



Cronfa - Swansea University Open Access Repository
This is an author produced version of a paper published in: Injury
Cronfa URL for this paper: http://cronfa.swan.ac.uk/Record/cronfa37128
Paper: Eftaxiopoulou, T., Barnett-Vanes, A., Arora, H., Macdonald, W., Nguyen, T., Itadani, M., Sharrock, A., Britzman, D., Proud, W., et. al. (2016). Prolonged but not short-duration blast waves elicit acute inflammation in a rodent model of primary blast limb trauma. <i>Injury, 47</i> (3), 625-632. http://dx.doi.org/10.1016/j.injury.2016.01.017

This item is brought to you by Swansea University. Any person downloading material is agreeing to abide by the terms of the repository licence. Copies of full text items may be used or reproduced in any format or medium, without prior permission for personal research or study, educational or non-commercial purposes only. The copyright for any work remains with the original author unless otherwise specified. The full-text must not be sold in any format or medium without the formal permission of the copyright holder.

Permission for multiple reproductions should be obtained from the original author.

Authors are personally responsible for adhering to copyright and publisher restrictions when uploading content to the repository.

http://www.swansea.ac.uk/library/researchsupport/ris-support/

Table 1: Experimental Groups used in the study

Group	Number of Subjects	Burst Pressure (bar)	Driver Volume Used	
Shams	12	-	-	
Blast I	12	6.0	10%	
Blast II	6	16.0	10%	
Blast III	12	6.0	100%	

Table 2: Average burst pressure, corresponding peak pressure, plateau pressure, and shock impulse (relative to ambient pressure) from Sensor 3 for three loading scenarios (mean and standard deviations for each condition from 3 individual experiments).

Sensor 3	Peak Pressure (bar)	Plateau Pressure (bar)	Impulse (bar ms)	Duration (ms)
6.0 bar burst pressure – 10% volume	1.85 ± 0.10	0.55 ± 0.05	0.69 ± 0.10	3.0±0.3
16.0 bar burst pressure – 10% volume	3.65 ± 0.30	1.70 ± 0.20	2.23 ± 0.20	3.5±0.5
6.0 bar burst pressure – 100% Full volume	2.60 ± 0.05	1.15 ± 0.05	10.00 ± 0.60	11.5±0.5