Bu Yılın makaleleri ?
- VİROLOJİ -

- Atıf alanlar ?

  (Bir yıl içinde anlamlı değil)
- En yeniler ?
- En popülerler ?
  - En çok indirilenler

- ✓ ***PubMed***
- ✓ ***Google Scholar***
- ✓ ***Virology***
- ✓ ***Journal of Virology***
- ✓ ***Journal of Clinical Virology***
- ✓ ***Journal of Medical Virology***
- ✓ ***Journal of General Virology***
- ✓ ***Virology Journal***
- ✓ ***Archives of Virology***
- ✓ ***Science → "virus"***
- ✓ ***Türk Medline***

- ❖ *Bu yıla damga vuran olaylar ?*
- ❖ *Çalışmaların yoğunlaştığı, umut veren konular ?*

Türkiye'den yayınlar
PubMed - son bir yıl – (~ 190)

Molecular epidemiology of **Crimean-Congo hemorrhagic fever** virus in Turkey
occurrence of local topotype. Ozkaya E, Dincer E, Carhan A, Uyar Y, Ertek M,
Whitehouse CA, Ozkul A. Virus Res. 2010 Apr;149(1):64-70. Epub 2010 Jan 15

A newly identified Crimean-Congo hemorrhagic fever virus strain in Turkey.
Elevli M, Ozkul AA, Civilibal M, Midilli K, Gargili A, Duru NS.
Int J Infect Dis. 2010 Sep;14 Suppl 3:e213-6. Epub 2009 Dec 14.

The complete genome analysis of Crimean-Congo hemorrhagic fever virus isolated
in Turkey. Ozdarendeli A, Canakoğlu N, Berber E, Aydin K, Tonbak S, Ertek M, Buzgan T,
Bolat Y, Aktaş M, Kalkan A.Virus Res. 2010 Feb;147(2):288-93. Epub 2009 Nov 24

Evaluation of clinical and laboratory predictors of fatality in patients with Crimean-Congo
fever in a tertiary care hospital in Turkey. Hatipoglu CA, Bulut C, Yetkin MA, Ertem GT, Erd
Sari T, Kinikli S, Oral B, Demiroz AP. Scand J Infect Dis. 2010 Jul;42(6-7):516-21

ular Detection of Crimean-Congo Haemorrhagic Fever Virus (CCHFV) but not West Nile Viru
ks from Provinces in Northern Turkey. Albayrak H, Ozan E, Kurt M. Zoonoses Public Health

The effectiveness of routine laboratory findings in determining disease severity in patients w
Congo hemorrhagic fever: severity prediction criteria. Yilmaz G, Koksal I, Topbas M, Yilmaz
J Clin Virol. 2010 Apr;47(4):361-5. Epub 2010 Feb 9.

Türkiye'den yayınlar
PubMed - son bir yıl – (~ 190)

Sensitivity of rapid influenza antigen tests in the diagnosis of **pandemic (H1N1)2009** compared with the standard rRT-PCR technique during the 2009 pandemic in Turkey.

Ciblak MA, Kanturvardar M, Asar S, Bozkaya E, Yenen OS, Badur S.

Scand J Infect Dis. 2010 Jul 22

Clinical and Epidemiological Characteristics of Pandemic Influenza A/(H1N1) in Hospitalized Pediatric Patients at a University Hospital, Istanbul, Turkey.

Torun SH, Somer A, Salman N, Ciblak M, Demirkol D, Kanturvardar M, Badur S, Devecioglu O.

J Trop Pediatr. 2010 Sep 5

Influenza a (H1N1) virus pneumonia in newborns: experience of a referral level iii neonatal intensive care unit in turkey.

Kanmaz G, Erdeve O, Oguz SS, Uras N, Dilmen U.

Pediatr Pulmonol. 2010 Oct 20. [Epub ahead of print]

Swine influenza A (H1N1) virus infection in infants.

Zenciroglu A, Kundak AA, Aydin M, Okumus N, Dursun A, Ipek MS, Karagol BS, Hakan N, Karadag NN, Altas AB, Korukluoglu G.

