**Table S1.** Results of the one-way ANOVA (Kruskal-Wallis test) followed by Dunn's multiple comparison between the percentage rates of different T helper cell subsets in the peripheral blood.

Kruskal-Wallis Test	Dunn's Multiple Comparisons Test	Mean Rank Difference	<i>p</i> -Value
<i>p</i> -value < 0.0001	CXCR3+ vs. CCR5+	-25.58	>0.9999
	CXCR3+ vs. CCR3+	30.12	0.9204
	CXCR3+ vs. CCR4+	-85.58	< 0.0001
	CXCR3+ vs. CD161+	50.95	0.0265
	CXCR3+ vs. CCR6+	-21.30	>0.9999
	CCR5+ vs. CCR3+	55.70	0.0082
	CCR5+ vs. CCR4+	-60.00	0.0029
	CCR5 <sup>+</sup> vs. CD161 <sup>+</sup>	76.52	< 0.0001
	CCR5+ vs. CCR6+	4.280	>0.9999
	CCR3+vs. CCR4+	-115.7	< 0.0001
	CCR3+vs. CD161+	20.82	>0.9999
	CCR3+vs. CCR6+	-51.42	0.0273
	CCR4 <sup>+</sup> vs. CD161 <sup>+</sup>	136.5	< 0.0001
	CCR4+ vs. CCR6+	64.28	0.0015
	CD161 <sup>+</sup> vs. CCR6 <sup>+</sup>	-72.24	0.0002

ANOVA = analysis of variance; CD = cluster of differentiation; CXCR3 = C-X-C motif chemokine receptor 3; CCR = C-C chemokine receptor.

**Table S2.** Results of the one-way ANOVA (Kruskal-Wallis test) followed by Dunn's multiple comparison between the percentage rates of different T helper cell subsets in the synovial membrane.

Kruskal-Wallis Test	Dunn's Multiple Comparisons Test	Mean Rank Difference	<i>p</i> -Value	
<i>p</i> -value < 0.0001	CXCR3+ vs. CCR5+	-38.61	0.1564	
	CXCR3+ vs. CCR3+	61.01	0.0008	
	CXCR3+ vs. CCR4+	6.689	>0.9999	
	CXCR3 <sup>+</sup> vs. CD161 <sup>+</sup>	23.77	>0.9999	
	CXCR3+ vs. CCR6+	95.75	< 0.0001	
	CCR5 <sup>+</sup> vs. CCR3 <sup>+</sup>	99.62	< 0.0001	
	CCR5+ vs. CCR4+	45.30	0.0399	
	CCR5+ vs. CD161+	62.37	0.0005	
	CCR5⁺ vs. CCR6⁺	134.4	< 0.0001	
	CCR3+ vs. CCR4+	-54.32	0.0047	
	CCR3+ vs. CD161+	-37.25	0.1929	
	CCR3+ vs. CCR6+	34.74	0.3050	
	CCR4+ vs. CD161+	17.08	>0.9999	
	CCR4 <sup>+</sup> vs. CCR6 <sup>+</sup>	89.06	< 0.0001	
	CD161 <sup>+</sup> vs. CCR6 <sup>+</sup>	71.99	< 0.0001	

CD = cluster of differentiation; CXCR3 = C-X-C motif chemokine receptor 3; CCR = C-C chemokine receptor.

**Table S3.** Results of the one-way ANOVA (Kruskal-Wallis test) followed by Dunn's multiple comparison between the percentage rates of different T helper cell subsets in the synovial fluid.

Kruskal-Wallis Test	Dunn's Multiple Comparisons Test	Mean Rank Difference	<i>p</i> -Value
<i>p</i> -value < 0.0001	CXCR3+ vs. CCR5+	-30.44	0.1560
	CXCR3+ vs. CCR3+	33.60	0.0701
	CXCR3+ vs. CCR4+	16.17	> 0.9999
	CXCR3+ vs. CD161+	53.29	0.0001
	CXCR3+ vs. CCR6+	21.46	> 0.9999
	CCR5+ vs. CCR3+	64.04	< 0.0001
	CCR5+ vs. CCR4+	46.60	0.0013
	CCR5+ vs. CD161+	83.73	< 0.0001
	CCR5+ vs. CCR6+	51.90	0.0002
	CCR3+ vs. CCR4+	-17.44	> 0.9999
	CCR3+ vs. CD161+	19.68	> 0.9999
	CCR3+ vs. CCR6+	-12.14	> 0.9999
	CCR4+ vs. CD161+	37.12	0.0299
	CCR4 <sup>+</sup> vs. CCR6 <sup>+</sup>	5.295	> 0.9999
	CD161 <sup>+</sup> vs. CCR6 <sup>+</sup>	-31.83	0.1309

CD = cluster of differentiation; CXCR3 = C-X-C motif chemokine receptor 3; CCR = C-C chemokine receptor.

