Supplemental Materials

Resolvin D1 and Resolvin D2 Govern Local Inflammatory Tone in Obese Fat[1]

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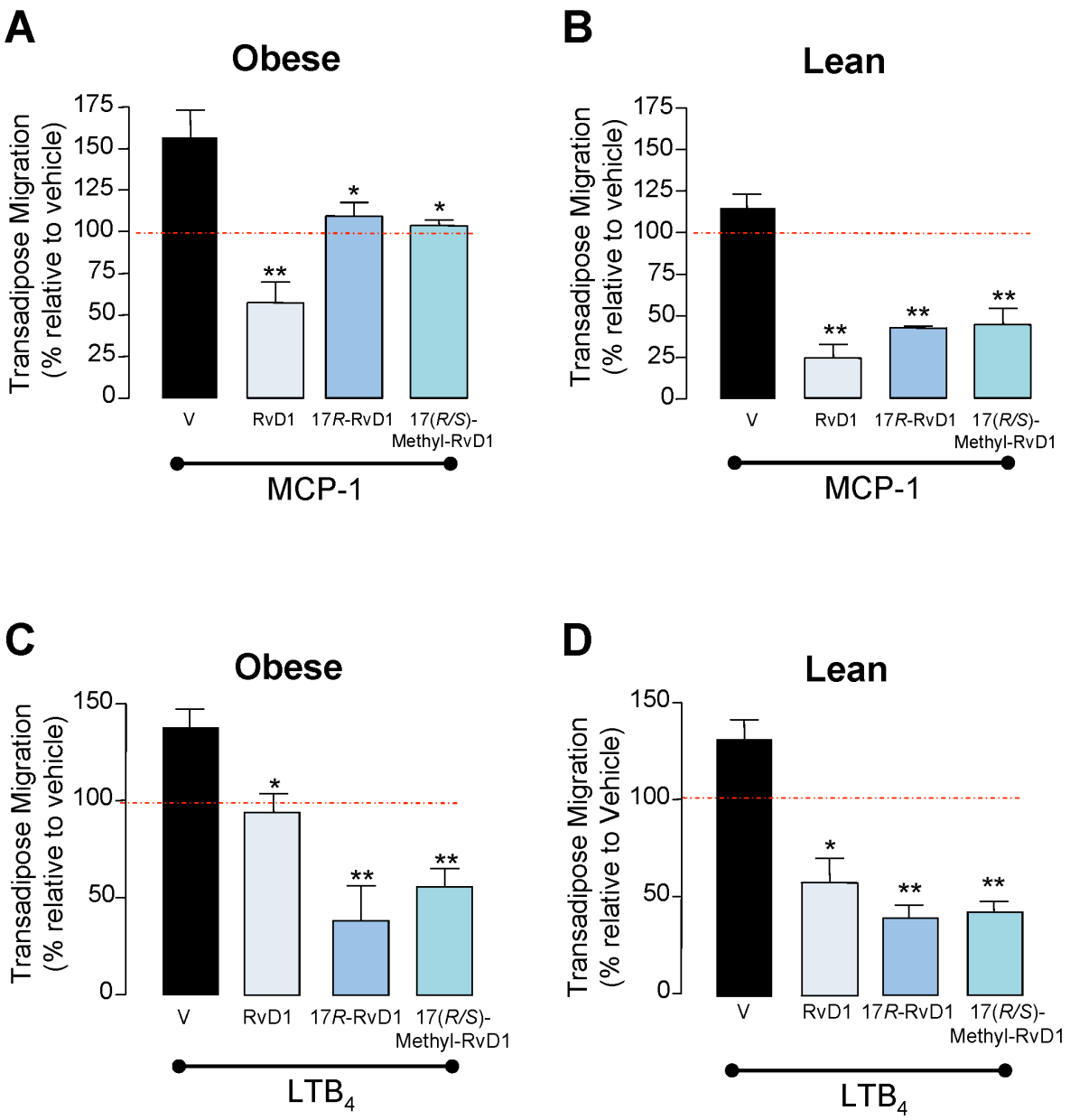
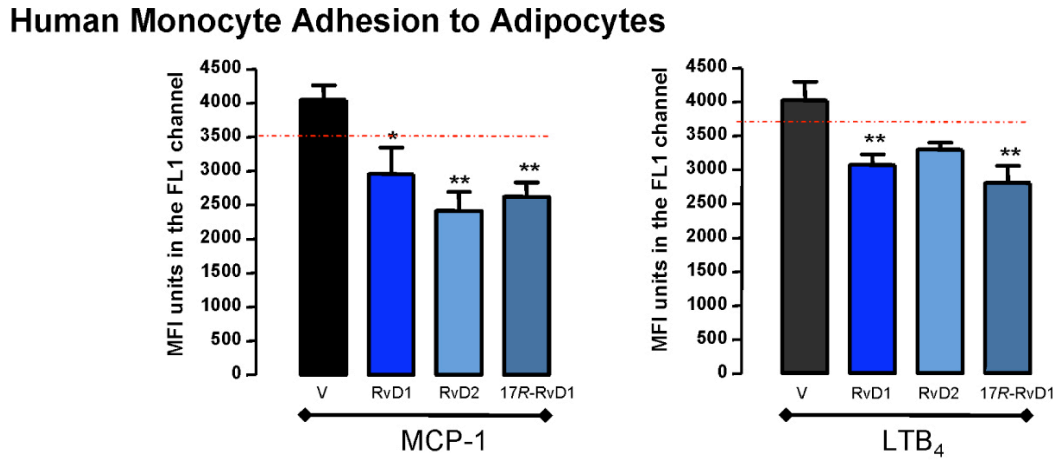


