

Informal document **GRSP-50-28**  
(50th GRSP, 6–9 December 2011,  
agenda item 14)



# RESULTS

Phase II

*Latin NCAP*  
*GRSP – December, 2011*  
*Geneva*



GLOBAL NCAP





## Presentation agenda

- Latin NCAP Phase 2 highlights
- Cars tested in Phase 2
- Latin NCAP frontal offset crash test setup
- Results visualization
- Results Phase 2
- Conclusions





## Latin NCAP phase 2 highlights

- 🌐 Latin NCAP Phase 2 is a part of Latin NCAP's **pilot phases**.
- 🌐 From 2011 Latin NCAP allows manufacturers to sponsor cars independently whether the car has been selected or not for testing.
- 🌐 Latin NCAP selected 5 cars for Phase 2, based on sales figures.
- 🌐 3 of the selected manufacturers sponsored extra cars.
- 🌐 1 Manufacturer sponsored a NEW car for Brazil market.

# Cars Selected by Latin NCAP

Chevrolet Corsa Classic



Chevrolet Celta



Ford KA Fly Viral



Nissan Tiida HB



Fiat Novo UNO



## Cars Sponsored by manufacturers

Chevrolet Cruze LT



Ford Focus Hatchback



Nissan Tiida Hatchback



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## NEW Car Sponsored by manufacturers

