

Supplementary Material

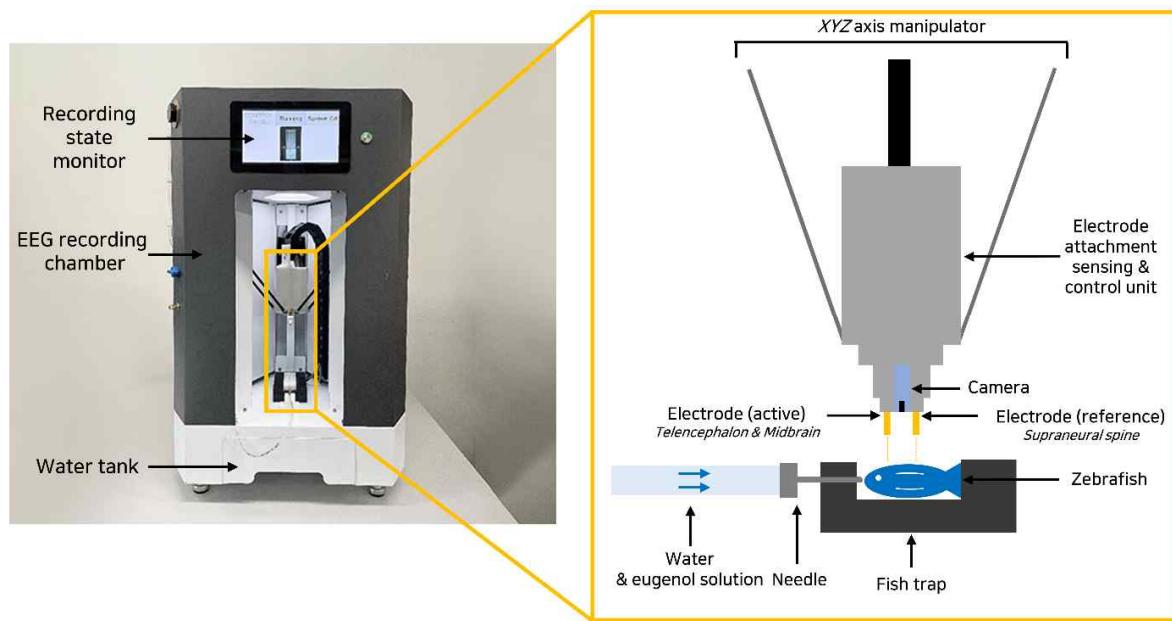


Figure S1. Zebrafish EEG measurement system. Electrodes were attached to the heads of zebrafish that were immobilized in the fish trap as the location of the head was determined through an internal camera. The inside of the system was sealed with a shielding film to reduce electromagnetic interference and noise. During recording of EEG data, the system was turned off to record the data with minimal electromagnetic interference.

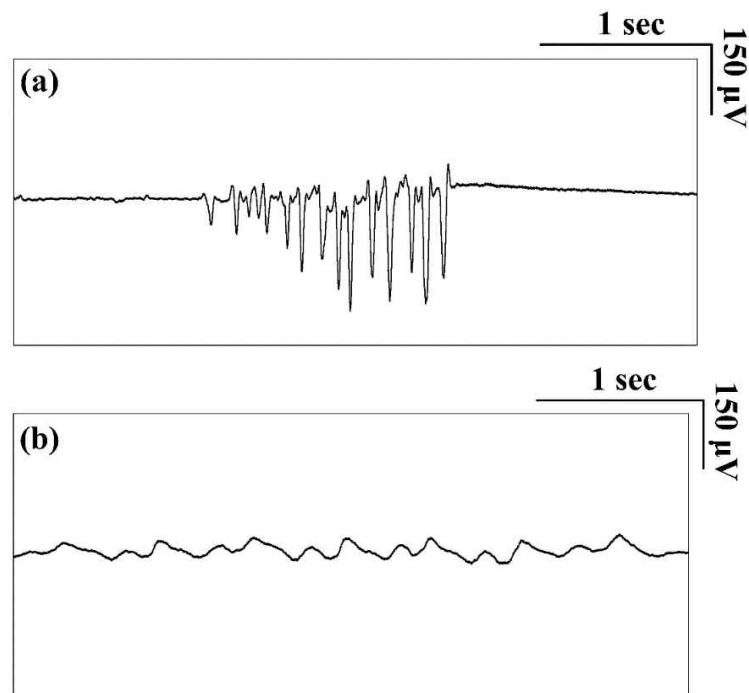


Figure S2. Examples of measured zebrafish EEG signals representing (a) tonic-clonic seizure and (b) absence-like seizure.

