Supplementary Table S1: Antigen-specific fluorochrome-labelled monoclonal antibodies used for flow cytometry assays.

Antigen	Antobody	Reporter	Manufacture	Clone	Isotype	Dilution	Cat#
LRP1	Anti-LRP1-α	PE	AbD Serotec	MCA1965	Mouse IgG1	1/100	MCA1965PE
CD14	Anti-CD14	FITC	BD Biosciences	MφP9	Mouse IgG2b	1/50	561708
CD16	Anti-CD16	APC-Cy7	BD Biosciences	3G8	Mouse IgG1	1/50	557758
CD45	Anti-CD45	PC5	Beckam Coulter	J.33	Mouse IgG1	1/50	IM2653
CD36	Anti-CD36	PerCP-Cy5.5	BD Biosciences	CB38	Mouse IgM	1/100	561536
CD11b	Anti-CD11b	PerCP-Cy5.5	BD Biosciences	-------	Rat IgG2b	1/100	561114
CD11c	Anti-CD11c	PerCP-Cy5.5	BD Pharmingen	B-ly6	Mouse IgG1	1/100	565227

FITC, Fluorescein isothiocyanate; APC-Cy7, Allophycocyanin dye coupled with Cyanine 7; PE, R-phycoerythrin; PC5, phycoerythrin dye coupled with Cyanine 5; PerCP-Cy5.5, Peridinin-chlorophyll-protein Complex: CY5.5 Conjugate. AbD Serotec from Bio-Rad Laboratories, Inc. (Oxford, UK), BD Biosciences/Pharmingen (San Jose, CA); Beckam Coulter (Krefeld, Germany).

Supplementary Table S2: Specific primers for quantitative RT-PCR.

Gen	**NM/ID**	**Sequence:** **sense primer (F)** **anti-sense primer (R)**
LRP1	002332.2/4035	F 5´ -CTATGCACGCCCCTAAGACTT- 3´ R 5´-CATCGCTGGGCCTTACTCT- 3´
TNF-α	000594.3/7124	F 5´-TGCACTTTGGAGTGATCGGC -3´ *R 5´-GCTTGAGGGTTTGCTACAACA -3´*
IL-1β	000576.2/3553	F 5´-ATGATGGCTTATTACAGTGGCAA 3´ R 5´-GTCGGAGATTCGTAGCTGGA -3´
CCL2	002982.3/6247	F 5´-CTTCATTCCCCAAGGGCTC -3´ R 5´-GGTTTGCTTGTCCAGGTGGT -3´
CCR2	001123041.2/729230	F 5´-GGGATGACTCACTGCTGCAT -3´ R 5´-GGAGTGGGGCAATCCTACAG -3´
GAPDH	001256799.2/2597	F 5´-CTCCGGGTGATGCTTTTCCT 3´ R 5´-TGAAGGGGTCATTGATGGCA -3´

Supplementary Table S3: Correlation analysis between LRP1 expression at cell surface of total monocytes and CVD risk parameters

Parameters	**Total Individuals (n=227)**	**Low risk group (LR) (n=21)**	**Intermediate group (IR) (n=124)**	**Subclinical atherosclerosis group (SCA) (n=82)**
BMI, kg/m^2	***r*= -0,0835** ***p*= 0.2102**	***r*=** -0,0374 ***p*=** 0.8721	***r*=** 0,0713 ***p*=** 0.4314	***r*=** -0,1341 ***p*=** 0.2296
Total Cholesterol, mg/dl	***r*= -0.1718** ***p*= 0.0095**	***r*=** 0,1678 ***p*=** 0.4671	***r*=** -0,1457 ***p*=** 0.1064	***r*=** -0,0685 ***p*=** 0.5411
Triglycerides, mg/dl	***r*=** -0,1290 ***p*=** 0.0522	***r*=** 0,0327 ***p*=** 0.8880	***r*=** -0,0717 ***p*=** 0.4288	***r*=** -0,1087 ***p*=** 0.3312
LDLc, mg/dl	***r*=** -0,1235 ***p*=** 0.0632	***r*=** 0,3426 ***p*=** 0.1284	***r*=** -0,0302 ***p*=** 0.7395	***r*=** -0,0905 ***p*=** 0.4190
Non-HDLc, mg/dl	***r*= -0,1611** ***p*= 0.0151**	***r*=** 0,2796 ***p*=** 0.2197	***r*=** -0,0630 ***p*=** 0.4871	***r*=** -0,1043 ***p*=** 0.3511

LRP1 levels were log-transformed to achieve normal distribution and to apply the Pearson correlation analysis. Other parameters showed normal distribution. **BMI**, body mass index; **LDLc**, low density lipoprotein-cholesterol; **non-HDLc**, non-high density lipoprotein-cholesterol. Significant value, *p*<0.05. **Bold font** indicates parameter with statistical significance.