Eur J Pediatr. 2010 Sep 21.

Influenza A (H1N1) virus pneumonia in intensive care unit.

Adıgüzel N, Karakurt Z, Kalamanoğlu Balcı M, Acartürk E, Güngör G, Yazıcıoğlu Moçin O, Batı Kutlu S, Yılmaz A.

Recent | Top 10 Cited | **Most Downloaded**
Extracted from *Tue Oct 12 23:22:25 BST 2010*

- **25 years after HIV discovery: Prospects for cure and vaccine**
  Virology, Volume 397, Issue 2, February 2010, Pages 248-254

- **Ebola virus uses clathrin-mediated endocytosis as an entry pathway**
  Virology, Volume 401, Issue 1, May 2010, Pages 18-28
- **Modeling host responses in ferrets during A/California/07/2009 influenza infection**
  Virology, Volume 401, Issue 2, June 2010, Pages 257-265
- **Systematic identification of microRNA and messenger RNA profiles in hepatitis C virus-infected human hepatoma cells**
  Virology, Volume 398, Issue 1, March 2010, Pages 57-67
- **The influenza A virus hemagglutinin glycosylation state affects receptor-binding specificity**
  Virology, Volume 403, Issue 1, July 2010, Pages 17-25
- **Antibody-mediated neutralization of Ebola virus can occur by two distinct mechanisms**
  Virology, Volume 401, Issue 2, June 2010, Pages 228-235
- **Classification of papillomaviruses (PVs) based on 189 PV types and proposal of taxonomic amendments**
  Virology, Volume 401, Issue 1, May 2010, Pages 70-79
- **Lambda and alpha interferons inhibit hepatitis B virus replication through a common molecular mechanism but with different in vivo activities**
  Virology, Volume 401, Issue 2, June 2010, Pages 197-206
- **Sorting of influenza A virus RNA genome segments after nuclear export**
  Virology, Volume 401, Issue 2, June 2010, Pages 248-256
- **Structure of the Newcastle disease virus F protein in the post-fusion conformation**
  Virology, Volume 402, Issue 2, July 2010, Pages 372-379

Virology 397 (2010) 248–254

Virology 397 (2010) 248-254

Nobel Lecture

25 years after HIV discovery: Prospects for cure and vaccine☆

Luc Montagnier

World Foundation AIDS Research and Prevention, UNESCO, Paris, France

Bu metin, 7 Aralık 2007 tarihinde İsveç, Stokholm, Karolinska Enstitüsü'nde sunulan Nobel Konferansını içermektedir.

First Viral isolates of the Viral Oncology Unit

Patient initials		Origin	clinical conditions	cytopathic effect
Bru	♂	Gay man, caucasian	Pre-AIDS	-
Loi	♂	Haemophiliac, caucasian	AIDS	+
Lai	♂	Gay man, caucasian	AIDS (Ks)	++
Eli	♀	Zaïre, african	AIDS	+

Vol. 220, No. 4599 (May 20, 1983), pp. 868-871

Isolation of a T-Lymphotropic Retrovirus from a Patient at Risk for Acquired Immune Deficiency Syndrome (AIDS)

F. Barré-Sinoussi, J. C. Chermann, F. Rey, M. T. Nugeyre, S. Chamaret, J. Gruest, C. Dauguet, C. Axler-Blin, F. Vézinet-Brun, C. Rouzioux, W. Rozenbaum and L. Montagnier

Selective Tropism of Lymphadenopathy Associated Virus (LAV) for Helper-Inducer T Lymphocytes

Vol. 225, No. 4657 (Jul. 6, 1984), pp. 59-63

David Klatzmann, Francoise Barré-Sinoussi, Marie Thèrése Nugeyre, Charles Dauguet, Etienne Vilmer, Claude Griscelli, Francoise Brun-Vezinet, Christine Rouzioux, Jean Claude Gluckman, Jean-Claude Chermann and Luc Montagnier

