



Vaccinazione terapeutica per la cura del cancro della cervice

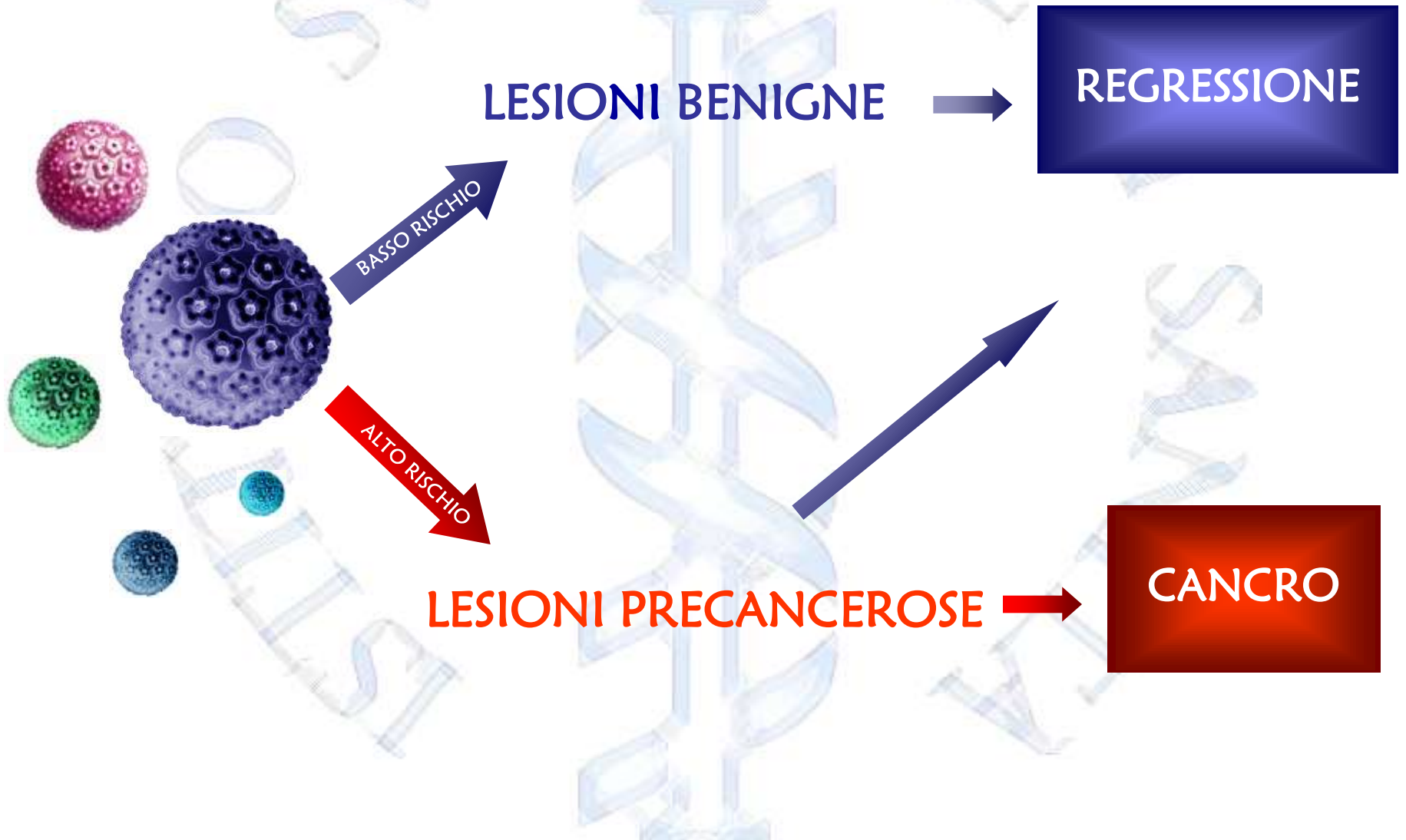
Felicia Grasso

Infezione da HPV: dalla diagnosi precoce alla prevenzione primaria

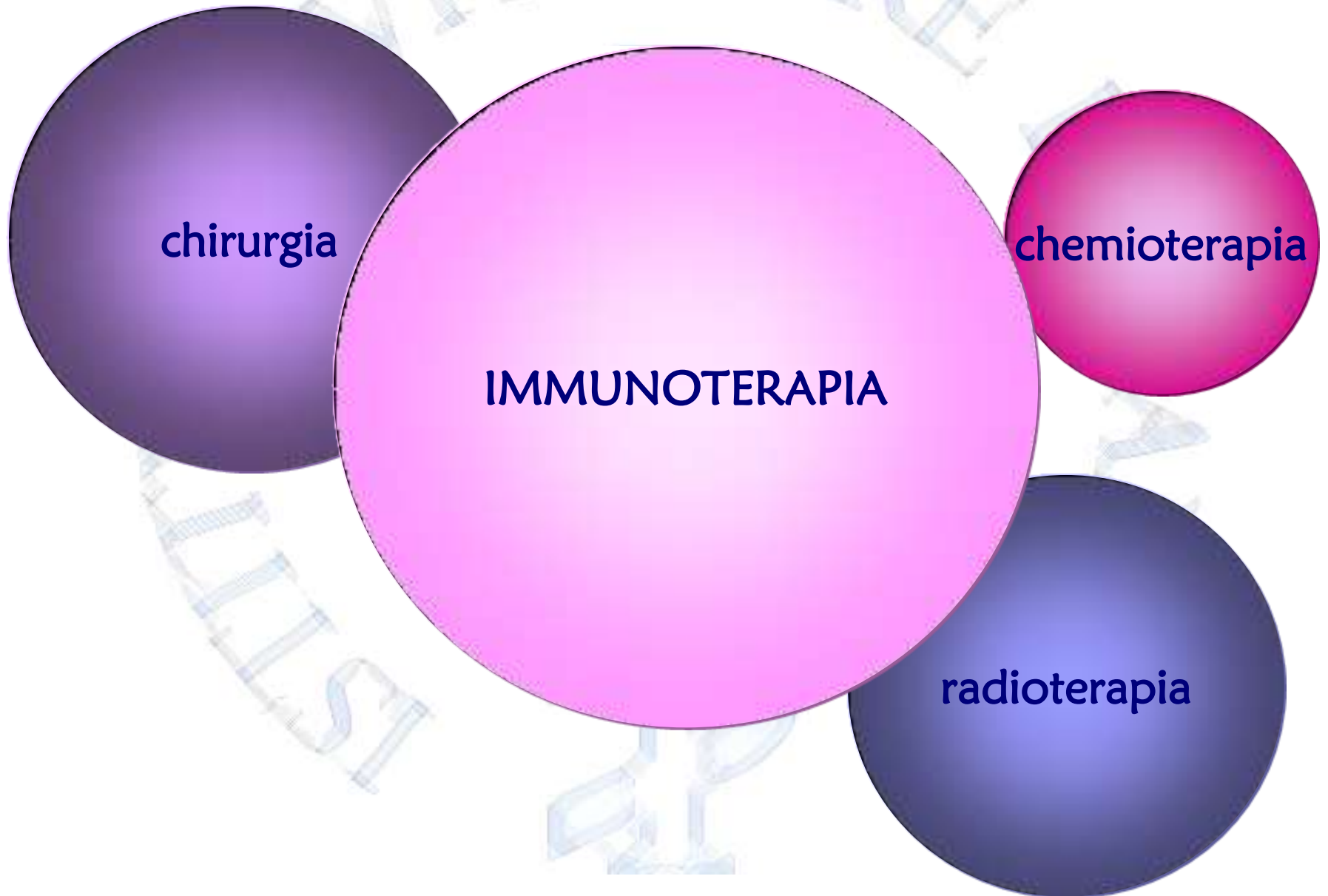
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HPV



Terapie del cancro della cervice



IMMUNOTERAPIA

IMMUNOTERAPIA: strategia in grado di attivare o potenziare la risposta immunitaria del paziente contro le cellule tumorali.