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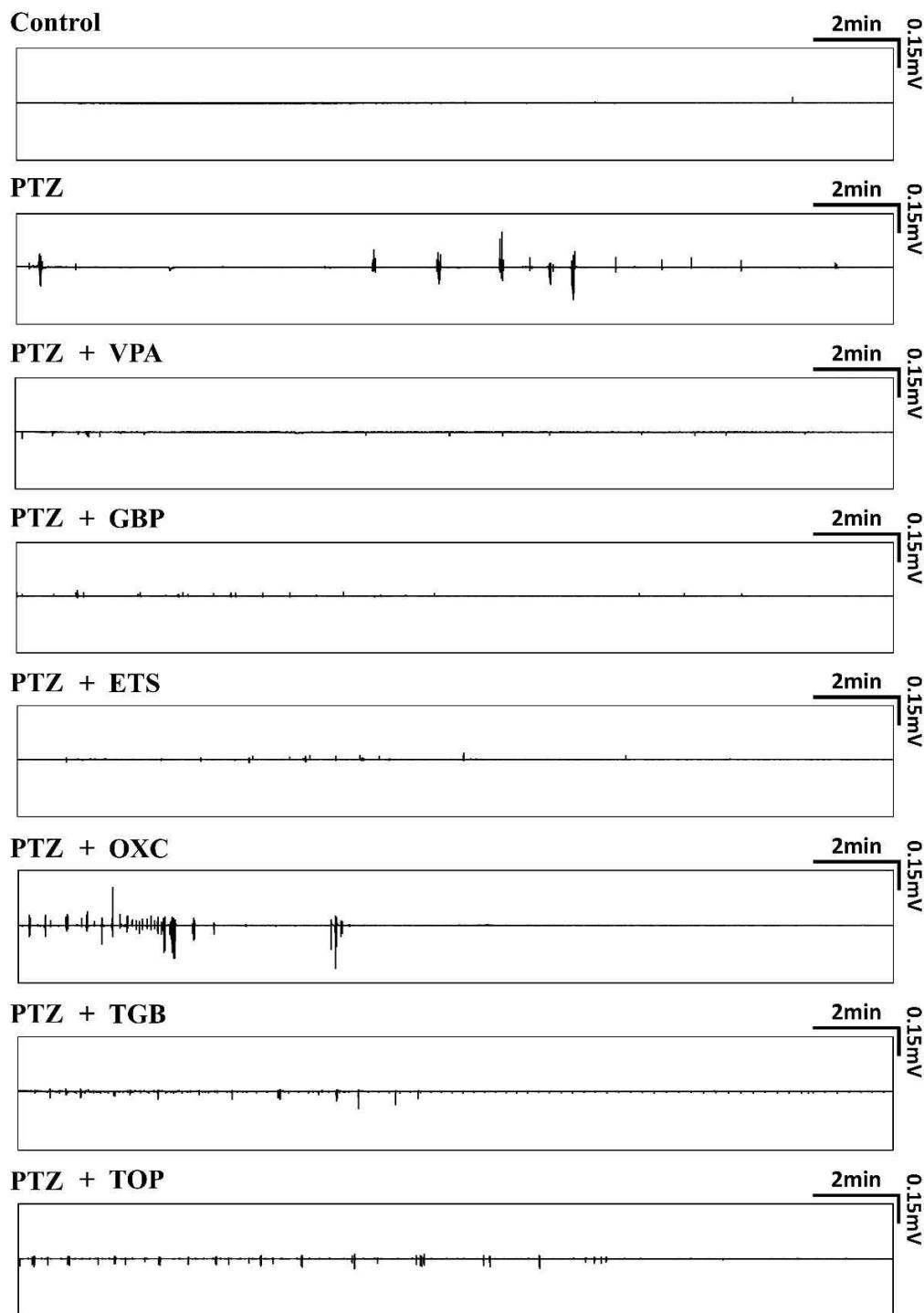


Figure S3. Representative real-time EEG recordings for 20 minutes from all groups.