Nissan March



**Only valid  
for Brazil**



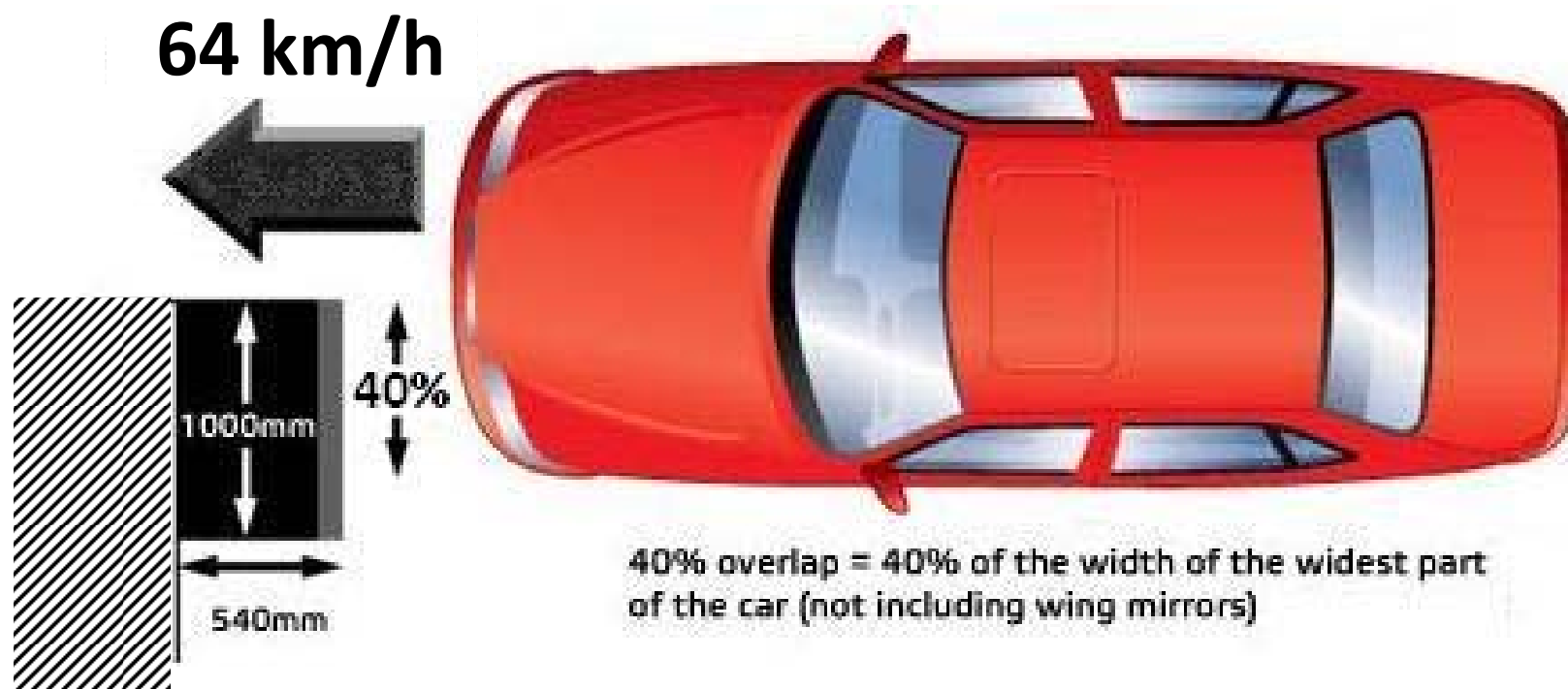
# Summary of cars



Mfr. and model	Body type	Doors	AIRBAGS
Cars selected by Latin NCAP			
Fiat Novo Uno	hatchback	5	<b>NO Airbags</b>
Chevrolet Celta	hatchback	3	<b>NO Airbags</b>
Chevrolet Corsa Classic	sedan	4	<b>NO Airbags</b>
Ford KA Fly Viral	hatchback	3	<b>NO Airbags</b>
Nissan Tiida Full	hatchback	5	<b>DRIVER Airbag</b>
Cars sponsored by manufacturers			
Chevrolet Cruze	sedan	4	<b>2 Airbags</b>
Ford Focus Style	hatchback	5	<b>2 Airbags</b>
Nissan Tiida Extra Full	hatchback	5	<b>2 Airbags</b>
NEW car sponsored by manufacturers			
Nissan March	hatchback	5	<b>2 Airbags</b>

**Total 8 models and 9 cars**

## Test: Frontal crash 40% offset



# WHO ARE THE OCCUPANTS IN THE CAR?

Adults



50th percentile Hybrid III dummy (x2)

Child dummies



P3 (3 years old)



P1.5 (18 months old)





