**Effect of collection matrix, platelet depletion, and storage conditions on plasma extracellular vesicles and extracellular vesicle-associated miRNAs measurements**

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**Supplementary Table 3. Matched detected and undetected EV-miRNAs in between-group comparison.**

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|  |  | **-80°C** | | | |  | **24 h RT** | | | |  | **24 h 4°C** | | | |
| **N=179** | | **Detected**  **EV-miRNAs** | **Undetected**  **EV-miRNAs** | ***McNemar's***  **Test**  df(1) | **p-value** |  | **Detected EV-miRNAs** | **Undetected EV-miRNAs** | ***Mc Nemar's* Test**  df(1) | **P -value** |  | **Detected EV-miRNAs** | **Undetected EV-miRNAs** | ***Mc Nemar's* Test**  df(1) | **p-value** |
|  |  | ***K2E*** | |  |  |  | ***K2E*** | |  |  |  | ***K2E*** | |  |  |
| ***PPT*** | **Detected EV-miRNAs** | 138 | 5 | 17.361 | < 0,001 | **Detected EV-miRNAs** | 130 | 10 | 8.308 | 0.004 | **Detected EV-miRNAs** | 151 | 22 | 11.115 | < 0,001 |
| **Undetected EV-miRNAs** | 21 | 15 | **Undetected EV-miRNAs** | 29 | 10 | **Undetected EV-miRNAs** | 4 | 2 |
| ***PPP*** |  | ***K2E*** | |  |  |  | ***K2E*** | |  |  |  | ***K2E*** | |  |  |
| **Detected EV-miRNAs** | 114 | 1 | 40.196 | < 0,001 | **Detected EV-miRNAs** | 79 | 3 | 68.598 | < 0,001 | **Detected EV-miRNAs** | 87 | 5 | 52.658 | < 0,001 |
| **Undetected EV-miRNAs** | 45 | 19 | **Undetected EV-miRNAs** | 79 | 18 | **Undetected EV-miRNAs** | 68 | 19 |
|  |  | ***PPT*** | |  |  |  | ***PPT*** | |  |  |  | ***PPT*** | |  |  |
| ***PPP*** | **Detected EV-miRNAs** | 106 | 9 | 15.848 | < 0,001 | **Detected EV-miRNAs** | 71 | 12 | 38.716 | < 0,001 | **Detected EV-miRNAs** | 92 | 0 | 79.012 | < 0,001 |
| **Undetected EV-miRNAs** | 37 | 27 | **Undetected EV-miRNAs** | 69 | 27 | **Undetected EV-miRNAs** | 81 | 6 |

Number of matched detected and undetected EV-miRNAs are expressed as absolute values. McNemar's test with continuity correction was used to analyzed the following comparisons, between two conditions: K2E-PPP, K2E-PPT and PPP-PPT immediately stored at -80°C, K2E-PPP, K2E-PPT, and PPP-PPT stored for 24 h at RT, and K2E-PPP, K2E-PPT, and PPP-PPT stored for 24 h at 4°C. p-value is shown for all comparisons and was considered significant when p-value< 0.05.

Abbreviations: RT: room temperature; K2E: dipotassium ethylendiaminotetraacetate tubes; PPP: platelet-poor plasma; PPT: plasma preparation tubes.