Date: November 26, 2024
To: William Schief
From: Kellie MacPhee, Allan deCamp, Ollivier Hyrien
RE: Schief 856 (G002) B Cell Figures and Tables for Manuscript
cc: Troy Sincomb, Christopher Cottrell, Michael Duff, Drienna Holman, Erica Beatman, Amanda Tsai
Contact: Kellie MacPhee, kmacphee@fredhutch.org Allan deCamp, adecamp@scharp.org

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1 Figures and Tables: eOD-GT8 Immunogen

1.1 Percent of B cells that are VRC01-class (eOD-GT8 sorts)

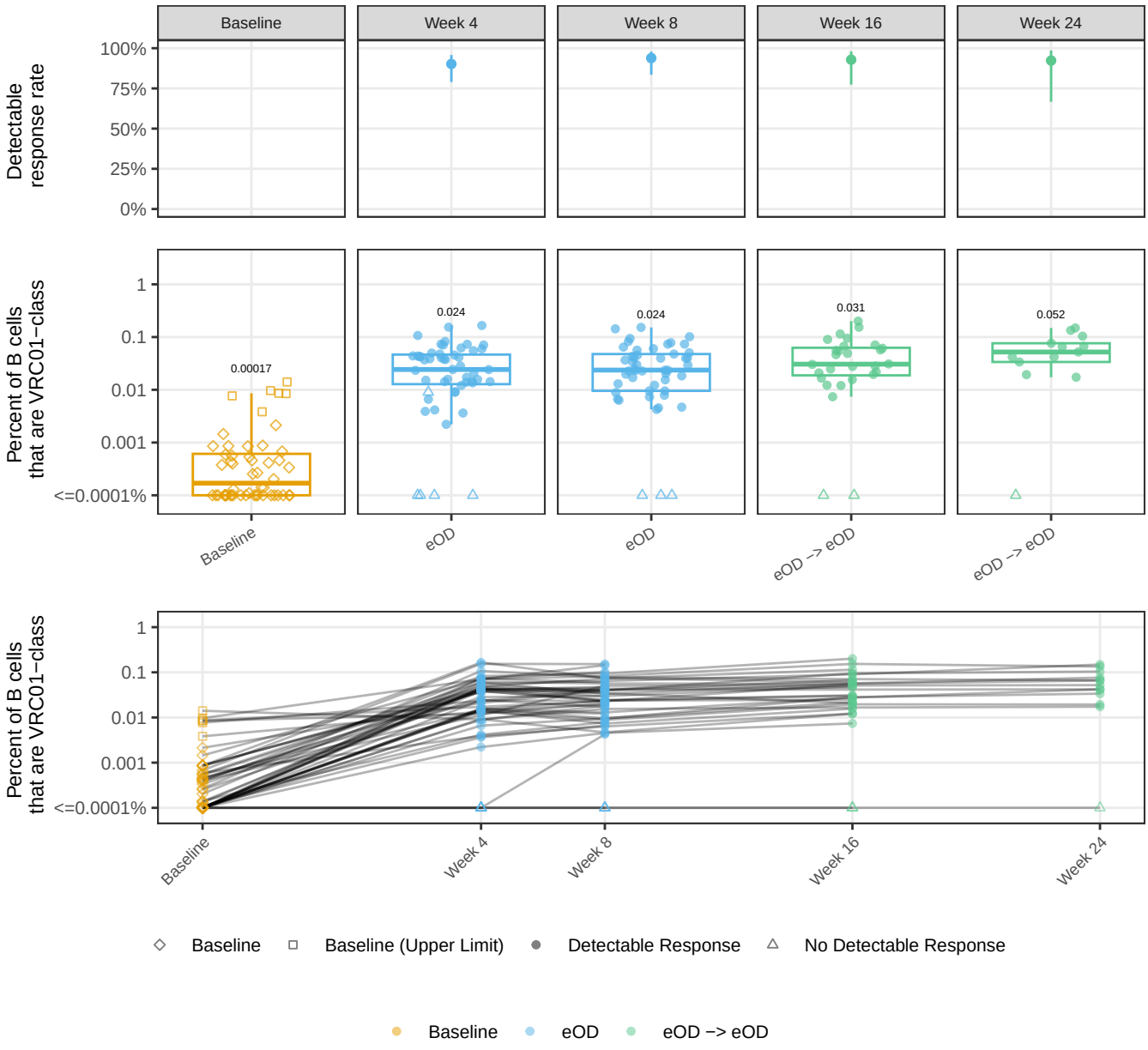

Figure 1: Percent of B cells that are VRC01-class (eOD-GT8 sorts). Detectable response rates are shown in the first row of plots (mean and 95 percent Wilson confidence interval). Response magnitudes are shown in the second row of plots: each marker represents one participant, and the boxplots indicate the median and interquartile range among participants (the median is also noted in text above the boxplot). Response magnitudes over time (i.e., kinetics) are shown in the third row of plots, with each line representing a single participant.

Table 1: Percent of B cells that are VRC01-class (eOD-GT8 sorts): differences in response rates over time, within groups. Hypothesis testing was done using McNemar's test for paired data (two-sided, $\alpha = 0.05$) and p-values less than 0.05 are highlighted. P-values were not computed for insufficient sample sizes (less than three at either time point), or if response rates were identical.

Treatment	Week Comparison	Response Rates (95% Wilson CI)	P-value
Any eOD	4 vs. 8	43/48 = **89.6%** (77.8%, 95.5%) vs. 45/48 = **93.8%** (83.2%, 97.9%)	0.480
	4 vs. 16	26/28 = **92.9%** (77.4%, 98.0%) vs. 25/28 = **89.3%** (72.8%, 96.3%)	1.000
	4 vs. 24	11/12 = **91.7%** (64.6%, 98.5%) vs. 10/12 = **83.3%** (55.2%, 95.3%)	1.000
	8 vs. 16	25/27 = **92.6%** (76.6%, 97.9%) vs. 25/27 = **92.6%** (76.6%, 97.9%)	—
	8 vs. 24	12/13 = **92.3%** (66.7%, 98.6%) vs. 12/13 = **92.3%** (66.7%, 98.6%)	—
	16 vs. 24	10/11 = **90.9%** (62.3%, 98.4%) vs. 10/11 = **90.9%** (62.3%, 98.4%)	—

Table 2: Percent of B cells that are VRC01-class (eOD-GT8 sorts): differences in response magnitudes over time, within each group. Hypothesis testing was done using the Wilcoxon signed-rank test for paired data (two-sided, $\alpha = 0.05$) and p-values less than 0.05 are highlighted. P-values are not computed for insufficient sample sizes (less than three paired data points).

Treatment	Week Comparison	Number of Pairs	Median (Range)	P-value
Any eOD	-5 vs. 4	51	**0.000** [0.000, 0.014] vs. **0.024** [0.000, 0.166]	<0.001
	-5 vs. 8	49	**0.000** [0.000, 0.014] vs. **0.024** [0.000, 0.152]	<0.001
	-5 vs. 16	28	**0.000** [0.000, 0.014] vs. **0.031** [0.000, 0.201]	<0.001
	-5 vs. 24	13	**0.000** [0.000, 0.014] vs. **0.052** [0.000, 0.149]	<0.001
	4 vs. 8	48	**0.024** [0.000, 0.166] vs. **0.024** [0.000, 0.152]	0.811
	4 vs. 16	28	**0.024** [0.000, 0.166] vs. **0.031** [0.000, 0.201]	0.027
	4 vs. 24	12	**0.032** [0.000, 0.107] vs. **0.054** [0.000, 0.149]	0.030
	8 vs. 16	27	**0.024** [0.000, 0.094] vs. **0.031** [0.000, 0.201]	<0.001
	8 vs. 24	13	**0.040** [0.000, 0.082] vs. **0.052** [0.000, 0.149]	0.005
	16 vs. 24	11	**0.056** [0.000, 0.154] vs. **0.066** [0.000, 0.149]	0.160

1.2 Percent of IgG B cells that are VRC01-class (eOD-GT8 sorts)

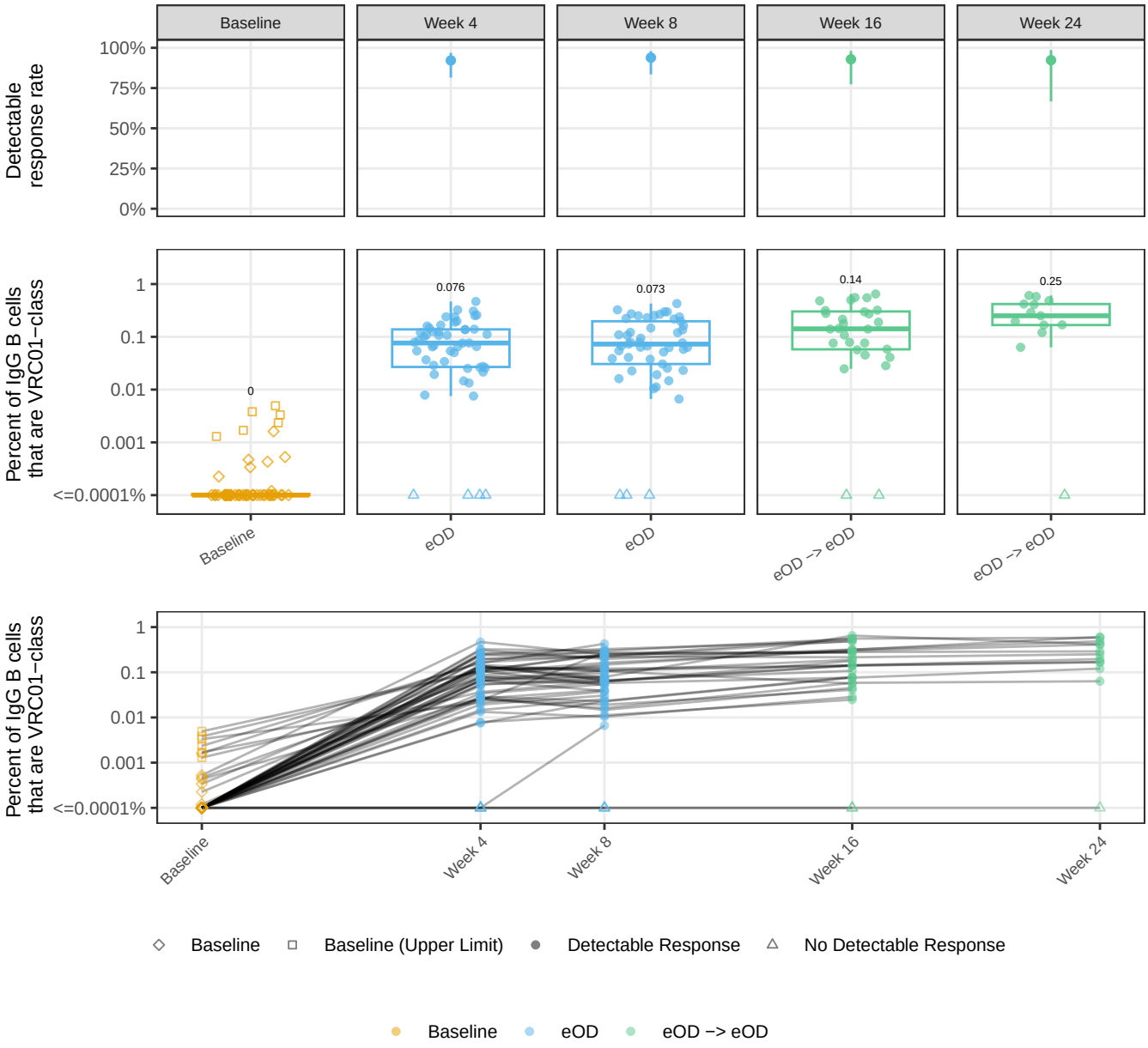

Figure 2: Percent of IgG B cells that are VRC01-class (eOD-GT8 sorts). Detectable response rates are shown in the first row of plots (mean and 95 percent Wilson confidence interval). Response magnitudes are shown in the second row of plots: each marker represents one participant, and the boxplots indicate the median and interquartile range among participants (the median is also noted in text above the boxplot). Response magnitudes over time (i.e., kinetics) are shown in the third row of plots, with each line representing a single participant.

Table 3: Percent of IgG B cells that are VRC01-class (eOD-GT8 sorts): differences in response rates over time, within groups. Hypothesis testing was done using McNemar's test for paired data (two-sided, $\alpha = 0.05$) and p-values less than 0.05 are highlighted. P-values were not computed for insufficient sample sizes (less than three at either time point), or if response rates were identical.

Treatment	Week Comparison	Response Rates (95% Wilson CI)	P-value
Any eOD	4 vs. 8	44/48 = **91.7%** (80.4%, 96.7%) vs. 45/48 = **93.8%** (83.2%, 97.9%)	1.000
	4 vs. 16	26/28 = **92.9%** (77.4%, 98.0%) vs. 26/28 = **92.9%** (77.4%, 98.0%)	—
	4 vs. 24	11/12 = **91.7%** (64.6%, 98.5%) vs. 11/12 = **91.7%** (64.6%, 98.5%)	—
	8 vs. 16	25/27 = **92.6%** (76.6%, 97.9%) vs. 25/27 = **92.6%** (76.6%, 97.9%)	—
	8 vs. 24	12/13 = **92.3%** (66.7%, 98.6%) vs. 12/13 = **92.3%** (66.7%, 98.6%)	—
	16 vs. 24	10/11 = **90.9%** (62.3%, 98.4%) vs. 10/11 = **90.9%** (62.3%, 98.4%)	—

Table 4: Percent of IgG B cells that are VRC01-class (eOD-GT8 sorts): differences in response magnitudes over time, within each group. Hypothesis testing was done using the Wilcoxon signed-rank test for paired data (two-sided, $\alpha = 0.05$) and p-values less than 0.05 are highlighted. P-values are not computed for insufficient sample sizes (less than three paired data points).

