

**Table S1.** Spearman rank order correlations between RBD antibody responses and device-generated metrics (retaining  $n=51$  values of “>250 IU/ml” as 250 IU/ml) on nights before and after vaccine injections.

Night Relative to Injection	Metric	Injection 1		Injection 1				Injection 2			
		J&J		Moderna		Pfizer		Moderna		Pfizer	
		rho	P	rho	P	rho	P	rho	P	rho	P
-2	Sleep Duration	-0.127	0.207	-0.012	0.819	0.019	0.617	0.027	0.618	-0.025	0.528
	REM Sleep	0.026	0.799	-0.028	0.596	<b>0.095</b>	<b>0.015</b>	-0.015	0.787	0.041	0.297
	Deep Sleep	-0.139	0.166	0.004	0.938	0.040	0.298	0.100	0.066	0.063	0.109
	HRV (RMSSD)	-0.119	0.236	0.039	0.467	-0.053	0.172	0.010	0.861	0.010	0.800
	HR	-0.038	0.706	0.028	0.595	<b>0.149</b>	<b>0.000</b>	0.022	0.684	<b>0.085</b>	<b>0.030</b>
	RR	0.072	0.477	-0.073	0.170	-0.037	0.336	<b>-0.128</b>	<b>0.018</b>	-0.022	0.575
	Temp Deviation	-0.028	0.784	-0.064	0.234	0.061	0.115	0.011	0.841	-0.010	0.789
-1	Sleep Duration	0.036	0.723	-0.017	0.756	-0.050	0.193	-0.014	0.796	-0.044	0.266
	REM Sleep	0.018	0.856	-0.058	0.278	0.012	0.753	-0.055	0.314	0.004	0.915
	Deep Sleep	0.012	0.908	-0.017	0.746	0.069	0.073	0.012	0.826	0.057	0.145
	HRV (RMSSD)	-0.081	0.421	0.074	0.163	-0.004	0.922	0.060	0.270	0.028	0.480
	HR	0.056	0.574	-0.001	0.987	<b>0.112</b>	<b>0.004</b>	0.000	0.998	<b>0.114</b>	<b>0.003</b>
	RR	0.122	0.223	-0.061	0.251	-0.060	0.119	-0.072	0.185	-0.054	0.168
	Temp Deviation	-0.047	0.640	-0.046	0.390	-0.017	0.654	0.054	0.325	-0.009	0.820
0	Sleep Duration	0.125	0.211	0.096	0.076	<b>-0.082</b>	<b>0.034</b>	0.001	0.991	-0.027	0.482
	REM Sleep	0.054	0.593	0.045	0.400	0.002	0.952	0.054	0.321	0.027	0.487
	Deep Sleep	-0.162	0.106	-0.006	0.913	0.025	0.520	-0.022	0.680	-0.029	0.452
	HRV (RMSSD)	-0.047	0.638	0.037	0.494	-0.005	0.892	-0.066	0.222	<b>-0.090</b>	<b>0.020</b>
	HR	0.125	0.213	0.012	0.829	<b>0.104</b>	<b>0.007</b>	<b>0.148</b>	<b>0.006</b>	<b>0.185</b>	<b>0.000</b>
	RR	0.123	0.222	-0.059	0.275	-0.034	0.380	0.000	0.996	0.025	0.531
	Temp Deviation	0.155	0.122	0.006	0.917	-0.021	0.587	<b>0.132</b>	<b>0.014</b>	<b>0.133</b>	<b>0.001</b>
1	Sleep Duration	<b>-0.202</b>	<b>0.044</b>	-0.044	0.408	0.001	0.980	0.042	0.448	0.004	0.919
	REM Sleep	-0.056	0.580	0.028	0.600	0.045	0.252	0.045	0.417	<b>0.082</b>	<b>0.038</b>
	Deep Sleep	-0.149	0.138	-0.006	0.913	0.061	0.114	-0.051	0.350	0.043	0.272
	HRV (RMSSD)	-0.073	0.471	0.025	0.639	-0.024	0.530	0.039	0.481	-0.026	0.514
	HR	0.049	0.631	0.005	0.931	<b>0.103</b>	<b>0.008</b>	0.030	0.587	<b>0.132</b>	<b>0.001</b>
	RR	0.157	0.119	-0.036	0.505	-0.043	0.268	-0.035	0.525	0.073	0.065
	Temp Deviation	0.093	0.356	0.045	0.400	-0.040	0.302	0.096	0.081	<b>0.172</b>	<b>0.000</b>
2	Sleep Duration	0.046	0.646	0.008	0.884	-0.004	0.925	-0.003	0.959	<b>-0.091</b>	<b>0.020</b>
	REM Sleep	0.019	0.853	0.002	0.970	0.036	0.350	0.008	0.879	-0.004	0.921
	Deep Sleep	0.026	0.795	-0.018	0.732	0.006	0.878	0.044	0.424	-0.002	0.955
	HRV (RMSSD)	-0.074	0.465	0.026	0.631	-0.021	0.592	0.034	0.539	-0.044	0.263
	HR	0.108	0.282	0.038	0.483	<b>0.109</b>	<b>0.005</b>	0.024	0.659	<b>0.110</b>	<b>0.005</b>
	RR	0.144	0.152	-0.036	0.497	-0.055	0.156	-0.065	0.233	-0.006	0.880
	Temp Deviation	0.187	0.062	0.006	0.912	0.000	0.997	0.099	0.072	0.003	0.940