Science 4 May 1984: 497-500

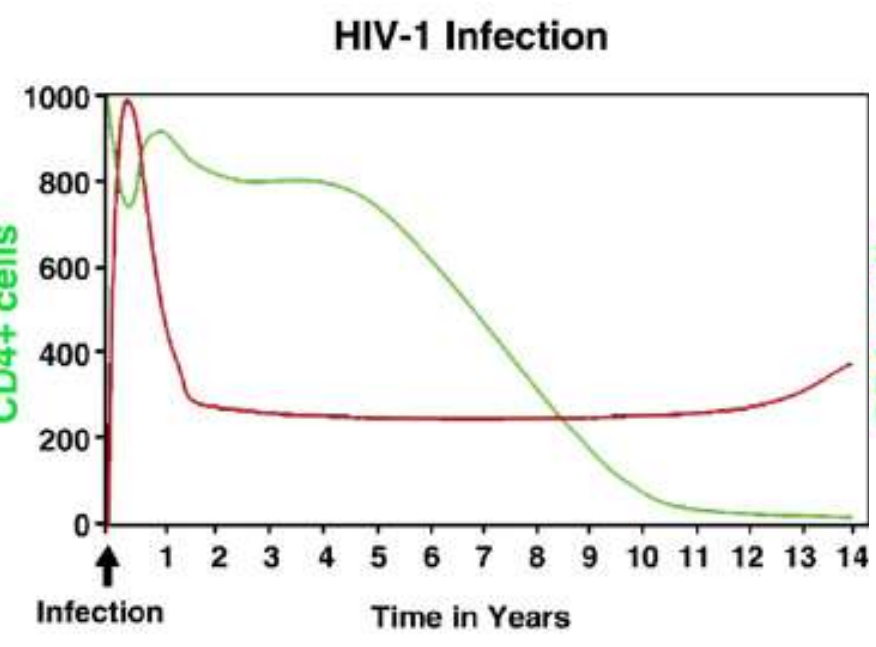
Detection, isolation, and continuous production of cytopathic retroviruses (HTLV-III) from patients with AIDS and pre-AIDS

*M Popovic, MG Sarngadharan, E Read, and **RC Gallo***

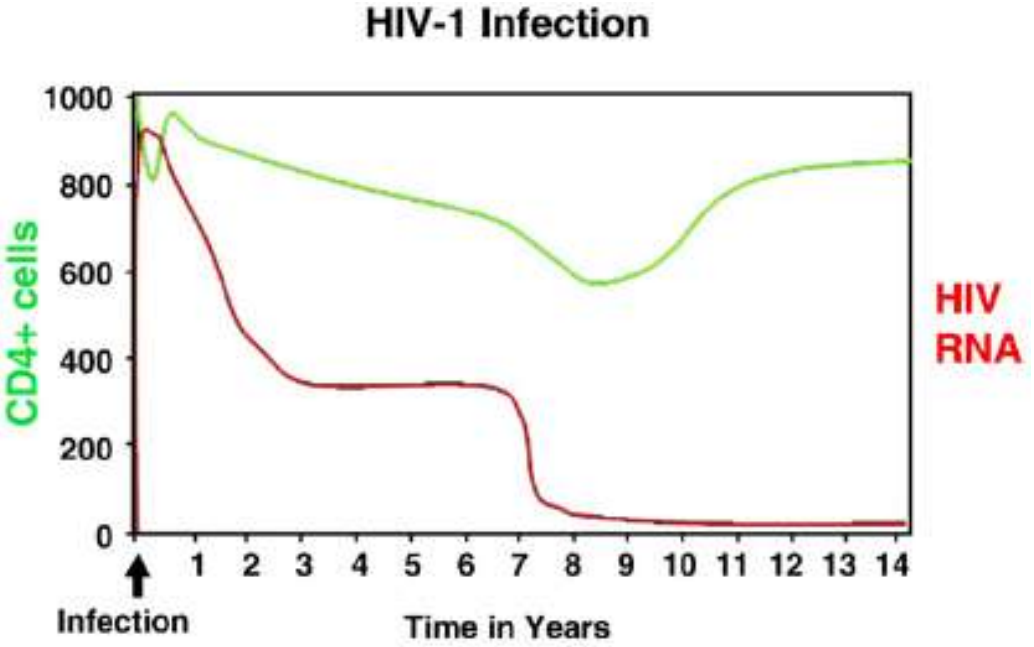
Isolation of Lymphocytopathic Retroviruses from San Francisco Patients with AIDS