Published OnlineFirst April 6, 2011; DOI:10.1158/1078-0432.CCR-10-3126

**Clinical
Cancer
Research**

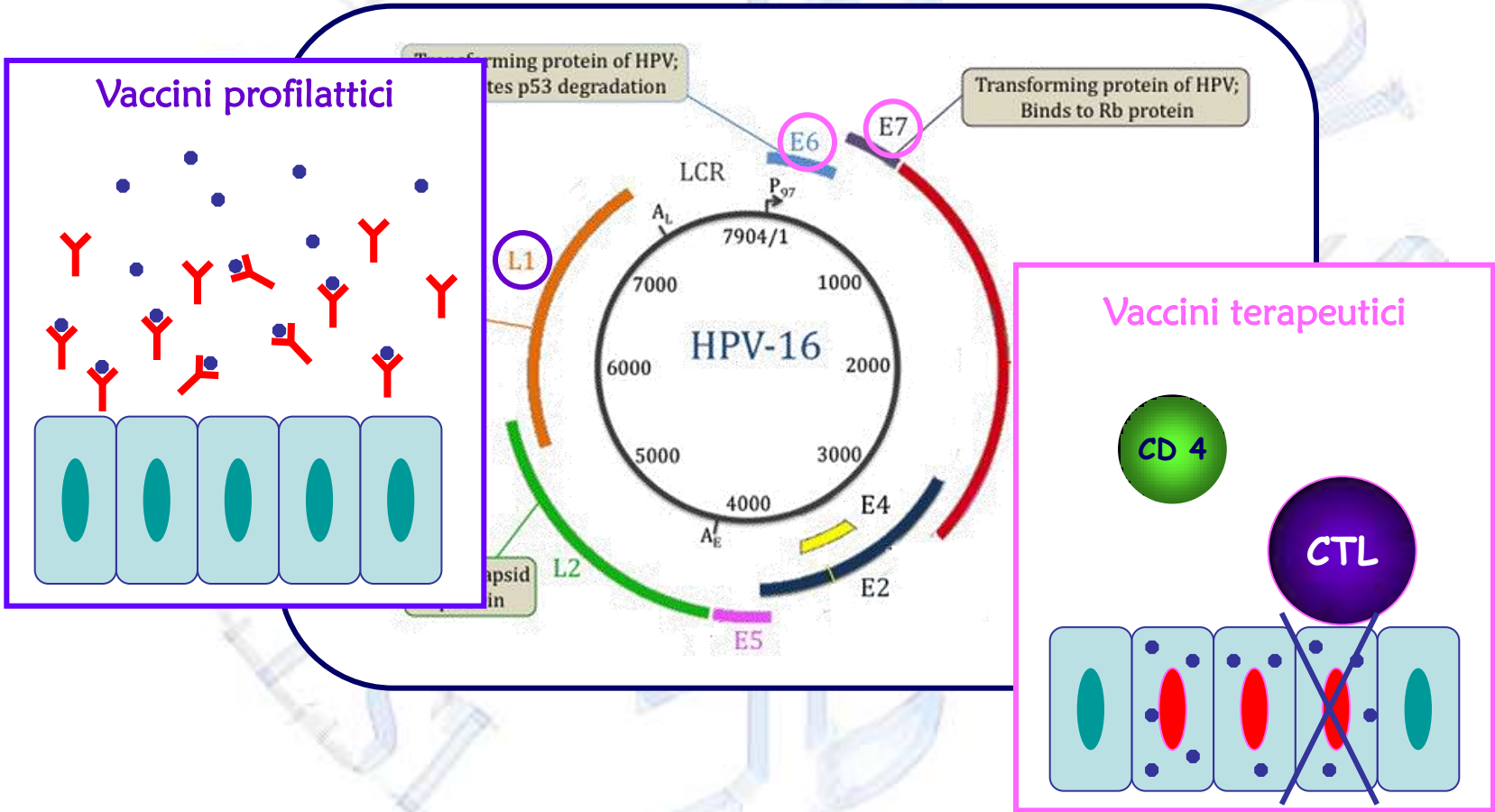
CCR Drug Updates

PROVENGE (Sipuleucel-T) in Prostate Cancer: The First FDA-Approved Therapeutic Cancer Vaccine