Note. See Table 2 note. Analyses are identical to Table 2, however, retain the  $n=51$  participants whose RBD antibody responses were returned from LabCorp as “>250 IU/ml” as having values of 250 IU/ml.

## Supplementary Tables

**Table S2.** Spearman rank order correlations between RBD antibody responses and device-generated metrics before and after adjusting for the pre-vaccination baseline period (retaining  $n=51$  values of “ $>250$  IU/ml” as 250 IU/ml) on nights surrounding injections for Moderna-NIAID and Pfizer-BioNTech vaccine recipients, combined.

Night Relative to Injection	Metric	Device-generated Metric				Adjusted for Baseline period			
		Injection 1		Injection 2		Injection 1		Injection 2	
		rho	P	rho	P	rho	P	rho	P
-2	Sleep Duration	0.005	0.868	0.008	0.802	0.008	0.800	0.038	0.230
	REM Sleep	0.052	0.100	0.036	0.252	0.018	0.559	0.014	0.656
	Deep Sleep	0.022	0.487	0.062	0.051	0.010	0.756	0.045	0.157
	HRV (RMSSD)	-0.028	0.370	-0.015	0.638	-0.058	0.064	-0.003	0.915
	HR	<b>0.107</b>	<b>0.001</b>	<b>0.063</b>	<b>0.046</b>	<b>0.079</b>	<b>0.012</b>	-0.029	0.367
	RR	-0.030	0.335	-0.055	0.080	0.058	0.064	-0.018	0.566
	Temp Deviation	0.010	0.753	-0.010	0.758	0.034	0.278	0.013	0.676
-1	Sleep Duration	-0.017	0.587	-0.014	0.659	-0.029	0.358	-0.001	0.976
	REM Sleep	0.019	0.551	-0.007	0.835	-0.013	0.670	-0.041	0.202
	Deep Sleep	0.041	0.188	0.040	0.208	0.052	0.095	0.022	0.481
	HRV (RMSSD)	0.005	0.878	0.040	0.212	0.024	0.438	<b>0.073</b>	<b>0.022</b>
	HR	<b>0.070</b>	<b>0.025</b>	<b>0.063</b>	<b>0.048</b>	-0.035	0.268	-0.018	0.573
	RR	-0.040	0.205	-0.053	0.093	-0.003	0.935	-0.033	0.299
	Temp Deviation	-0.014	0.658	-0.003	0.916	0.015	0.627	0.027	0.390
0	Sleep Duration	-0.017	0.590	-0.008	0.792	-0.022	0.479	0.014	0.648
	REM Sleep	0.013	0.668	0.035	0.271	-0.023	0.463	0.017	0.591
	Deep Sleep	-0.007	0.814	-0.056	0.074	-0.022	0.491	<b>-0.114</b>	<b>0.000</b>
	HRV (RMSSD)	-0.010	0.754	<b>-0.117</b>	<b>0.000</b>	0.006	0.849	<b>-0.188</b>	<b>0.000</b>
	HR	<b>0.072</b>	<b>0.022</b>	<b>0.203</b>	<b>0.000</b>	-0.009	0.785	<b>0.195</b>	<b>0.000</b>
	RR	-0.026	0.403	0.058	0.065	0.061	0.052	<b>0.183</b>	<b>0.000</b>
	Temp Deviation	-0.004	0.899	<b>0.221</b>	<b>0.000</b>	0.014	0.650	<b>0.228</b>	<b>0.000</b>
1	Sleep Duration	-0.014	0.647	0.061	0.057	-0.008	0.796	<b>0.109</b>	<b>0.001</b>
	REM Sleep	0.036	0.253	<b>0.073</b>	<b>0.022</b>	0.005	0.863	<b>0.067</b>	<b>0.035</b>
	Deep Sleep	0.029	0.359	0.010	0.752	0.020	0.525	-0.020	0.541
	HRV (RMSSD)	-0.032	0.301	-0.025	0.428	<b>-0.076</b>	<b>0.015</b>	-0.059	0.064
	HR	<b>0.082</b>	<b>0.009</b>	<b>0.105</b>	<b>0.001</b>	0.031	0.325	<b>0.067</b>	<b>0.037</b>
	RR	-0.005	0.876	<b>0.071</b>	<b>0.026</b>	<b>0.095</b>	<b>0.002</b>	<b>0.228</b>	<b>0.000</b>
	Temp Deviation	0.026	0.407	<b>0.211</b>	<b>0.000</b>	0.049	0.121	<b>0.219</b>	<b>0.000</b>
2	Sleep Duration	0.025	0.425	-0.059	0.065	0.039	0.208	-0.062	0.051
	REM Sleep	0.045	0.151	-0.002	0.948	0.033	0.299	-0.034	0.286
	Deep Sleep	-0.009	0.773	-0.002	0.956	-0.009	0.765	-0.023	0.467
	HRV (RMSSD)	-0.021	0.510	-0.025	0.427	-0.009	0.775	-0.026	0.409
	HR	<b>0.083</b>	<b>0.008</b>	<b>0.072</b>	<b>0.024</b>	0.012	0.704	-0.017	0.591
	RR	-0.038	0.228	-0.001	0.980	0.039	0.215	<b>0.095</b>	<b>0.003</b>
	Temp Deviation	0.025	0.430	0.058	0.070	0.031	0.321	0.061	0.056