Treatment	Week Comparison	Number of Pairs	Median (Range)	P-value
Any eOD	-5 vs. 4	51	**0.000** [0.000, 0.005] vs. **0.076** [0.000, 0.467]	<0.001
	-5 vs. 8	49	**0.000** [0.000, 0.005] vs. **0.073** [0.000, 0.427]	<0.001
	-5 vs. 16	28	**0.000** [0.000, 0.005] vs. **0.142** [0.000, 0.648]	<0.001
	-5 vs. 24	13	**0.000** [0.000, 0.002] vs. **0.250** [0.000, 0.606]	<0.001
	4 vs. 8	48	**0.076** [0.000, 0.467] vs. **0.070** [0.000, 0.427]	0.207
	4 vs. 16	28	**0.076** [0.000, 0.467] vs. **0.142** [0.000, 0.648]	<0.001
	4 vs. 24	12	**0.081** [0.000, 0.307] vs. **0.223** [0.000, 0.606]	<0.001
	8 vs. 16	27	**0.067** [0.000, 0.325] vs. **0.144** [0.000, 0.648]	<0.001
	8 vs. 24	13	**0.120** [0.000, 0.272] vs. **0.250** [0.000, 0.606]	<0.001
	16 vs. 24	11	**0.215** [0.000, 0.648] vs. **0.250** [0.000, 0.606]	0.047

1.3 Percent of antigen-specific IgG B cells that are VRC01-class (eOD-GT8 sorts)

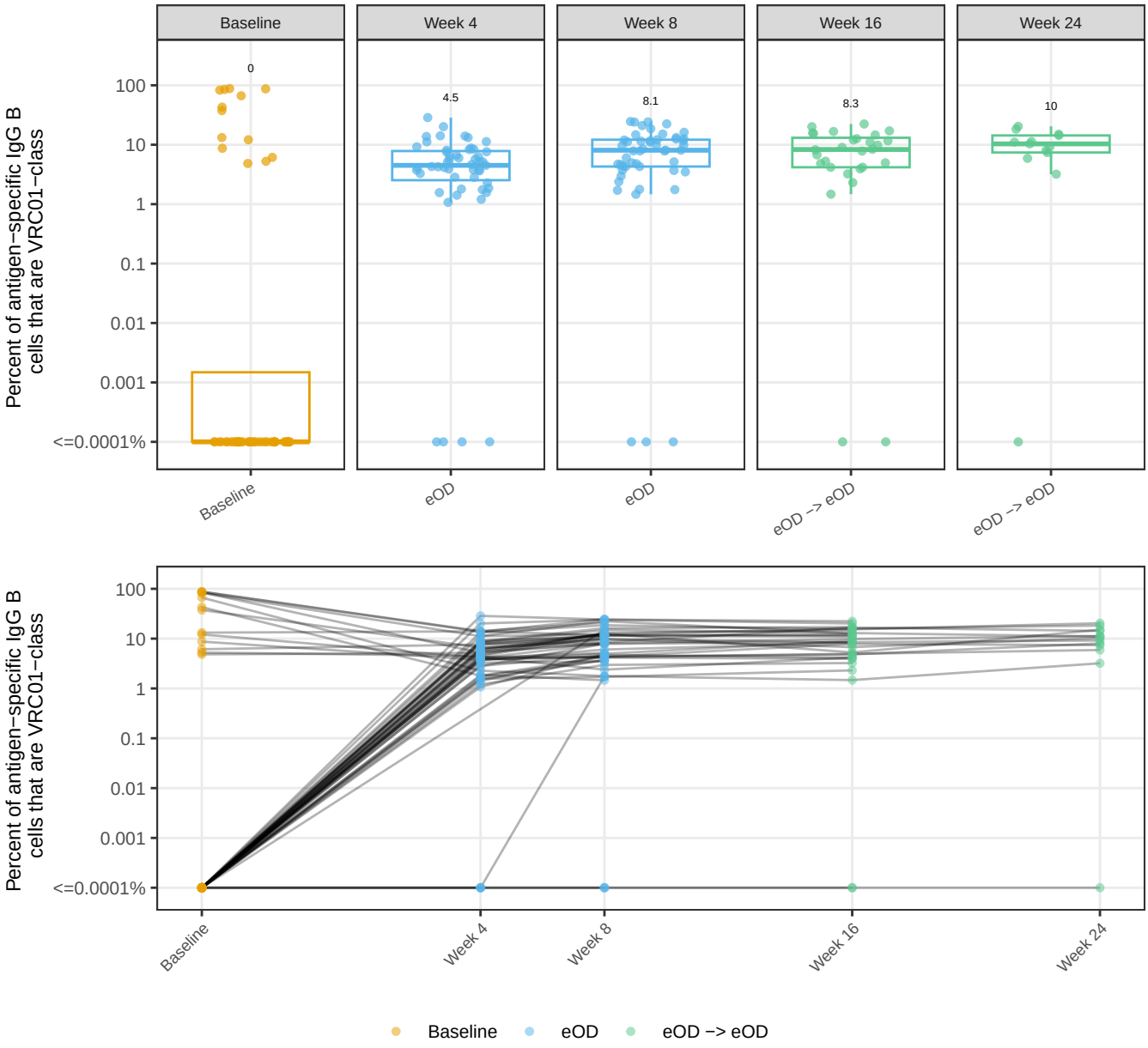

Figure 3: Percent of antigen-specific IgG B cells that are VRC01-class (eOD-GT8 sorts). Response magnitudes are shown in the first row of plots: each marker represents one participant, and the boxplots indicate the median and interquartile range among participants (the median is also noted in text above the boxplot). Response magnitudes over time (i.e., kinetics) are shown in the second row of plots, with each line representing a single participant.

Table 5: Percent of antigen-specific IgG B cells that are VRC01-class (eOD-GT8 sorts): differences in response magnitudes over time, within each group. Hypothesis testing was done using the Wilcoxon signed-rank test for paired data (two-sided, $\alpha = 0.05$) and p-values less than 0.05 are highlighted. P-values are not computed for insufficient sample sizes (less than three paired data points).

Treatment	Week Comparison	Number of Pairs	Median (Range)	P-value
Any eOD	-5 vs. 4	51	**0.000** [0.000, 88.000] vs. **4.496** [0.000, 28.621]	0.017
	-5 vs. 8	49	**0.000** [0.000, 88.000] vs. **8.084** [0.000, 24.573]	0.011
	-5 vs. 16	28	**0.000** [0.000, 82.927] vs. **8.317** [0.000, 22.328]	0.039
	-5 vs. 24	13	**0.000** [0.000, 66.667] vs. **10.335** [0.000, 20.390]	0.660
	4 vs. 8	48	**4.578** [0.000, 28.621] vs. **7.979** [0.000, 24.573]	<0.001
	4 vs. 16	28	**4.913** [0.000, 28.621] vs. **8.317** [0.000, 22.328]	0.001
	4 vs. 24	12	**4.639** [0.000, 13.200] vs. **9.755** [0.000, 20.390]	<0.001
	8 vs. 16	27	**8.501** [0.000, 24.225] vs. **8.393** [0.000, 22.328]	0.670
	8 vs. 24	13	**8.084** [0.000, 18.582] vs. **10.335** [0.000, 20.390]	0.015
	16 vs. 24	11	**6.765** [0.000, 16.688] vs. **10.335** [0.000, 20.390]	0.027

1.4 Percent of CD4bs-specific IgG B cells that are VRC01-class (eOD-GT8 sorts)

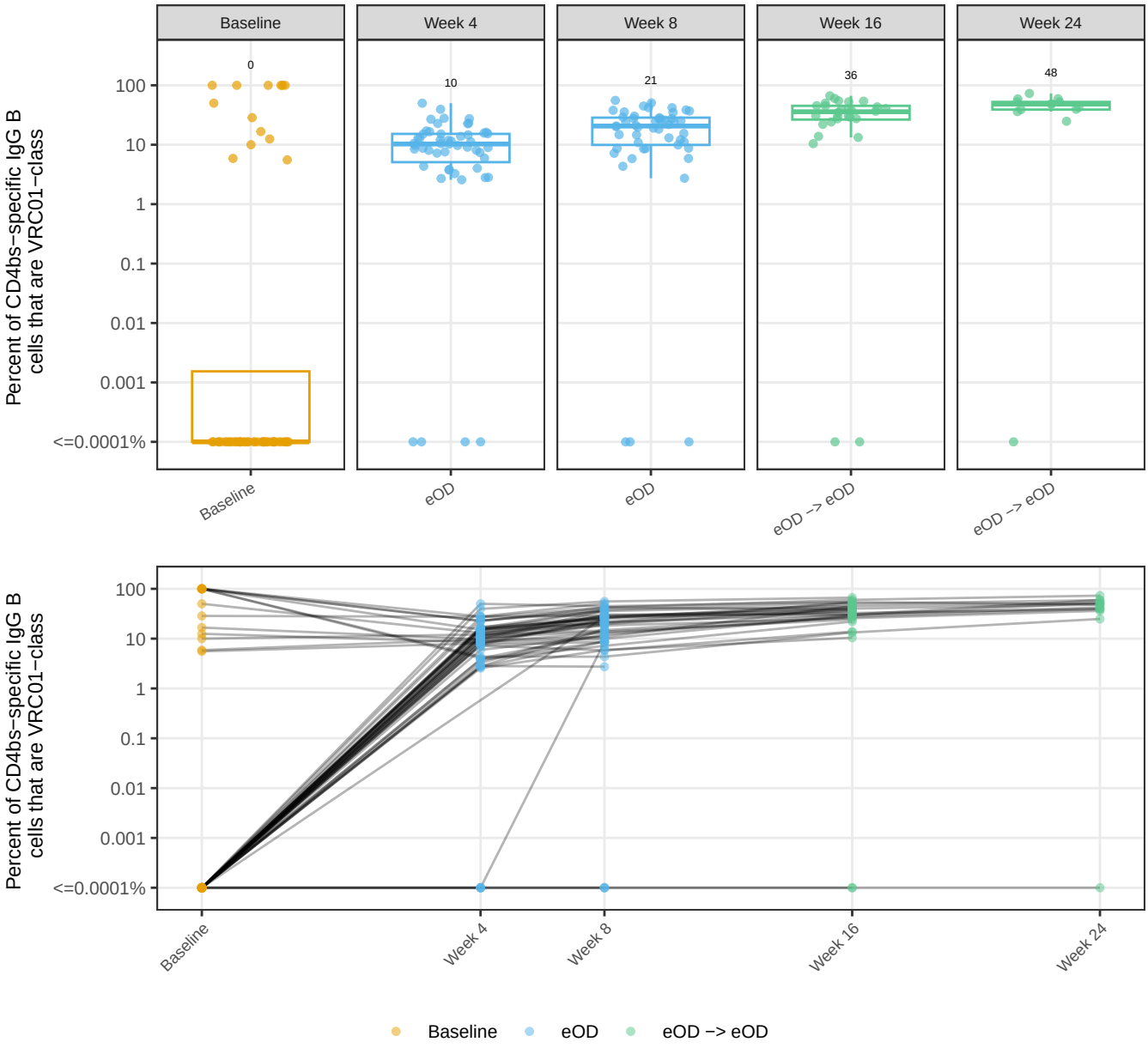

Figure 4: Percent of CD4bs-specific IgG B cells that are VRC01-class (eOD-GT8 sorts). Response magnitudes are shown in the first row of plots: each marker represents one participant, and the boxplots indicate the median and interquartile range among participants (the median is also noted in text above the boxplot). Response magnitudes over time (i.e., kinetics) are shown in the second row of plots, with each line representing a single participant.

Table 6: Percent of CD4bs-specific IgG B cells that are VRC01-class (eOD-GT8 sorts): differences in response magnitudes over time, within each group. Hypothesis testing was done using the Wilcoxon signed-rank test for paired data (two-sided, $\alpha = 0.05$) and p-values less than 0.05 are highlighted. P-values are not computed for insufficient sample sizes (less than three paired data points).

Treatment	Week Comparison	Number of Pairs	Median (Range)	P-value
Any eOD	-5 vs. 4	51	**0.000** [0.000, 100.000] vs. **10.294** [0.000, 50.000]	0.007
	-5 vs. 8	49	**0.000** [0.000, 100.000] vs. **20.617** [0.000, 55.714]	0.003
	-5 vs. 16	28	**0.000** [0.000, 100.000] vs. **35.903** [0.000, 66.549]	0.006
	-5 vs. 24	13	**0.000** [0.000, 100.000] vs. **48.208** [0.000, 72.887]	0.203
	4 vs. 8	48	**10.011** [0.000, 50.000] vs. **20.428** [0.000, 55.714]	<0.001
	4 vs. 16	28	**10.380** [0.000, 50.000] vs. **35.903** [0.000, 66.549]	<0.001
	4 vs. 24	12	**9.721** [0.000, 26.869] vs. **48.436** [0.000, 72.887]	<0.001
	8 vs. 16	27	**21.123** [0.000, 55.714] vs. **36.667** [0.000, 66.549]	<0.001
	8 vs. 24	13	**20.239** [0.000, 42.065] vs. **48.208** [0.000, 72.887]	<0.001
	16 vs. 24	11	**30.639** [0.000, 60.050] vs. **48.664** [0.000, 72.887]	0.004

1.5 Percent of IgG B cells that are antigen-specific (eOD-GT8 sorts)

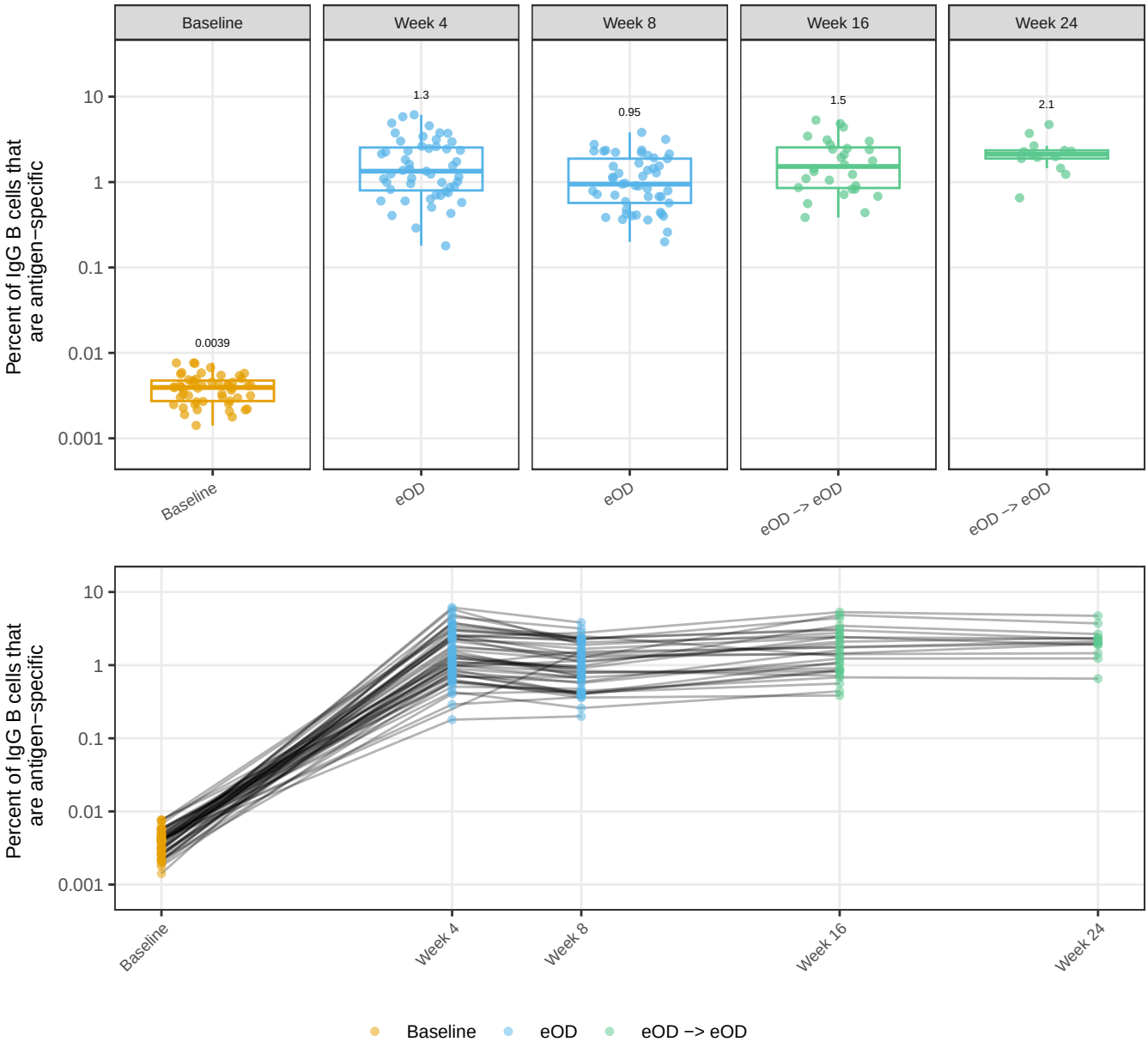

Figure 5: Percent of IgG B cells that are antigen-specific (eOD-GT8 sorts). Response magnitudes are shown in the first row of plots: each marker represents one participant, and the boxplots indicate the median and interquartile range among participants (the median is also noted in text above the boxplot). Response magnitudes over time (i.e., kinetics) are shown in the second row of plots, with each line representing a single participant.