# Results

## Visualization



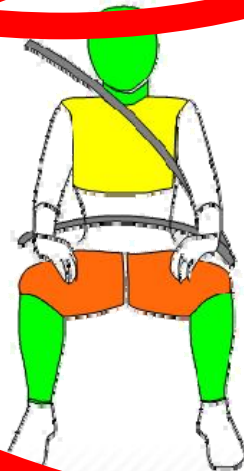
# Car Brand and model



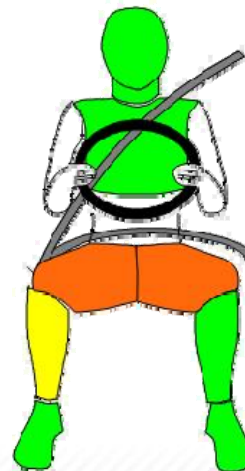
2.28 max. 16.00 - Adult occupant



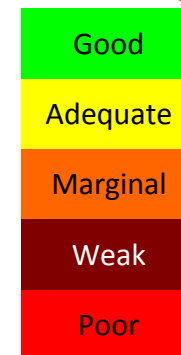
33.58 max. 49.00 - Child occupant



Front passenger



Driver



# Results



2.28 max. 16.00 - Adult occupant

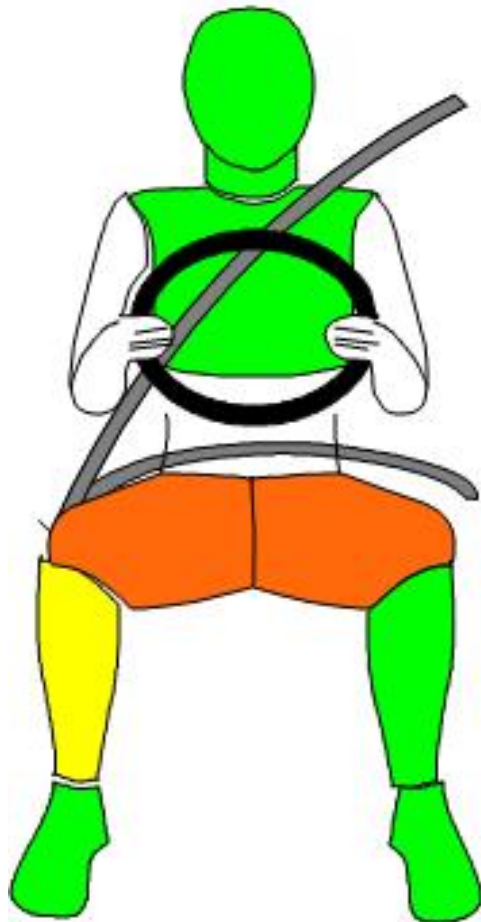
Star rate: MAX 5 STARS

POINTS



33.58 max. 49.00 - Child occupant

# RESULTS codes in dummies



Green	Good
Yellow	Adequate
Orange	Marginal
Brown	Weak
Red	Poor



# Results





# Results:

## Cars sponsored by Manufacturers



# Ford Focus Hatchback + 2 Airbags



13.53 max. 16.00 - Adult occupant



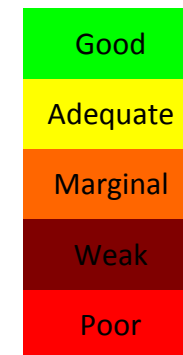
33.68 max. 49.00 - Child occupant



Front passenger



Driver



# Chevrolet Cruze LT + 2 Airbags



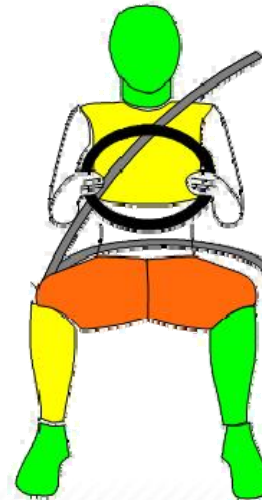
13.18 max. 16.00 - Adult occupant



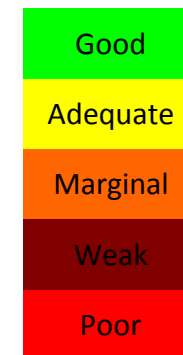
32.59 max. 49.00 - Child occupant



Front passenger



Driver





# Nissan Tiida Hatchback + 2 Airbags



13.12 max. 16.00 - Adult occupant



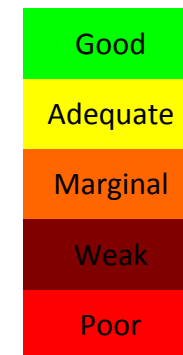
9.29 max. 49.00 - Child occupant



Front passenger



Driver





# Results:

NEW Car types sponsored  
by Manufacturers



# Nissan March + 2 Airbags

(Only valid for Brazil Market)



7.62 max. 16.00 - Adult occupant



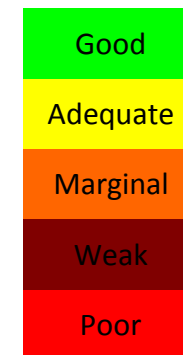
9.68 max. 49.00 - Child occupant



Front passenger



Driver





# Results:

Cars selected by  
Latin NCAP



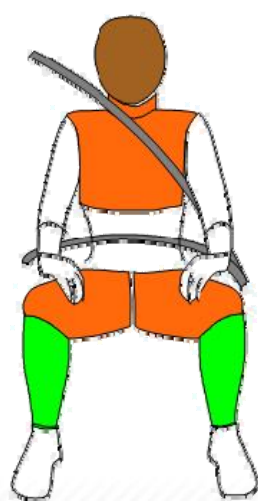
# Nissan Tiida Hatchback + Driver Airbag