*Note.* See Table 2 and Table 3 notes for variable descriptions and preparations. Analyses are identical to Table 3, however, retain the  $n=51$  participants whose RBD antibody responses were returned from LabCorp as “ $>250$  IU/ml” as having values of 250 IU/ml.

## Supplementary Tables

**Table S3.** Spearman rank order correlations between RBD antibody responses and device-generated metrics (retaining  $n=51$  values of “>250 IU/ml” as 250 IU/ml) on nights before and after vaccine injections, adjusted for the pre-vaccination baseline period.

Night Relative to Injection	Metric	Injection 1		Injection 1				Injection 2			
		J&J		Moderna		Pfizer		Moderna		Pfizer	
		rho	P	rho	P	rho	P	rho	P	rho	P
-2	Sleep Duration	-0.095	0.343	-0.012	0.825	0.053	0.172	0.062	0.257	0.035	0.366
	REM Sleep	-0.052	0.605	-0.063	0.240	0.071	0.069	-0.024	0.661	0.028	0.472
	Deep Sleep	-0.137	0.173	-0.004	0.944	0.010	0.787	0.093	0.088	0.027	0.491
	HRV (RMSSD)	-0.105	0.297	-0.006	0.910	<b>-0.102</b>	<b>0.009</b>	0.006	0.907	0.024	0.542
	HR	-0.111	0.268	0.013	0.807	<b>0.105</b>	<b>0.007</b>	-0.036	0.505	-0.060	0.123
	RR	-0.076	0.450	-0.045	0.398	<b>0.083</b>	<b>0.032</b>	-0.046	0.403	0.024	0.539
	Temp Deviation	-0.052	0.605	-0.017	0.752	0.067	0.084	0.037	0.494	-0.005	0.903
-1	Sleep Duration	0.033	0.740	-0.033	0.531	-0.048	0.217	0.012	0.823	-0.001	0.984
	REM Sleep	-0.016	0.874	-0.066	0.209	-0.037	0.335	-0.079	0.148	-0.035	0.368
	Deep Sleep	0.062	0.539	-0.026	0.618	0.066	0.087	-0.008	0.887	0.024	0.533
	HRV (RMSSD)	-0.077	0.441	0.054	0.311	0.015	0.702	0.069	0.207	0.046	0.238
	HR	0.128	0.199	-0.033	0.531	-0.032	0.414	-0.093	0.087	0.027	0.490
	RR	0.007	0.947	-0.039	0.464	0.006	0.886	-0.025	0.644	0.017	0.665
	Temp Deviation	0.004	0.971	0.004	0.945	-0.012	0.758	0.076	0.163	-0.004	0.910
0	Sleep Duration	0.166	0.098	0.094	0.083	-0.057	0.138	0.011	0.841	0.011	0.784
	REM Sleep	0.106	0.293	0.025	0.641	-0.035	0.367	0.038	0.488	0.005	0.899