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Table S1. Dosage of each AED, taken from the literature ([Yien and Trocóniz, 2015](#); [Czuczwar et al., 1999](#); [Nielsen et al., 1991](#)). The efficacy assay was performed with the high dose of AEDs from ED50 values reported in previous studies. In addition, when the efficacy was not observed in experiments, the dose of AEDs was increased to twice the high dose. Low and middle doses were defined to be 1/4 and 1/2 of the high dose, respectively.

	Low (mpk)	Middle (mpk)	High (mpk)
VPA (Czuczwar et al., 1999)	31	62	124
GBP (Yien and Trocóniz, 2015)	42	84	168
ETS (Czuczwar et al., 1999)	27	54	108
OXC (Yien and Trocóniz, 2015)	11.4	22.8	45.6
TGB (Nielsen et al., 1991)	0.65	1.3	2.6
TOP (Yien and Trocóniz, 2015)	10.725	21.45	42.9

Table S2. Characteristics of ictal events in zebrafish, rodents, and humans ([Cho et al., 2019](#); [Amzica and Steriade, 1998](#)).

	Zebrafish		Rodents		Humans	
Seizure type	Tonic-clonic	Absence	Tonic-clonic	Absence	Tonic-clonic	Absence
Amplitude	High	Low	High	Low	High	Low
Frequency (Hz)	5~7	2~3	6~8	3~7	4~5	~3

Hereafter, Tables S3 to S5 summarize all statistical results of one-way analysis of variance (ANOVA) and normality test of all datasets presented in Figure 2 to 4. The method of one-way ANOVA and the interpretation of the results are explained in the main text. Normality tests (Kolmogorov-Smirnov test and Shapiro-Wilk test) were performed to check the normality in all datasets. The Kolmogorov-Smirnov test is a goodness-of-fit method that compares the maximum distance between an experimental cumulative distribution function and a theoretical cumulative distribution function. The Kolmogorov-Smirnov statistics quantify the distance between the empirical distribution function of a sample and the cumulative distribution function of a reference distribution, or between the empirical distribution function of two samples, which have values between 0 and 1. If the p-value provided by the Kolmogorov-Smirnov test is $p < 0.05$, then the test rejects the null hypothesis that the variable is normally distributed. The Shapiro-Wilk test can be used to determine whether a sample fits a normal distribution and is usually used for small samples. The Shapiro-Wilk statistic values are basically a measure of how well an ordered and standardized sample quantile fits the standard normal quantiles, which range from 0 and 1, with 1 being a perfect match. The test rejects the normality hypothesis when the p-value is less than or equal to 0.05.

Table S3. Raw statistical results of the datasets presented in Figure 2. All data were analyzed by one-way ANOVA (F value), followed by Dunnett's test (post hoc). All adjusted p-values were the result of Dunnett's test. Statistical significance was accepted for $p < 0.05$, with indications of * for $p < 0.05$, ** for $p < 0.01$, and *** for $p < 0.001$. Normality tests (Kolmogorov-Smirnov test and Shapiro-Wilk test) were performed to check the normality in all datasets. Statistics of the Kolmogorov-Smirnov test have values between 0 and 1, with 1 being the maximum. Statistics of the Shapiro-Wilk test have values between 0 and 1, with 1 being a perfect match. ‘Sig.’ represents the p-value in normality tests.

Figure 2A	One-way ANOVA test					
	Dunnett's multiple comparisons test	Summary	Adjusted P Value	ANOVA summary	F-value 6.061	
	PTZ vs. VHC	**	0.0021			
	PTZ vs. VPA	*	0.0309			
	PTZ vs. GBP	*	0.0214			
	PTZ vs. ETS	*	0.0334			
	PTZ vs. OXC	ns	0.9996			
	PTZ vs. TGB	ns	0.5747			
	PTZ vs. TOP	ns	0.9998			
Tests of normality						
	Group	Kolmogorov-Smirnov test		Shapiro-Wilk test		
		Statistic	Sig.	Statistic	Sig.	
	VHC	ns	ns	1	<0.0001	
	PTZ	0.9008	0.2937	0.2039	>0.1000	
	VPA	0.6754	0.002	0.3177	0.0314	
	GBP	0.927	0.3499	0.1443	>0.1000	