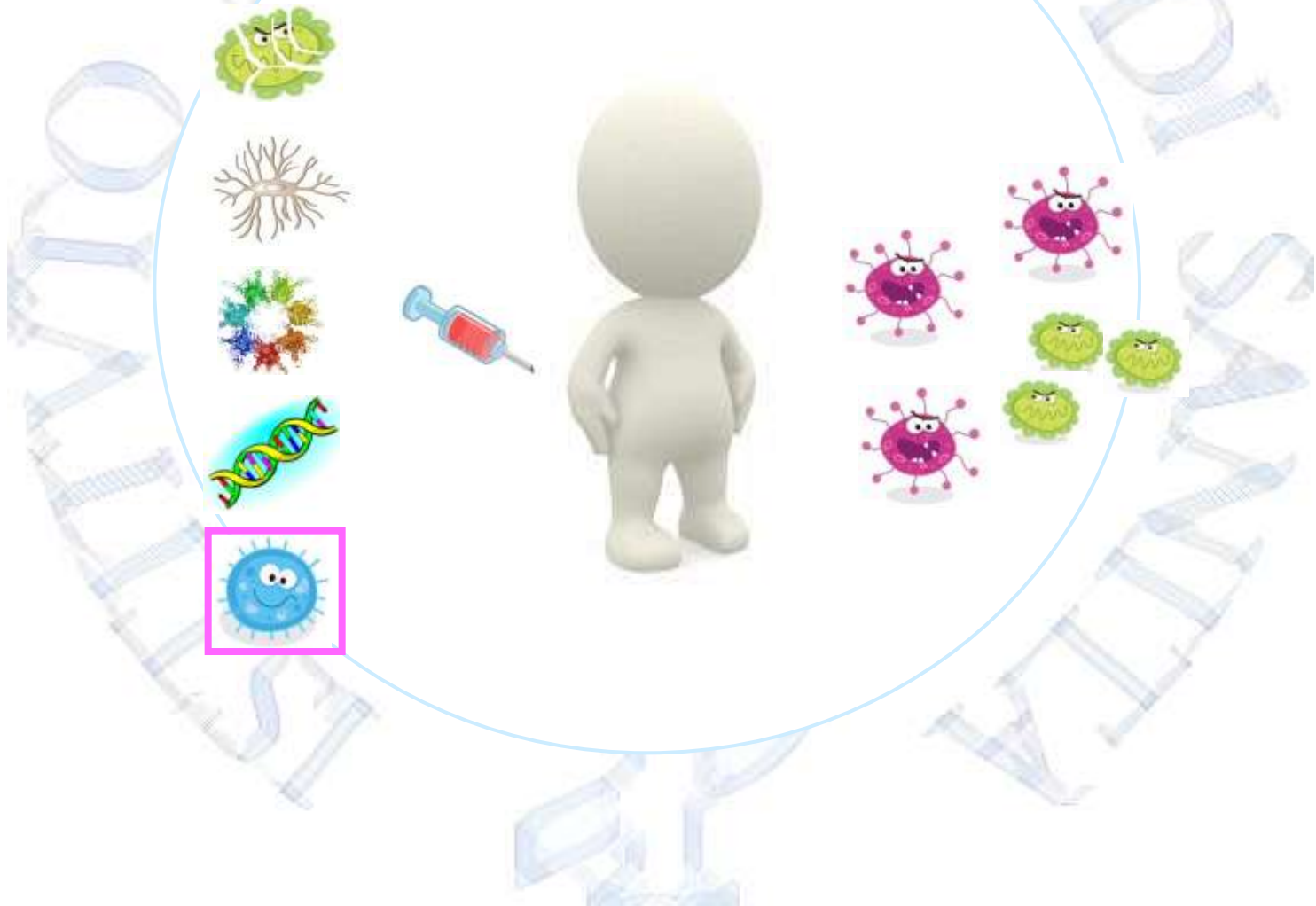
Martin A. Cheever and Celestia S. Higano