Table 7: Percent of IgG B cells that are antigen-specific (eOD-GT8 sorts): differences in response magnitudes over time, within each group. Hypothesis testing was done using the Wilcoxon signed-rank test for paired data (two-sided, $\alpha = 0.05$) and p-values less than 0.05 are highlighted. P-values are not computed for insufficient sample sizes (less than three paired data points).

Treatment	Week Comparison	Number of Pairs	Median (Range)	P-value
Any eOD	-5 vs. 4	51	**0.004** [0.001, 0.008] vs. **1.340** [0.179, 6.139]	<0.001
	-5 vs. 8	49	**0.004** [0.001, 0.008] vs. **0.946** [0.200, 3.817]	<0.001
	-5 vs. 16	28	**0.004** [0.002, 0.008] vs. **1.524** [0.385, 5.313]	<0.001
	-5 vs. 24	13	**0.003** [0.002, 0.008] vs. **2.117** [0.653, 4.720]	<0.001
	4 vs. 8	48	**1.294** [0.179, 6.139] vs. **0.927** [0.200, 3.817]	<0.001
	4 vs. 16	28	**1.241** [0.406, 3.774] vs. **1.524** [0.385, 5.313]	0.210
	4 vs. 24	12	**1.984** [0.406, 3.764] vs. **2.196** [0.653, 4.720]	0.233
	8 vs. 16	27	**0.908** [0.259, 2.765] vs. **1.605** [0.385, 5.313]	<0.001
	8 vs. 24	13	**1.282** [0.444, 2.765] vs. **2.117** [0.653, 4.720]	<0.001
	16 vs. 24	11	**2.396** [0.681, 5.313] vs. **2.274** [0.653, 4.720]	0.147

1.6 Percent of IgG B cells that are CD4bs-specific (eOD-GT8 sorts)

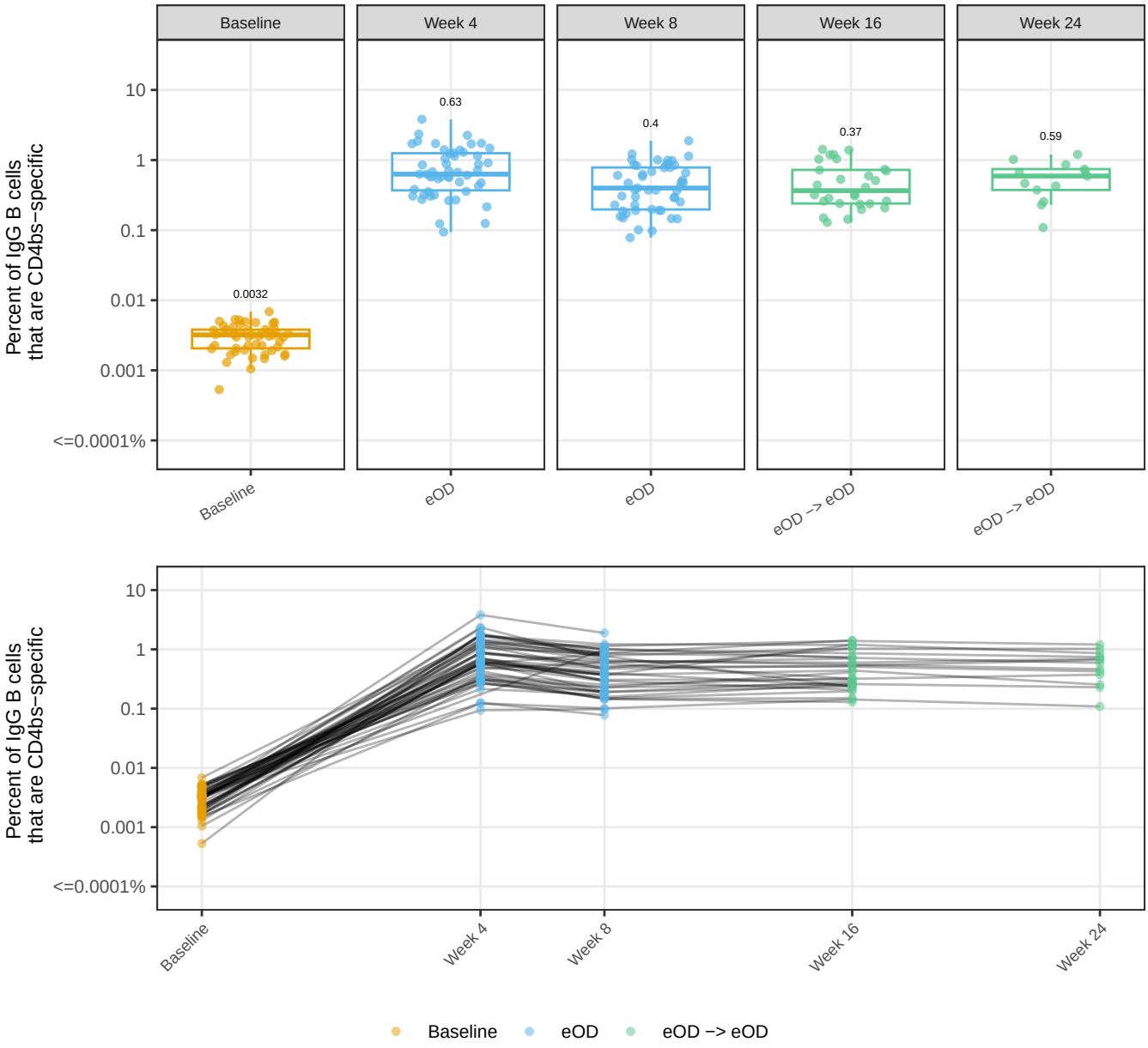

Figure 6: Percent of IgG B cells that are CD4bs-specific (eOD-GT8 sorts). Response magnitudes are shown in the first row of plots: each marker represents one participant, and the boxplots indicate the median and interquartile range among participants (the median is also noted in text above the boxplot). Response magnitudes over time (i.e., kinetics) are shown in the second row of plots, with each line representing a single participant.

Table 8: Percent of IgG B cells that are CD4bs-specific (eOD-GT8 sorts): differences in response magnitudes over time, within each group. Hypothesis testing was done using the Wilcoxon signed-rank test for paired data (two-sided, $\alpha = 0.05$) and p-values less than 0.05 are highlighted. P-values are not computed for insufficient sample sizes (less than three paired data points).

Treatment	Week Comparison	Number of Pairs	Median (Range)	P-value
Any eOD	-5 vs. 4	51	**0.003** [0.001, 0.007] vs. **0.630** [0.094, 3.812]	<0.001
	-5 vs. 8	49	**0.003** [0.001, 0.007] vs. **0.399** [0.078, 1.887]	<0.001
	-5 vs. 16	28	**0.003** [0.001, 0.005] vs. **0.368** [0.129, 1.419]	<0.001
	-5 vs. 24	13	**0.002** [0.001, 0.005] vs. **0.591** [0.109, 1.204]	<0.001
	4 vs. 8	48	**0.629** [0.094, 3.812] vs. **0.389** [0.078, 1.887]	<0.001
	4 vs. 16	28	**0.629** [0.123, 1.735] vs. **0.368** [0.129, 1.419]	0.005
	4 vs. 24	12	**0.872** [0.123, 1.735] vs. **0.527** [0.109, 1.204]	0.021
	8 vs. 16	27	**0.373** [0.101, 1.221] vs. **0.410** [0.129, 1.419]	0.086
	8 vs. 24	13	**0.516** [0.101, 1.138] vs. **0.591** [0.109, 1.204]	0.893
	16 vs. 24	11	**0.532** [0.143, 1.388] vs. **0.591** [0.109, 1.204]	0.206

1.7 Percent of antigen-specific IgG B cells that are CD4bs-specific (eOD-GT8 sorts)

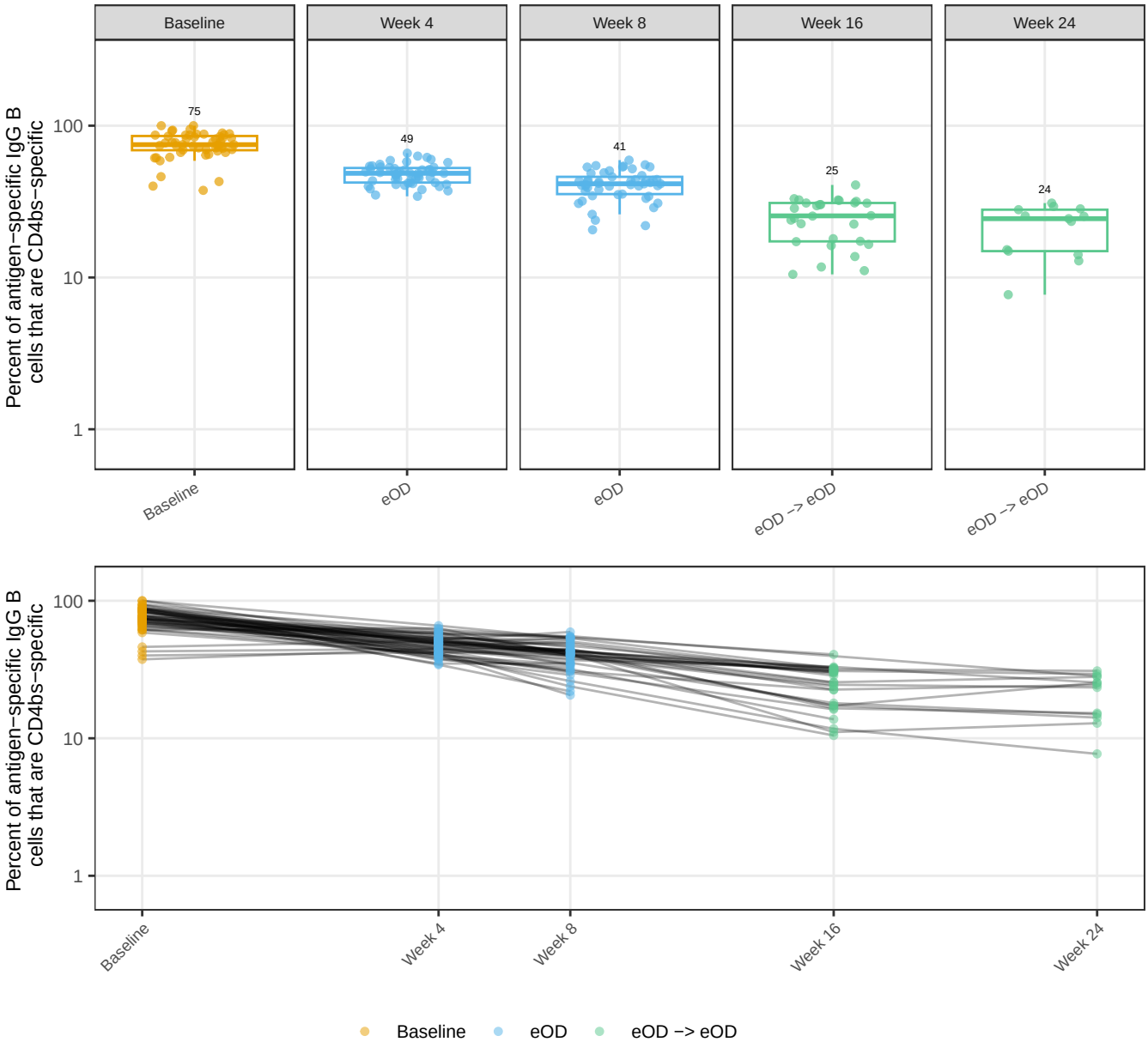

Figure 7: Percent of antigen-specific IgG B cells that are CD4bs-specific (eOD-GT8 sorts). Response magnitudes are shown in the first row of plots: each marker represents one participant, and the boxplots indicate the median and interquartile range among participants (the median is also noted in text above the boxplot). Response magnitudes over time (i.e., kinetics) are shown in the second row of plots, with each line representing a single participant.

Table 9: Percent of antigen-specific IgG B cells that are CD4bs-specific (eOD-GT8 sorts): differences in response magnitudes over time, within each group. Hypothesis testing was done using the Wilcoxon signed-rank test for paired data (two-sided, $\alpha = 0.05$) and p-values less than 0.05 are highlighted. P-values are not computed for insufficient sample sizes (less than three paired data points).

Treatment	Week Comparison	Number of Pairs	Median (Range)	P-value
Any eOD	-5 vs. 4	51	**75.000** [37.500, 100.000] vs. **48.555** [34.267, 65.871]	<0.001
	-5 vs. 8	49	**76.923** [37.500, 100.000] vs. **41.441** [20.608, 59.298]	<0.001
	-5 vs. 16	28	**72.556** [40.000, 100.000] vs. **25.472** [10.485, 40.699]	<0.001
	-5 vs. 24	13	**66.667** [40.000, 84.615] vs. **24.397** [7.703, 30.912]	<0.001
	4 vs. 8	48	**48.754** [34.267, 65.871] vs. **41.417** [20.608, 59.298]	<0.001
	4 vs. 16	28	**49.353** [38.358, 63.055] vs. **25.472** [10.485, 40.699]	<0.001
	4 vs. 24	12	**48.790** [39.833, 63.055] vs. **23.909** [7.703, 30.912]	<0.001
	8 vs. 16	27	**40.887** [23.830, 54.150] vs. **25.559** [10.485, 40.699]	<0.001
	8 vs. 24	13	**41.441** [26.067, 55.263] vs. **24.397** [7.703, 30.912]	<0.001
	16 vs. 24	11	**18.009** [11.088, 31.734] vs. **23.420** [7.703, 30.912]	0.765

