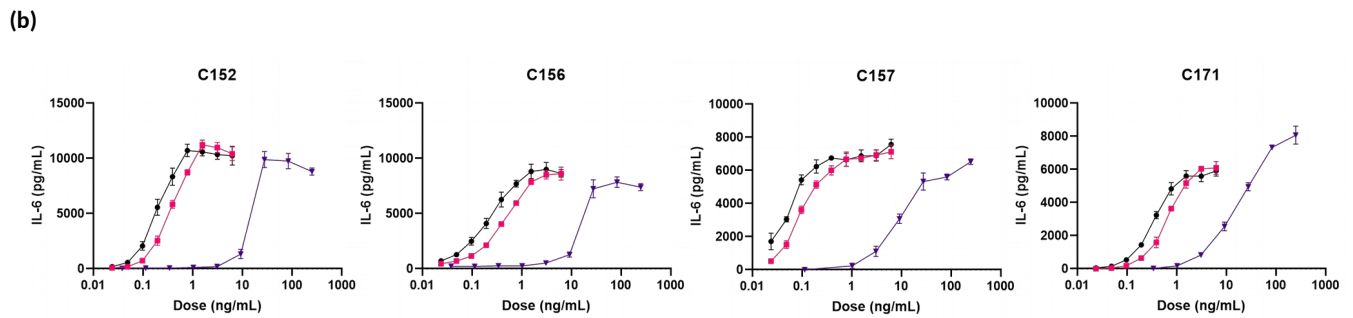
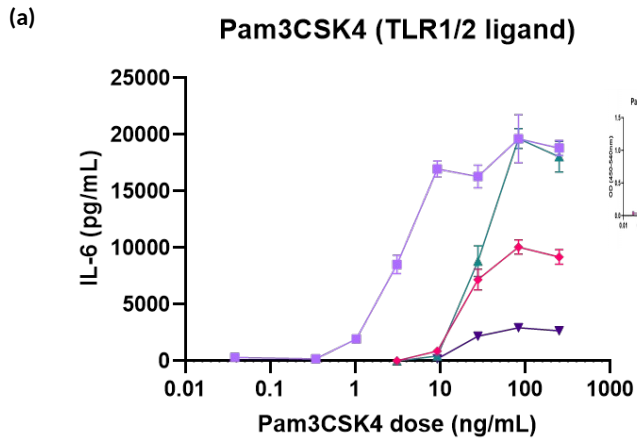


**Figure S1.** Response of PBMCs from two donors, C145 (left) and C149 (right) treated with 10-fold increasing doses of Alhydrogel only (grey bars) or Alhydrogel with spiked endotoxin (red and blue bars) at a final concentration of 0.1 IU/mL.



**Figure S2. (a)** Dose response curves of PBMCs from four donors (C162 - pink diamonds, C163 - light purple squares, C164 - green triangles, C165 - dark purple inverted triangles) treated with toll-like receptor (TLR)1/2 agonist Pam3CSK4. Nine three-fold dilutions of Pam3CSK4 between 0.04 and 250 ng/ml were tested. **(b)** Dose response curves of PBMCs from four representative donors; C152, 156, 157 and 171 treated with *S. sonnei* GMMA drug product (DP, 1790GAHB FF01, black circles), *S. sonnei* 1790 GMMA drug substance (DS, pink squares) and Pam3CSK4 (purple inverted triangles). The highest concentration of *S. sonnei* GMMA DP and DS was 6.25 ng/mL for all illustrated donors.

**Table S1.** MAT data showing relative pyrogenicity units (RPU) and statistical analysis for GMMA with Pam3CSK4 as a reference standard

IL-6 ANALYSIS			Donors			
			C152	C156	C157	C171
Pam3CSK4 AS STANDARD	1790GAHB FF01 DP	RPU	8.03	15.71	22.66	52.71
		Non-parallelism	0.128	0.000	0.016	0.000
		Non-linearity	0.962	0.402	0.000	0.036
		Eq. ratio with standard	0.845	0.430	0.828	1.779
		Correlation r (weighted)	0.934	0.856	0.921	0.914
	1790 GMMA DS	RPU	4.58	8.45	10.45	25.66
		Non-parallelism	0.866	0.000	0.002	0.000
		Non-linearity	0.057	0.012	0.000	0.029
		Eq. ratio with standard	1.016	0.462	0.813	1.686
		Correlation r (weighted)	0.943	0.867	0.932	0.942

**Table S2.** MAT data showing relative pyrogenicity units (RPU) and statistical analysis for different batches of *S. sonnei* GMMA drug product (DP) with a reference *S. sonnei* DP batch as standard