	Deep Sleep	-0.173	0.083	-0.036	0.510	-0.011	0.779	-0.072	0.181	<b>-0.100</b>	<b>0.011</b>
	HRV (RMSSD)	-0.001	0.993	-0.014	0.791	0.020	0.605	<b>-0.158</b>	<b>0.003</b>	<b>-0.155</b>	<b>0.000</b>
	HR	0.125	0.212	-0.027	0.620	-0.042	0.276	<b>0.158</b>	<b>0.003</b>	<b>0.111</b>	<b>0.004</b>
	RR	0.113	0.262	0.035	0.516	0.054	0.160	<b>0.181</b>	<b>0.001</b>	<b>0.112</b>	<b>0.004</b>
	Temp Deviation	0.141	0.160	0.026	0.624	-0.013	0.744	<b>0.157</b>	<b>0.003</b>	<b>0.139</b>	<b>0.000</b>
1	Sleep Duration	<b>-0.224</b>	<b>0.025</b>	-0.062	0.248	0.034	0.382	0.045	0.410	<b>0.082</b>	<b>0.038</b>
	REM Sleep	<b>-0.281</b>	<b>0.005</b>	0.043	0.423	-0.010	0.798	0.066	0.228	0.059	0.138
	Deep Sleep	-0.152	0.130	-0.026	0.630	0.054	0.164	-0.102	0.063	0.003	0.936
	HRV (RMSSD)	0.002	0.986	-0.046	0.392	-0.057	0.146	-0.009	0.863	-0.040	0.309
	HR	0.042	0.677	-0.031	0.565	-0.009	0.810	0.018	0.737	0.046	0.243
	RR	0.057	0.573	<b>0.108</b>	<b>0.043</b>	0.041	0.290	<b>0.126</b>	<b>0.022</b>	<b>0.233</b>	<b>0.000</b>
	Temp Deviation	0.067	0.511	0.085	0.113	-0.024	0.535	<b>0.127</b>	<b>0.021</b>	<b>0.169</b>	<b>0.000</b>
2	Sleep Duration	0.030	0.769	-0.004	0.938	0.047	0.223	-0.037	0.505	-0.048	0.219
	REM Sleep	-0.125	0.214	-0.019	0.728	0.022	0.575	<b>-0.049</b>	0.377	-0.022	0.569
	Deep Sleep	0.052	0.602	-0.004	0.940	-0.008	0.841	0.043	0.437	-0.054	0.173
	HRV (RMSSD)	-0.039	0.701	0.039	0.467	-0.026	0.498	0.018	0.738	<b>-0.079</b>	<b>0.043</b>
	HR	0.111	0.269	-0.014	0.797	0.014	0.715	-0.034	0.542	0.013	0.749
	RR	0.082	0.416	0.049	0.358	0.026	0.510	0.082	0.132	<b>0.088</b>	<b>0.024</b>
	Temp Deviation	0.195	0.051	0.043	0.420	-0.006	0.878	<b>0.117</b>	<b>0.032</b>	-0.006	0.874

Note. See Table 2 and Table 3 notes for variable descriptions and preparations. Analyses are identical to Table 4, however, retain the  $n=51$  participants whose RBD antibody responses were returned from LabCorp as “>250 IU/ml” (rather than a specific value).