2 Figures and Tables: Core-g28v2 Immunogen

2.1 Percent of B cells that are VRC01-class (Core-g28v2 sorts)

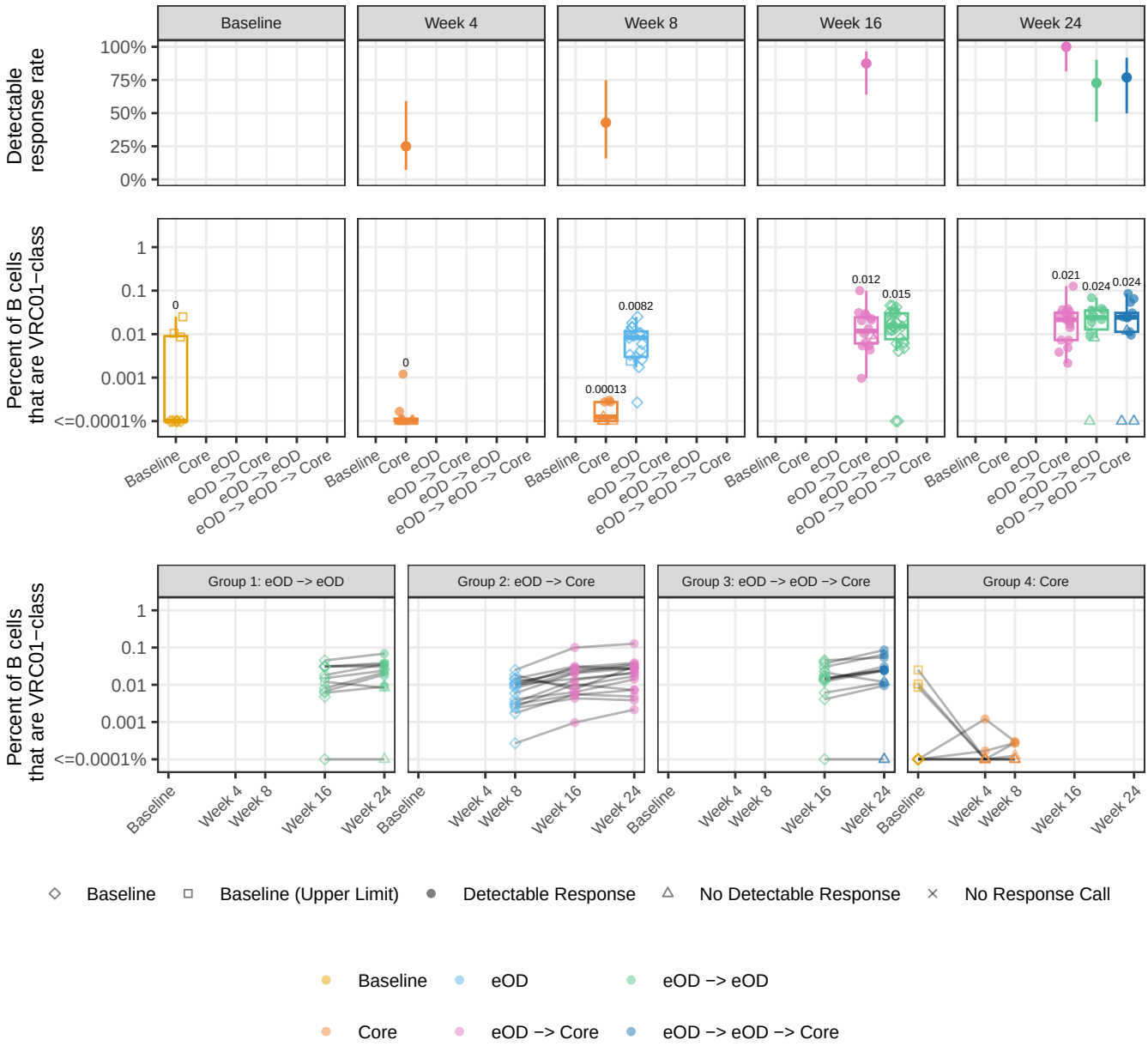

Figure 8: Percent of B cells that are VRC01-class (Core-g28v2 sorts). Detectable response rates are shown in the first row of plots (mean and 95 percent Wilson confidence interval). Response magnitudes are shown in the second row of plots: each marker represents one participant, and the boxplots indicate the median and interquartile range among participants (the median is also noted in text above the boxplot). Response magnitudes over time (i.e., kinetics) are shown in the third row of plots, with each line representing a single participant.

Table 10: Percent of B cells that are VRC01-class (Core-g28v2 sorts): differences in response rates between groups. Hypothesis testing was done using Barnard's exact test (two-sided, $\alpha = 0.05$) and p-values less than 0.05 are highlighted. P-values were not computed for insufficient sample sizes (less than three in either group), or if observed response rates were identical.

Time Point	Comparison	Response Rates (95% Wilson CI)	P-value
Week 24	eOD → Core vs. eOD → eOD	17/17 = **100.0%** (81.6%, 100.0%) vs. 8/11 = **72.7%** (43.4%, 90.3%)	0.023
	eOD → Core vs. eOD → eOD → Core	17/17 = **100.0%** (81.6%, 100.0%) vs. 10/13 = **76.9%** (49.7%, 91.8%)	0.045
	eOD → eOD vs. eOD → eOD → Core	8/11 = **72.7%** (43.4%, 90.3%) vs. 10/13 = **76.9%** (49.7%, 91.8%)	0.852
8 weeks post-Core	Core vs. eOD → Core	3/7 = **42.9%** (15.8%, 75.0%) vs. 14/16 = **87.5%** (64.0%, 96.5%)	0.027
	Core vs. eOD → eOD → Core	3/7 = **42.9%** (15.8%, 75.0%) vs. 10/13 = **76.9%** (49.7%, 91.8%)	0.144
	eOD → Core vs. eOD → eOD → Core	14/16 = **87.5%** (64.0%, 96.5%) vs. 10/13 = **76.9%** (49.7%, 91.8%)	0.598

Table 11: Percent of B cells that are VRC01-class (Core-g28v2 sorts): differences in response rates over time, within groups. Hypothesis testing was done using McNemar's test for paired data (two-sided, $\alpha = 0.05$) and p-values less than 0.05 are highlighted. P-values were not computed for insufficient sample sizes (less than three at either time point), or if response rates were identical.

Treatment	Week Comparison	Response Rates (95% Wilson CI)	P-value
Core	4 vs. 8	2/7 = **28.6%** (8.2%, 64.1%) vs. 3/7 = **42.9%** (15.8%, 75.0%)	1.000
eOD → Core	16 vs. 24	14/16 = **87.5%** (64.0%, 96.5%) vs. 16/16 = **100.0%** (80.6%, 100.0%)	0.480

Table 12: Percent of B cells that are VRC01-class (Core-g28v2 sorts): differences in response magnitudes between groups. Hypothesis testing was done using the Wilcoxon rank-sum test (two-sided, $\alpha = 0.05$) and p-values less than 0.05 are highlighted. P-values are not computed for insufficient sample sizes (less than three in either group).

Time Point	Comparison	Sample Sizes	Median (Range)	P-value
Week 8	Core vs. eOD	7 vs. 17	**0.000** [0.000, 0.000] vs. **0.008** [0.000, 0.025]	<0.001
Week 16	eOD → Core vs. eOD → eOD	16 vs. 28	**0.012** [0.001, 0.100] vs. **0.015** [0.000, 0.046]	0.550
Week 24	eOD → Core vs. eOD → eOD	17 vs. 13	**0.021** [0.002, 0.127] vs. **0.024** [0.000, 0.069]	0.536
	eOD → Core vs. eOD → eOD → Core	17 vs. 13	**0.021** [0.002, 0.127] vs. **0.024** [0.000, 0.086]	0.991
	eOD → eOD vs. eOD → eOD → Core	13 vs. 13	**0.024** [0.000, 0.069] vs. **0.024** [0.000, 0.086]	0.880
prior to Core dose	eOD vs. eOD → eOD	17 vs. 16	**0.008** [0.000, 0.025] vs. **0.016** [0.000, 0.046]	0.005
8 weeks post-Core	Core vs. eOD → Core	7 vs. 16	**0.000** [0.000, 0.000] vs. **0.012** [0.001, 0.100]	<0.001
	Core vs. eOD → eOD → Core	7 vs. 13	**0.000** [0.000, 0.000] vs. **0.024** [0.000, 0.086]	0.004
	eOD → Core vs. eOD → eOD → Core	16 vs. 13	**0.012** [0.001, 0.100] vs. **0.024** [0.000, 0.086]	0.263

Table 13: Percent of B cells that are VRC01-class (Core-g28v2 sorts): differences in response magnitudes over time, within each group. Hypothesis testing was done using the Wilcoxon signed-rank test for paired data (two-sided, $\alpha = 0.05$) and p-values less than 0.05 are highlighted. P-values are not computed for insufficient sample sizes (less than three paired data points).

Treatment	Week Comparison	Number of Pairs	Median (Range)	P-value
Core	4 vs. 8	7	**0.000** [0.000, 0.001] vs. **0.000** [0.000, 0.000]	0.625
eOD → Core	16 vs. 24	16	**0.012** [0.001, 0.100] vs. **0.024** [0.002, 0.127]	0.009
eOD → eOD	16 vs. 24	11	**0.015** [0.000, 0.045] vs. **0.024** [0.000, 0.069]	0.016

2.2 Percent of IgG B cells that are VRC01-class (Core-g28v2 sorts)

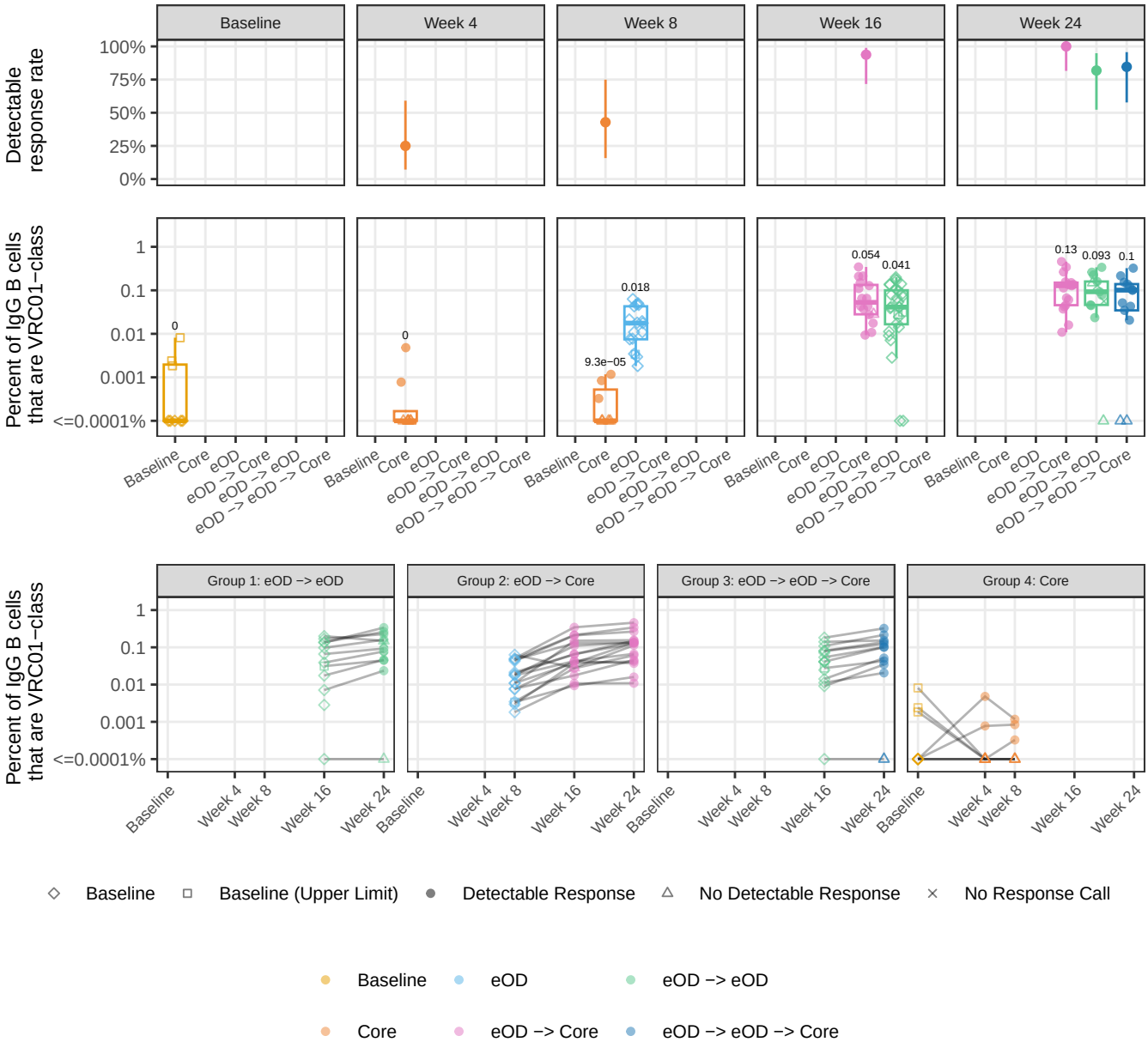

Figure 9: Percent of IgG B cells that are VRC01-class (Core-g28v2 sorts). Detectable response rates are shown in the first row of plots (mean and 95 percent Wilson confidence interval). Response magnitudes are shown in the second row of plots: each marker represents one participant, and the boxplots indicate the median and interquartile range among participants (the median is also noted in text above the boxplot). Response magnitudes over time (i.e., kinetics) are shown in the third row of plots, with each line representing a single participant.

Table 14: Percent of IgG B cells that are VRC01-class (Core-g28v2 sorts): differences in response rates between groups. Hypothesis testing was done using Barnard's exact test (two-sided, $\alpha = 0.05$) and p-values less than 0.05 are highlighted. P-values were not computed for insufficient sample sizes (less than three in either group), or if observed response rates were identical.

Time Point	Comparison	Response Rates (95% Wilson CI)	P-value
Week 24	eOD → Core vs. eOD → eOD	17/17 = **100.0%** (81.6%, 100.0%) vs. 9/11 = **81.8%** (52.3%, 94.9%)	0.079
	eOD → Core vs. eOD → eOD → Core	17/17 = **100.0%** (81.6%, 100.0%) vs. 11/13 = **84.6%** (57.8%, 95.7%)	0.118
	eOD → eOD vs. eOD → eOD → Core	9/11 = **81.8%** (52.3%, 94.9%) vs. 11/13 = **84.6%** (57.8%, 95.7%)	0.957
8 weeks post-Core	Core vs. eOD → Core	3/7 = **42.9%** (15.8%, 75.0%) vs. 15/16 = **93.8%** (71.7%, 98.9%)	0.009
	Core vs. eOD → eOD → Core	3/7 = **42.9%** (15.8%, 75.0%) vs. 11/13 = **84.6%** (57.8%, 95.7%)	0.064
	eOD → Core vs. eOD → eOD → Core	15/16 = **93.8%** (71.7%, 98.9%) vs. 11/13 = **84.6%** (57.8%, 95.7%)	0.585

Table 15: Percent of IgG B cells that are VRC01-class (Core-g28v2 sorts): differences in response rates over time, within groups. Hypothesis testing was done using McNemar's test for paired data (two-sided, $\alpha = 0.05$) and p-values less than 0.05 are highlighted. P-values were not computed for insufficient sample sizes (less than three at either time point), or if response rates were identical.

Treatment	Week Comparison	Response Rates (95% Wilson CI)	P-value
Core	4 vs. 8	2/7 = **28.6%** (8.2%, 64.1%) vs. 3/7 = **42.9%** (15.8%, 75.0%)	1.000
eOD → Core	16 vs. 24	15/16 = **93.8%** (71.7%, 98.9%) vs. 16/16 = **100.0%** (80.6%, 100.0%)	1.000

Table 16: Percent of IgG B cells that are VRC01-class (Core-g28v2 sorts): differences in response magnitudes between groups. Hypothesis testing was done using the Wilcoxon rank-sum test (two-sided, $\alpha = 0.05$) and p-values less than 0.05 are highlighted. P-values are not computed for insufficient sample sizes (less than three in either group).

