

# Supplementary for "Cytoskeletal and motility changes in human MSCs associated with nuclear-cytoplasmic Rho redistribution during replicative senescence"

immediate

## 1 | ADDITIONAL TABLES

**TABLE 1** Cheddock scale for Kendall correlation coefficient estimation

Tau-Kendall Correlation coeff value	Colocalization
< 0.1	no link
0.1-0.3	weak
0.3-0.5	moderate
0.5-0.7	noticeable
0.7-0.9	high
0.9-0.99	very high

**TABLE 2** PCA analysys of myosin-9/F-actin colocalization data loadings for 2 factors

	Rval	tM1	tM2	bTau	Rs
Factor 1	0.77	0.91	0.97	0.19	0.23
Factor 2	0.46	0.13	0.17	0.98	0.96
Uniqueness	0.198	0.159	0.039	0.005	0.024

## 2 | ADDITIONAL FIGURES

**TABLE 3** Kruskal-Wallis rank sum test results for myosin-9 and F-actin colocalization coefficients

Colocalization coefficient	chi-squared	df	p-value
Kendall's Tau-b	34.669	10	0.0001422
Spearman's R	34.373	10	0.0001596
Manders' M	16.107	10	0.09661
Pearson's R	15.152	10	0.1266

**TABLE 4** Logistic regression with myosin-9 and F-actin colocalization coefficients as predictors and passage number as fitted values

	Df	Deviance	Resid. Df	Resid. Dev	Pr(>Chi)
NULL			115	68.13	
Rval	1	0.95	114	67.18	0.3295
tM1	1	0.91	113	66.27	0.3407
tM2	1	1.32	112	64.96	0.2510
bTau	1	4.14	111	60.82	0.0419 *
Rs	1	0.20	110	60.61	0.6509

**TABLE 5** Logistic regression with  $\alpha$ -actinin-4 and nucleus colocalization coefficients as predictors and passage number as fitted values

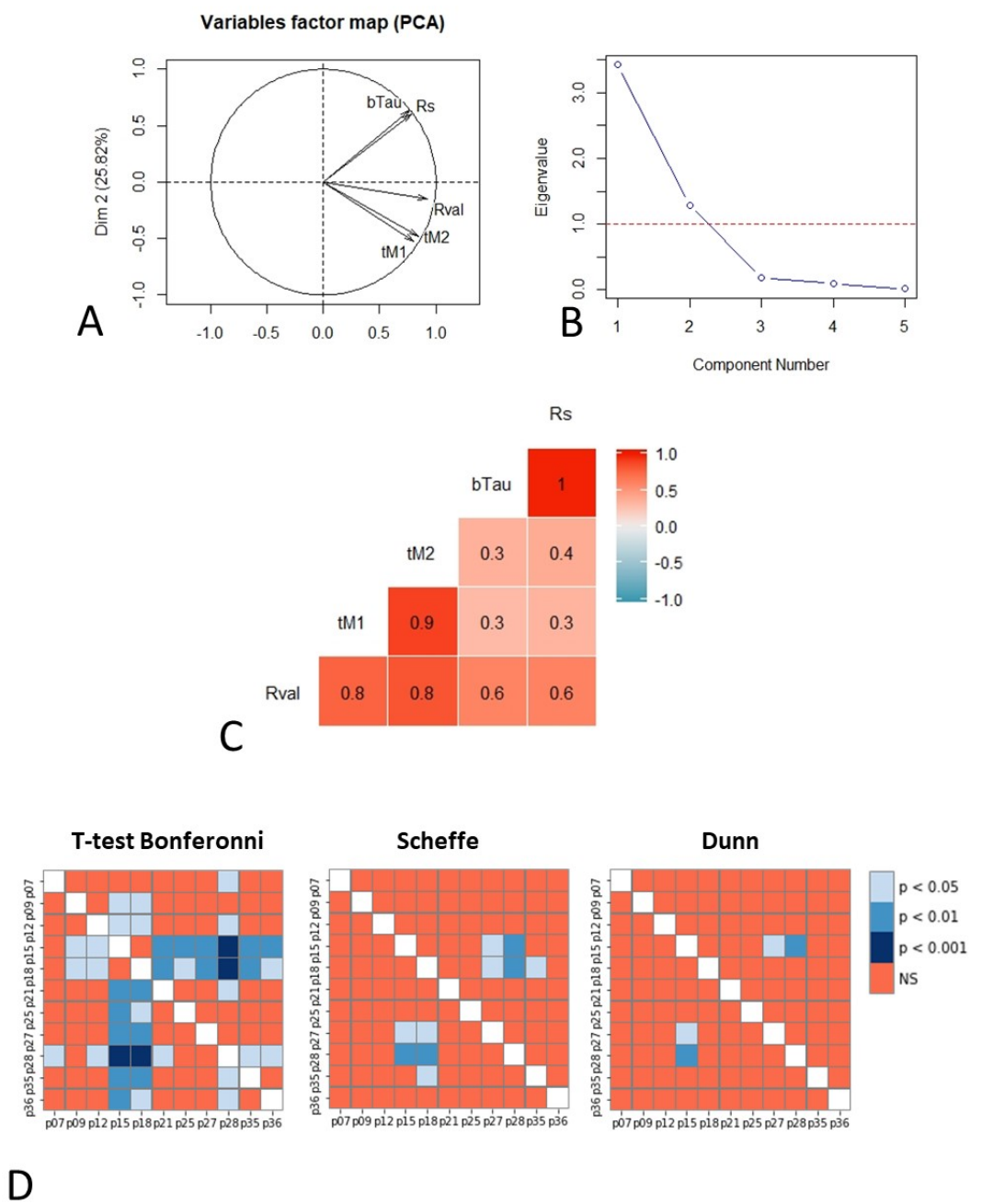
	Estimate	Std. Error	z value	Pr(> z )
(Intercept)	3.7063	1.6058	2.31	0.0210
bTau	58.8841	22.4644	2.62	0.0088
tM1	-0.9898	1.5118	-0.65	0.5126
tM2	-1.9521	1.6107	-1.21	0.2256
Rval	-4.3852	1.9107	-2.30	0.0217
Rs	-50.4674	17.4231	-2.90	0.0038

**TABLE 6** Logistic regression with RhoA and nucleus colocalization coefficients as predictors and passage number as fitted values

	Estimate	Std. Error	z value	Pr(> z )
(Intercept) (**)	2.2687	0.7100	3.20	0.0014
bTau (***)	97.1021	27.8353	3.49	0.0005
Rval	0.5242	1.3355	0.39	0.6947
Rs (***)	-78.1599	22.1536	-3.53	0.0004



F-actin and Myosin-9 colocalization in MSCWJ-1



**FIGURE 2** (A) Variables factor map (PCA) (C) Scree plot (D) Correlation plot (E) Pairwise comparison post hoc tests.