447 studi clinici sui vaccini terapeutici antitumorali

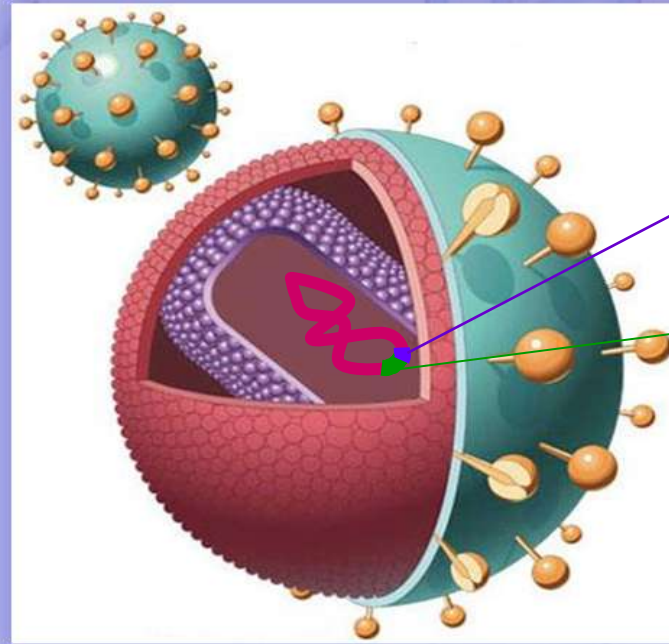
VACCINI HPV



VACCINI TERAPEUTICI ANTITUMORALI



Vettore lentivirale integrasi difettivo

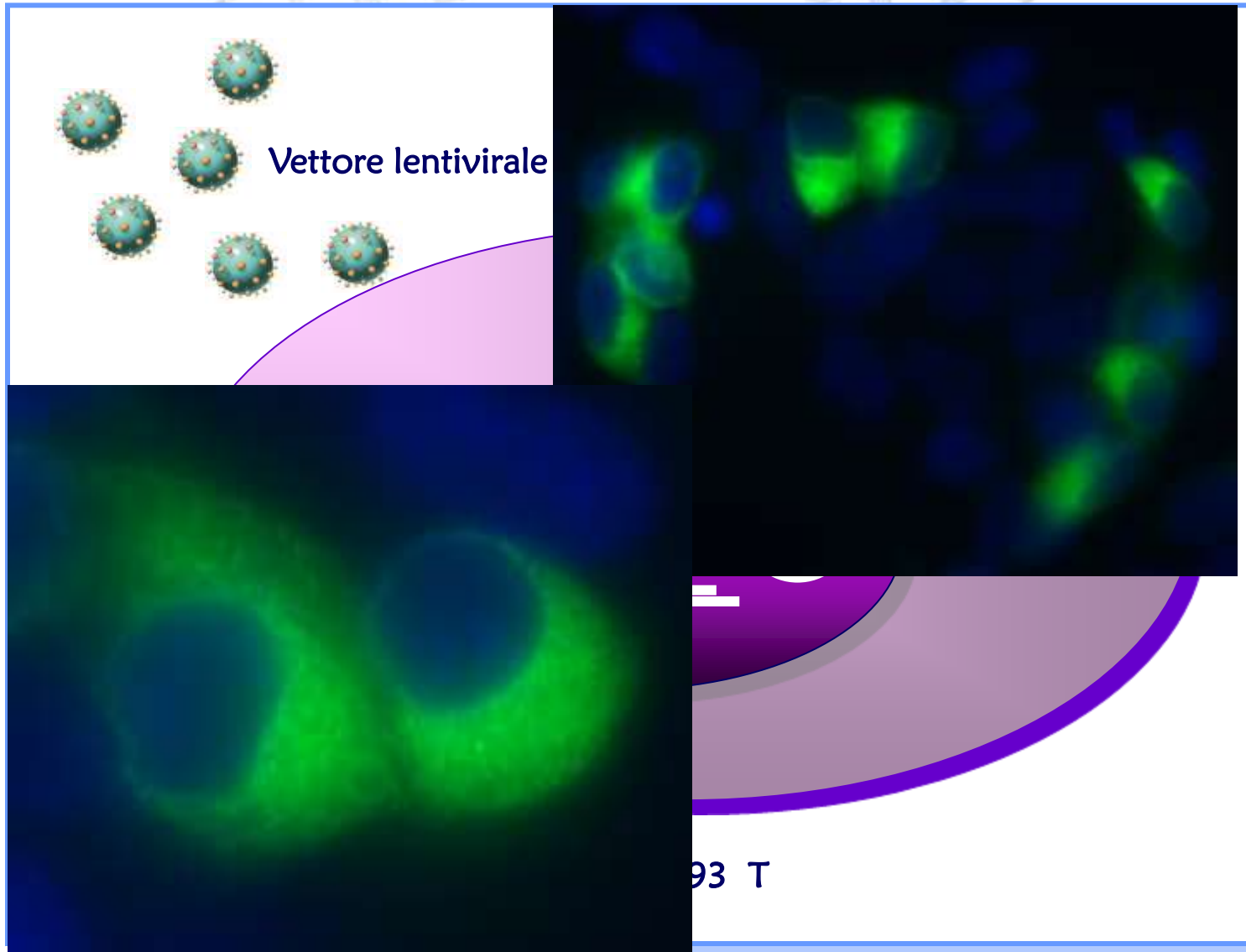


CRT

E7 mut

ALTA EFFICENZA DI ESPRESSIONE
FORTE RISPOSTA IMMUNATARIA
NON SI INTEGRA NEL GENOMA

Espressione E7 in vitro



MODELLO MURINO PRECLINICO DEL TUMORE DELLA CERVICIA UTERINA

esprimono HPV 16 E7



Cellule TC-1
Cellule trasformate con E6 ed E7 di HPV16



Topi C57Bl6 ♀ 6-8 settimane

K.-Y. Lin, F. G. Guarnieri, K. F. Staveley-O'Carroll, H. I. Levitsky, J. T. August, D. M. Pardoll and T.-C. Wu (1996).
Cancer Research 56:21-26.