Time Point	Comparison	Sample Sizes	Median (Range)	P-value
Week 8	Core vs. eOD	7 vs. 17	**0.000** [0.000, 0.001] vs. **0.018** [0.002, 0.063]	<0.001
Week 16	eOD → Core vs. eOD → eOD	16 vs. 28	**0.054** [0.009, 0.344] vs. **0.041** [0.000, 0.199]	0.349
Week 24	eOD → Core vs. eOD → eOD	17 vs. 13	**0.127** [0.011, 0.458] vs. **0.093** [0.000, 0.338]	0.934
	eOD → Core vs. eOD → eOD → Core	17 vs. 13	**0.127** [0.011, 0.458] vs. **0.101** [0.000, 0.323]	0.379
	eOD → eOD vs. eOD → eOD → Core	13 vs. 13	**0.093** [0.000, 0.338] vs. **0.101** [0.000, 0.323]	0.479
prior to Core dose	eOD vs. eOD → eOD	17 vs. 16	**0.018** [0.002, 0.063] vs. **0.041** [0.000, 0.181]	0.021
8 weeks post-Core	Core vs. eOD → Core	7 vs. 16	**0.000** [0.000, 0.001] vs. **0.054** [0.009, 0.344]	<0.001
	Core vs. eOD → eOD → Core	7 vs. 13	**0.000** [0.000, 0.001] vs. **0.101** [0.000, 0.323]	0.004
	eOD → Core vs. eOD → eOD → Core	16 vs. 13	**0.054** [0.009, 0.344] vs. **0.101** [0.000, 0.323]	0.803

Table 17: Percent of IgG B cells that are VRC01-class (Core-g28v2 sorts): differences in response magnitudes over time, within each group. Hypothesis testing was done using the Wilcoxon signed-rank test for paired data (two-sided, $\alpha = 0.05$) and p-values less than 0.05 are highlighted. P-values are not computed for insufficient sample sizes (less than three paired data points).

Treatment	Week Comparison	Number of Pairs	Median (Range)	P-value
Core	4 vs. 8	7	**0.000** [0.000, 0.005] vs. **0.000** [0.000, 0.001]	0.625
eOD → Core	16 vs. 24	16	**0.054** [0.009, 0.344] vs. **0.120** [0.011, 0.458]	<0.001
eOD → eOD	16 vs. 24	11	**0.066** [0.000, 0.199] vs. **0.093** [0.000, 0.338]	0.021

2.3 Percent of antigen-specific IgG B cells that are VRC01-class (Core-g28v2 sorts)

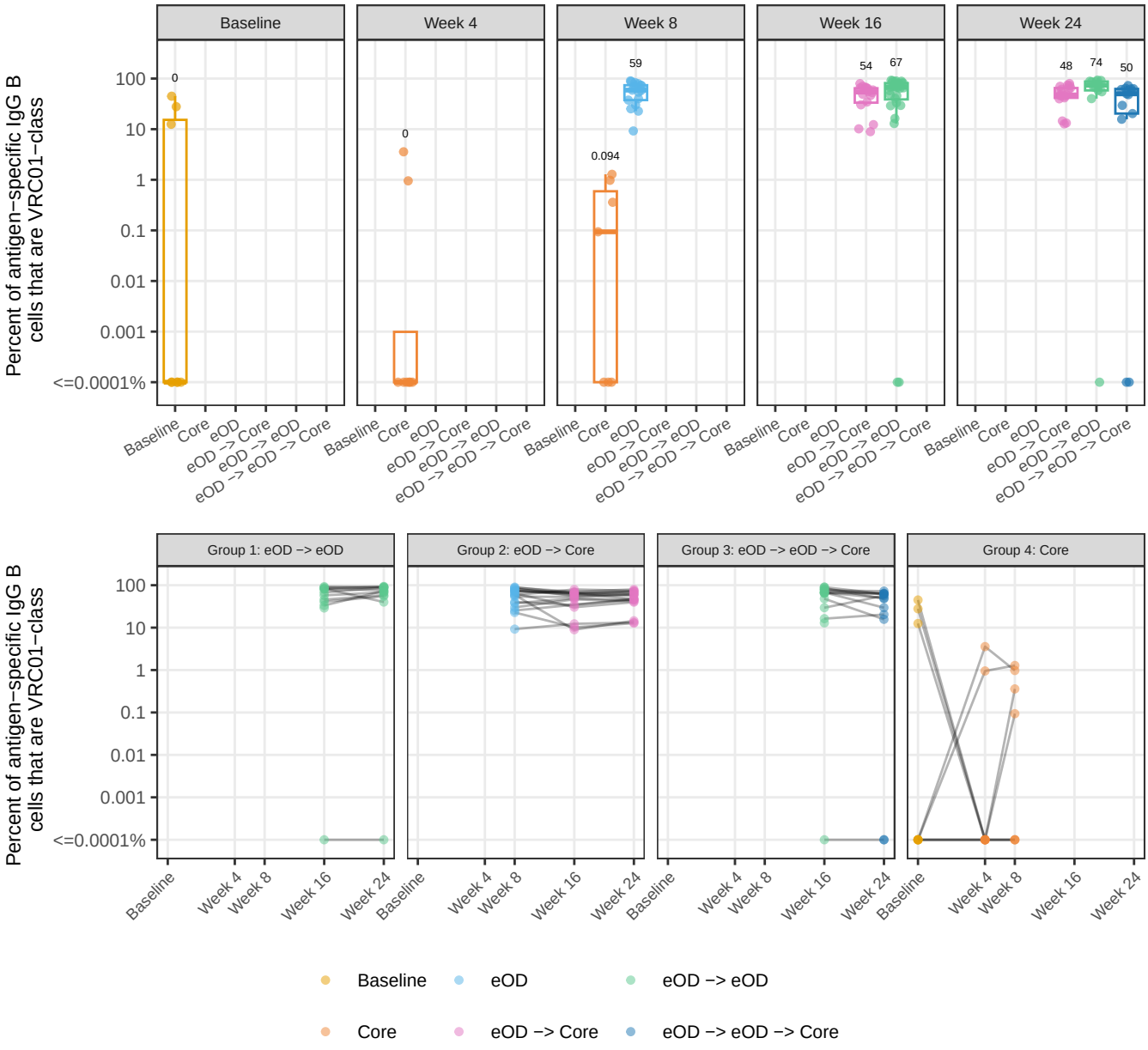

Figure 10: Percent of antigen-specific IgG B cells that are VRC01-class (Core-g28v2 sorts). Response magnitudes are shown in the first row of plots: each marker represents one participant, and the boxplots indicate the median and interquartile range among participants (the median is also noted in text above the boxplot). Response magnitudes over time (i.e., kinetics) are shown in the second row of plots, with each line representing a single participant.

Table 18: Percent of antigen-specific IgG B cells that are VRC01-class (Core-g28v2 sorts): differences in response magnitudes between groups. Hypothesis testing was done using the Wilcoxon rank-sum test (two-sided, $\alpha = 0.05$) and p-values less than 0.05 are highlighted. P-values are not computed for insufficient sample sizes (less than three in either group).

Time Point	Comparison	Sample Sizes	Median (Range)	P-value
Week 8	Core vs. eOD	7 vs. 17	**0.094** [0.000, 1.282] vs. **59.091** [9.220, 90.000]	<0.001
Week 16	eOD → Core vs. eOD → eOD	16 vs. 28	**54.165** [8.923, 79.470] vs. **67.208** [0.000, 92.451]	0.094
Week 24	eOD → Core vs. eOD → eOD	17 vs. 13	**47.538** [12.738, 79.619] vs. **73.717** [0.000, 93.112]	0.022
	eOD → Core vs. eOD → eOD → Core	17 vs. 13	**47.538** [12.738, 79.619] vs. **49.853** [0.000, 72.619]	0.613
	eOD → eOD vs. eOD → eOD → Core	13 vs. 13	**73.717** [0.000, 93.112] vs. **49.853** [0.000, 72.619]	0.007
prior to Core dose	eOD vs. eOD → eOD	17 vs. 16	**59.091** [9.220, 90.000] vs. **67.393** [0.000, 90.261]	0.657
8 weeks post-Core	Core vs. eOD → Core	7 vs. 16	**0.094** [0.000, 1.282] vs. **54.165** [8.923, 79.470]	<0.001
	Core vs. eOD → eOD → Core	7 vs. 13	**0.094** [0.000, 1.282] vs. **49.853** [0.000, 72.619]	0.004
	eOD → Core vs. eOD → eOD → Core	16 vs. 13	**54.165** [8.923, 79.470] vs. **49.853** [0.000, 72.619]	0.495

Table 19: Percent of antigen-specific IgG B cells that are VRC01-class (Core-g28v2 sorts): differences in response magnitudes over time, within each group. Hypothesis testing was done using the Wilcoxon signed-rank test for paired data (two-sided, $\alpha = 0.05$) and p-values less than 0.05 are highlighted. P-values are not computed for insufficient sample sizes (less than three paired data points).

Treatment	Week Comparison	Number of Pairs	Median (Range)	P-value
Core	4 vs. 8	7	**0.000** [0.000, 3.572] vs. **0.094** [0.000, 1.282]	0.625
eOD → Core	16 vs. 24	16	**54.165** [8.923, 79.470] vs. **52.143** [12.738, 79.619]	0.274
eOD → eOD	16 vs. 24	11	**67.293** [0.000, 92.451] vs. **73.717** [0.000, 93.112]	0.299

2.4 Percent of CD4bs-specific IgG B cells that are VRC01-class (Core-g28v2 sorts)

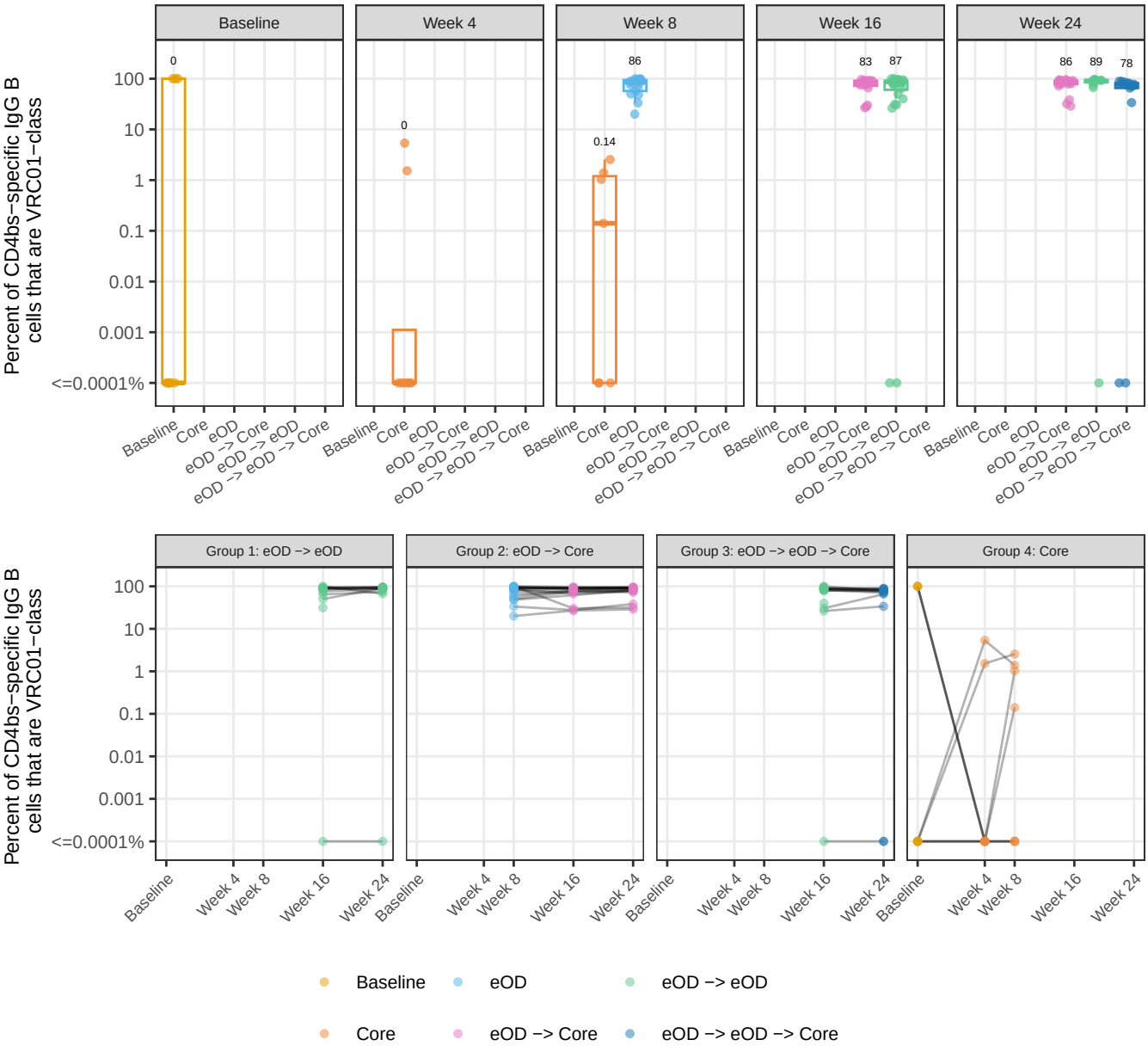

Figure 11: Percent of CD4bs-specific IgG B cells that are VRC01-class (Core-g28v2 sorts). Response magnitudes are shown in the first row of plots: each marker represents one participant, and the boxplots indicate the median and interquartile range among participants (the median is also noted in text above the boxplot). Response magnitudes over time (i.e., kinetics) are shown in the second row of plots, with each line representing a single participant.

Table 20: Percent of CD4bs-specific IgG B cells that are VRC01-class (Core-g28v2 sorts): differences in response magnitudes between groups. Hypothesis testing was done using the Wilcoxon rank-sum test (two-sided, $\alpha = 0.05$) and p-values less than 0.05 are highlighted. P-values are not computed for insufficient sample sizes (less than three in either group).

Time Point	Comparison	Sample Sizes	Median (Range)	P-value
Week 8	Core vs. eOD	7 vs. 17	**0.141** [0.000, 2.548] vs. **85.714** [20.000, 100.000]	<0.001
Week 16	eOD → Core vs. eOD → eOD	16 vs. 28	**83.457** [26.852, 96.667] vs. **86.794** [0.000, 100.000]	0.777
Week 24	eOD → Core vs. eOD → eOD	17 vs. 13	**85.556** [28.736, 96.162] vs. **89.404** [0.000, 96.296]	0.341
	eOD → Core vs. eOD → eOD → Core	17 vs. 13	**85.556** [28.736, 96.162] vs. **77.689** [0.000, 89.224]	0.077
	eOD → eOD vs. eOD → eOD → Core	13 vs. 13	**89.404** [0.000, 96.296] vs. **77.689** [0.000, 89.224]	0.009
prior to Core dose	eOD vs. eOD → eOD	17 vs. 16	**85.714** [20.000, 100.000] vs. **86.794** [0.000, 100.000]	0.709
8 weeks post-Core	Core vs. eOD → Core	7 vs. 16	**0.141** [0.000, 2.548] vs. **83.457** [26.852, 96.667]	<0.001
	Core vs. eOD → eOD → Core	7 vs. 13	**0.141** [0.000, 2.548] vs. **77.689** [0.000, 89.224]	0.004
	eOD → Core vs. eOD → eOD → Core	16 vs. 13	**83.457** [26.852, 96.667] vs. **77.689** [0.000, 89.224]	0.167

Table 21: Percent of CD4bs-specific IgG B cells that are VRC01-class (Core-g28v2 sorts): differences in response magnitudes over time, within each group. Hypothesis testing was done using the Wilcoxon signed-rank test for paired data (two-sided, $\alpha = 0.05$) and p-values less than 0.05 are highlighted. P-values are not computed for insufficient sample sizes (less than three paired data points).