IL-6 ANALYSIS			Donors			
			C162	C163	C164	C165
1709GAHB FF01 AS STANDARD	1790GAHB SH15-001	RPU	0.18	0.14	0.18	0.20
		Non-parallelism ( <i>p</i> value)	0.148	0.353	0.583	0.014
		Non-linearity ( <i>p</i> value)	0.071	0.126	0.146	0.539
		Eq. ratio (standard = 1)	1.427	1.133	0.933	1.568
		Correlation <i>r</i> (weighted)	0.743	0.878	0.899	0.853
	BATCH A	RPU	0.43	0.62	0.75	0.80
		Non-parallelism ( <i>p</i> value)	0.002	0.053	0.000	0.000
		Non-linearity ( <i>p</i> value)	0.138	0.325	0.000	0.003
		Eq. ratio (standard = 1)	0.508	1.254	1.693	1.977
		Correlation <i>r</i> (weighted)	0.732	0.929	0.801	0.839
	BATCH B	RPU	0.41	0.58	0.56	0.55
		Non-parallelism ( <i>p</i> value)	0.011	0.108	0.004	0.196
		Non-linearity ( <i>p</i> value)	0.336	0.149	0.000	0.336
		Eq. ratio (standard = 1)	0.572	1.284	1.390	1.254
		Correlation <i>r</i> (weighted)	0.786	0.833	0.884	0.865
	BATCH C	RPU	0.65	1.01	1.10	1.32
		Non-parallelism ( <i>p</i> value)	0.002	0.784	0.934	0.000
		Non-linearity ( <i>p</i> value)	0.659	0.282	0.056	0.002
		Eq. ratio (standard = 1)	0.517	1.039	0.991	1.763
		Correlation <i>r</i> (weighted)	0.795	0.862	0.923	0.865

**Table S3** MAT data showing relative pyrogenicity units (RPU) and statistical analysis of accelerated degradation *Shigella* 4-component GMMA drug product samples

IL-6 ANALYSIS			Donors									
			C162	C163	C164	C165	C168	C169	C170	C171	C152	C154
SHIGELLA 4-COMPONENT DP AS STANDARD	SHIGELLA 4-COMPONENT DP 25°C	RPU	0.53	0.67	0.82	0.73	0.88	0.47	0.55	0.58	0.79	1.10
		Non-parallelism ( <i>p</i> value)	0.079	0.763	0.011	0.629	0.158	0.053	0.095	0.055	0.001	0.000
		Non-linearity ( <i>p</i> value)	0.941	0.601	0.923	0.996	0.971	0.108	1.000	0.098	0.011	0.000
		Eq. ratio (standard = 1)	0.783	0.950	1.387	0.949	1.223	0.804	0.901	0.824	1.177	1.651
		Correlation <i>r</i> (weighted)	0.904	0.885	0.898	0.939	0.905	0.909	0.977	0.939	0.981	0.894
	SHIGELLA 4-COMPONENT DP 40°C	RPU	0.13	0.20	0.20	0.19	0.42	0.09	0.17	0.12	0.12	0.30
		Non-parallelism ( <i>p</i> value)	0.799	0.000	0.098	0.706	0.090	0.012	0.343	0.024	0.100	0.050
		Non-linearity ( <i>p</i> value)	1.000	0.509	0.952	0.996	0.997	0.103	1.000	1.000	0.277	0.251
		Eq. ratio (standard = 1)	0.963	0.604	1.313	0.952	1.184	0.829	0.952	0.829	1.130	0.871
		Correlation <i>r</i> (weighted)	0.906	0.906	0.861	0.932	0.952	0.969	0.988	0.970	0.964	0.972

**Table S4** MAT data showing relative pyrogenicity units (RPU) and statistical analysis of mono- and multi-component *Shigella* GMMA drug products with *S. sonnei* GMMA drug substance as a reference standard