Immunizzazione # 1: stadio precoce



TC-1 cells



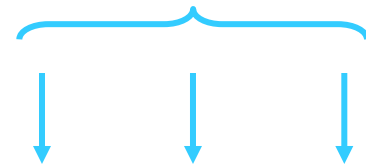
•E7 IDLV
•GFP IDLV



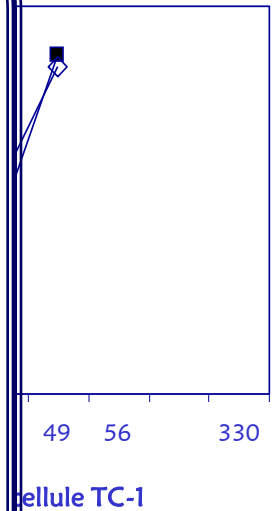
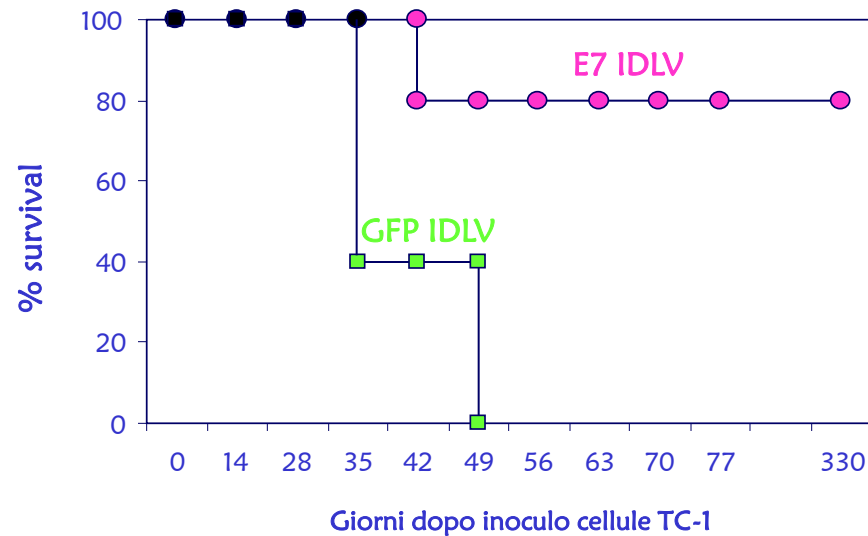
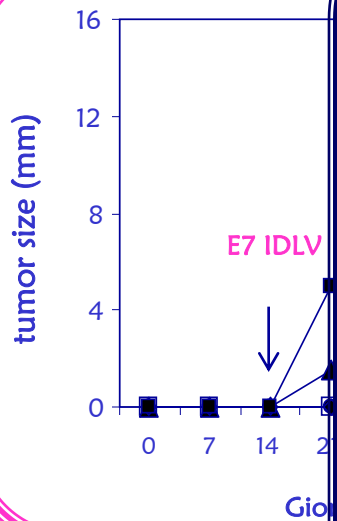
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14

