

# Supplement 1: Outcomes Delphi study for animal and cell cultures research

**Table S1.** Background characteristics respondents (n=4).

Characteristic	Percentage	M±SD
<b>Country located (%)</b>		
United states of America	50	
Canada	50	
<b>Academic background (%)</b>		
Biomedical Engineering	25	
Physiology	50	
Biophysical	25	
<b>Highest academic degree (%)</b>		
Professor	100	
<b>Experience with WBV in animals (%)</b>	100	
<b>Experience with WBV in cell cultures (%)</b>	100	
<b>Experience with WBV research (M±SD, years)</b>		29.3 ± 3.0
<b># of publications WBV animals/cell cultures (M±SD)</b>		10.0 ± 10.0

Abbreviation: WBV = whole-body vibration.

**Table S2.** Outcomes Delphi study: information about the vibration. Is it important to report...

Item	Round 1			Round 2		
	agree	disagree	neutral	agree	disagree	neutral
1 the type of vibration (i.e., synchronous, side-alternating, other)?	100	0	0	100	0	0
2 which frequency (Hz) is used?	100	0	0	100	0	0
3 whether the vibration is immediately full or increases slowly?	50	25	25	75	0	25
4 whether the frequency (Hz) is constant or variable?	100	0	0	100	0	0
5 which peak-to-peak displacement (PPD) / amplitude of the vibration occurs?	100	0	0	75	0	25
6 which peak-acceleration (in multiples of g) occurs?	100	0	0	100	0	0
7 which acceleration (in RMS) occurs?	50	25	25	50	25	25
8 the units of the vibration parameters?	100	0	0	100	0	0
9 the definitions/explanations of the vibration parameters?	75	25	0	100	0	0
10 if manufacturer settings or settings measured by researcher were reported?	100	0	0	100	0	0
11 how the vibration parameters are measured?	100	0	0	100	0	0
12 where on the platform the vibration parameters are measured?	100	0	0	100	0	0
13 how reproducible the vibration parameters are?	75	25	0	100	0	0
14 whether the vibrations are purely sinusoidal?	100	0	0	100	0	0
15 <sup>a</sup> if unidirectional vibrations are vertical or horizontal				100	0	0
16 <sup>a</sup> if "how much vertical vs horizontal vibrations" is measured by 3D accelerometry?				100	0	0
17 <sup>a</sup> if accelerometers are ATTACHED to the cell culture plate?				100	0	0
18 <sup>a</sup> the duration of vibration, number of bouts and intervals between bouts?				100	0	0

<sup>a</sup>Added on round 2 based on the suggestions of the respondents in round 1.

**Table S3.** Outcomes Delphi study: information about the device. Is it important to report...

Item	Round 1			Round 2		
	agree	disagree	neutral	agree	disagree	neutral
1 the manufacturer, device specifications, and production type?	75	25	0	100	0	0
2 the size of the vibration platform?	25	50	25	75	25	0
3 whether changes are made to the device (e.g., mounting a cage on it)?	100	0	0	100	0	0
4 the dimensions of the cage or container in which the animal(s) was (were) placed (if any) during WBV?	75	0	25	75	0	25
5 how the energy is generated (e.g., direct mechanical transmission or electromagnetic transmission) as this can have an effect on the performance of the device?	50	25	25	50	0	50
6 <sup>a</sup> if animals were on all 4 paws or were able to (or did) rear up during vibration exposure?				100	0	0
7 <sup>a</sup> how closely the sham conditions mimic those encountered by the animals treated with vibration?				100	0	0

<sup>a</sup>Added on round 2 based on the suggestions of the respondents in round 1.

**Table S4.** Outcomes Delphi study: information about the administration. Is it important to report...

Item	Round 1			Round 2		
	agree	disagree	neutral	agree	disagree	neutral
1 the number of sessions (per day or week) with WBV?	100	0	0	100	0	0
2 the number of exposures to WBV within one session?	100	0	0	100	0	0
3 the time between sessions of WBV?						
4 the on vs. off-times of vibration (e.g., pauses and how long) within one session?	100	0	0	100	0	0
5 the total exposure time to WBV across all sessions?	75	0	25	75	0	25
6 the conditions of the test room (e.g., light and temperature)?	50	50	0	100	0	0
7 the location of the intervention (e.g., a separated experimental room or the room where the subjects are housed during the experiment)?	50	25	25	75	0	25
8 whether (motor) behavior is being monitored and/or reduced during the WBV session?	75	25	0	100	0	0
9 which posture or body position the subjects take on during the vibration (e.g., sitting, standing, lying, etc.) depending on the species used?	100	0	0	100	0	0
10 whether the position/posture changes during WBV?	100	0	0	100	0	0
11 whether subjects were restrained or not during WBV?	100	0	0	100	0	0
12 the time of day the WBV session takes place (in relation to the L/D cycle)?	50	50	0	100	0	0
13 the subjects' body weight before and after the entire WBV protocol?	75	0	25	100	0	0
14 whether the subjects were habituated to the device before the start of the WBV protocol?	75	0	25	75	0	25
15 species-specific inclusion/exclusion criteria?	100	0	0	100	0	0
16 whether whiskers were present/intact (when species are used having whiskers)?	0	50	50	75	0	25
17 whether the animals were anesthetized or not during the WBV session?	100	0	0	100	0	0
18 whether the animals were housed individually or in groups	100	0	0	100	0	0

	during a WBV session on the vibrating plate?			
19 <sup>a</sup>	to what conditions EXACTLY the normal control animals/cell cultures were subjected to, in comparison to vibrated experimental animals/cell cultures?	100	0	0

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<sup>a</sup>Added on round 2 based on the suggestions of the respondents in round 1.