IL-6 ANALYSIS			Donors											
			C162	C163	C164	C165	C168	C169	C170	C171	C152	C154	C156	C157
1790 GMMA DS AS STANDARD	1790GAHB FF01	RPU	1.51	0.66	1.34	1.42	1.95	1.69	1.77	1.74	1.81	1.62	2.15	1.96
		Non-parallelism ( <i>p</i> value)	0.138	0.148	0.880	0.982	0.456	0.889	0.217	0.054	0.526	0.745	0.506	0.472
		Non-linearity ( <i>p</i> value)	0.198	0.065	0.059	0.032	0.565	0.353	0.252	0.569	0.042	0.003	0.840	0.256
		Eq. ratio (standard = 1)	1.138	0.881	0.989	0.998	0.943	1.017	1.064	0.857	0.962	1.036	0.959	1.060
		Correlation <i>r</i> (weighted)	0.950	0.939	0.955	0.940	0.966	0.903	0.986	0.957	0.973	0.924	0.971	0.949
	4-COMPONENT	RPU	0.39	0.40	1.37	0.84	0.59	0.99	0.52	0.85	1.11	0.70	0.67	0.56
		Non-parallelism ( <i>p</i> value)	0.115	0.000	0.000	0.000	0.000	0.123	0.002	0.000	0.000	0.000	0.000	0.000
		Non-linearity ( <i>p</i> value)	0.098	0.000	0.000	0.000	0.127	0.124	0.219	0.000	0.571	0.000	0.610	0.076
		Eq. ratio (standard = 1)	1.181	2.636	2.142	2.644	1.363	1.418	1.315	1.905	1.263	2.132	1.257	1.318
		Correlation <i>r</i> (weighted)	0.935	0.798	0.891	0.654	0.950	0.755	0.949	0.893	0.973	0.853	0.988	0.946

**Table S5** MAT data showing relative pyrogenicity units (RPU) and statistical analysis of *Shigella* 4-component GMMA drug product with *Shigella* 4-component GMMA drug substance as standard

IL-6 ANALYSIS			Donors									
			C162	C163	C164	C165	C168	C169	C170	C171	C152	C154
SHIGELLA 4-COMPONENT DS AS STANDARD	SHIGELLA 4-COMPONENT DP	RPU	2.09	1.27	1.64	2.52	1.18	1.54	1.44	1.65	1.08	0.98
		Non-parallelism (p value)	0.009	0.300	0.057	0.002	0.074	0.010	0.056	0.001	0.020	0.964
		Non-linearity (p value)	0.112	0.815	0.678	0.994	0.092	0.716	1.000	0.943	0.339	0.128
		Eq. ratio (standard = 1)	0.909	1.239	1.349	1.450	0.909	1.321	1.124	1.406	1.180	1.003
		Correlation <i>r</i> (weighted)	0.867	0.866	0.875	0.919	0.980	0.933	0.977	0.939	0.962	0.977

**Table S6** MAT data showing relative pyrogenicity units (RPU) and statistical analysis of accelerated degradation *Shigella* 4-component GMMA drug substance samples

IL-6 ANALYSIS			Donors							
			C162	C163	C164	C165	C168	C169	C170	C171
SHIGELLA 4-COMPONENT DS -80 AS STANDARD	SHIGELLA 4-COMPONENT DS -20°C	RPU	0.73	1.15	0.78	0.56	0.70	1.58	0.68	0.90
		Non-parallelism ( <i>p</i> value)	0.062	0.062	0.026	0.000	0.039	0.029	0.800	0.150
		Non-linearity ( <i>p</i> value)	0.042	0.169	0.121	0.194	0.106	0.837	1.000	0.989
		Eq. ratio (standard = 1)	0.856	1.510	0.847	0.572	0.659	1.889	0.959	1.162
		Correlation <i>r</i> (weighted)	0.958	0.793	0.967	0.917	0.793	0.747	0.854	0.946
	SHIGELLA 4-COMPONENT DS 4°C	RPU	0.61	0.77	0.62	0.49	0.57	1.13	0.55	0.78
		Non-parallelism ( <i>p</i> value)	0.001	0.463	0.066	0.000	0.001	0.047	0.389	0.071
		Non-linearity ( <i>p</i> value)	0.000	0.973	0.753	0.430	0.027	0.064	0.966	0.629
		Eq. ratio (standard = 1)	0.680	0.858	0.844	0.651	0.502	1.663	0.875	0.825
		Correlation <i>r</i> (weighted)	0.876	0.841	0.960	0.945	0.772	0.729	0.858	0.936
	SHIGELLA 4-COMPONENT DS 37°C	RPU	0.82	0.69	0.53	0.53	0.79	0.41	0.60	0.60
		Non-parallelism ( <i>p</i> value)	0.185	0.136	0.053	0.034	0.014	0.029	0.337	0.586
		Non-linearity ( <i>p</i> value)	0.180	0.924	0.330	0.083	0.868	0.750	1.000	0.990
		Eq. ratio (standard = 1)	1.122	0.700	0.755	0.703	0.731	0.680	1.168	1.074
		Correlation <i>r</i> (weighted)	0.949	0.797	0.885	0.863	0.911	0.852	0.860	0.926