	ETS	0.7935	0.0121	0.2728	0.0335
	OXC	0.9579	0.7531	0.1493	>0.1000
	TGB	0.808	0.0116	0.2061	>0.1000
	TOP	0.9231	0.3834	0.1805	>0.1000
One-way ANOVA test					
Figure 2B	Dunnett's multiple comparisons test	Summary	Adjusted P Value	ANOVA summary 8.144	F-value
	PTZ vs. VHC	****	<0.0001		
	PTZ vs. VPA	****	<0.0001		
	PTZ vs. GBP	****	<0.0001		
	PTZ vs. ETS	****	<0.0001		
	PTZ vs. OXC	*	0.0155		
	PTZ vs. TGB	***	0.0001		
	PTZ vs. TOP	**	0.004		
	Tests of normality				
Figure 2C	Group	Kolmogorov-Smirnov test		Shapiro-Wilk test	
		Statistic	Sig.	Statistic	Sig.
	VHC	ns	ns	1	<0.0001
	PTZ	0.899	0.2831	0.1998	>0.1000
	VPA	0.7386	0.0096	0.3103	0.0404
	GBP	0.8073	0.0114	0.2041	>0.1000
	ETS	0.7418	0.0028	0.3058	0.0086
	OXC	0.9371	0.461	0.1654	>0.1000
	TGB	0.8616	0.0511	0.2571	0.0276
	TOP	0.9293	0.4413	0.1867	>0.1000
One-way ANOVA test					
Figure 2C	Dunnett's multiple comparisons test	Summary	Adjusted P Value	ANOVA summary 7.391	F-value
	PTZ vs. VHC	****	<0.0001		
	PTZ vs. VPA	***	0.0002		
	PTZ vs. GBP	***	0.0001		
	PTZ vs. ETS	****	<0.0001		
	PTZ vs. OXC	ns	0.0871		
	PTZ vs. TGB	***	0.0006		
	PTZ vs. TOP	**	0.0032		
Tests of normality					
Figure 2C	Group	Kolmogorov-Smirnov test		Shapiro-Wilk test	
		Statistic	Sig.	Statistic	Sig.
	VHC	ns	ns	1	<0.0001

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	PTZ	0.9827	0.975	0.1204	>0.1000
	VPA	0.7525	0.0135	0.3402	0.0141
	GBP	0.8553	0.0427	0.2507	0.0359
	ETS	0.7808	0.0085	0.3045	0.0092
	OXC	0.7708	0.0044	0.278	0.011
	TGB	0.8768	0.0798	0.1781	>0.1000
	TOP	0.9321	0.469	0.2092	>0.1000

Table S4. Raw statistical results of the datasets presented in Figure 3. All data were analyzed by one-way ANOVA (F value), followed by Dunnett's test (post hoc). All adjusted p-values were the result of Dunnett's test. Statistical significance was accepted for $p < 0.05$, with indications of * for $p < 0.05$, ** for $p < 0.01$, and *** for $p < 0.001$. Normality tests (Kolmogorov-Smirnov test and Shapiro-Wilk test) were performed to check the normality in all datasets. Statistics of the Kolmogorov-Smirnov test have values between 0 and 1, with 1 being the maximum. Statistics of the Shapiro-Wilk test have values between 0 and 1, with 1 being a perfect match. ‘Sig.’ represents the p-value in normality tests.

Figure 3B	One-way ANOVA test					
	Dunnett's multiple comparisons test	Summary	Adjusted P Value	ANOVA summary	F-value 3.507	
	PTZ vs. VHC	**	0.0059			
	PTZ vs. VPA	*	0.0273			
	PTZ vs. GBP	**	0.0036			
	PTZ vs. ETS	*	0.0161			
	PTZ vs. OXC	ns	0.6003			
	PTZ vs. TGB	*	0.018			
	PTZ vs. TOP	ns	0.7769			
Tests of normality						
	Group	Kolmogorov-Smirnov test		Shapiro-Wilk test		
		Statistic	Sig.	Statistic	Sig.	
	VHC	0.8856	0.2127	0.2058	>0.1000	
	PTZ	0.8083	0.0351	0.2637	>0.1000	
	VPA	0.7333	0.0085	0.3408	0.0137	
	GBP	0.9522	0.6688	0.1323	>0.1000	
	ETS	0.3953	<0.0001	0.5001	<0.0001	
	OXC	0.8261	0.0189	0.2818	0.0092	
	TGB	0.7171	0.0012	0.2968	0.0045	
	TOP	0.6992	0.0014	0.3432	0.003	