Treatment	Week Comparison	Number of Pairs	Median (Range)	P-value
Core	4 vs. 8	7	**0.000** [0.000, 5.366] vs. **0.141** [0.000, 2.548]	0.625
eOD → Core	16 vs. 24	16	**83.457** [26.852, 96.667] vs. **86.743** [28.736, 96.162]	0.093
eOD → eOD	16 vs. 24	11	**87.838** [0.000, 100.000] vs. **89.404** [0.000, 96.296]	0.189

2.5 Percent of IgG B cells that are antigen-specific (Core-g28v2 sorts)

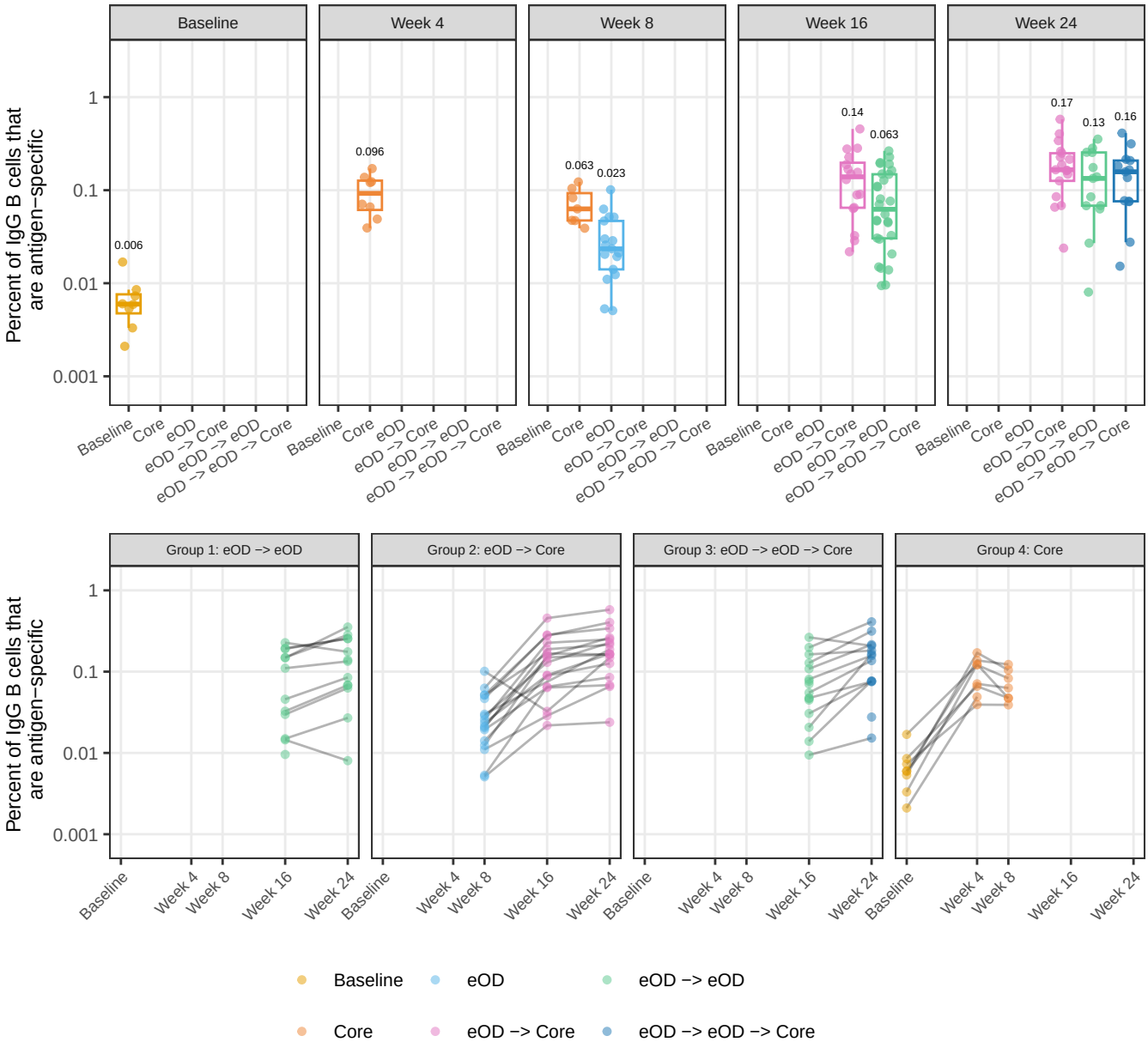

Figure 12: Percent of IgG B cells that are antigen-specific (Core-g28v2 sorts). Response magnitudes are shown in the first row of plots: each marker represents one participant, and the boxplots indicate the median and interquartile range among participants (the median is also noted in text above the boxplot). Response magnitudes over time (i.e., kinetics) are shown in the second row of plots, with each line representing a single participant.

Table 22: Percent of IgG B cells that are antigen-specific (Core-g28v2 sorts): differences in response magnitudes between groups. Hypothesis testing was done using the Wilcoxon rank-sum test (two-sided, $\alpha = 0.05$) and p-values less than 0.05 are highlighted. P-values are not computed for insufficient sample sizes (less than three in either group).

Time Point	Comparison	Sample Sizes	Median (Range)	P-value
Week 8	Core vs. eOD	7 vs. 17	**0.063** [0.039, 0.123] vs. **0.023** [0.005, 0.101]	0.003
Week 16	eOD → Core vs. eOD → eOD	16 vs. 28	**0.140** [0.022, 0.455] vs. **0.063** [0.009, 0.264]	0.061
Week 24	eOD → Core vs. eOD → eOD	17 vs. 13	**0.166** [0.024, 0.578] vs. **0.134** [0.008, 0.354]	0.281
	eOD → Core vs. eOD → eOD → Core	17 vs. 13	**0.166** [0.024, 0.578] vs. **0.158** [0.015, 0.410]	0.363
	eOD → eOD vs. eOD → eOD → Core	13 vs. 13	**0.134** [0.008, 0.354] vs. **0.158** [0.015, 0.410]	0.687
prior to Core dose	eOD vs. eOD → eOD	17 vs. 16	**0.023** [0.005, 0.101] vs. **0.063** [0.009, 0.264]	0.006
8 weeks post-Core	Core vs. eOD → Core	7 vs. 16	**0.063** [0.039, 0.123] vs. **0.140** [0.022, 0.455]	0.103
	Core vs. eOD → eOD → Core	7 vs. 13	**0.063** [0.039, 0.123] vs. **0.158** [0.015, 0.410]	0.081
	eOD → Core vs. eOD → eOD → Core	16 vs. 13	**0.140** [0.022, 0.455] vs. **0.158** [0.015, 0.410]	0.846

Table 23: Percent of IgG B cells that are antigen-specific (Core-g28v2 sorts): differences in response magnitudes over time, within each group. Hypothesis testing was done using the Wilcoxon signed-rank test for paired data (two-sided, $\alpha = 0.05$) and p-values less than 0.05 are highlighted. P-values are not computed for insufficient sample sizes (less than three paired data points).

Treatment	Week Comparison	Number of Pairs	Median (Range)	P-value
Core	4 vs. 8	7	**0.121** [0.039, 0.171] vs. **0.063** [0.039, 0.123]	0.016
eOD → Core	16 vs. 24	16	**0.140** [0.022, 0.455] vs. **0.165** [0.024, 0.578]	<0.001
eOD → eOD	16 vs. 24	11	**0.110** [0.014, 0.227] vs. **0.134** [0.008, 0.354]	0.024

2.6 Percent of IgG B cells that are CD4bs-specific (Core-g28v2 sorts)

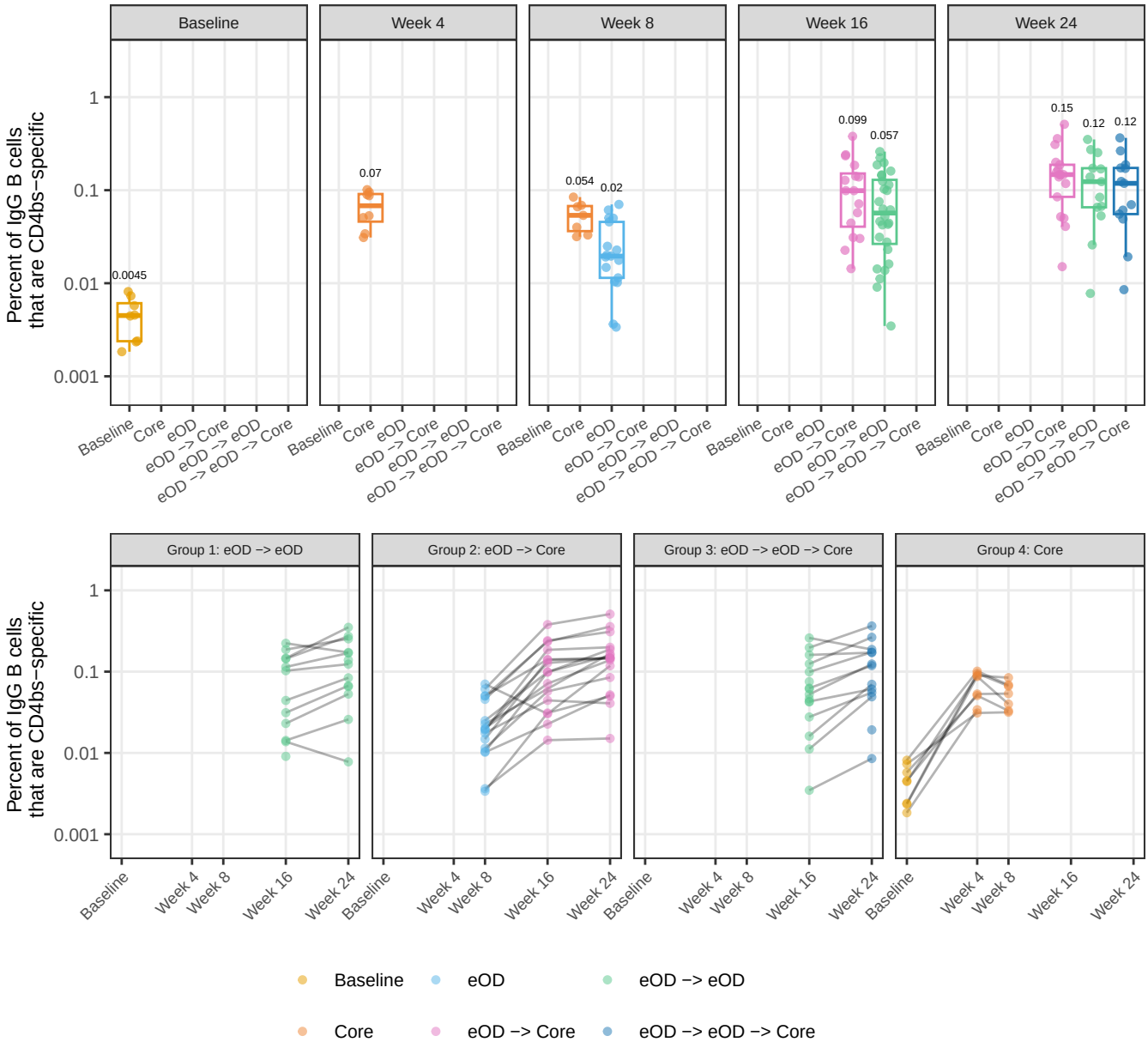

Figure 13: Percent of IgG B cells that are CD4bs-specific (Core-g28v2 sorts). Response magnitudes are shown in the first row of plots: each marker represents one participant, and the boxplots indicate the median and interquartile range among participants (the median is also noted in text above the boxplot). Response magnitudes over time (i.e., kinetics) are shown in the second row of plots, with each line representing a single participant.

Table 24: Percent of IgG B cells that are CD4bs-specific (Core-g28v2 sorts): differences in response magnitudes between groups. Hypothesis testing was done using the Wilcoxon rank-sum test (two-sided, $\alpha = 0.05$) and p-values less than 0.05 are highlighted. P-values are not computed for insufficient sample sizes (less than three in either group).

Time Point	Comparison	Sample Sizes	Median (Range)	P-value
Week 8	Core vs. eOD	7 vs. 17	**0.054** [0.032, 0.084] vs. **0.020** [0.003, 0.070]	0.009
Week 16	eOD → Core vs. eOD → eOD	16 vs. 28	**0.099** [0.014, 0.379] vs. **0.057** [0.003, 0.260]	0.250
Week 24	eOD → Core vs. eOD → eOD	17 vs. 13	**0.147** [0.015, 0.510] vs. **0.123** [0.008, 0.351]	0.592
	eOD → Core vs. eOD → eOD → Core	17 vs. 13	**0.147** [0.015, 0.510] vs. **0.118** [0.009, 0.365]	0.483
	eOD → eOD vs. eOD → eOD → Core	13 vs. 13	**0.123** [0.008, 0.351] vs. **0.118** [0.009, 0.365]	0.880
prior to Core dose	eOD vs. eOD → eOD	17 vs. 16	**0.020** [0.003, 0.070] vs. **0.057** [0.003, 0.260]	0.008
8 weeks post-Core	Core vs. eOD → Core	7 vs. 16	**0.054** [0.032, 0.084] vs. **0.099** [0.014, 0.379]	0.198
	Core vs. eOD → eOD → Core	7 vs. 13	**0.054** [0.032, 0.084] vs. **0.118** [0.009, 0.365]	0.115
	eOD → Core vs. eOD → eOD → Core	16 vs. 13	**0.099** [0.014, 0.379] vs. **0.118** [0.009, 0.365]	0.880

Table 25: Percent of IgG B cells that are CD4bs-specific (Core-g28v2 sorts): differences in response magnitudes over time, within each group. Hypothesis testing was done using the Wilcoxon signed-rank test for paired data (two-sided, $\alpha = 0.05$) and p-values less than 0.05 are highlighted. P-values are not computed for insufficient sample sizes (less than three paired data points).