Supplementary Table S4: CD36, CD11b and CD11c expression at cell surface in total monocytes and monocyte subsets in LR, IR and SCA groups (Study I)

Monocyte marker MFI, arbitrary units	**Without Subclinical Atherosclerosis**		**Subclinical Atherosclerosis (SCA) (n=82)**	***p*-value* *Binary comparison*****
	Low Risk Group (LR) (n=21)	**Intermediate Risk Group (IR) (n=124)**		
CD36-Total Monocytes Median [IQR]	100.0 [76.2-124.0]	91.6 [68.6-117.0]	86.6 [60.2-117.0]	0.4077 ***a***, *ns* ***b***, *ns* ***c***, *ns*
CD36-Classical Monocytes Median [IQR]	136.0 [110.5-177.5]	124.0 [91.8-169.8]	124.0 [87.4-162.0]	0.6453 ***a***, *ns* ***b***, *ns* ***c***, *ns*
CD36-Intermediate Monocytes Median [IQR]	57.6 [41.4-75.6]	52.6 [37.7-71.6]	51.6 [38.4-75.8]	0.7196 ***a***, *ns* ***b***, *ns* ***c***, *ns*
CD36-Non-classical Monocytes Median [IQR]	6.8 [5.9-8.8]	8.4 [6.7-10.4]	8.0 [7.0-9.9]	0.0934 ***a***, *ns* ***b***, *ns* ***c***, *ns*
CD11b-Total Monocytes Median [IQR]	30.0 [19.2-40.5]	23.7 [15.6-31.9]	25.3 [17.7-33.5]	0.1380 ***a***, *ns* ***b***, *ns* ***c***, *ns*
CD11b-Classical Monocytes Median [IQR]	38.2 [22.2-51.3]	28.5 [20.2-39.7]	30.3 [23.0-43.0]	0.2010 ***a***, *ns* ***b***, *ns* ***c***, *ns*
CD11b-Intermediate Monocytes Median [IQR]	23.5 [14.1-36.3]	18.2 [11.0-25.8]	21.8 [13.3-32.2]	0.0576 ***a***, *ns* ***b***, *ns* ***c***, *ns*
CD11b-Non-classical Monocytes Median [IQR]	8.0 [5.6-8.4]	6.6 [5.6-8.8]	7.4 [5.6-9.1]	0.3314 ***a***, *ns* ***b***, *ns* ***c***, *ns*
CD11c-Total Monocytes Median [IQR]	711 [639-766]	597 [419-705]	535 [450-656]	0.2065 ***a***, *ns* ***b***, *ns* ***c***, *ns*
CD11c-Classical Monocytes Median [IQR]	643 [563-795]	561 [410-700]	533 [456-664]	0.1558 ***a***, *ns* ***b***, *ns* ***c***, *ns*
CD11c-Intermediate Monocytes Median [IQR]	1606 [1307-1937]	1460 [1263-1665]	1468 [1288-1670]	0.5964 ***a***, *ns* ***b***, *ns* ***c***, *ns*
CD11c-Non-classical Monocytes Median [IQR]	1246 [1130-1425]	1147 [772-1365]	1020 [849-1224]	0.0920 ***a***, *ns* ***b***, *ns* ***c***, *ns*

Values are median (IQR, interquartile range). Parameters were log-transformed to achieve normal distribution and to apply statistical parametric analysis, but in these table the original data were used. * Ordinary one-way ANOVA; *ns*, non-significant. ****a***, ***b***, and ***c***: umpired *t*-test for mean values; ***a***, IR vs LR; ***b***, SCA vs LR; and ***c***, SCA vs IR. Significant value, *p*<0.05. **MFI**, mean fluorescence intensity.

Supplementary Table S5: Clinical and biochemical parameters (Study II).

