Supplemental digital content

Figure S1 Experimental procedure

Figure S2 Flow chart of study participants

Figure S3 Troponin T levels after surgery

Table S1 Pre- and postoperative MIF concentration in serum samples

Table S2 Pre- and postoperative CXCL12 concentration in serum samples

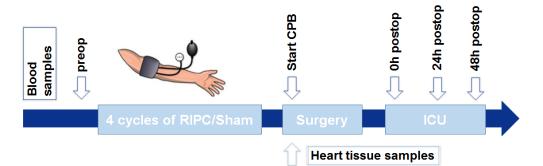


Figure S1 Experimental procedure. Blood samples were drawn prior to surgery, after RIPC by 4 cycles of 5min arm ischemia/5 min reperfusion (n=19) and sham (n=21) procedure, after connection to cardiopulmonary bypass (CPB), at the end of surgery, 24h postoperatively and 48h after surgery.

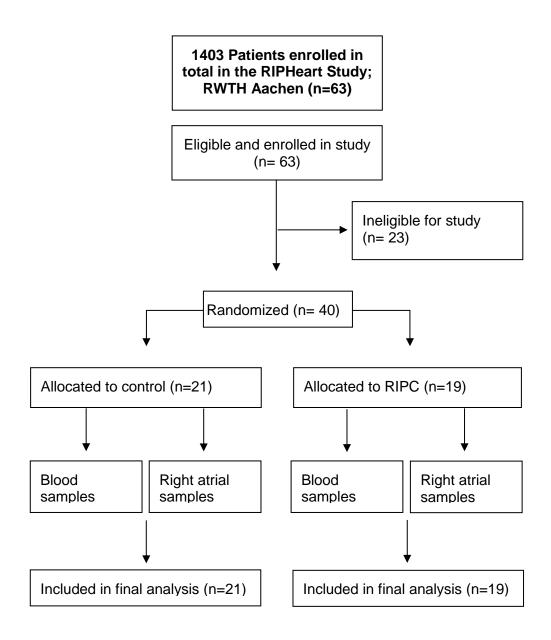


Figure S2. Flow chart of study participants.

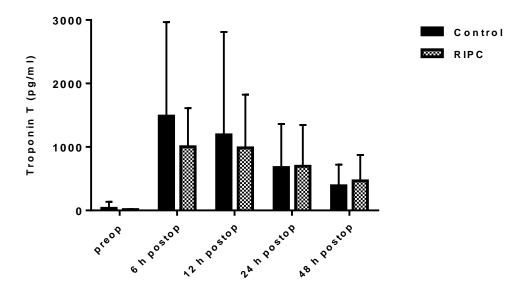


Figure S3. Troponin T levels after surgery. Troponin T levels were measured before surgery (Pre-OP) and 6h, 12h, 24h, 48h after cardiac surgery. Data represents means+/-SD.

Table S1 MIF data.

| | Control group (n=21) | | RIPC group (n=19) | | |
|-------------------------------------|----------------------|------------------------------------|-------------------|------------------------------------|--------------------------------|
| MIF (ng/ml) | Mean ± SD | p-value compared to baseline | Mean ± SD | p-value compared to baseline | p-value comparing groups |
| A (before surgery) | 53.4 ±53.31 | 1 | 57.35 ±60.99 | 1 | 0.828 |
| X (after RIPC, before HLM) | 71.58 ±63.51 | 0.255 | 61.62 ±69.15 | 0.802 | 0.665 |
| B (ICU admission) | 90.59 ±69.26 | 0.023 | 84.9 ±82.7 | 0.164 | 0.814 |
| D (24h after surgery) | 52 ±63.98 | 0.921 | 38.86±46.4 | 0.10 | 0.466 |
| E (48h after surgery) | 55.54 ±38,46 | 0.812 | 47.29 ±52.28 | 0.426 | 0.587 |

Table S2 CXCL12 data.

| | Control group (n=21) | | RIPC group (n=19) | | |
|-------------------------------------|----------------------|---------------------------------------|-------------------|---------------------------------------|--------------------------------|
| CXCL12 (pg/ml) | Mean ± SD | p-value compared to baseline | Mean ± SD | p-value compared to baseline | p-value comparing groups |
| A (before surgery) | 276.46±243.45 | 1 | 322.29±247.89 | 1 | 0.597 |
| X (after RIPC, before HLM) | 188.60±140.38 | 0.029 | 198.88±113.51 | 0.001 | 0.827 |
| B (ICU admission) | 912.05±789.81 | 0.002 | 793.85±448.23 | 0.001 | 0.607 |
| D (24h after surgery) | 271.94±226.32 | 0.934 | 214.71±128.65 | 0.008 | 0.405 |
| E (48h after surgery) | 351.08±329.60 | 0.364 | 299.34±164.49 | 0.597 | 0.587 |