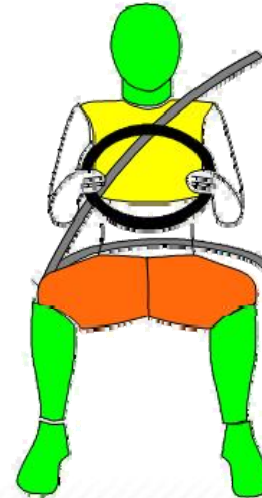
9.54 max. 16.00 - Adult occupant



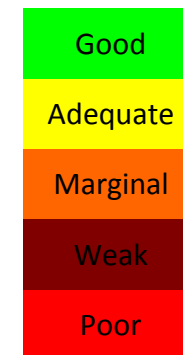
8.00 max. 49.00 - Child occupant



Front passenger



Driver



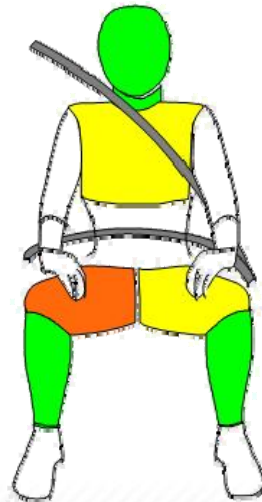
# Chevrolet Celta - **NO** Airbags



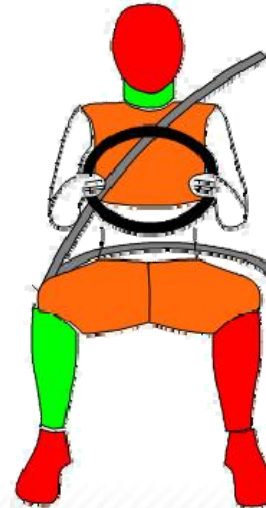
3.82 max. 16.00 - Adult occupant



22.68 max. 49.00 - Child occupant



Front passenger



Driver

Good
Adequate
Marginal
Weak
Poor

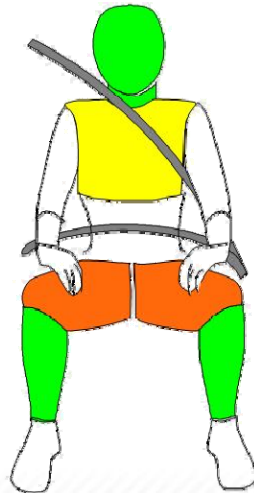
# Ford KA Fly Viral - **NO** Airbags



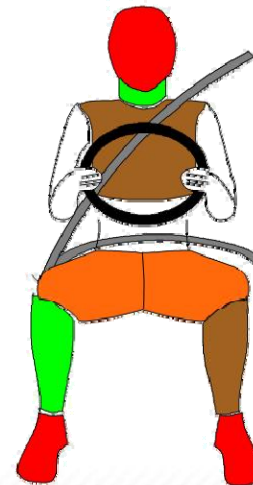
2.37 max. 16.00 - Adult occupant



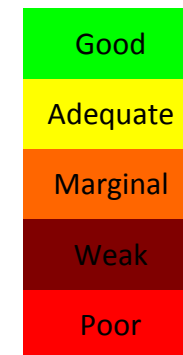
30.52 max. 49.00 - Child occupant



Front passenger



Driver



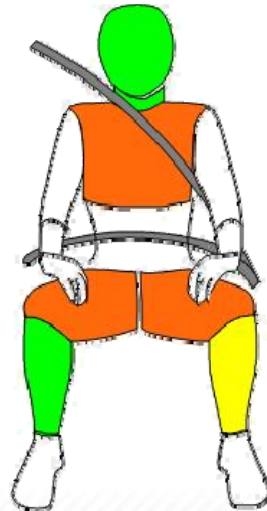
# Chevrolet Corsa Classic - **NO Airbags**



