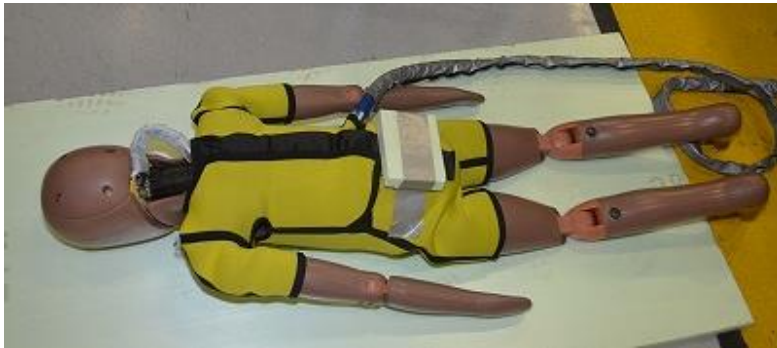


# Test Results of UMTRI Seating Procedure

60th GRSP Informal Group on Child Restraint System  
13<sup>th</sup> September 2016  
NTSEL

# Purpose

Comparison of the test results between the current seating procedure and UMTRI seating procedure in R129 test condition.



# Test Conditions

Dummy : Q6 (without abdominal sensor,  
without Hip liner)

Test bench: R129 test bench

Booster seat: available in Japan

# Test Video

R129



UMTRI



# Results

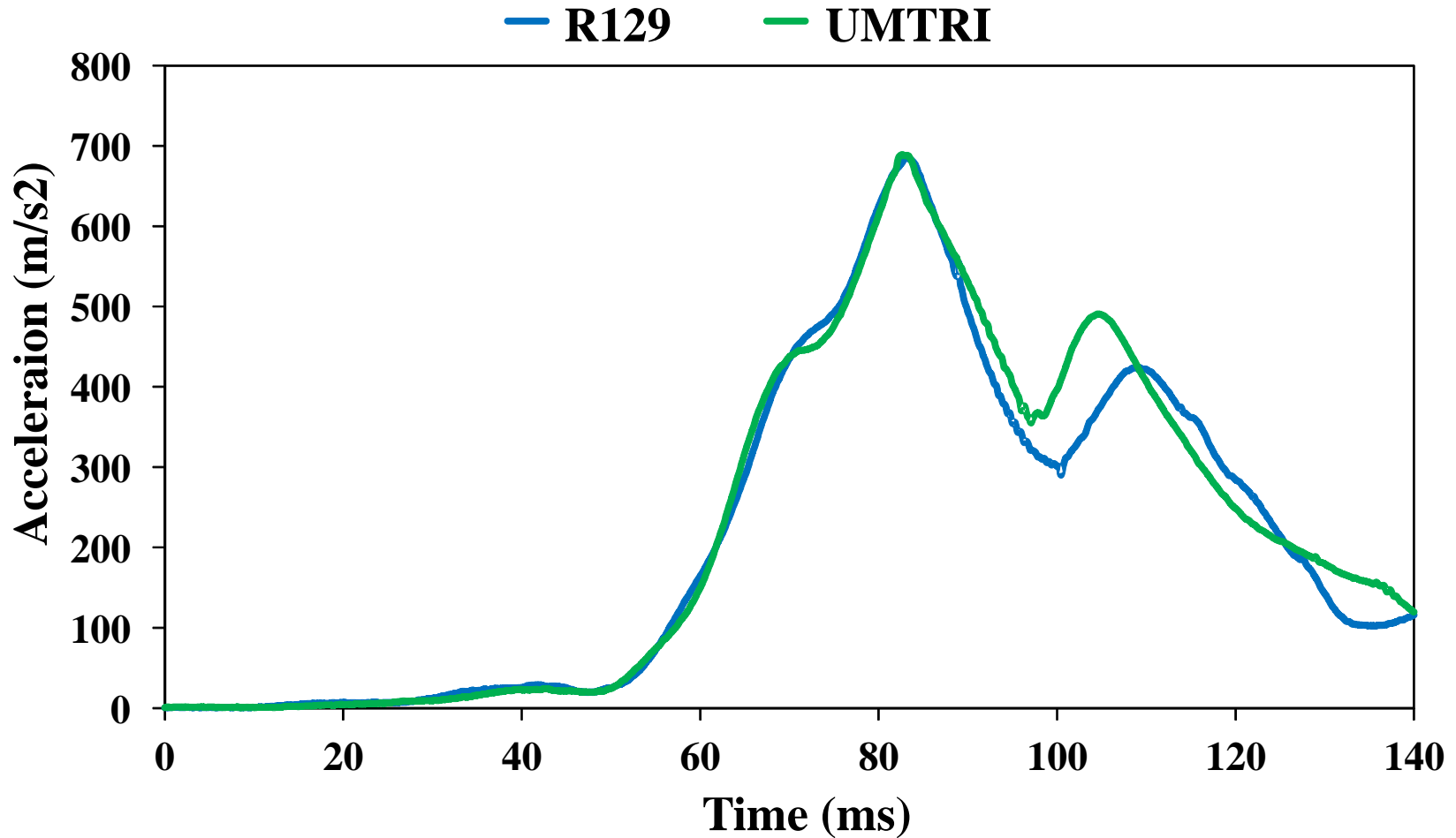
	<b>unit</b>	<b>R129</b>	<b>UMTRI</b>
<b>Head excursion</b>	<b>mm</b>	<b>404</b>	<b>389</b>
<b>Head acceleration (3m)</b>	<b>G</b>	<b>68</b>	<b>67</b>
<b>Upper neck tension force(Fz)</b>	<b>N</b>	<b>1979</b>	<b>1976</b>
<b>Upper neck flexion moment(MY)</b>	<b>Nm</b>	<b>50</b>	<b>52</b>
<b>Chest acceleration (3ms)</b>	<b>G</b>	<b>40</b>	<b>41</b>
<b>Chest Deflection</b>	<b>mm</b>	<b>25</b>	<b>23</b>