***Jay A. Levy**, Anthony D. Hoffman, Susan M. Kramer, Jill A. Landis, Joni M. Shimabukuro and Lyndon S. Oshiro*

Vol. 225
(Aug. 24, 1984)
pp. 840-842



Untreated patients



Patients treated by antiretroviral therapy at Year 6

CIRBA—Centre intégré de Recherche Bioclinique d'Abidjan, créé en 1996.

- ✓ İyileşme:Yok
- ✓ Aşı: Yok
- ✓ ***Aşı yoluyla iyileşme ?***

- ➢ ***Viral rezervuarın kontrolü → baskılanması***
- ➢ ***Viral proteinlerin korunmuş bölgelerine karşı immün sistemin kamçılanması***

1. **HAART (3-6 ay)**
2. **Antioksidanlar ve immünstimülanlar**
3. **Terapötik aşı**
4. **HAART kesilmesi → izlem**

"HIV enfeksiyonunun, tanıdan hemen sonra iyileşebileceğinin bilinmesi, erken tanıyı ve sorumlu davranışları olumlu etkileyebilir."
"Koruyucu aşı için model olabilir." *Luc Montagnier*

Bu Yılın makaleleri ?
- VİROLOJİ -

- Makale seçimi -

- *Popüler makaleler : "25 years after HIV discovery"*
- *Bu yıla damga vuran olaylar ?*
  "Pandemik H1N1 influenza"
- *Çalışmaların yoğunlaştığı, umut veren konular ?*
  "Engelleyici RNA'ların tedavide kullanımı"
  → Hepatit C tedavisinde ?

Selda Erensoy
EGE Üniversitesi Tıp Fakültesi Tıbbi Mikrobiyoloji AD

Science
AAAS

Structural Basis of Preexisting Immunity to the 2009 H1N1 Pandemic Influenza Virus
Rui Xu, *et al.*
Science **328**, 357 (2010);
DOI: 10.1126/science.1186430

www.sciencemag.org SCIENCE VOL 328 16 APRIL 2010

Structural Basis of Preexisting Immunity to the 2009 H1N1 Pandemic Influenza Virus

Rui Xu,[1*] Damian C. Ekiert,[1*] Jens C. Krause,[2] Rong Hai,[3] James E. Crowe Jr.,[2] Ian A. Wilson[1,4†]

[1]Department of Molecular Biology, Scripps Research Institute, 10550 North Torrey Pines Road, La Jolla, CA 92037, USA. [2]Departments of Pediatrics and Microbiology and Immunology, Vanderbilt University Medical Center, Nashville, TN 37232, USA. [3]Department of Microbiology, Mount Sinai School of Medicine, New York, NY 10029, USA. [4]Skaggs Institute for Chemical Biology, Scripps Research Institute, 10550 North Torrey Pines Road, La Jolla, CA 92037, USA.

Scripps Research Institute, CA, USA
Vanderbilt University Medical Center, TN, USA
Mount Sinai School of Medicine NY, USA

2009 H1N1 Pandemik İnfluenza Virüsüne Karşı Önceden Bulunan İmmünitenin Antijenik Yapısal Temeli

2009 influenza pandemisinden sorumlu H1N1 virüsünün antijenitesinin yapısal temelini açıklamak amacıyla;

- **H1N1 A/California/04/2009 (CA04) virüsünün hemaglütininin kristal yapısının** belirlenerek analizi
- **20.yüzyılın başındaki insan ve domuz H1 virüsleri ile ortak HA antijenik epitopların gösterilmesi**

2009 ve 1918 pandemik virüslerinde çapraz antikor etkileşimin temeli

❖ **Amino asid dizi analizi üç boyutlu yapıya taşınması.**

- **1918 ve 2009 pandemik H1 influenza virüslerinin HA kristal yapıları incelenmesi**