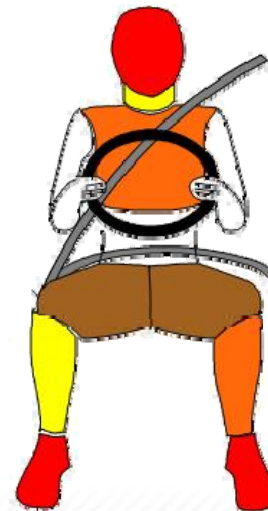
2.28 max. 16.00 - Adult occupant



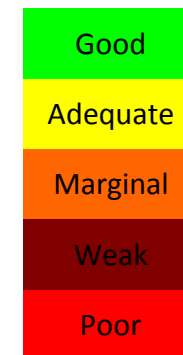
9.16 max. 49.00 - Child occupant



Front passenger



Driver





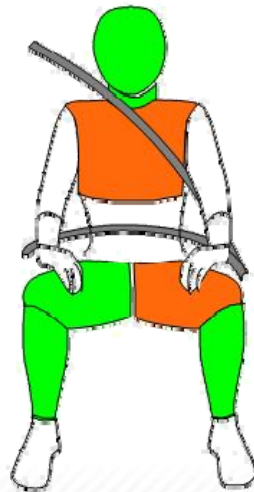
# Fiat Novo Uno Evo - **NO** Airbags



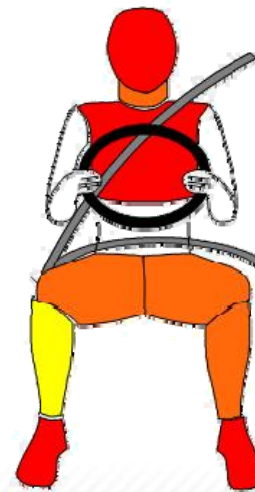
2.00 max. 16.00 - Adult occupant



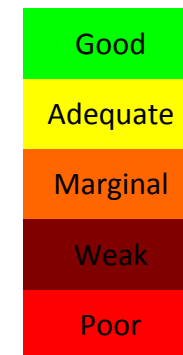
20.73 max. 49.00 - Child occupant



Front passenger



Driver





# Summary of results



## Cars selected by Latin NCAP

Fiat Novo Uno – <b>NO Airbags</b>	★☆☆☆☆	★☆☆☆☆
Chevrolet Celta – <b>NO Airbags</b>	★☆☆☆☆	★☆☆☆☆
Chevrolet Corsa Classic – <b>NO Airbags</b>	★☆☆☆☆	★☆☆☆☆
Ford KA Fly Viral – <b>NO Airbags</b>	★☆☆☆☆	★★☆☆☆
Nissan Tiida Full <b>+ 1 Airbag</b>	★★★☆☆	★☆☆☆☆

## Cars sponsored by manufacturers

Chevrolet Cruze <b>+ 2 Airbags</b>	★★★★☆	★★★☆☆
Ford Focus Style <b>+ 2 Airbags</b>	★★★★☆	★★★☆☆
Nissan Tiida Extra Full <b>+ 2 Airbags</b>	★★★★☆	★☆☆☆☆

## NEW cars sponsored by manufacturers

Only Valid  
for Brazil

Nissan March <b>+ 2 Airbags</b>	★★★☆☆	★☆☆☆☆
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# Summary of results phase 1 and 2



**LATIN NCAP**  
**SELECTED CARS**

**MANUFACTURERS**  
**SPONSORED CARS**

Geely CK1 1.3 - <b>NO Airbags</b>	☆☆☆☆☆	☆☆☆☆☆
Peugeot 207 Compact 5p 1.4 - <b>NO Airbags</b>	☆☆☆☆☆	☆☆☆☆☆
VW Gol Trend 1.6 - <b>NO Airbags</b>	☆☆☆☆☆	☆☆☆☆☆
Fiat Palio ELX 1.4 - <b>NO Airbags</b>	☆☆☆☆☆	☆☆☆☆☆
Chevrolet Celta - <b>NO Airbags</b>	☆☆☆☆☆	☆☆☆☆☆
Ford KA Fly Viral - <b>NO Airbags</b>	☆☆☆☆☆	☆☆☆☆☆
Chevrolet Corsa Classic - <b>NO Airbags</b>	☆☆☆☆☆	☆☆☆☆☆
Fiat Novo Uno - <b>NO Airbags</b>	☆☆☆☆☆	☆☆☆☆☆
Nissan Tiida Hatchback + 1 Airbags	☆☆☆☆☆	☆☆☆☆☆
Toyota Corolla XEI + 2 Airbags	☆☆☆☆☆	☆☆☆☆☆
Chevrolet Meriva GL Plus + 2 Airbags	☆☆☆☆☆	☆☆☆☆☆
Ford Focus Style + 2 Airbags	☆☆☆☆☆	☆☆☆☆☆
Chevrolet Cruze + 2 Airbags	☆☆☆☆☆	☆☆☆☆☆
Nissan Tiida Hatchback + 2 Airbags	☆☆☆☆☆	☆☆☆☆☆
Fiat Palio ELX 1.4 Emotion + 2 Airbags	☆☆☆☆☆	☆☆☆☆☆
VW Gol Trend 1.6 + 2 Airbags	☆☆☆☆☆	☆☆☆☆☆
Nissan March + 2 Airbags	☆☆☆☆☆	☆☆☆☆☆
Peugeot 207 Compact 5p 1.4 + 2 Airbags	☆☆☆☆☆	☆☆☆☆☆

Comparison test

Comparison test




Only Valid for Brazil






# Conclusions



## Conclusions: Adult Occupant protection

-  Bodyshell integrity is critical for the protection of occupants even in cars fitted with airbags. Four of the five cars selected by Latin NCAP for Phase 2 showed unstable body shells in the crash test.
-  In Phases 1 and 2, the absence of airbags showed high risk of life threatening injuries for the passengers in a crash.
-  In Phases 1 and 2 the tested cars showed low scores in the leg areas of the adult occupants. In Phase 2 the Ford Focus and the Chevrolet Cruze showed well developed lower leg areas reducing possible injuries to the occupants in a crash.