Table S5. Raw statistical results of the datasets presented in Figure 4. All data were analyzed by one-way ANOVA (F value), followed by Dunnett's test (post hoc). All adjusted p-values were the result of Dunnett's test. Statistical significance was accepted for $p < 0.05$, with indications of * for $p < 0.05$, ** for $p < 0.01$, and *** for $p < 0.001$. Normality tests (Kolmogorov-Smirnov test and Shapiro-Wilk test) were performed to check the normality in all datasets. Statistics of the Kolmogorov-Smirnov test have values between 0 and 1, with 1 being the maximum. Statistics of the Shapiro-Wilk test have values between 0 and 1, with 1 being a perfect match. ‘Sig.’ represents the p-value in normality tests.

Figure 4A VPA	One-way ANOVA test					
	Dunnett's multiple comparisons test	Summary	Adjusted P Value	ANOVA summary	F-value	
	PTZ vs. VHC	**	0.0025		5.194	
	PTZ vs. Low (VPA)	ns	0.7601			
	PTZ vs. Middle (VPA)	ns	0.3061			
	PTZ vs. High (VPA)	*	0.0122			
Tests of Normality						
Figure 4B VPA	Group	Kolmogorov-Smirnov test		Shapiro-Wilk test		
		Statistic	Sig.	Statistic	Sig.	
	VHC	ns	ns	1	<0.0001	
	PTZ	0.9008	0.2937	0.2039	>0.1000	
	Low (VPA)	0.8232	0.1236	0.3049	>0.1000	
	Middle (VPA)	0.836	0.1542	0.2651	>0.1000	
	High (VPA)	0.6754	0.002	0.3177	0.0314	
	One-way ANOVA test					
	Dunnett's multiple comparisons test	Summary	Adjusted P Value	ANOVA summary	F-value	
Figure 4B VPA	PTZ vs. VHC	***	0.0003		7.895	
	PTZ vs. Low (VPA)	*	0.0256			
	PTZ vs. Middle (VPA)	**	0.0056			
	PTZ vs. High (VPA)	***	0.0005			
	Tests of Normality					
Figure 4B VPA	Group	Kolmogorov-Smirnov test		Shapiro-Wilk test		
		Statistic	Sig.	Statistic	Sig.	
	VHC	ns	ns	1	<0.0001	
	PTZ	0.899	0.2831	0.1998	>0.1000	
	Low (VPA)	0.933	0.6171	0.2194	>0.1000	
	Middle (VPA)	0.7742	0.0491	0.2976	>0.1000	
	High (VPA)	0.7386	0.0096	0.3103	0.0404	
	One-way ANOVA test					

Figure 4C VPA	Dunnett's multiple comparisons test	Summary	Adjusted P Value	ANOVA summary	F-value 9.252	
	PTZ vs. VHC	****	<0.0001			
	PTZ vs. Low (VPA)	ns	0.0578			
	PTZ vs. Middle (VPA)	**	0.0021			
	PTZ vs. High (VPA)	***	0.0008			
	Tests of Normality					
Figure 4A GBP	Group	Kolmogorov-Smirnov test		Shapiro-Wilk test		
		Statistic	Sig.	Statistic	Sig.	
	VHC	ns	ns	1	<0.0001	
	PTZ	0.9827	0.975	0.1204	>0.1000	
	Low (GBP)	0.7932	0.0713	0.3766	0.0194	
	Middle (GBP)	0.8711	0.271	0.2492	>0.1000	
	High (GBP)	0.7525	0.0135	0.3402	0.0141	
	One-way ANOVA test					
Figure 4B GBP	Dunnett's multiple comparisons test	Summary	Adjusted P Value	ANOVA summary	F-value 9.809	
	PTZ vs. VHC	***	0.0001			
	PTZ vs. Low (GBP)	ns	0.7905			
	PTZ vs. Middle (GBP)	*	0.0334			
	PTZ vs. High (GBP)	***	0.0004			
	Tests of Normality					
Figure 4A GBP	Group	Kolmogorov-Smirnov test		Shapiro-Wilk test		
		Statistic	Sig.	Statistic	Sig.	
	VHC	ns	ns	1	<0.0001	
	PTZ	0.9008	0.2937	0.2039	>0.1000	
	Low (GBP)	0.7228	0.0009	0.2614	0.0344	
	Middle (GBP)	0.872	0.1056	0.2526	0.0701	
	High (GBP)	0.927	0.3499	0.1443	>0.1000	
	One-way ANOVA test					
Figure 4B GBP	Dunnett's multiple comparisons test	Summary	Adjusted P Value	ANOVA summary	F-value 11.03	
	PTZ vs. VHC	****	<0.0001			
	PTZ vs. Low (GBP)	**	0.0042			
	PTZ vs. Middle (GBP)	***	0.0004			
	PTZ vs. High (GBP)	****	<0.0001			
Figure 4C VPA	Tests of Normality					
	Group	Kolmogorov-Smirnov test		Shapiro-Wilk test		