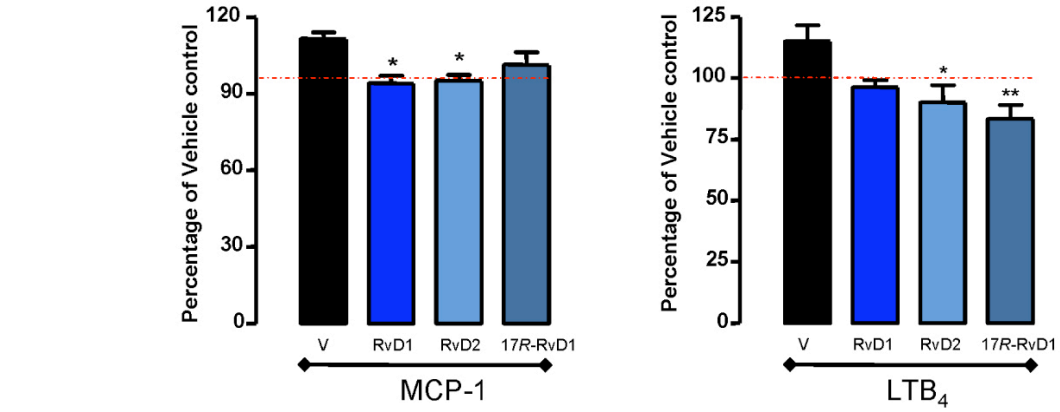
Figure S1. 17*R*-RvD1 and 17(*R/S*)-Methyl-RvD1 are potent inhibitors of monocyte transadipose migration. Murine adipocytes were loaded onto a 96-well ChemoTx® plate and either MCP-1 (15 ng/ml) or LTB_4 (10 nM) were added to the lower wells. Bone marrow-derived monocytes from either obese (**A,C**) or lean (**B,D**) mice were loaded on top of a 3 µm-pore size

filter in the presence of 10 nM of RvD1, 17*R*-RvD1 or 17(*R/S*)-Methyl-RvD1 and then co-incubated for 90 min at 37^{o}C. The number of transmigrated monocytes was assessed by flow cytometry using anti-CD11b antibodies. Results represent the mean±SEM of 3 experiments assayed in triplicate. *, *P<0.05* and **, *P<0.01* versus cells receiving MCP-1 or LTB_4 alone.

A


Human Monocyte Adhesion to Adipocytes
MFI units in the FL1 channel
4500
4000
3500
3000
2500
2000
1500
1000
500
0
*
**
**
V
RvD1
RvD2
17R-RvD1
MCP-1
**
**
LTB4

B


Human Monocyte Transadipose Migration
Percentage of Vehicle control
120
90
60
30
0
*
*
V
RvD1
RvD2
17R-RvD1
MCP-1
125
100
75
50
25
0
*
**
LTB4

C

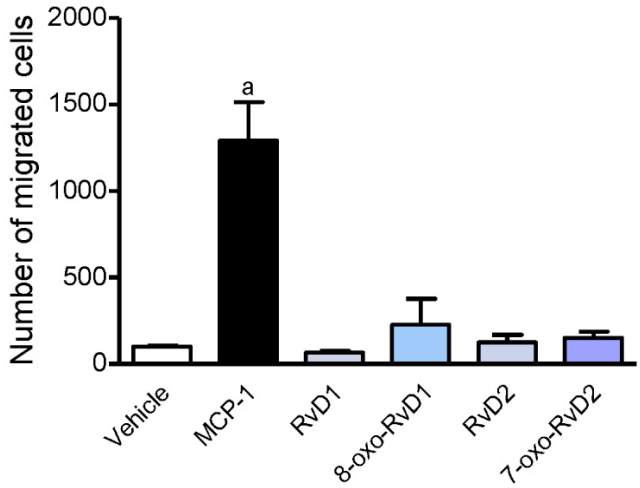

Number of migrated cells
2000
1500
1000
500
0
a
Vehicle
MCP-1
RvD1
8-oxo-RvD1
RvD2
7-oxo-RvD2

Figure S2. Resolvins reduce human monocyte adhesion to human adipocytes and transadipose migration. Human adipocytes were loaded onto a 96-well ChemoTx® plate and either MCP-1 (15 ng/ml) or LTB_4 (10 nM) were added to the lower wells. Peripheral blood monocytes were loaded on top of a 3 μm-pore size filter in the presence of 10 nM of RvD1, RvD2 or 17*R*-RvD1 and then co-incubated for 90 min at 37°C. The number of monocytes adhered to adipocytes (**A**) and the number of transmigrated monocytes (**B**) were assessed by flow cytometry using anti-perilipin and anti-CD11b antibodies. Results represent the mean±SEM of 3 experiments assayed in triplicate. *, *P<0.05* and **, *P<0.01* versus cells receiving MCP-1 or LTB_4 alone. (**C**) **RvD1, RvD2 and the oxo-containing RvD1 and RvD2 metabolites do not induce a chemotactic response in monocytes.** MCP-1, RvD1, 8-oxo-RvD1, RvD2 and 7-oxo-RvD2 were loaded in the bottom wells of the ChemoTx® plates and monocytes were loaded on top of the filter (3 μm pore size). Plates were then incubated (90 min, 37°C) and the number of transmigrated cells was assessed as described in Materials and Methods. *a*, *P<0.005* versus vehicle.