Additional file 2: Comparison of results with and without RPP correction

The paper shows myocardial blood flow (MBF) and myocardial perfusion reserve (MPR) after normalizing the resting MBF values with the rate-pressure product (RPP). This additional file shows the variation of RPP and perfusion results with and without normalizing the resting studies for RPP. Figure A2.1 shows a plot comparing the RPP values of the 10 subjects between scan 1 and scan 2.

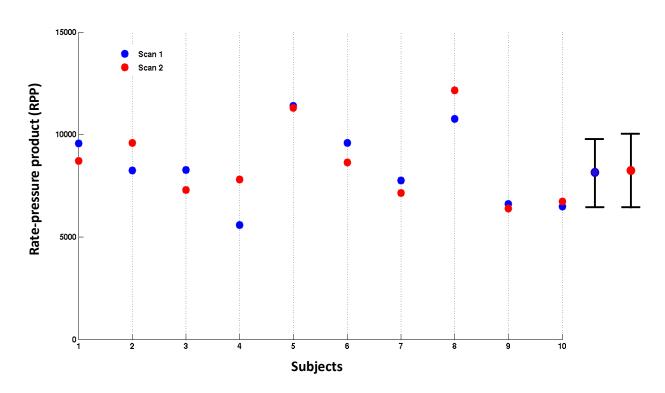


Figure A2.1: A comparison of the RPP values between scan 1 and scan 2 for all 10 subjects

It is seen from Figure A2.1 that the RPP values were similar between scans for each subject. A comparison of the segmental resting MBF values and the segmental MPR values with and without RPP normalization was also done. Table TA2.1a shows a summary of the segmental MBF and MPR values for the self-gated near-systole dataset. Similarly, Table TA2.1b shows a summary of the segmental MBF and MPR values for the self-gated near-diastole dataset.

a)	Mean ± SD (Scan 1)	Mean ± SD (Scan 2)	CoV (%)
Rest RPP	0.7 ± 0.2	0.7 ± 0.2	22.7
Rest No RPP	0.6 ± 0.2	0.6 ± 0.2	26
MPR RPP	2.6 ± 0.7	2.5 ± 0.8	25
MPR No RPP	2.7 ± 1	2.6 ± 1.2	31.6

b)	Mean ± SD (Scan 1)	Mean ± SD (Scan 2)	CoV (%)
Rest RPP	0.7 ± 0.3	0.7 ± 0.3	44.9
Rest No RPP	0.6 ± 0.2	0.6 ± 0.3	53.4
MPR RPP	2.9 ± 0.9	3 ± 1.2	47.2
MPR No RPP	3 ± 1.6	3 ± 1.8	70.1

Table TA2.1: A summary of the segmental resting MBF and segmental MPR values with and without RPP normalization for a) self-gated near-systole and b) self-gated near-diastole

It is seen from Table TA2.1 that the CoV improves after normalizing the resting MBF values by the rate-pressure product.