**Table S4.** T cell infiltration in PB, SM and SF depending on UC and BC OA.

	PB			SM		SF			
T cells	UC	BC	UC:BC	UC	BC	UC:BC	UC	BC	UC:BC
	Mean ± SEM	Mean ± SEM	<i>p</i> -Value	Mean ± SEM	Mean ± SEM	<i>p</i> -Value	Mean ± SEM	Mean ± SEM	<i>p</i> -Value
CD3+									
Cell count	$121988 \pm 8867$	$123552 \pm 7862$	n.s.	$47716 \pm 14225$	$89224 \pm 22348$	n.s.	$12508 \pm 3805$	$16806 \pm 6131$	n.s.
Cells/mL (g)	$13957 \pm 1378$	$15962 \pm 1279$	n.s.	$18927 \pm 5769$	$32184 \pm 8206$	n.s.	$2690 \pm 1117$	$1752 \pm 450$	n.s.
CD4+									
Cell count	$98189 \pm 7204$	$96031 \pm 7003$	n.s.	33582 ± 10439	68345 ± 18189	n.s.	$3940 \pm 1405$	$8900 \pm 3638$	n.s.
Cells/mL (g)	11256 ± 1120	12462 ± 1141	n.s.	13491 ± 4474	$24606 \pm 6711$	n.s.	881.8 ±	$795.6 \pm 251.4$	n.s.
% of CD3+cells	$80.88 \pm 1.97$	$77.10 \pm 1.85$	n.s.	$65.92 \pm 4.0$	$74.07 \pm 1.47$	*<0.05	$36.41 \pm 6.77$	$44.35 \pm 3.72$	n.s.
Th1 CD4+ CXCR3+ % of CD4+ cells	23.94 ± 3.42	± 16.67 ± 2.13	n.s.	45.18 ± 5.35	34.35 ± 3.37	n.s.	64.94 ± 9.91	51.39 ± 6.93	n.s
CD4 <sup>+</sup> CCR5 <sup>+</sup> % of CD4 <sup>+</sup> cells	22.38 ± 2.57	22.83 ± 1.87	n.s.	56.29 ± 3.92	48.62 ± 3.59	n.s.	$82.57 \pm 7.36$	78.61 ± 4.93	n.s
CD4+ CXCR3+ CCR5+ % of CD4+ cells	$1.50 \pm 0.35$	$1.67 \pm 0.38$	n.s.	$8.15 \pm 4.5$	$3.82 \pm 0.74$	n.s.	$4.08 \pm 2.4$	5.06 ± 1.93	n.s.
Th2 CD4+ CCR3+ % of CD4+ cells	15.24 ± 2.03	13.12 ± 1.23	n.s.	$22.32 \pm 3.06$	19.55 ± 2.49	n.s.	39.76 ± 11.61	27.88 ± 3.28	n.s.
CD4+ CCR4+ % of CD4+ cells	$41.83 \pm 4.11$	$38.68 \pm 3.26$	n.s.	35.13 ± 5.55	$34.02 \pm 2.28$	n.s.	$42.54 \pm 10.49$	$40.93 \pm 4.89$	n.s.
CD4 <sup>+</sup> CCR3 <sup>+</sup> CCR4 <sup>+</sup> % of CD4 <sup>+</sup> cells	1.55 ± 0.17	± 1.85 ± 0.2	n.s.	$1.38 \pm 0.16$	$2.70 \pm 0.52$	n.s.	$7.6 \pm 3.57$	$9.07 \pm 3.23$	n.s.
<b>Th17</b> CD4+ CD161+ % of CD4+ cells	11.24 ± 1.23	11.51 ± 1.59	n.s.	33.90 ± 7.41	28.61 ± 1.72	n.s.	25.36 ± 6.2	18.71 ± 1.65	n.s.
CD4+ CCR6+ % of CD4+ cells	$19.33 \pm 3.41$	$23.20 \pm 2.17$	n.s.	$16.91 \pm 7.63$	11.12 ± 1.29	n.s.	44.29 ± 11.45	$34.51 \pm 4.99$	n.s.

CD4<sup>+</sup> CD161<sup>+</sup> CCR6<sup>+</sup> % of CD4<sup>+</sup> cells

 $\pm + \text{cells}$  8.15 ± 1.02 8.98 ± 0.88 n.s. 13.24 ±

 $3.24 \pm 10.30 \pm 0.48$ 

n.s.  $12.03 \pm 3.01$ 

 $12.73 \pm 1.59$ 

n.s.

The distribution of T cells in peripheral blood (PB), synovial membrane (SM) and synovial fluid (SF) samples compared between unicompartmental (UC) and bicompartmental osteoarthritis (OA). T lymphocytes were stained for CD4 to detect T helper cells (Th; CD3+CD4+, in Table referred to as CD4+). To analyze Th subpopulations (Th1, Th2, Th17) CD4+ cells were stained for distinct surface markers (Th1: CXCR3, CCR5; Th2: CCR3, CCR4; Th17: CD161, CCR6). For CD3+ MACS-isolated T lymphocytes mean cell count and concentration levels (cells/sample volume (mL) or weight (g)) are shown. For CD4+ cells the mean CD4+ T cell percentage rate (% of CD3+ cells stained positive for CD4) was calculated additionally. For different Th1, Th2 and Th17 cells mean percentage rates of CD4+ cells (% of % of CD4+ cells) are displayed. Unpaired t-test was used to compare the mean percentage rates between UC and BC patients. p-Values < 0.05 were considered statistically significant and are indicated with asterisks: \* p < 0.05. Data are presented as mean  $\pm$  standard error of the mean (SEM). CD = cluster of differentiation; CXCR3 = C-X-C motif chemokine receptor 3; CCR = C-C chemokine receptor; n.s. = not significant.