→ **HA tepeleri çok benzer yapıda**

- **1918 epidemisinde yaşayan birinden elde edilen antikor (2D1) ile SC1918 HA birlikte kristalize edilmesi**

→ ***CA04 / SC1918 HA bağlanma epitopları ortak***

Gereç ve Yöntemler

❑ *CA04 HA eldesi, saflaştırılması, kristalleştirilmesi ve yapısının belirlenmesi*

- ✓ A/California/04/2009 (CA04) HA ektodomen geni → bakülovirüs ekspresyon vektöründe

(trombin kesim bölgesi, "foldon" dizisi, $His_{6\text{-}tag}$)

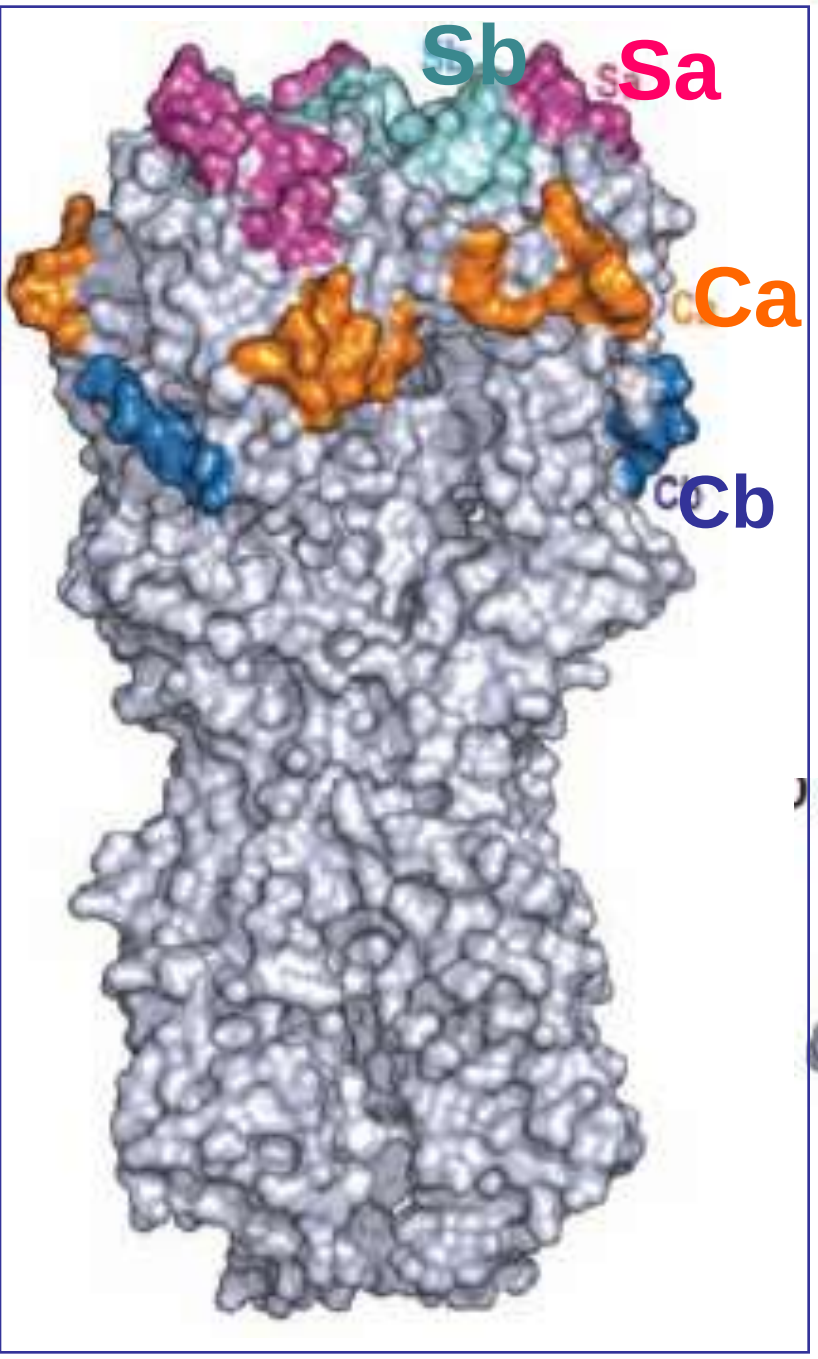
- ✓ Tripsin sindirimi, iyon değişimi ve kromatografi ile saflaştırma, konsantrasyon, buhar difüzyon yöntemi ile kristalleştirme→ sıvı nitrojende şok soğutma
- ✓ Veri toplama ve yapı geliştirme istatistikleri