**Injury measures are almost similar as for the current research.**

# Appendix

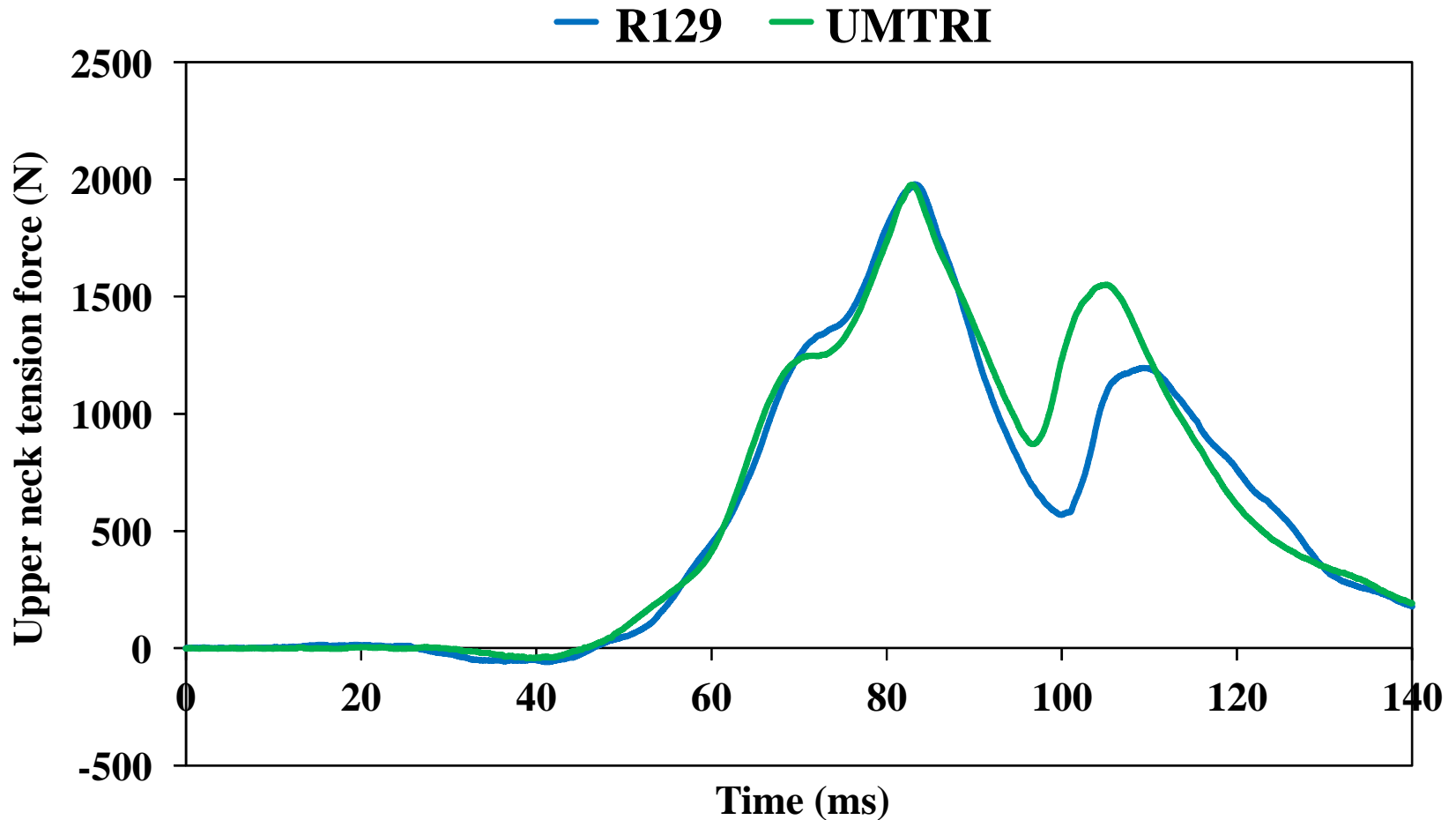