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		Statistic	Sig.	Statistic	Sig.
Figure 4C GBP	VHC	ns	ns	1	<0.0001
	PTZ	0.899	0.2831	0.1998	>0.1000
	Low (GBP)	0.8933	0.1528	0.1671	>0.1000
	Middle (GBP)	0.6876	0.0006	0.3652	0.0005
	High (GBP)	0.8073	0.0114	0.2041	>0.1000
	One-way ANOVA test				
Figure 4A ETS	Dunnett's multiple comparisons test	Summary	Adjusted P Value	ANOVA summary	F-value 10.07
	PTZ vs. VHC	****	<0.0001		
	PTZ vs. Low (GBP)	*	0.0231		
	PTZ vs. Middle (GBP)	*	0.0193		
	PTZ vs. High (GBP)	****	<0.0001		
	Tests of Normality				
Figure 4C GBP	Group	Kolmogorov-Smirnov test		Shapiro-Wilk test	
		Statistic	Sig.	Statistic	Sig.
	VHC	ns	ns	1	<0.0001
	PTZ	0.9827	0.975	0.1204	>0.1000
	Low (GBP)	0.8936	0.1541	0.2368	0.0852
	Middle (GBP)	0.9192	0.3506	0.1781	>0.1000
	High (GBP)	0.8553	0.0427	0.2507	0.0359
Figure 4A ETS	One-way ANOVA test				
	Dunnett's multiple comparisons test	Summary	Adjusted P Value	ANOVA summary	F-value 7.514
	PTZ vs. VHC	****	<0.0001		
	PTZ vs. Low (ETS)	**	0.0068		
	PTZ vs. Middle (ETS)	***	0.0005		
	PTZ vs. High (ETS)	***	0.0004		
	Tests of Normality				
Figure 4A ETS	Group	Kolmogorov-Smirnov test		Shapiro-Wilk test	
		Statistic	Sig.	Statistic	Sig.
	VHC	ns	ns	1	<0.0001
	PTZ	0.9008	0.2937	0.2039	>0.1000
	Low (ETS)	0.9564	0.744	0.1545	>0.1000
	Middle (ETS)	0.8029	0.0103	0.2221	>0.1000
	High (ETS)	0.7935	0.0121	0.2728	0.0335
	One-way ANOVA test				

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Figure 4B ETS	Dunnett's multiple comparisons test	Summary	Adjusted P Value	ANOVA summary	F-value 14.17	
	PTZ vs. VHC	****	<0.0001			
	PTZ vs. Low (ETS)	****	<0.0001			
	PTZ vs. Middle (ETS)	****	<0.0001			
	PTZ vs. High (ETS)	****	<0.0001			
	Tests of Normality					
Figure 4C ETS	Group	Kolmogorov-Smirnov test		Shapiro-Wilk test		
		Statistic	Sig.	Statistic	Sig.	
	VHC	ns	ns	1	<0.0001	
	PTZ	0.899	0.2831	0.1998	>0.1000	
	Low (ETS)	0.9035	0.2393	0.2104	>0.1000	
	Middle (ETS)	0.7951	0.0081	0.2906	0.01	
	High (ETS)	0.7418	0.0028	0.3058	0.0086	
	One-way ANOVA test					
Figure 4C ETS	Dunnett's multiple comparisons test	Summary	Adjusted P Value	ANOVA summary	F-value 12.83	
	PTZ vs. VHC	****	<0.0001			
	PTZ vs. Low (ETS)	***	0.0005			
	PTZ vs. Middle (ETS)	****	<0.0001			
	PTZ vs. High (ETS)	****	<0.0001			
	Tests of Normality					
Figure 4A OXC	Group	Kolmogorov-Smirnov test		Shapiro-Wilk test		
		Statistic	Sig.	Statistic	Sig.	
	VHC	ns	ns	1	<0.0001	
	PTZ	0.9827	0.975	0.1204	>0.1000	
	Low (ETS)	0.9715	0.9044	0.1374	>0.1000	
	Middle (ETS)	0.7752	0.0044	0.3197	0.0025	
	High (ETS)	0.7808	0.0085	0.3045	0.0092	
	One-way ANOVA test					
Figure 4A OXC	Dunnett's multiple comparisons test	Summary	Adjusted P Value	ANOVA summary	F-value 3.554	
	PTZ vs. VHC	**	0.0098			
	PTZ vs. Low (OXC)	ns	0.6609			
	PTZ vs. Middle (OXC)	ns	0.4591			
	PTZ vs. High (OXC)	ns	0.9999			
	Tests of Normality					
	Group	Kolmogorov-Smirnov test		Shapiro-Wilk test		