## Supplementary Tables

**Table S4.** Kendall rank order correlations between RBD antibody responses and device-generated metrics on nights before and after vaccine injections.

Night Relative to Injection	Metric	Injection 1		Injection 1				Injection 2			
		J&J		Moderna		Pfizer		Moderna		Pfizer	
		$\tau$	P	$\tau$	P	$\tau$	P	$\tau$	P	$\tau$	P
-2	Sleep Duration	-0.086	0.204	-0.024	0.574	0.011	0.692	0.053	0.219	-0.016	0.563
	REM Sleep	0.019	0.774	-0.029	0.494	<b>0.073</b>	<b>0.008</b>	0.007	0.866	0.043	0.124
	Deep Sleep	-0.095	0.162	-0.019	0.647	0.006	0.829	0.054	0.213	0.034	0.222
	HRV (RMSSD)	-0.076	0.262	0.012	0.782	-0.033	0.237	0.006	0.885	0.017	0.543
	HR	-0.022	0.747	0.025	0.553	<b>0.096</b>	<b>0.000</b>	0.025	0.561	0.043	0.120
	RR	0.053	0.436	-0.038	0.372	-0.048	0.082	<b>-0.102</b>	<b>0.019</b>	-0.033	0.243
	Temp Deviation	-0.009	0.890	-0.009	0.833	0.037	0.186	0.033	0.446	-0.004	0.884
-1	Sleep Duration	0.025	0.716	-0.017	0.685	-0.031	0.261	-0.043	0.314	-0.048	0.086
	REM Sleep	0.018	0.792	-0.048	0.253	0.022	0.418	-0.064	0.134	0.001	0.971
	Deep Sleep	0.005	0.942	-0.036	0.392	0.032	0.242	0.005	0.904	0.033	0.241
	HRV (RMSSD)	-0.054	0.425	0.038	0.363	0.000	0.996	0.021	0.627	0.031	0.267
	HR	0.036	0.589	0.015	0.716	<b>0.072</b>	<b>0.009</b>	0.014	0.748	<b>0.064</b>	<b>0.021</b>
	RR	0.085	0.211	-0.036	0.394	<b>-0.067</b>	<b>0.016</b>	-0.037	0.392	<b>-0.056</b>	<b>0.044</b>
	Temp Deviation	-0.028	0.683	-0.017	0.688	0.002	0.955	0.041	0.344	-0.016	0.566
0	Sleep Duration	0.084	0.213	0.049	0.246	<b>-0.056</b>	<b>0.041</b>	-0.003	0.940	-0.024	0.396
	REM Sleep	0.033	0.628	0.036	0.399	-0.001	0.961	0.019	0.652	0.024	0.395
	Deep Sleep	-0.111	0.100	-0.007	0.861	0.003	0.908	-0.019	0.654	-0.040	0.147
	HRV (RMSSD)	-0.029	0.668	0.008	0.850	0.005	0.870	-0.044	0.308	<b>-0.064</b>	<b>0.023</b>
	HR	0.085	0.209	0.006	0.889	<b>0.070</b>	<b>0.011</b>	<b>0.105</b>	<b>0.014</b>	<b>0.123</b>	<b>0.000</b>
	RR	0.085	0.214	-0.039	0.362	-0.041	0.141	-0.016	0.707	-0.004	0.892
	Temp Deviation	0.112	0.097	-0.008	0.857	-0.002	0.956	<b>0.096</b>	<b>0.024</b>	<b>0.107</b>	<b>0.000</b>
1	Sleep Duration	<b>-0.135</b>	<b>0.047</b>	-0.041	0.330	-0.001	0.961	0.053	0.223	-0.005	0.864
	REM Sleep	-0.035	0.606	0.016	0.699	0.030	0.278	0.054	0.215	<b>0.057</b>	<b>0.040</b>
	Deep Sleep	-0.089	0.189	-0.004	0.919	0.029	0.298	-0.068	0.120	0.018	0.516
	HRV (RMSSD)	-0.045	0.508	0.001	0.981	-0.009	0.754	0.009	0.835	-0.011	0.690
	HR	0.036	0.598	0.001	0.976	<b>0.061</b>	<b>0.028</b>	0.040	0.359	<b>0.080</b>	<b>0.004</b>
	RR	0.111	0.107	-0.024	0.576	-0.046	0.097	-0.005	0.909	0.034	0.228
	Temp Deviation	0.066	0.334	0.042	0.316	-0.021	0.446	<b>0.104</b>	<b>0.017</b>	<b>0.129</b>	<b>0.000</b>
2	Sleep Duration	0.032	0.639	-0.016	0.695	-0.012	0.660	-0.047	0.280	<b>-0.075</b>	<b>0.007</b>
	REM Sleep	0.010	0.883	-0.020	0.635	0.021	0.438	-0.029	0.508	-0.001	0.977
	Deep Sleep	0.022	0.740	-0.029	0.487	-0.005	0.867	0.008	0.845	-0.010	0.715
	HRV (RMSSD)	-0.042	0.538	0.029	0.498	0.004	0.896	0.005	0.913	-0.029	0.307
	HR	0.078	0.248	0.025	0.549	<b>0.062</b>	<b>0.025</b>	0.031	0.481	<b>0.069</b>	<b>0.014</b>
	RR	0.098	0.153	-0.001	0.981	<b>-0.065</b>	<b>0.020</b>	-0.038	0.385	-0.021	0.453
	Temp Deviation	0.130	0.055	0.000	0.998	-0.013	0.628	0.062	0.152	0.014	0.617