Treatment	Week Comparison	Number of Pairs	Median (Range)	P-value
Core	4 vs. 8	7	**0.087** [0.031, 0.101] vs. **0.054** [0.032, 0.084]	0.078
eOD → Core	16 vs. 24	16	**0.099** [0.014, 0.379] vs. **0.147** [0.015, 0.510]	<0.001
eOD → eOD	16 vs. 24	11	**0.103** [0.014, 0.223] vs. **0.123** [0.008, 0.351]	0.024

2.7 Percent of antigen-specific IgG B cells that are CD4bs-specific (Core-g28v2 sorts)

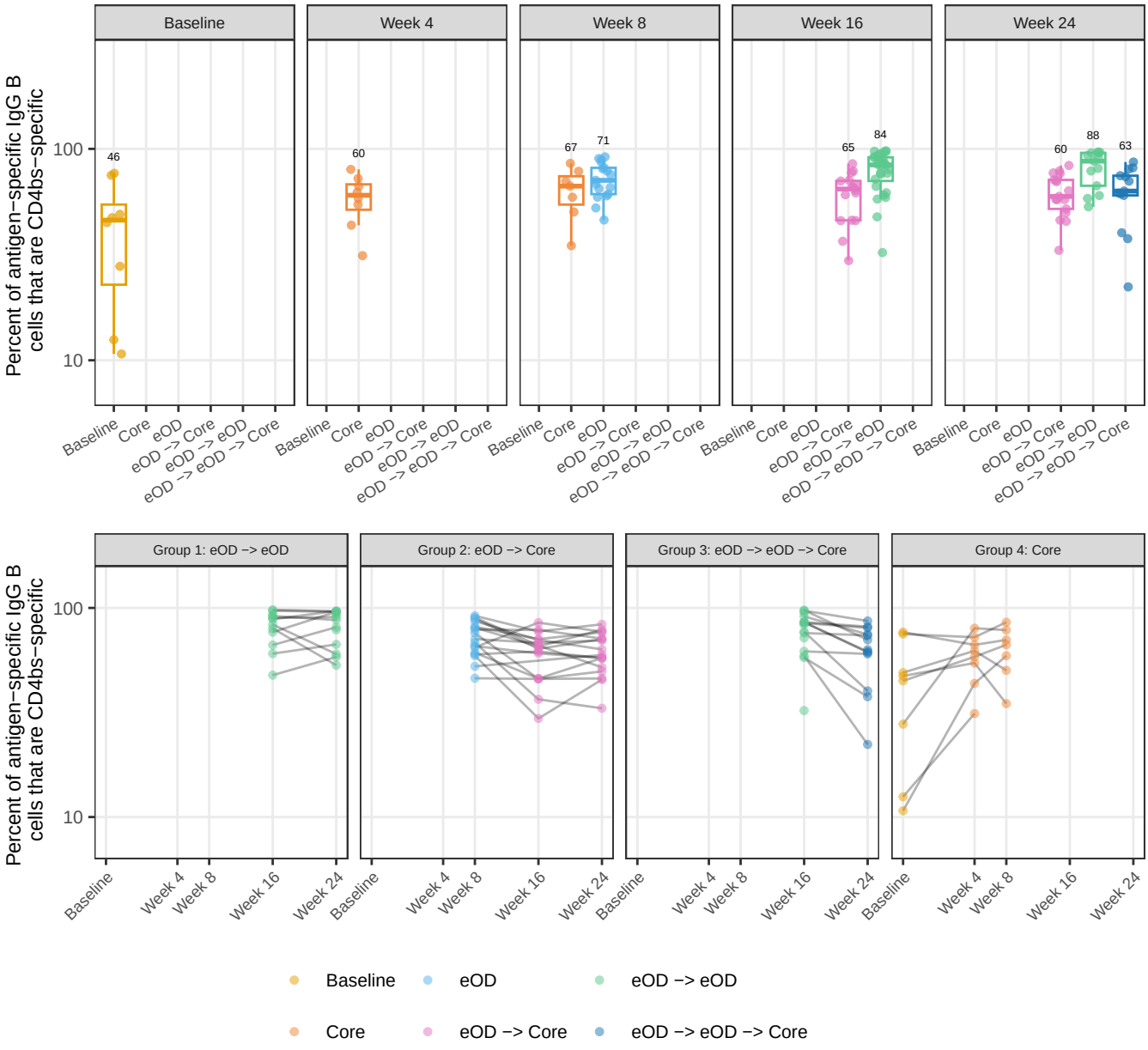

Figure 14: Percent of antigen-specific IgG B cells that are CD4bs-specific (Core-g28v2 sorts). Response magnitudes are shown in the first row of plots: each marker represents one participant, and the boxplots indicate the median and interquartile range among participants (the median is also noted in text above the boxplot). Response magnitudes over time (i.e., kinetics) are shown in the second row of plots, with each line representing a single participant.

Table 26: Percent of antigen-specific IgG B cells that are CD4bs-specific (Core-g28v2 sorts): differences in response magnitudes between groups. Hypothesis testing was done using the Wilcoxon rank-sum test (two-sided, $\alpha = 0.05$) and p-values less than 0.05 are highlighted. P-values are not computed for insufficient sample sizes (less than three in either group).

Time Point	Comparison	Sample Sizes	Median (Range)	P-value
Week 8	Core vs. eOD	7 vs. 17	**66.650** [34.848, 85.410] vs. **70.992** [46.099, 91.681]	0.260
Week 16	eOD → Core vs. eOD → eOD	16 vs. 28	**64.585** [29.608, 85.047] vs. **83.995** [32.313, 97.951]	<0.001
Week 24	eOD → Core vs. eOD → eOD	17 vs. 13	**59.605** [33.120, 83.482] vs. **87.500** [53.226, 96.693]	0.002
	eOD → Core vs. eOD → eOD → Core	17 vs. 13	**59.605** [33.120, 83.482] vs. **63.140** [22.241, 86.667]	0.592
	eOD → eOD vs. eOD → eOD → Core	13 vs. 13	**87.500** [53.226, 96.693] vs. **63.140** [22.241, 86.667]	0.026
prior to Core dose	eOD vs. eOD → eOD	17 vs. 16	**70.992** [46.099, 91.681] vs. **83.845** [32.313, 97.494]	0.231
8 weeks post-Core	Core vs. eOD → Core	7 vs. 16	**66.650** [34.848, 85.410] vs. **64.585** [29.608, 85.047]	0.720
	Core vs. eOD → eOD → Core	7 vs. 13	**66.650** [34.848, 85.410] vs. **63.140** [22.241, 86.667]	0.877
	eOD → Core vs. eOD → eOD → Core	16 vs. 13	**64.585** [29.608, 85.047] vs. **63.140** [22.241, 86.667]	0.779

Table 27: Percent of antigen-specific IgG B cells that are CD4bs-specific (Core-g28v2 sorts): differences in response magnitudes over time, within each group. Hypothesis testing was done using the Wilcoxon signed-rank test for paired data (two-sided, $\alpha = 0.05$) and p-values less than 0.05 are highlighted. P-values are not computed for insufficient sample sizes (less than three paired data points).

Treatment	Week Comparison	Number of Pairs	Median (Range)	P-value
Core	4 vs. 8	7	**62.345** [43.558, 79.975] vs. **66.650** [34.848, 85.410]	0.813
eOD → Core	16 vs. 24	16	**64.585** [29.608, 85.047] vs. **60.470** [33.120, 83.482]	0.669
eOD → eOD	16 vs. 24	11	**83.333** [47.702, 97.951] vs. **87.500** [53.226, 96.693]	0.831

3 Additional tables for manuscript

3.1 Sequence counts

Table 28: Number of paired heavy and light chain sequences included in analysis (PBMCs)

		eOD-GT8-specific B Cells Sequenced					Core-g28v2-specific B Cells Sequenced				
Group	ID	Wk -5	Wk 4	Wk 7.5/8	Wk 15.5/16	Wk 24	Wk -5	Wk 4	Wk 7.5/8	Wk 15.5/16	Wk 24
Group 1: eOD → eOD	254	23	602	No Sort	Excluded	Excluded	-	-	-	Excluded	Excluded
	302	743	401	96	275	253	-	-	-	107	176
	479	6	480	108	Excluded	Excluded	-	-	-	Excluded	Excluded
	502	148	1817	1708	No Sort	633	-	-	-	No Sort	81
	509	30	No Sort	1122	No Sort	981	-	-	-	No Sort	199
	516	136	961	605	380	No Sort	-	-	-	30	No Sort
	546	6	822	757	657	281	-	-	-	104	211
	616	35	2030	2354	1478	338	-	-	-	509	167
	619	107	1210	852	668	180	-	-	-	199	189
	678	68	616	537	1443	1807	-	-	-	405	766
	733	54	374	267	Excluded	Excluded	-	-	-	Excluded	Excluded
	758	7	1094	1958	291	640	-	-	-	136	227
	813	39	681	1027	125	637	-	-	-	61	222
	834	57	453	209	46	57	-	-	-	No Seq	12
	852	100	2728	2730	1928	1950	-	-	-	847	1053
	905	14	195	837	716	167	-	-	-	10	40
	969	33	364	190	288	185	-	-	-	122	42
Group 2: eOD → Core	119	6	1377	2054	-	-	-	-	40	209	292
	136	102	2515	1383	-	-	-	-	211	76	514
	145	101	1213	1276	-	-	-	-	158	383	1144
	230	3	757	339	-	-	-	-	38	448	287
	293	185	1565	1702	-	-	-	-	43	104	669
	341	379	2851	1326	-	-	-	-	7	239	101
	480	41	27	53	-	-	-	-	8	22	33
	493	19	885	2118	-	-	-	-	8	20	14
	577	2158	857	2164	-	-	-	-	24	585	617
	620	61	89	329	-	-	-	-	No Seq	104	91
	630	105	1418	1418	-	-	-	-	110	422	507
	820	17	1068	1189	-	-	-	-	44	156	929
	831	64	3767	1800	-	-	-	-	400	No Sort	368
	855	212	952	676	-	-	-	-	97	163	73
	943	18	571	1554	-	-	-	-	39	414	572
	947	2	95	62	-	-	-	-	54	138	189
	957	23	509	142	-	-	-	-	42	82	39
Group 3: eOD → eOD → Core	278	9	480	47	254	-	-	-	-	98	211
	304	180	237	773	534	-	-	-	-	178	268
	371	121	1568	1273	428	-	-	-	-	8	30
	427	203	105	156	253	-	-	-	-	147	103
	462	77	4	49	178	-	-	-	-	57	Excluded
	477	99	1378	589	489	-	-	-	-	132	Excluded
	595	139	737	327	1012	-	-	-	-	74	387
	632	119	296	87	685	-	-	-	-	179	Excluded
	689	123	888	No Sort	Excluded	-	-	-	-	Excluded	Excluded
	796	7	784	337	1027	-	-	-	-	388	773
	810	73	202	166	157	-	-	-	-	51	Excluded
	825	49	567	No Sort	164	-	-	-	-	No Seq	287
	866	73	496	280	404	-	-	-	-	124	62
	871	68	170	210	No Sort	-	-	-	-	No Sort	22
	884	94	614	513	1275	-	-	-	-	390	757
	931	226	1081	2232	2993	-	-	-	-	460	825
	988	No Seq	153	972	960	-	-	-	-	831	230
	997	316	1403	1140	1949	-	-	-	-	325	458
Group 4: Core	104	-	-	-	-	-	36	161	83	-	-
	365	-	-	-	-	-	64	141	204	-	-
	387	-	-	-	-	-	55	123	215	-	-
	396	-	-	-	-	-	71	215	151	-	-
	489	-	-	-	-	-	34	19	No Sort	-	-
	611	-	-	-	-	-	No Seq	702	1112	-	-
	710	-	-	-	-	-	No Seq	804	672	-	-
	794	-	-	-	-	-	209	91	106	-	-
	Total Obs.	**51**	**51**	**49**	**28**	**13**	**6**	**8**	**23**	**42**	**43**

Note:

-: The given probe set (eOD-GT8 or Core-g28v2) was not used for this treatment group and time point due to the vaccination schedule

Excluded: Samples that were either not collected, or were excluded from analysis, due to protocol deviations (i.e., missed vaccine doses and/or study discontinuation)

No Seq: Samples for which flow cytometry data was available, but no sequencing data was available

No Sort: Samples for which no flow cytometry or sequencing data was available

Table 29: Number of paired heavy and light chain IgG sequences included in analysis (PBMCs)

		eOD-GT8-specific IgG B Cells Sequenced					Core-g28v2-specific IgG B Cells Sequenced				
Group	ID	Wk -5	Wk 4	Wk 7.5/8	Wk 15.5/16	Wk 24	Wk -5	Wk 4	Wk 7.5/8	Wk 15.5/16	Wk 24
Group 1: eOD → eOD	254	6	482	No Sort	Excluded	Excluded	-	-	-	Excluded	Excluded
	302	62	357	92	255	235	-	-	-	74	157
	479	1	427	98	Excluded	Excluded	-	-	-	Excluded	Excluded
	502	6	1511	1458	No Sort	524	-	-	-	No Sort	49
	509	2	No Sort	811	No Sort	761	-	-	-	No Sort	148
	516	7	623	408	259	No Sort	-	-	-	16	No Sort
	546	3	671	625	565	238	-	-	-	66	187
	616	6	1727	2095	1288	307	-	-	-	449	151
	619	2	1036	680	588	144	-	-	-	101	132
	678	4	428	397	1209	1479	-	-	-	326	682
	733	3	286	208	Excluded	Excluded	-	-	-	Excluded	Excluded
	758	1	589	1167	226	563	-	-	-	109	205
	813	10	480	819	111	524	-	-	-	47	174
	834	0	323	165	40	53	-	-	-	No Seq	6
	852	17	2193	2302	1596	1637	-	-	-	636	864
	905	0	138	668	625	149	-	-	-	10	34
	969	12	296	157	232	144	-	-	-	56	18
Group 2: eOD → Core	119	2	1044	1587	-	-	-	-	38	166	248
	136	18	2143	1201	-	-	-	-	184	61	469
	145	4	879	973	-	-	-	-	135	341	1002
	230	0	524	239	-	-	-	-	24	411	264
	293	9	1096	1383	-	-	-	-	34	77	540
	341	3	2215	1019	-	-	-	-	5	216	87
	480	3	21	47	-	-	-	-	2	8	18
	493	1	602	1610	-	-	-	-	6	18	13
	577	124	696	1819	-	-	-	-	20	512	562
	620	4	74	297	-	-	-	-	No Seq	73	72
	630	12	1239	1135	-	-	-	-	58	335	405
	820	5	864	923	-	-	-	-	37	121	778
	831	7	3041	1437	-	-	-	-	185	No Sort	326
	855	7	612	452	-	-	-	-	62	121	58
	943	4	482	1324	-	-	-	-	35	364	499
	947	0	70	39	-	-	-	-	14	60	103
	957	0	436	119	-	-	-	-	28	59	35
Group 3: eOD → eOD → Core	278	3	408	42	238	-	-	-	-	84	204
	304	2	185	548	466	-	-	-	-	120	232
	371	10	1140	972	347	-	-	-	-	3	24
	427	8	71	130	216	-	-	-	-	80	80
	462	2	4	38	144	-	-	-	-	45	Excluded
	477	13	1144	514	420	-	-	-	-	111	Excluded
	595	14	527	257	882	-	-	-	-	66	353
	632	12	228	70	568	-	-	-	-	147	Excluded
	689	5	607	No Sort	Excluded	-	-	-	-	Excluded	Excluded
	796	1	621	266	910	-	-	-	-	349	703
	810	9	143	115	122	-	-	-	-	35	Excluded
	825	7	430	No Sort	124	-	-	-	-	No Seq	251
	866	14	398	223	314	-	-	-	-	91	51
	871	4	147	187	No Sort	-	-	-	-	No Sort	21
	884	12	521	428	1173	-	-	-	-	338	658
	931	5	759	1650	2601	-	-	-	-	414	727
	988	No Seq	124	845	846	-	-	-	-	810	214
	997	7	1096	954	1670	-	-	-	-	253	362
Group 4: Core	104	-	-	-	-	-	6	134	74	-	-
	365	-	-	-	-	-	22	131	157	-	-
	387	-	-	-	-	-	12	107	187	-	-
	396	-	-	-	-	-	6	205	144	-	-
	489	-	-	-	-	-	0	17	No Sort	-	-
	611	-	-	-	-	-	No Seq	466	711	-	-
	710	-	-	-	-	-	No Seq	484	402	-	-
	794	-	-	-	-	-	21	74	97	-	-
	Total Obs.	**51**	**51**	**49**	**28**	**13**	**6**	**8**	**23**	**42**	**43**

Note:

-: The given probe set (eOD-GT8 or Core-g28v2) was not used for this treatment group and time point due to the vaccination schedule

Excluded: Samples that were either not collected, or were excluded from analysis, due to protocol deviations (i.e., missed vaccine doses and/or study discontinuation)

No Seq: Samples for which flow cytometry data was available, but no sequencing data was available

