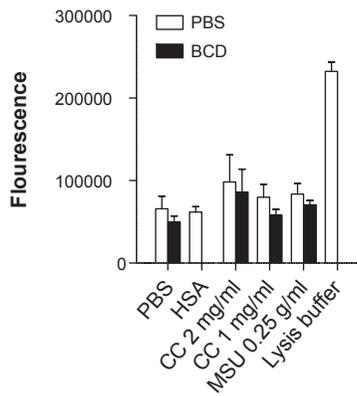
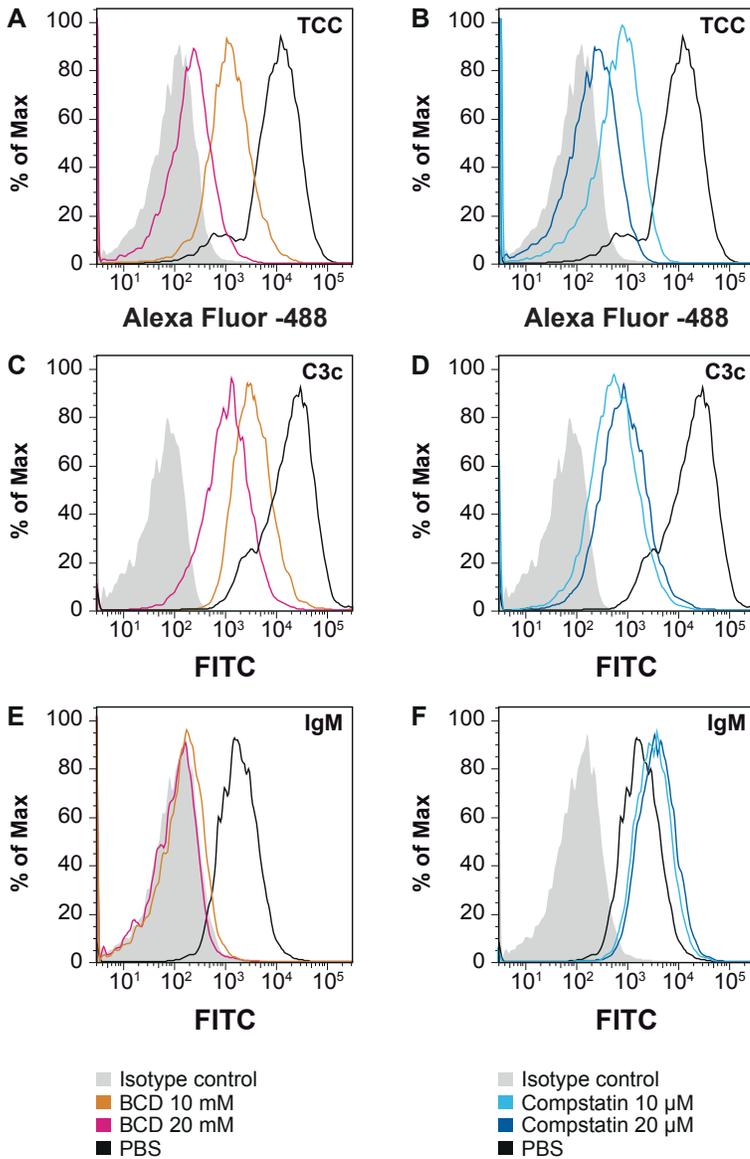


Supplemental Figure 1. Dissolution of CC by BCD over time. **(A-B)** CC (1 mg/ml) was incubated in human plasma (50%) with or without BCD (10 mM) or EtOH (50%). **(A)** Effect of BCD on CC dissolution measured by optical density (OD). Data presented are mean + SEM for n=7 healthy donors. **(B)** Flow cytometer scatter plot with a set gate around CC cloud representing the percentage of total events at starting time 0h, and after 1 h and 24 h incubation with or without BCD. Data shown are one representative of six independent experiments, n=6 healthy donors. BCD: 2-hydroxypropyl- β -cyclodextrin, CC: cholesterol crystals



Supplemental Figure 2. The concentrations used of CC, BCD or MSU does not affect the viability of immune cells in whole blood. LDH cytotoxicity assay was performed on whole blood incubated with CC (1 and 2 mg/ml), MSU (0.25 mg/ml) or PBS, with or without BCD (10 mM) for 6 h. Lysis buffer is a positive control. Data presented are mean + SEM for n=3 healthy donors. BCD: 2-hydroxypropyl- β -cyclodextrin, CC: cholesterol crystals, LDH: lactate dehydrogenase, MSU: monosodium urate crystals.



Supplemental Figure 3. Comparison of compstatin and BCD on CC activation of complement factors. Binding of TCC, C3c or IgM on the CC was determined in human plasma incubated with CC with or without 20 (red) or 10 (orange) mM BCD (**A, C, E**) or 20 (blue) or 10 (light blue) μM compstatin (**B, D, F**) for 30 min. The isotype control is shown in light grey, filled. Data shown are one representative of three independent experiments, n=3 healthy donors. (**A, B**) Deposition of TCC on the crystals was detected using an anti-C5b-9 and the secondary antibody was Alexa Fluor-488. (**C, D**) C3c on the crystals was stained with a FITC conjugated antibody against C3c. (**E, F**) IgM deposition on CC detected using a FITC conjugated antibody against IgM. BCD: 2-hydroxypropyl-β-cyclodextrin, C3c: complement factor c, CC: cholesterol crystals, TCC; terminal complement complex.

Supplemental Table 1. BCD inhibits cytokine/chemokine release induced by CC in PBMC.

Time (h)	¹⁾ Cytokines (pg/ml)	TNF	IL-8	MCP-1	IL-1 α	MIP-1 α	IL-6	IL-1 β
5	PBS	223 \pm 86	1806 \pm 455	547 \pm 203	5.70 \pm 2.49	225 \pm 107	127 \pm 69	19.3 \pm 13.5
	BCD	359 \pm 298	1741 \pm 629	746 \pm 278	6.69 \pm 3.22	270 \pm 192	203 \pm 179	41.2 \pm 38.2
	CC	2651 \pm 723	2739 \pm 584	285 \pm 147	20.2 \pm 2.78	594 \pm 218	407 \pm 157	73.5 \pm 35.3
	CC+BCD	68.9 \pm 33.1	521 \pm 121	50.9 \pm 13.2	9.32 \pm 2.83	43.9 \pm 19.6	20.6 \pm 11.1	38.9 \pm 22
0.5	PBS	60.2 \pm 20.8	468 \pm 117	44.2 \pm 5.52		26.9 \pm 8.30	3.00 \pm 1.00	3.43 \pm 0.499
	BCD	57.0 \pm 14.5	259 \pm 27	61.6 \pm 18.4		15.6 \pm 4.89	2.48 \pm 1.21	2.56 \pm 0.831
	CC	127 \pm 14	648 \pm 257	47.1 \pm 9.05		37.5 \pm 12.5	5.23 \pm 2.01	8.08 \pm 1.30
	CC+BCD	66.5 \pm 16.2	296 \pm 17	31.5 \pm 4.00		17.9 \pm 5.17	1.18 \pm 0.485	4.99 \pm 1.68

¹⁾ PBMC was isolated from whole blood and preincubated with BCD (10 mM) for 1 h, then incubated with CC (2 mg/ml) for 0.5 or 5h in 50% autologous plasma. Plasma was collected and multiplex cytokine assay performed. Data presented are mean \pm SEM for n= 3-9 healthy donors. BCD: 2-hydroxypropyl- β -cyclodextrin, CC: cholesterol crystals