

JAMA opinion to “BioRID II Corridor Analysis for GTR7 TEG meeting August 27, 2019 by HUMANETICS”

- JAMA agree with Corridor Summary of Jacket test, Sled and Track certification test and Dummy certification with out Headrest test(Page 115 to 117).
- JAMA does not agree with Corridor Summary of Pelvis test(Page 115).
- JAMA propose Corridors of Pelvis test of this matrix.

Parameter	Current Corridor	HIS Proposed Corridor 27 <sup>th</sup> Aug	JAMA Propose Corridor 12 <sup>th</sup> Sep
Impact Velocity	1.500 – 1.550 m/s	No change	<b>No change</b>
Pendulum Force	3250 - 4620 N	3082 – 4344 N	<b>2767-4763 N</b>
Sled Velocity	0.325 – 0.375 m/s	0.310 – 0.378 m/s	<b>0.315-0.369 m/s</b>
Jacket Compression	17.8 – 19.5 mm	16.6 – 20.4 mm	<b>15.0-21.4 mm</b> (18.2 ± 1.58*2mm)
		Page 94,96,98 ± 2 σ of Calculated by deleted outliers tests	<b>Page 89,90,91</b> <b>± 2 σ of Calculated</b> <b>by all tests</b>

## Reason

- Blue is 2017 pelvis certification test by HIS-Huron and Orange is 2018 ~ 2019 test by Toyota-Boshoku of same pelvis.
- Blue passed both current and HIS proposed corridor, but 1 or 2 years later TB test come out of HIS proposed corridor. Force Increased and compression decreased even sled velocity is same blue and orange.
- Aging and/or different Laboratory might influence. But we dummy user has no way to adjust characteristic pelvis. Only way is remolding but it very cost us.
- JAMA know that the reduction of the unevenness is important, so we propose corridor as  $\pm 2\sigma$  of Calculated by all tests of page 89,90,91.