Risposta Immunitaria
Effetto Terapeutico

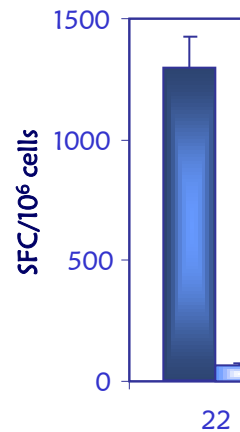


Immunizzazione # 1: effetto terapeutico

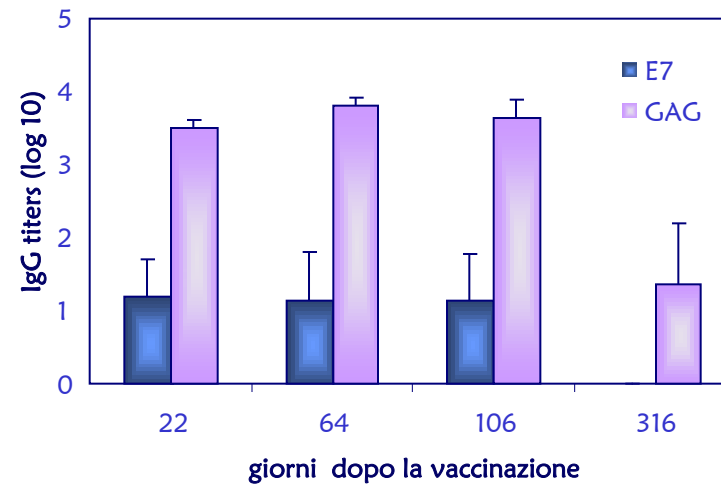


Immunizzazione # 1: risposta immunitaria

Risposta cellulare



Risposta anticorpale



Immunizzazione # 2: stadio tardivo

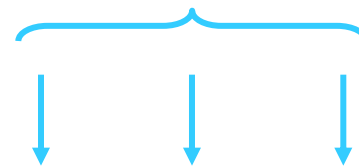


TC-1 cells



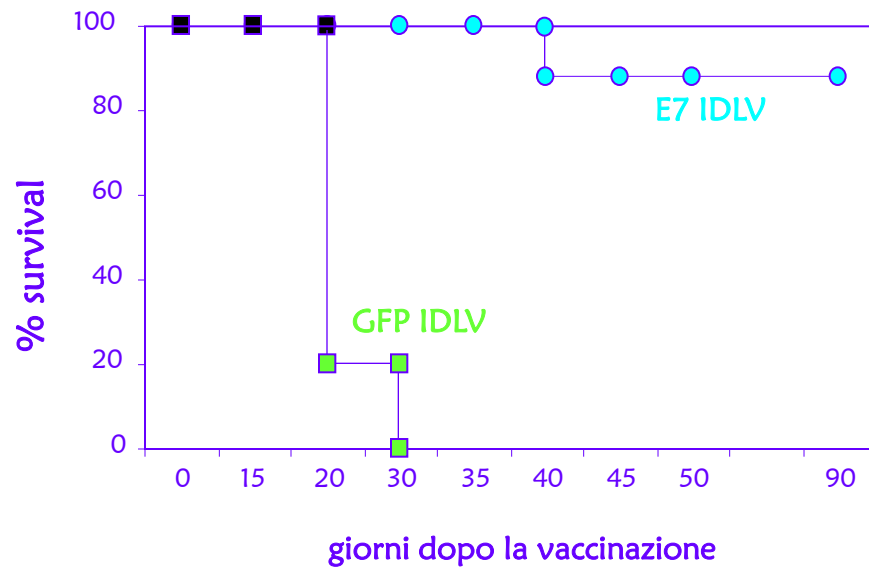
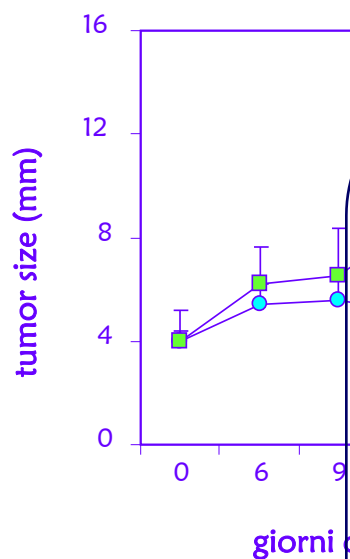
• E7 IDLV
• GFP IDLV