No Sort: Samples for which no flow cytometry or sequencing data was available

3.2 IGHV1-2 genotype and detection of VRC01-class B cells

Table 30: IGHV1-2 genotype and detection of VRC01-class B cells in PBMCs

			VRC01-class eOD-GT8-specific B Cells Detected					VRC01-class Core-g28v2-specific B Cells Detected				
Group	Genotype	ID	Wk -5	Wk 4	Wk 7.5/8	Wk 15.5/16	Wk 24	Wk -5	Wk 4	Wk 7.5/8	Wk 15.5/16	Wk 24
Group 1: eOD → eOD	02/02	479	No	Yes	Yes	Excluded	Excluded	-	-	-	Excluded	Excluded
	02/02	509	Yes	No Sort	Yes	No Sort	Yes	-	-	-	No Sort	Yes
	02/02	813	Yes	Yes	Yes	Yes	Yes	-	-	-	Yes	Yes
	02/04	616	Yes	Yes	Yes	Yes	Yes	-	-	-	Yes	Yes
	02/04	678	Yes	Yes	Yes	Yes	Yes	-	-	-	Yes	Yes
	02/04	852	Yes	Yes	Yes	Yes	Yes	-	-	-	Yes	Yes
	02/05	619	Yes	Yes	Yes	Yes	Yes	-	-	-	Yes	Yes
	02/05	758	No	Yes	Yes	Yes	Yes	-	-	-	Yes	Yes
	04/04	254	No	Yes	No Sort	Excluded	Excluded	-	-	-	Excluded	Excluded
	04/04	302	Yes	Yes	Yes	Yes	Yes	-	-	-	Yes	Yes
	04/04	502	Yes	Yes	Yes	No Sort	Yes	-	-	-	No Sort	Yes
	04/04	546	No	Yes	Yes	Yes	Yes	-	-	-	Yes	Yes
	04/04	733	Yes	Yes	Yes	Excluded	Excluded	-	-	-	Excluded	Excluded
	04/04	834	No	Yes	Yes	Yes	Yes	-	-	-	No Seq	Yes
	04/05	905	No	Yes	Yes	Yes	Yes	-	-	-	Yes	Yes
	04/06	516	No	Yes	Yes	Yes	No Sort	-	-	-	Yes	No Sort
	06/06	969	No	No	No	No	No	-	-	-	No	No
Group 2: eOD → Core	02/02	145	Yes	Yes	Yes	-	-	-	-	Yes	Yes	Yes
	02/02	230	No	Yes	Yes	-	-	-	-	Yes	Yes	Yes
	02/02	293	Yes	Yes	Yes	-	-	-	-	Yes	Yes	Yes
	02/02	630	Yes	Yes	Yes	-	-	-	-	Yes	Yes	Yes
	02/02	947	No	Yes	Yes	-	-	-	-	Yes	Yes	Yes
	02/04	119	Yes	Yes	Yes	-	-	-	-	Yes	Yes	Yes
	02/04	136	Yes	Yes	Yes	-	-	-	-	Yes	Yes	Yes
	02/04	577	Yes	Yes	Yes	-	-	-	-	Yes	Yes	Yes
	02/04	820	Yes	Yes	Yes	-	-	-	-	Yes	Yes	Yes
	02/06	957	Yes	Yes	Yes	-	-	-	-	Yes	Yes	Yes
	04/04	341	Yes	Yes	Yes	-	-	-	-	Yes	Yes	Yes
	04/04	493	No	Yes	Yes	-	-	-	-	Yes	Yes	Yes
	04/04	620	Yes	Yes	Yes	-	-	-	-	No Seq	Yes	Yes
	04/04	831	Yes	Yes	Yes	-	-	-	-	Yes	No Sort	Yes
	04/04	855	Yes	Yes	Yes	-	-	-	-	Yes	Yes	Yes
	04/04	943	No	Yes	Yes	-	-	-	-	Yes	Yes	Yes
	04/06	480	No	No	Yes	-	-	-	-	Yes	Yes	Yes
Group 3: eOD → eOD → Core	02/02	632	Yes	Yes	Yes	Yes	Excluded	-	-	-	Yes	Excluded
	02/04	278	No	Yes	Yes	Yes	-	-	-	-	Yes	Yes
	02/04	462	Yes	Yes	Yes	Yes	Excluded	-	-	-	Yes	Excluded
	02/04	477	Yes	Yes	Yes	Yes	Excluded	-	-	-	Yes	Excluded
	02/04	595	Yes	Yes	Yes	Yes	-	-	-	-	Yes	Yes
	02/04	689	Yes	Yes	No Sort	Excluded	Excluded	-	-	-	Excluded	Excluded
	02/04	796	No	Yes	Yes	Yes	-	-	-	-	Yes	Yes
	02/04	884	Yes	Yes	Yes	Yes	-	-	-	-	Yes	Yes
	02/04	931	Yes	Yes	Yes	Yes	-	-	-	-	Yes	Yes
	02/04	988	No Seq	Yes	Yes	Yes	-	-	-	-	Yes	Yes
	02/04	997	Yes	Yes	Yes	Yes	-	-	-	-	Yes	Yes
	02/06	304	Yes	Yes	Yes	Yes	-	-	-	-	Yes	Yes
	02/06	427	Yes	Yes	Yes	Yes	-	-	-	-	Yes	Yes
	02/06	825	No	Yes	No Sort	Yes	-	-	-	-	No Seq	Yes
	04/04	810	Yes	Yes	Yes	Yes	Excluded	-	-	-	Yes	Excluded
	04/06	866	No	Yes	Yes	Yes	-	-	-	-	Yes	Yes
	05/05	371	No	No	No	No	-	-	-	-	No	No
	05/05	871	No	No	No	No Sort	-	-	-	-	No Sort	No
Group 4: Core	02/02	794	-	-	-	-	-	No	No	Yes	-	-
	02/06	365	-	-	-	-	-	No	Yes	Yes	-	-
	02/06	396	-	-	-	-	-	No	Yes	Yes	-	-
	04/04	387	-	-	-	-	-	No	No	No	-	-
	04/04	611	-	-	-	-	-	No Seq	No	Yes	-	-
	04/05	104	-	-	-	-	-	No	No	No	-	-
	04/06	489	-	-	-	-	-	No	No	No Sort	-	-
	05/05	710	-	-	-	-	-	No Seq	No	No	-	-
Total			**32 / 51**	**47 / 51**	**46 / 49**	**26 / 28**	**12 / 13**	**0 / 6**	**2 / 8**	**20 / 23**	**40 / 42**	**40 / 43**

Note:

-: The given probe set (eOD-GT8 or Core-g28v2) was not used for this treatment group and time point due to the vaccination schedule

Excluded: Samples that were either not collected, or were excluded from analysis, due to protocol deviations (i.e., missed vaccine doses and/or study discontinuation)

No Seq: Samples for which flow cytometry data was available, but no sequencing data was available

No Sort: Samples for which no flow cytometry or sequencing data was available

Table 31: IGHV1-2 genotype and detection of VRC01-class IgG B cells in PBMCs

			VRC01-class eOD-GT8-specific IgG B Cells Detected					VRC01-class Core-g28v2-specific IgG B Cells Detected				
Group	Genotype	ID	Wk -5	Wk 4	Wk 7.5/8	Wk 15.5/16	Wk 24	Wk -5	Wk 4	Wk 7.5/8	Wk 15.5/16	Wk 24
Group 1: eOD → eOD	02/02	479	No	Yes	Yes	Excluded	Excluded	-	-	-	Excluded	Excluded
	02/02	509	No	No Sort	Yes	No Sort	Yes	-	-	-	No Sort	Yes
	02/02	813	Yes	Yes	Yes	Yes	Yes	-	-	-	Yes	Yes
	02/04	616	Yes	Yes	Yes	Yes	Yes	-	-	-	Yes	Yes
	02/04	678	No	Yes	Yes	Yes	Yes	-	-	-	Yes	Yes
	02/04	852	Yes	Yes	Yes	Yes	Yes	-	-	-	Yes	Yes
	02/05	619	No	Yes	Yes	Yes	Yes	-	-	-	Yes	Yes
	02/05	758	No	Yes	Yes	Yes	Yes	-	-	-	Yes	Yes
	04/04	254	No	Yes	No Sort	Excluded	Excluded	-	-	-	Excluded	Excluded
	04/04	302	No	Yes	Yes	Yes	Yes	-	-	-	Yes	Yes
	04/04	502	Yes	Yes	Yes	No Sort	Yes	-	-	-	No Sort	Yes
	04/04	546	No	Yes	Yes	Yes	Yes	-	-	-	Yes	Yes
	04/04	733	No	Yes	Yes	Excluded	Excluded	-	-	-	Excluded	Excluded
	04/04	834	No	Yes	Yes	Yes	Yes	-	-	-	No Seq	Yes
	04/05	905	No	Yes	Yes	Yes	Yes	-	-	-	Yes	Yes
	04/06	516	No	Yes	Yes	Yes	No Sort	-	-	-	Yes	No Sort
	06/06	969	No	No	No	No	No	-	-	-	No	No
Group 2: eOD → Core	02/02	145	No	Yes	Yes	-	-	-	-	Yes	Yes	Yes
	02/02	230	No	Yes	Yes	-	-	-	-	Yes	Yes	Yes
	02/02	293	No	Yes	Yes	-	-	-	-	Yes	Yes	Yes
	02/02	630	No	Yes	Yes	-	-	-	-	Yes	Yes	Yes
	02/02	947	No	Yes	Yes	-	-	-	-	Yes	Yes	Yes
	02/04	119	No	Yes	Yes	-	-	-	-	Yes	Yes	Yes
	02/04	136	Yes	Yes	Yes	-	-	-	-	Yes	Yes	Yes
	02/04	577	No	Yes	Yes	-	-	-	-	Yes	Yes	Yes
	02/04	820	No	Yes	Yes	-	-	-	-	Yes	Yes	Yes
	02/06	957	No	Yes	Yes	-	-	-	-	Yes	Yes	Yes
	04/04	341	No	Yes	Yes	-	-	-	-	Yes	Yes	Yes
	04/04	493	No	Yes	Yes	-	-	-	-	Yes	Yes	Yes
	04/04	620	No	Yes	Yes	-	-	-	-	No Seq	Yes	Yes
	04/04	831	No	Yes	Yes	-	-	-	-	Yes	No Sort	Yes
	04/04	855	No	Yes	Yes	-	-	-	-	Yes	Yes	Yes
	04/04	943	No	Yes	Yes	-	-	-	-	Yes	Yes	Yes
	04/06	480	No	No	Yes	-	-	-	-	Yes	Yes	Yes
Group 3: eOD → eOD → Core	02/02	632	No	Yes	Yes	Yes	Excluded	-	-	-	Yes	Excluded
	02/04	278	No	Yes	Yes	Yes	-	-	-	-	Yes	Yes
	02/04	462	No	Yes	Yes	Yes	Excluded	-	-	-	Yes	Excluded
	02/04	477	No	Yes	Yes	Yes	Excluded	-	-	-	Yes	Excluded
	02/04	595	No	Yes	Yes	Yes	-	-	-	-	Yes	Yes
	02/04	689	No	Yes	No Sort	Excluded	Excluded	-	-	-	Excluded	Excluded
	02/04	796	No	Yes	Yes	Yes	-	-	-	-	Yes	Yes
	02/04	884	No	Yes	Yes	Yes	-	-	-	-	Yes	Yes
	02/04	931	No	Yes	Yes	Yes	-	-	-	-	Yes	Yes
	02/04	988	No Seq	Yes	Yes	Yes	-	-	-	-	Yes	Yes
	02/04	997	Yes	Yes	Yes	Yes	-	-	-	-	Yes	Yes
	02/06	304	No	Yes	Yes	Yes	-	-	-	-	Yes	Yes
	02/06	427	Yes	Yes	Yes	Yes	-	-	-	-	Yes	Yes
	02/06	825	No	Yes	No Sort	Yes	-	-	-	-	No Seq	Yes
	04/04	810	No	Yes	Yes	Yes	Excluded	-	-	-	Yes	Excluded
	04/06	866	No	Yes	Yes	Yes	-	-	-	-	Yes	Yes
	05/05	371	No	No	No	No	-	-	-	-	No	No
	05/05	871	No	No	No	No Sort	-	-	-	-	No Sort	No
Group 4: Core	02/02	794	-	-	-	-	-	No	No	Yes	-	-
	02/06	365	-	-	-	-	-	No	Yes	Yes	-	-
	02/06	396	-	-	-	-	-	No	Yes	Yes	-	-
	04/04	387	-	-	-	-	-	No	No	No	-	-
	04/04	611	-	-	-	-	-	No Seq	No	Yes	-	-
	04/05	104	-	-	-	-	-	No	No	No	-	-
	04/06	489	-	-	-	-	-	No	No	No Sort	-	-
	05/05	710	-	-	-	-	-	No Seq	No	No	-	-
Total			**7 / 51**	**47 / 51**	**46 / 49**	**26 / 28**	**12 / 13**	**0 / 6**	**2 / 8**	**20 / 23**	**40 / 42**	**40 / 43**

Note:

-: The given probe set (eOD-GT8 or Core-g28v2) was not used for this treatment group and time point due to the vaccination schedule

Excluded: Samples that were either not collected, or were excluded from analysis, due to protocol deviations (i.e., missed vaccine doses and/or study discontinuation)

No Seq: Samples for which flow cytometry data was available, but no sequencing data was available

No Sort: Samples for which no flow cytometry or sequencing data was available

4 Reproducibility: software session and package version information

Table 32: Reproducibility software session information

name	value
version	R version 4.4.0 (2024-04-24)
os	macOS 15.1.1
system	aarch64, darwin20
ui	X11
language	(EN)
collate	en_US.UTF-8
ctype	en_US.UTF-8
tz	America/Los_Angeles
date	2024-11-26
pandoc	3.1.11 @ /Applications/RStudio.app/Contents/Resources/app/quarto/bin/tools/aarch64/ (via rmarkdown)
repo	git@github.com:FredHutch/Schief856Analysis.git
file name	Schief856_Bcell_tables_for_manuscript.Rmd
location	Bcell/manuscript_revisions
user	Kellie MacPhee

Table 33: Reproducibility software package version information

package	version	date	source
arrow	17.0.0.1	2024-08-21	CRAN (R 4.4.1)
conflicted	1.2.0	2023-02-01	CRAN (R 4.4.0)
dplyr	1.1.4	2023-11-17	CRAN (R 4.4.0)
flextable	0.9.6	2024-05-05	CRAN (R 4.4.0)
forcats	1.0.0	2023-01-29	CRAN (R 4.4.0)
ggplot2	3.5.1	2024-04-23	CRAN (R 4.4.0)
here	1.0.1	2020-12-13	CRAN (R 4.4.0)
kableExtra	1.4.0	2024-01-24	CRAN (R 4.4.0)
knitr	1.48	2024-07-07	CRAN (R 4.4.0)
lubridate	1.9.3	2023-09-27	CRAN (R 4.4.0)
patchwork	1.3.0	2024-09-16	CRAN (R 4.4.1)
purrr	1.0.2	2023-08-10	CRAN (R 4.4.0)
readr	2.1.5	2024-01-10	CRAN (R 4.4.0)
readxl	1.4.3	2023-07-06	CRAN (R 4.4.0)
rmarkdown	2.28	2024-08-17	CRAN (R 4.4.0)
stringr	1.5.1	2023-11-14	CRAN (R 4.4.0)
tibble	3.2.1	2023-03-20	CRAN (R 4.4.0)
tidyr	1.3.1	2024-01-24	CRAN (R 4.4.0)
tidyverse	2.0.0	2023-02-22	CRAN (R 4.4.0)
VISCfunctions	1.2.3	2024-09-10	Github (FredHutch/VISCfunctions@781efdc)
VISCtemplates	1.3.2.9000	2024-11-05	Github (FredHutch/VISCtemplates@02d8d8d)