## Conclusions: Child Occupant protection

-  In Phases 1 and 2 protection of child occupants is low because of the marginal to poor protection offered by the CRS, the incompatibility car-CRS and the poor CRS *installation* instructions.
-  In Phases 1 and 2 acceptable child protection performance was found in cars with weak structures and less developed restraint systems. Body shell deformation in the front reduces energy transfer to the rear seat passengers. As the structures get more stable, more energy is transferred to the rear passengers. In that case the performance of CRS and restraint systems needs extra attention.
-  Chevrolet Cruze was the first car with ISOFIX CRS attachment that was tested by Latin NCAP. The configuration showed good dynamic performance and good child safety. Latin NCAP would welcome when all governments will allow and promote ISOFIX use according to the UNECE technical standards.







## Final Comments

- Latin NCAP is pleased about the constructive dialogue with manufacturers.
- Latin NCAP is of the opinion that cars should be fitted with airbags. In case these safety devices are offered as an option the offer should be single and not in packages together with other accessories.



## General Conclusions - Recommendations


-  Latin NCAP recommends all governments to make the requirements of UNECE94 (technical standard) mandatory for all cars. Currently no car without airbags will pass UNECE94.  
**Only airbag requirement is not enough.**
-  Latin NCAP recommends all governments to make CRS use and technical standard approval for CRS mandatory.
-  Latin NCAP promotes the use of CRS in cars and strongly recommends closer cooperation between car manufacturers and CRS manufacturers.
-  Latin NCAP recommends Automobile clubs, Consumer organizations, car and CRS manufacturers as well as governments to work on better adult and child occupant protection in road vehicles.




## Only airbag requirement is not enough.




## General Conclusions - Recommendations

-  Latin NCAP recommends all governments to make the requirements of UNECE94 (technical standard) mandatory for all cars. Currently no car without airbags will pass UNECE94.  
**Only airbag requirement is not enough.**

-  Latin NCAP recommends all governments to make CRS use and technical standard approval for CRS mandatory.

-  Latin NCAP promotes the use of CRS in cars and strongly recommends closer cooperation between car manufacturers and CRS manufacturers.

-  Latin NCAP recommends Automobile clubs, Consumer organizations, car and CRS manufacturers as well as governments to work on better adult and child occupant protection in road vehicles.



Thank you very much  
for your attention.





# Summary of results phase 1 and 2



LATIN NCAP  
PARA AUTOS MAS SEGUROS  
SELECTED CARS

MANUFACTURERS  
SPONSORED CARS

Geely CK1 1.3 - <b>NO Airbags</b>	☆☆☆☆☆☆	☆☆☆☆☆☆
Peugeot 207 Compact 5p 1.4 - <b>NO Airbags</b>	☆☆☆☆☆☆	☆☆☆☆☆☆
VW Gol Trend 1.6 - <b>NO Airbags</b>	☆☆☆☆☆☆	☆☆☆☆☆☆
Fiat Palio ELX 1.4 - <b>NO Airbags</b>	☆☆☆☆☆☆	☆☆☆☆☆☆
Chevrolet Celta - <b>NO Airbags</b>	☆☆☆☆☆☆	☆☆☆☆☆☆
Ford KA Fly Viral - <b>NO Airbags</b>	☆☆☆☆☆☆	☆☆☆☆☆☆
Chevrolet Corsa Classic - <b>NO Airbags</b>	☆☆☆☆☆☆	☆☆☆☆☆☆
Fiat Novo Uno - <b>NO Airbags</b>	☆☆☆☆☆☆	☆☆☆☆☆☆
Nissan Tiida Hatchback + 1 Airbags	☆☆☆☆☆☆	☆☆☆☆☆☆
Toyota Corolla XEI + 2 Airbags	☆☆☆☆☆☆	☆☆☆☆☆☆
Chevrolet Meriva GL Plus + 2 Airbags	☆☆☆☆☆☆	☆☆☆☆☆☆
Ford Focus Style + 2 Airbags	☆☆☆☆☆☆	☆☆☆☆☆☆
Chevrolet Cruze + 2 Airbags	☆☆☆☆☆☆	☆☆☆☆☆☆
Nissan Tiida Hatchback + 2 Airbags	☆☆☆☆☆☆	☆☆☆☆☆☆
Fiat Palio ELX 1.4 Emotion + 2 Airbags	☆☆☆☆☆☆	☆☆☆☆☆☆
VW Gol Trend 1.6 + 2 Airbags	☆☆☆☆☆☆	☆☆☆☆☆☆
Nissan March + 2 Airbags	☆☆☆☆☆☆	☆☆☆☆☆☆
Peugeot 207 Compact 5p 1.4 + 2 Airbags	☆☆☆☆☆☆	☆☆☆☆☆☆

Comparison test

Comparison test

Only Valid for Brazil