Testing of Gene Delivery Vehicles

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Many Genetic Diseases Caused By Genes

“I’m having a bad D.N.A. day.”
Gene Therapy Targets Faulty DNA

Gene Delivery Vehicle

Cell

Faulty DNA

Nucleus

New DNA
But The Vehicle Has Obstacles To Overcome

Antibodies

Not absorbing
Vehicle Types for Introduction To Cell

- DOTAP
- PEG
- RGD
- DNA
Does Taxol Negatively Affect Gene Therapy?
Using Firefly DNA as a Tool
Measuring Vehicle and Taxol Combination

Add taxol and wait 24 hours
Counting The Survivors

Cells on cover slip

adding taxol

Cells on cover slip
Gene Vehicle Results With Different Concentrations Of Taxol
Chemo-Vehicle

**RGD-Coated Vehicles**

Gene Vehicle Efficiency (RLU/mg protein)

- 20 nM
- 40 nM
- 80 nM

Taxol Concentration

Number of Cells

Taxol Concentration (nM)
Conclusion