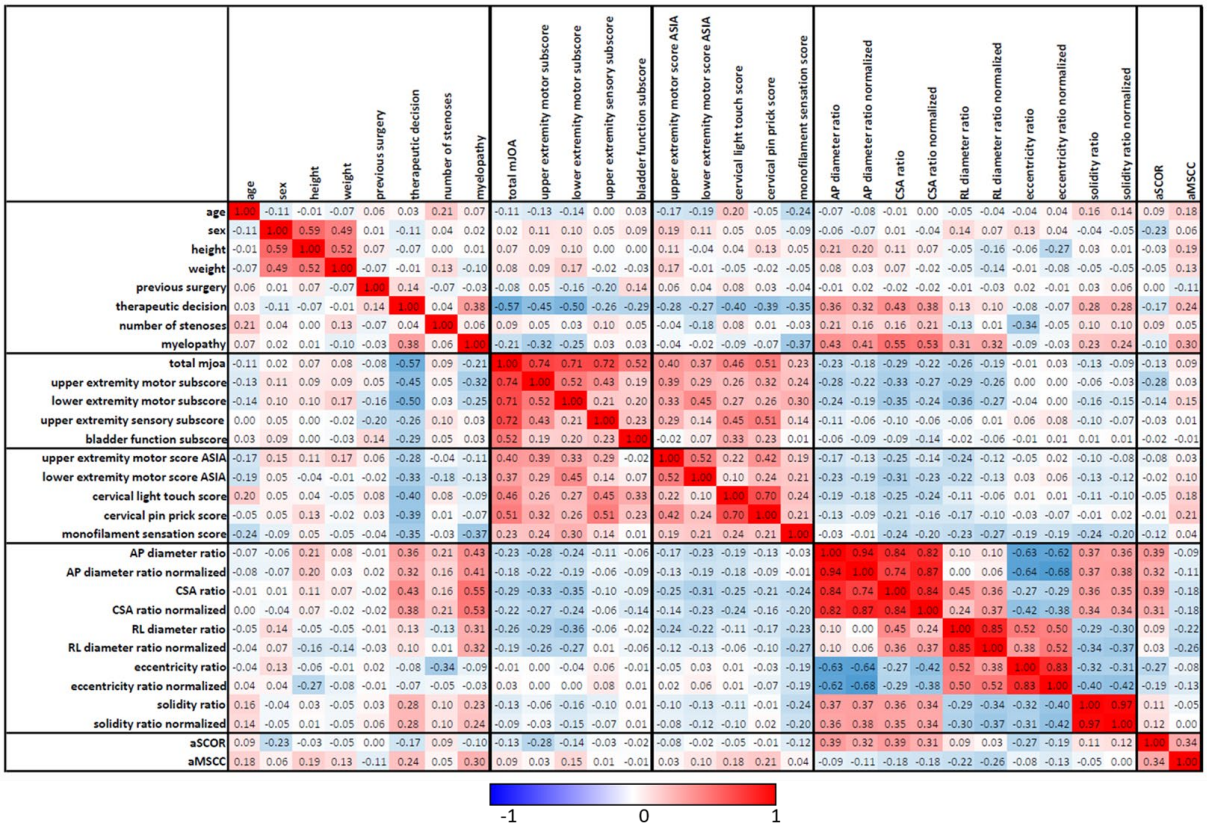

Figure S1. *Correlation matrix of demographics, clinical scores, clinical data, automatic, normalized and manual morphometric ratios. Spearman's correlation coefficient was computed for continuous variables, phi coefficient was computed across dichotomous variables and the Point-biserial correlation was computed across continuous and dichotomous variables. Sex, previous surgery, myelopathy and the therapeutic decision were the dichotomous variables.*

9.1. Clinical data correlations

AP diameter ratio (ρ=0.36), AP diameter ratio normalized (ρ=0.32), CSA ratio (ρ=0.43), CSA ratio normalized (ρ=0.38), solidity ratio (ρ=0.28), and solidity ratio normalized (ρ=0.28) were significantly correlated with the therapeutic decision. Normalized ratios seem to have lower correlations with the therapeutic decision than the ratios without normalization. For the manual morphometrics, aSCOR correlated significantly with the therapeutic decision (ρ=0.24), while aMSCC did not significantly correlate with the therapeutic decision.

The therapeutic decision significantly (p-value<0.05) correlated with the mJOA (ρ=-0.57), mJOA upper extremity motor subscore (ρ=-0.45), mJOA lower extremity motor subscore (ρ=-0.50), mJOA upper extremity sensory subscore (ρ=-0.26), mJOA bladder function subscore (ρ=-0.26), radiological signs of myelopathy (ρ=0.38), upper extremity motor score ASIA (ρ=-0.28), lower

extremity motor score ASIA (ρ=-0.27), cervical light touch score (ρ=-0.40), the cervical pin prick score, (ρ=-0.39), and the monofilament sensation score (ρ=-0.35).

Radiological signs of myelopathy significantly correlated with AP diameter ratio (ρ=0.43), AP diameter ratio normalized (ρ=0.41), CSA ratio (ρ=0.55), CSA ratio normalized (ρ=0.53), RL diameter ratio (ρ=0.31), RL diameter ratio normalized (ρ=0.32), and aSCOR (ρ=0.30) while it did not correlate significantly with aMSCC.

The number of stenoses significantly correlated with age (ρ=0.21, p-value=0.034).