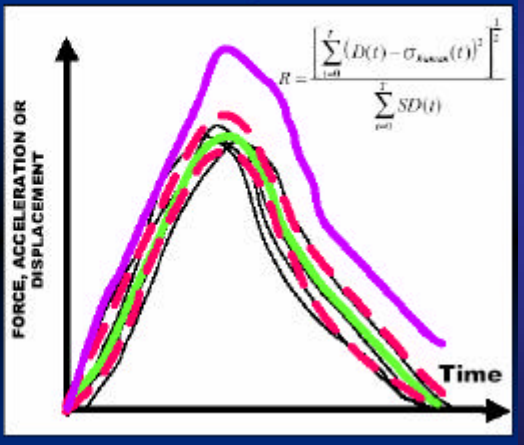
Explanation of the Bio-Rating Method of Maltese M. R. (NHTSA) and Application the Method to Flex-PLI 2003R using UVA Dynamic Bending Corridors for Mid-Thigh, Knee, and Mid-Leg

JARI

Bio Rating Method of Maltese M. R. (NHTSA)

Dummy-to-Human Comparison

- Human surrogate and dummy response signals are overlayed
- The dummy response (D), surrogate mean (•), and standard deviation (SD) are then combined to quantify (R) how well the dummy matches the cadaver.



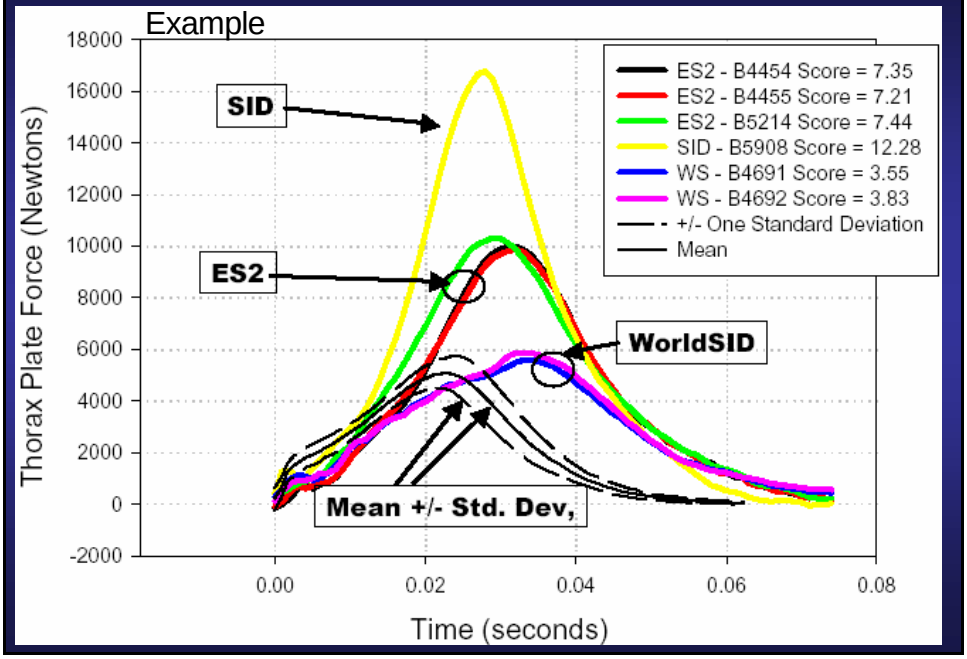
Maltese M. R. (NHTSA)

Bio Rating Method of Maltese M. R. (NHTSA), cont.

Rating Dummy Biofidelity

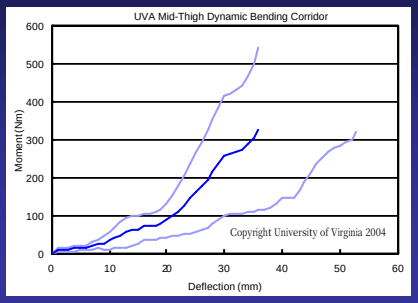
0 <= B <= 1	Excellent
1 < B <= 2	Good
2 < B <= 3	Moderate
3 < B	Poor

Bio Rating Method of Maltese M. R. (NHTSA), cont.