		Statistic	Sig.	Statistic	Sig.
Figure 4B OXC	VHC	ns	ns	1	<0.0001
	PTZ	0.9008	0.2937	0.2039	>0.1000
	Low (OXC)	0.8833	0.1699	0.1705	>0.1000
	Middle (OXC)	0.8077	0.0119	0.2919	0.0094
	High (OXC)	0.9579	0.7531	0.1493	>0.1000
	One-way ANOVA test				
Figure 4C OXC	Dunnett's multiple comparisons test	Summary	Adjusted P Value	ANOVA summary	F-value
	PTZ vs. VHC	****	<0.0001		6.968
	PTZ vs. Low (OXC)	**	0.0011		
	PTZ vs. Middle (OXC)	**	0.0013		
	PTZ vs. High (OXC)	**	0.008		
	Tests of Normality				
Figure 4C OXC	Group	Kolmogorov-Smirnov test		Shapiro-Wilk test	
		Statistic	Sig.	Statistic	Sig.
	VHC	ns	ns	1	<0.0001
	PTZ	0.899	0.2831	0.1998	>0.1000
	Low (OXC)	0.9348	0.5281	0.2062	>0.1000
	Middle (OXC)	0.7601	0.0028	0.2652	0.0295
	High (OXC)	0.9371	0.461	0.1654	>0.1000
Figure 4C OXC	One-way ANOVA test				
	Dunnett's multiple comparisons test	Summary	Adjusted P Value	ANOVA summary	F-value
	PTZ vs. VHC	***	0.0001		5.941
	PTZ vs. Low (OXC)	*	0.0121		
	PTZ vs. Middle (OXC)	**	0.0086		
	PTZ vs. High (OXC)	ns	0.0775		
	Tests of Normality				
Figure 4C OXC	Group	Kolmogorov-Smirnov test		Shapiro-Wilk test	
		Statistic	Sig.	Statistic	Sig.
	VHC	ns	ns	1	<0.0001
	PTZ	0.9827	0.975	0.1204	>0.1000
	Low (OXC)	0.9089	0.3085	0.1706	>0.1000
	Middle (OXC)	0.9268	0.3797	0.1569	>0.1000
	High (OXC)	0.7708	0.0044	0.278	0.011
	One-way ANOVA test				