# Results

## Head acceleration



# Results

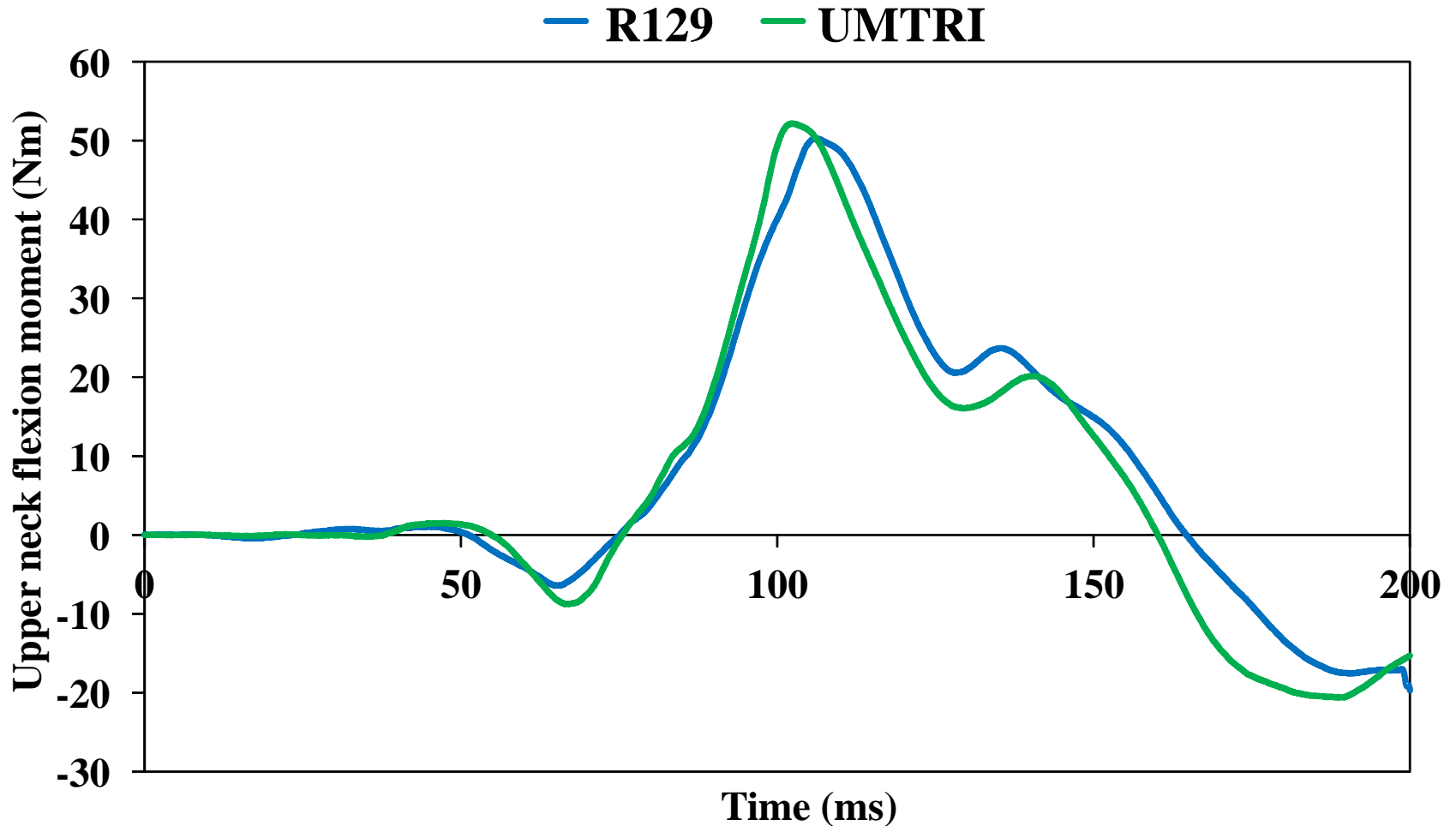
## Upper Neck Tension Force





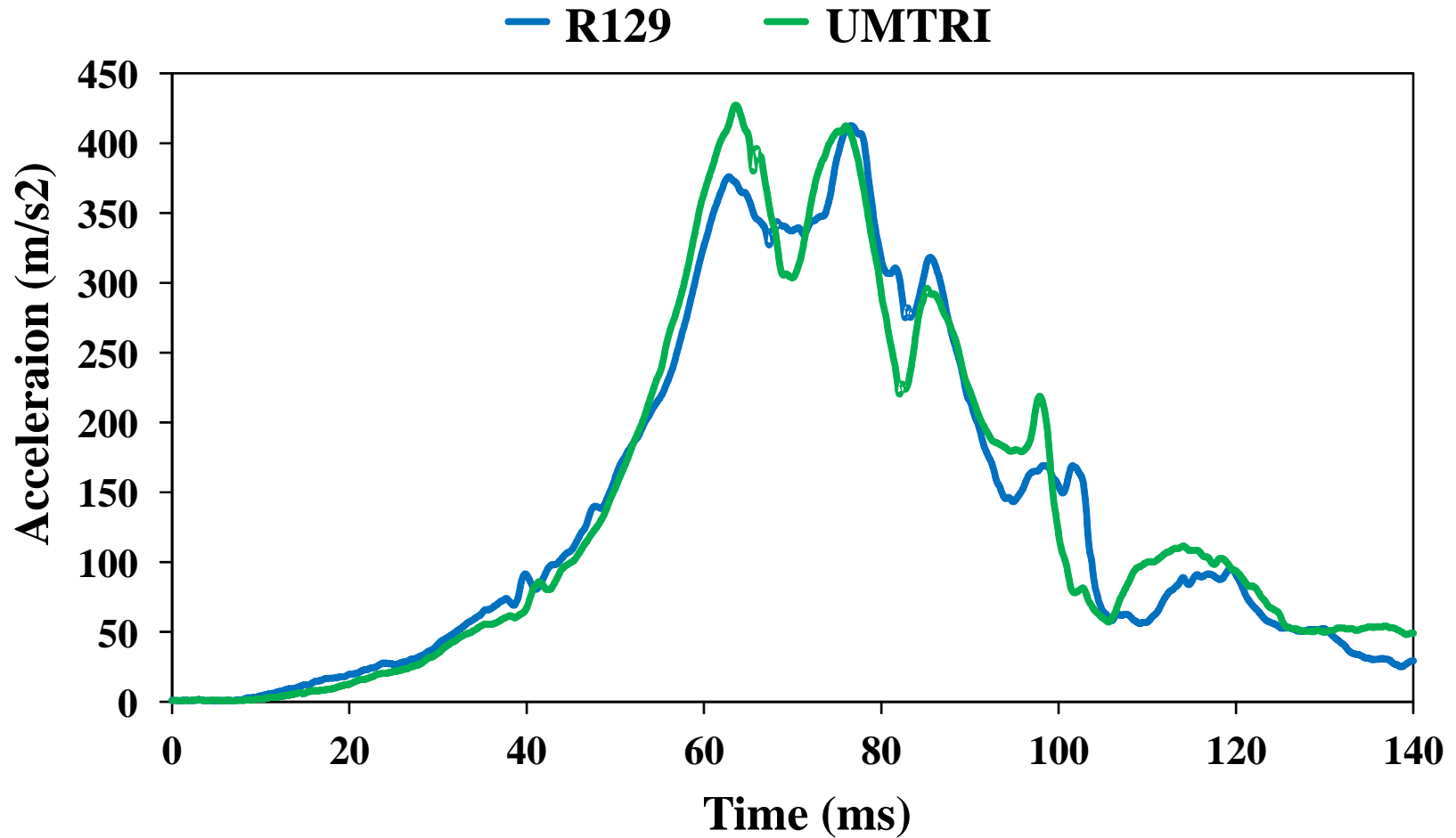
# Results

## Upper Neck Flexion Moment



# Results

## Chest acceleration



# Results

## Chest deflection