Note. See Table 2 note. Kendall rank order correlations directly account for tied ranks and better manage Type 1 error rates (see Materials and Methods).

## Supplementary Tables

**Table S5.** Kendall rank order correlations between RBD antibody responses and device-generated metrics before and after adjusting by the pre-vaccination baseline period on nights before and after injections for Moderna-NIAID and Pfizer-BioNTech vaccine recipients, combined.

Night Relative to Injection	Metric	Device-generated Metric				Adjusted for Baseline period			
		Injection 1		Injection 2		Injection 1		Injection 2	
		$\tau$	P	$\tau$	P	$\tau$	P	$\tau$	P
-2	Sleep Duration	-0.001	0.949	0.015	0.526	0.000	0.995	0.044	0.059
	REM Sleep	0.041	0.074	0.042	0.070	0.020	0.388	0.027	0.246
	Deep Sleep	-0.006	0.788	0.030	0.196	-0.003	0.882	0.029	0.211
	HRV (RMSSD)	-0.022	0.334	-0.005	0.818	<b>-0.047</b>	<b>0.041</b>	0.002	0.916
	HR	<b>0.072</b>	<b>0.002</b>	0.036	0.119	<b>0.058</b>	<b>0.012</b>	-0.016	0.489
	RR	-0.031	0.183	<b>-0.052</b>	<b>0.027</b>	0.041	0.071	-0.008	0.728
	Temp Deviation	0.012	0.603	0.001	0.973	0.031	0.172	0.016	0.495
-1	Sleep Duration	-0.008	0.724	-0.030	0.201	-0.007	0.750	-0.016	0.482
	REM Sleep	0.026	0.266	-0.011	<b>0.644</b>	0.005	0.815	-0.036	0.121
	Deep Sleep	0.012	0.596	0.022	0.343	0.040	0.080	0.017	0.472
	HRV (RMSSD)	-0.001	0.972	0.031	0.188	0.008	0.719	<b>0.052</b>	<b>0.025</b>
	HR	<b>0.050</b>	<b>0.030</b>	0.037	0.114	-0.006	0.783	-0.008	0.740
	RR	-0.041	0.074	<b>-0.047</b>	<b>0.046</b>	0.006	0.781	-0.018	0.439
	Temp Deviation	0.005	0.815	-0.011	0.652	0.026	0.262	0.013	0.591
0	Sleep Duration	-0.017	0.471	-0.009	0.692	-0.013	0.573	0.017	0.461
	REM Sleep	0.007	0.762	0.023	0.332	-0.017	0.466	0.016	0.497
	Deep Sleep	-0.019	0.420	<b>-0.057</b>	<b>0.014</b>	-0.010	0.656	<b>-0.091</b>	<b>0.000</b>
	HRV (RMSSD)	-0.007	0.751	<b>-0.085</b>	<b>0.000</b>	-0.005	0.826	<b>-0.143</b>	<b>0.000</b>
	HR	<b>0.050</b>	<b>0.030</b>	<b>0.141</b>	<b>0.000</b>	0.008	0.717	<b>0.149</b>	<b>0.000</b>
	RR	-0.029	0.219	0.027	0.251	<b>0.050</b>	<b>0.028</b>	<b>0.127</b>	<b>0.000</b>
	Temp Deviation	0.005	0.843	<b>0.172</b>	<b>0.000</b>	0.017	0.472	<b>0.176</b>	<b>0.000</b>
1	Sleep Duration	-0.013	0.562	<b>0.047</b>	<b>0.043</b>	-0.011	0.638	<b>0.090</b>	<b>0.000</b>
	REM Sleep	0.023	0.312	<b>0.058</b>	<b>0.013</b>	0.007	0.749	<b>0.060</b>	<b>0.010</b>
	Deep Sleep	0.010	0.659	-0.009	0.711	0.020	0.377	-0.014	0.548
	HRV (RMSSD)	-0.023	0.312	-0.020	0.388	<b>-0.057</b>	<b>0.013</b>	<b>-0.054</b>	<b>0.022</b>
	HR	<b>0.052</b>	<b>0.025</b>	<b>0.071</b>	<b>0.002</b>	0.024	0.286	<b>0.059</b>	<b>0.012</b>
	RR	-0.011	0.638	<b>0.048</b>	<b>0.042</b>	<b>0.070</b>	<b>0.002</b>	<b>0.187</b>	<b>0.000</b>
	Temp Deviation	0.029	0.212	<b>0.174</b>	<b>0.000</b>	<b>0.046</b>	<b>0.044</b>	<b>0.180</b>	<b>0.000</b>
2	Sleep Duration	0.007	0.766	<b>-0.061</b>	<b>0.010</b>	0.025	0.276	<b>-0.060</b>	<b>0.010</b>
	REM Sleep	0.026	0.260	-0.009	0.695	0.022	0.334	-0.034	0.143
	Deep Sleep	-0.017	0.457	-0.015	0.530	-0.013	0.586	-0.022	0.339
	HRV (RMSSD)	-0.001	0.974	-0.023	0.332	0.005	0.812	-0.036	0.124
	HR	<b>0.048</b>	<b>0.035</b>	<b>0.048</b>	<b>0.040</b>	0.017	0.470	0.004	0.873
	RR	-0.038	0.102	-0.007	0.775	0.040	0.083	<b>0.083</b>	<b>0.000</b>
	Temp Deviation	0.009	0.708	<b>0.048</b>	<b>0.042</b>	0.015	0.504	<b>0.054</b>	<b>0.022</b>