Figure 4A TGB	Dunnett's multiple comparisons test	Summary	Adjusted P Value	ANOVA summary	F-value
	PTZ vs. VHC	*	0.0289		
	PTZ vs. Low (TGB)	ns	0.9961		
	PTZ vs. Middle (TGB)	ns	0.4841		
	PTZ vs. High (TGB)	ns	0.1846		
	Tests of Normality				
Figure 4B TGB	Group	Kolmogorov-Smirnov test		Shapiro-Wilk test	
		Statistic	Sig.	Statistic	Sig.
	VHC	ns	ns	1	<0.0001
	PTZ	0.9008	0.2937	0.2039	>0.1000
	Low (TGB)	0.8925	0.127	0.2231	>0.1000
	Middle (TGB)	0.8775	0.0968	0.232	>0.1000
	High (TGB)	0.808	0.0116	0.2061	>0.1000
	One-way ANOVA test				
Figure 4C TGB	Dunnett's multiple comparisons test	Summary	Adjusted P Value	ANOVA summary	F-value
	PTZ vs. VHC	****	<0.0001		
	PTZ vs. Low (TGB)	**	0.0023		
	PTZ vs. Middle (TGB)	***	0.0002		
	PTZ vs. High (TGB)	****	<0.0001		
	Tests of Normality				
Figure 4B TGB	Group	Kolmogorov-Smirnov test		Shapiro-Wilk test	
		Statistic	Sig.	Statistic	Sig.
	VHC	ns	ns	1	<0.0001
	PTZ	0.899	0.2831	0.1998	>0.1000
	Low (TGB)	0.9141	0.2405	0.1773	>0.1000
	Middle (TGB)	0.912	0.2574	0.1441	>0.1000
	High (TGB)	0.8616	0.0511	0.2571	0.0276
	One-way ANOVA test				
Figure 4C TGB	Dunnett's multiple comparisons test	Summary	Adjusted P Value	ANOVA summary	F-value
	PTZ vs. VHC	****	<0.0001		
	PTZ vs. Low (TGB)	**	0.002		
	PTZ vs. Middle (TGB)	**	0.0026		
	PTZ vs. High (TGB)	**	0.0014		
Figure 4C TGB	Tests of Normality				
	Group	Kolmogorov-Smirnov test		Shapiro-Wilk test	

		Statistic	Sig.	Statistic	Sig.
Figure 4A TOP	VHC	ns	ns	1	<0.0001
	PTZ	0.9827	0.975	0.1204	>0.1000
	Low (TGB)	0.9458	0.5762	0.1893	>0.1000
	Middle (TGB)	0.8661	0.0691	0.2065	>0.1000
	High (TGB)	0.8768	0.0798	0.1781	>0.1000
	One-way ANOVA test				
Figure 4B TOP	Dunnett's multiple comparisons test	Summary	Adjusted P Value	ANOVA summary	F-value
	PTZ vs. VHC	***	0.0001		6.309
	PTZ vs. Low (TOP)	*	0.0124		
	PTZ vs. Middle (TOP)	**	0.0059		
	PTZ vs. High (TOP)	**	0.0027		
	Tests of Normality				
	Group	Kolmogorov-Smirnov test		Shapiro-Wilk test	
		Statistic	Sig.	Statistic	Sig.
	VHC	0.9777	0.9509	0.1546	>0.1000
	PTZ	0.9463	0.6493	0.1847	>0.1000
	Low (TOP)	0.913	0.3373	0.1656	>0.1000
	Middle (TOP)	0.9806	0.9659	0.1435	>0.1000
	High (TOP)	0.9231	0.3834	0.1805	>0.1000
Figure 4B TOP	One-way ANOVA test				
	Dunnett's multiple comparisons test	Summary	Adjusted P Value	ANOVA summary	F-value
	PTZ vs. VHC	****	<0.0001		11.06
	PTZ vs. Low (TOP)	***	0.0004		
	PTZ vs. Middle (TOP)	***	0.0006		
	PTZ vs. High (TOP)	****	<0.0001		
	Tests of Normality				
	Group	Kolmogorov-Smirnov test		Shapiro-Wilk test	
		Statistic	Sig.	Statistic	Sig.
	VHC	0.8769	0.1759	0.1814	>0.1000
	PTZ	0.9605	0.8037	0.2036	>0.1000
	Low (TOP)	0.9231	0.4182	0.1767	>0.1000
	Middle (TOP)	0.8072	0.0342	0.2387	>0.1000
	High (TOP)	0.9293	0.4413	0.1867	>0.1000
	One-way ANOVA test				

Supplementary Material

Figure 4C TOP	Dunnett's multiple comparisons test	Summary	Adjusted P Value	ANOVA summary	F-value	
	PTZ vs. VHC	ns	0.0611		2.746	
	PTZ vs. Low (TOP)	ns	0.2355			
	PTZ vs. Middle (TOP)	ns	0.9023			
	PTZ vs. High (TOP)	*	0.0278			
Tests of Normality						
	Group	Kolmogorov-Smirnov test		Shapiro-Wilk test		
		Statistic	Sig.	Statistic	Sig.	
	VHC	0.8622	0.1262	0.2038	>0.1000	
	PTZ	0.8558	0.0863	0.2581	0.0856	
	Low (TOP)	0.892	0.209	0.2033	>0.1000	
	Middle (TOP)	0.8475	0.0899	0.218	>0.1000	
	High (TOP)	0.9321	0.469	0.2092	>0.1000	