



**11th TEG FlexPLI Meeting
on 20. & 21.04.2010
Offices of ACEA, Brussels**

DRAFT
Injury values : impact vs rebound

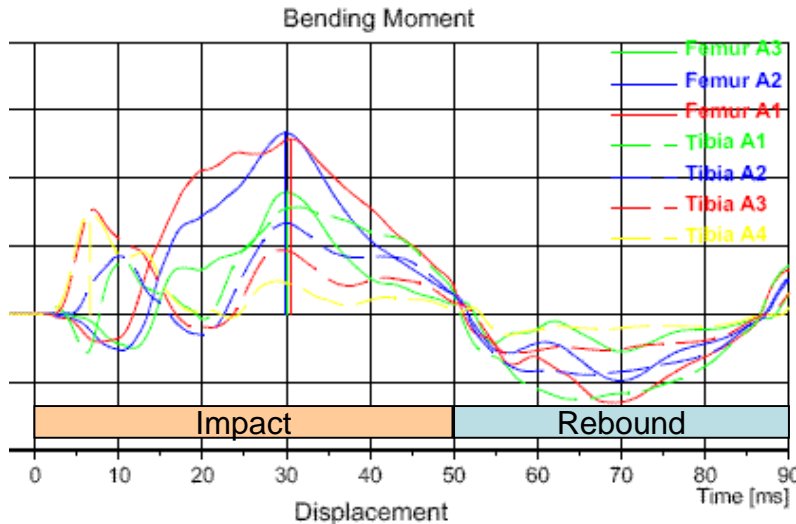


Content

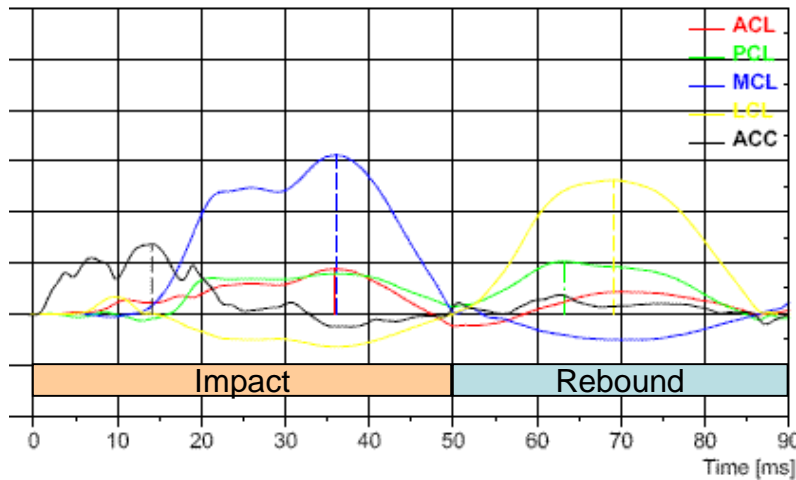
- 1. Current situation – injury values : impact vs rebound**
- 2. Conclusion & Recommendation**



Current situation – injury values : impact vs rebound (one example)



- Bending moments :
 - Highest values occur during the impact
- ACL/PCL :
 - Maximal PCL value occurs during the rebound – (slightly) higher value than during the impact



Impact



Rebound



Conclusion & Recommendation

Summary/Conclusion :

- In the rebound phase of the Flex GTR (vehicle impact), higher ACL/PCL elongation values can occur than during the impact itself
- Legform Kinematics are biofidelic up until rebound

Recommendation :

- All maxima occurring during and after the rebound phase shall be ignored. (The rebound phase usually starts around 50 milliseconds but must be determined from film analysis)