*Note.* See Table 2 and Table 3 notes for variable descriptions and preparations. See also Table S4 note. Physiological metric pre-vaccination baseline period taken from nights -14 to -4 prior to first injection.

## Supplementary Tables

**Table S6.** Kendall rank order correlations between RBD antibody responses and device-generated metrics on nights before and after vaccine injections, adjusted for the pre-vaccination baseline period.

Night Relative to Injection	Metric	Injection 1		Injection 1		Injection 2					
		J&J		Moderna		Pfizer		Moderna		Pfizer	
		$\tau$	P	$\tau$	P	$\tau$	P	$\tau$	P	$\tau$	P
-2	Sleep Duration	-0.061	0.366	-0.025	0.557	0.036	0.185	<b>0.098</b>	<b>0.023</b>	0.032	0.251
	REM Sleep	-0.037	0.585	-0.040	0.344	<b>0.056</b>	<b>0.042</b>	0.011	0.794	0.032	0.246
	Deep Sleep	-0.103	0.127	-0.009	0.836	-0.006	0.841	0.056	0.193	0.020	0.461
	HRV (RMSSD)	-0.072	0.285	-0.027	0.522	<b>-0.071</b>	<b>0.010</b>	0.038	0.379	0.015	0.593
	HR	-0.079	0.243	0.022	0.608	<b>0.070</b>	<b>0.011</b>	-0.021	0.633	-0.041	0.142
	RR	-0.052	0.446	-0.004	0.929	0.045	0.103	-0.036	0.410	0.025	0.362
	Temp Deviation	-0.039	0.561	0.029	0.486	0.041	0.140	0.056	0.191	-0.004	0.898
-1	Sleep Duration	0.032	0.637	-0.006	0.877	-0.024	0.385	-0.012	0.783	-0.014	0.611
	REM Sleep	-0.008	0.901	-0.049	0.241	-0.009	0.734	-0.082	0.056	-0.028	0.314
	Deep Sleep	0.044	0.512	-0.022	0.590	0.048	0.082	0.011	0.805	0.010	0.706
	HRV (RMSSD)	-0.051	0.447	0.027	0.510	0.004	0.883	0.040	0.356	0.034	0.224
	HR	0.089	0.184	0.008	0.839	-0.007	0.787	-0.040	0.352	0.016	0.565
	RR	-0.001	0.993	-0.006	0.889	0.006	0.830	0.044	0.308	0.003	0.913
	Temp Deviation	0.003	0.961	0.025	0.556	0.002	0.950	0.054	0.211	-0.012	0.675
0	Sleep Duration	0.108	0.110	0.073	0.088	-0.033	0.228	0.012	0.784	0.016	0.574
	REM Sleep	0.068	0.313	0.042	0.325	-0.030	0.271	0.028	0.511	0.009	0.753