Risposta Immunitaria
Effetto Terapeutico



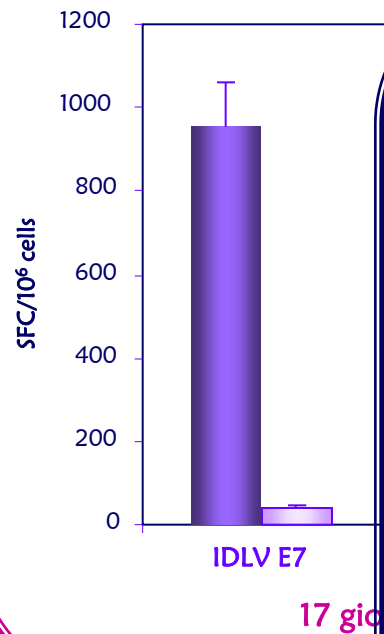
Diametro del tumore > 3 mm

Immunnizzazione # 2: effetto terapeutico

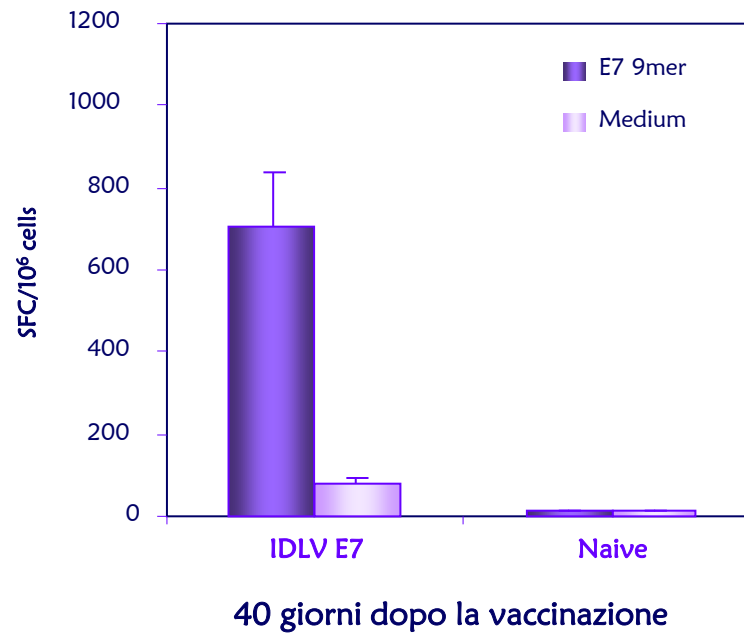


Immunizzazione # 2: risposta immunitaria

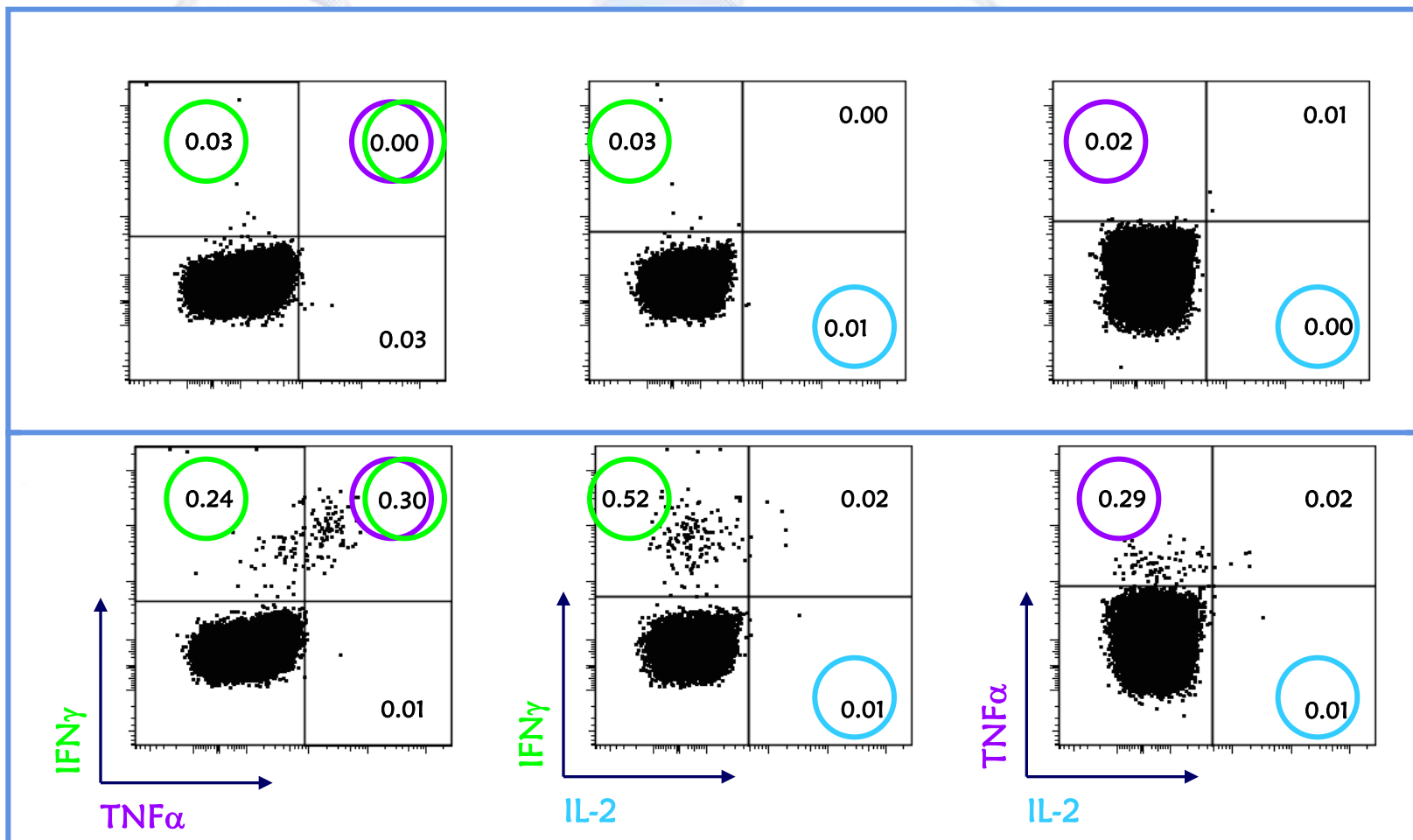
RISPOSTA cellulare su PBMC



RISPOSTA cellulare su splenociti



Immunizzazione # 2: risposta immunitaria



ICS per IFN γ , TNF α e IL-2 su splenociti



IJC

International Journal of Cancer

Successful therapeutic vaccination with integrase defective lentiviral vector expressing nononcogenic human papilloma virus E7 protein

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Prospettive

Testare la capacità del nostro vaccino di indurre o richiudere l'immunitaria E7 specifica nell'uomo.



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Massimo Giuliani

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Colomba Giorgi

Alessandra Rossi

Donatella Negri

Andrea Giovannelli

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Marina Franco

Andrea Cara