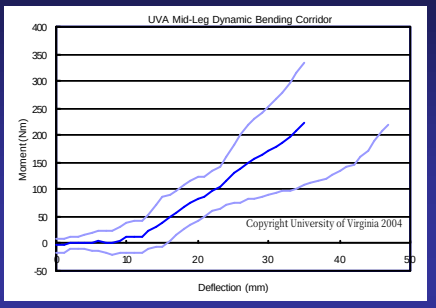


UVA Dynamic Bending Corridors

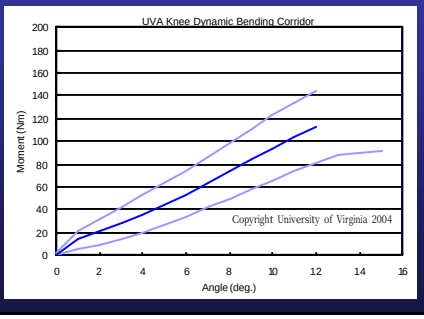
Thigh



Leg



Knee



Bio-Rating of FlexPLI 2003R for UVA Dynamic Mid-Thigh Bending Corridor

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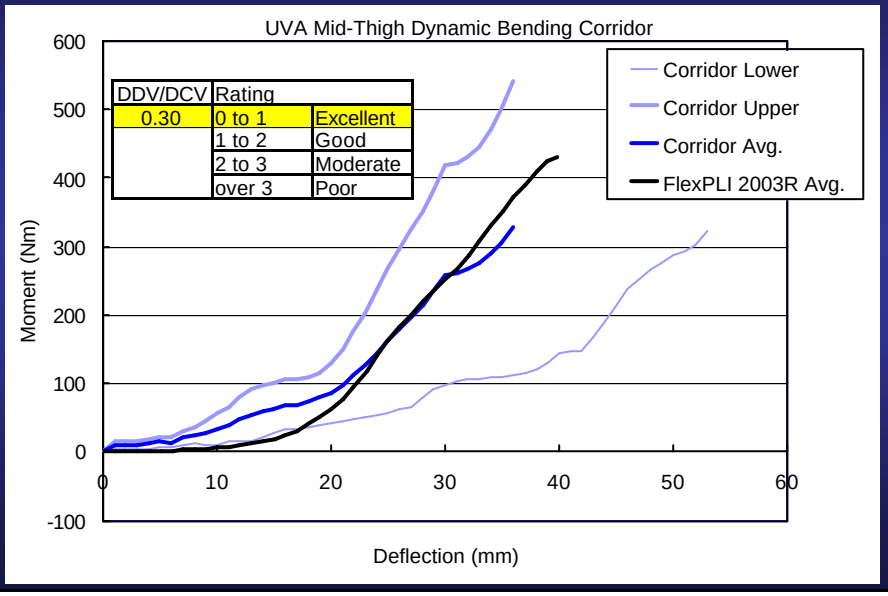

Bio-Rating of FlexPLI 2003R for UVA Dynamic Mid-Leg Bending Corridor

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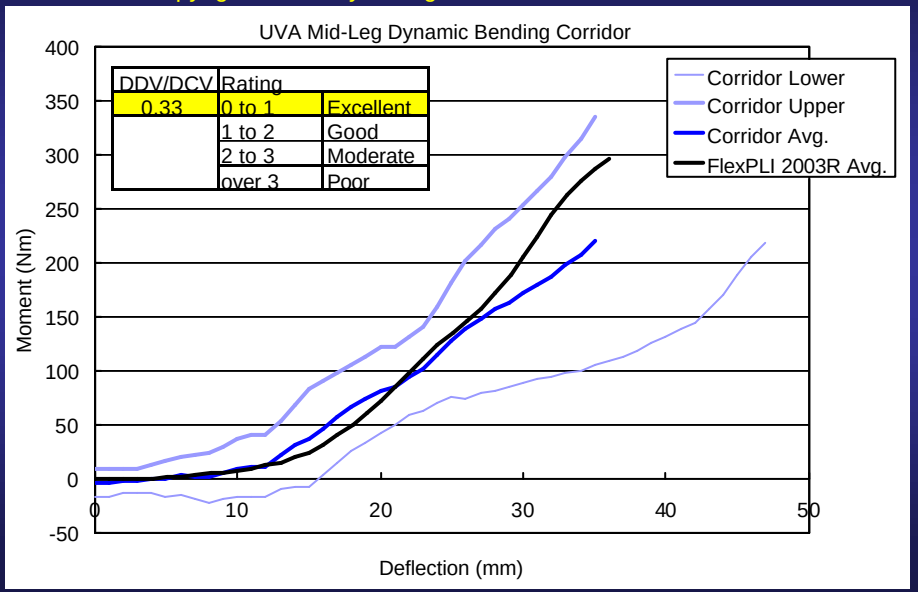

Bio-Rating of FlexPLI 2003R for UVA Dynamic Knee Joint Bending Corridor

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