	Deep Sleep	-0.119	0.077	-0.007	0.862	-0.007	0.802	-0.042	0.320	<b>-0.084</b>	<b>0.002</b>
	HRV (RMSSD)	-0.003	0.963	-0.034	0.419	0.010	0.728	<b>-0.091</b>	<b>0.031</b>	<b>-0.126</b>	<b>0.000</b>
	HR	0.092	0.175	-0.020	0.637	-0.014	0.606	<b>0.114</b>	<b>0.007</b>	<b>0.086</b>	<b>0.002</b>
	RR	0.077	0.252	0.006	0.886	0.052	0.059	<b>0.108</b>	<b>0.011</b>	<b>0.079</b>	<b>0.004</b>
	Temp Deviation	0.113	0.096	0.016	0.710	-0.001	0.983	<b>0.122</b>	<b>0.004</b>	<b>0.107</b>	<b>0.000</b>
1	Sleep Duration	<b>-0.150</b>	<b>0.027</b>	-0.053	0.208	0.018	0.512	0.068	0.116	<b>0.056</b>	<b>0.044</b>
	REM Sleep	<b>-0.186</b>	<b>0.006</b>	0.044	0.297	-0.006	0.818	0.084	0.052	0.046	0.103
	Deep Sleep	-0.115	0.090	0.019	0.652	0.032	0.240	<b>-0.092</b>	<b>0.035</b>	0.004	0.873
	HRV (RMSSD)	0.001	0.990	-0.031	0.454	-0.041	0.132	-0.004	0.926	-0.042	0.137
	HR	0.027	0.692	-0.038	0.368	-0.004	0.874	0.032	0.454	0.037	0.183
	RR	0.043	0.522	0.079	0.060	0.030	0.283	<b>0.127</b>	<b>0.003</b>	<b>0.180</b>	<b>0.000</b>
	Temp Deviation	0.055	0.416	0.072	0.087	-0.007	0.796	<b>0.128</b>	<b>0.003</b>	<b>0.127</b>	<b>0.000</b>
2	Sleep Duration	0.022	0.747	-0.004	0.923	0.027	0.322	-0.050	0.251	-0.046	0.102
	REM Sleep	-0.080	0.234	-0.015	0.722	0.011	0.698	-0.063	0.144	-0.021	0.453
	Deep Sleep	0.025	0.716	-0.014	0.740	-0.009	0.734	0.035	0.412	-0.046	0.100
	HRV (RMSSD)	-0.026	0.699	0.059	0.159	-0.011	0.687	0.004	0.921	<b>-0.076</b>	<b>0.006</b>
	HR	0.074	0.272	0.008	0.855	0.014	0.614	0.001	0.981	0.023	0.406
	RR	0.054	0.420	0.076	0.069	0.021	0.446	<b>0.107</b>	<b>0.014</b>	<b>0.066</b>	<b>0.018</b>
	Temp Deviation	<b>0.137</b>	<b>0.043</b>	0.034	0.416	-0.016	0.556	<b>0.096</b>	<b>0.027</b>	0.005	0.848

Note. See Table 2 and Table 3 notes for variable descriptions and preparations. See also Table S4 note.