Parameters	**Without Subclinical Atherosclerosis**		**Subclinical Atherosclerosis Group (SCA) (n=16)**	***p*-value*** ***Binary comparison****
	Low Risk Group (LR) (n=16)	**Intermediate Risk Group (IR) (n=16)**		
Male (%)	6 (37.5)	7 (43.7)	10 (62.5)	0.0082$^{\#\#}$
Ages, years$^{\#}$ Median [IQR]	38.5 [25.2 – 42.0]	52.0 [50.0 – 54.7]	50.0 [33.2 – 55.7]	0.0002 ***a, b***
BMI, kg/m2 Mean ± SD	22.8 ± 2.5	26.4 ± 3.5	26.7 ± 3.0	0.0010 ***a, b***
SBP, mmHg Mean ± SD	107 ± 10	115 ± 13	113 ± 10	*ns*
DBP, mmHg Mean ± SD	73 ± 7	79 ± 7	79 ± 5	*ns*
Total Cholesterol, mg/dl Mean ± SD	158 ± 28	203 ± 73	200 ± 48	0.0353 ***a, b***
LDLc, mg/dl Mean ± SD	84 ± 19	98 ± 39	117 ± 37	0.0251 ***b***
HDLc, mg/dl Mean ± SD	61 ± 11	58± 21	46 ± 17	0.0442 ***b***
Triglycerides, mg/dl Mean ± SD	65 ± 21	207 ± 408	145 ± 84	*ns*
Non-HDLc, mg/dl Mean ± SD	97 ± 23	145 ± 77	154 ± 47	0.0094 ***a, b***
Glucose, mg/dl Mean ± SD	88 ± 5	97 ± 7	100 ± 8	<0.0001 ***a, b***
Creatinine, mg/dl Mean ± SD	0.8 ± 0.2	0.8 ± 0.2	0.8 ± 0.1	*ns*
hs-CRP, mg/dl$^{\#}$ Median [IQR]	0.08 [0.04 – 0.15]	0.08 [0.04 – 0.14]	0.07 [0.04 – 0.16]	*ns*
White cell count x 10^9/L$^{\#}$ Median [IQR]	7.3 [5.8 – 7.8]	6.5 [5.9 – 7.7]	7.0 [5.5 – 8.0]	*ns*
Classical Monocytes, %$^{\#}$ Median [IQR]	76 [74 – 80]	71 [65 – 75]	74 [69 – 78]	*ns*
Non-Classical Monocytes, %$^{\#}$ Median [IQR]	8.6 [6.5–11.3]	11.0 [7.5–18.7]	10.6 [7.9–15.0]	*ns*
Intermediate Monocytes, %$^{\#}$ Median [IQR]	6.3 [5.0-9.6]	6.5 [5.4-7.8]	6.8 [5.8-8.1]	*ns*
CACS, Agatston Units	0	0	>1.0 F: 1/6 M: 7/10	

Values are mean ± SD (standard deviation) for normal distribution, or median (IQR, interquartile range) for non-normal distribution. **BMI**, body mass index; **SBP**, systolic blood pressure; **DBP**, diastolic blood pressure; **LDLc**, low density lipoprotein-cholesterol; **HDLc**, high density lipoprotein-cholesterol; **non-HDLc**, non-high-density lipoprotein-cholesterol; **hs-CRP**, high sensitivity - C-reactive protein; **CACS**, coronary artery calcium score. $^{\#}$Parameters were log-transformed to achieve normal distribution and to apply statistical parametric analysis, but in these table the original data were used. $^{\#\#}$Contingency analysis and Chi-square test. * Ordinary one-way ANOVA; *ns*, non-significant. ****a***, ***b***, and ***c***: umpired *t*-test for mean values; ***a***, IR vs LR; ***b***, SCA vs LR; and ***c***, SCA vs IR. Letters with significant value, *p*<0.05, are shown; **ns**, non-significant *p* value.

Supplementary Table S6: Correlation analysis between cell surface LRP1 expression and pro-inflammatory factor in total monocytes (Study II)

	LRP1 expression in total monocytes (MFI values) vs.				***LRP1/GADPH* mRNA levels (relative expression) vs.**			
	TNFα/GADPH (Relative Expression)	***IL-1β/GADPH (Relative Expression)***	***CCL2/GADPH (Relative Expression)***	***CCR2/GADPH (Relative Expression)***	***TNFα/GADPH (Relative Expression)***	***IL-1β/GADPH (Relative Expression)***	***CCL2/GADPH (Relative Expression)***	***CCR2/GADPH (Relative Expression)***
r	**-0.376**	**-0.387**	-0.257	-0.173	0.009	-0.008	-0.0879	-0.2561
p	**0.008**	**0.007**	0.077	0.241	0.949	0.959	0.5527	0.079

All parameters were log-transformed to achieve normal distribution and to apply the Pearson correlation analysis. Significant value, $p<0.05$. **Bold font** indicates parameter with statistical significance. **MFI**, mean fluorescence intensity; (n= 48)