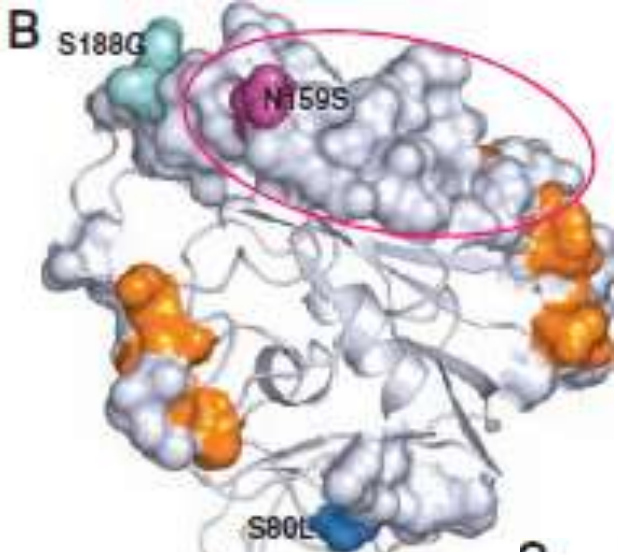
❑ *2D1- antikor bağlanma bölgesinde H1N1 mutasyonlarının ve Ab bağlanma afinitesinin analizi*

❑ *SC1918 mutantlarının oluşturulması*

- ✓ *Memeli hücresinde HA proteinin elde edilmesi ve sentezlenmesi*
- ✓ Sentetik genlerin pcDNA3.1 vektöründe klonlanması
- ✓ Mutagenez (PCR ile) → transfeksiyon → saflaştırma
- ✓ Mutantların 2D1 Ab Afinite ölçümleri (interferometri ile)
- ✓ Veri analizi

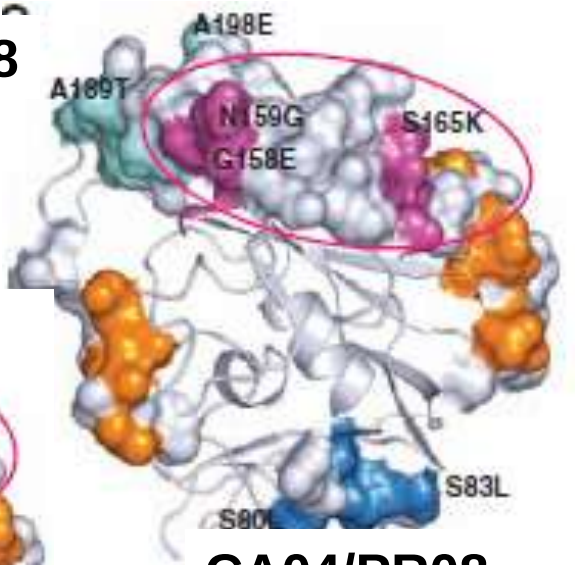
Data collection	CA04	2D1-SC1918
Beamline	SSRL 9-2	APS GM/CA-CAT 23ID-B
Wavelength (Å)	1.03317	1.03333
Space group	P1	P321
Unit cell parameters (Å, °)	a = 67.7 , b = 118.3, c = 120.1 α = 117.4, β = 92.7, γ = 100.8	a = b = 161.7, c = 143.5 α = β = 90.0, γ = 120.0
Resolution (Å)	50 - 2.60 (2.69 – 2.60)[a]	50 - 2.80 (2.82 – 2.80) [a]
Observations	171,150	557,716
Unique reflections	93,210 (7,120) [a]	53,366 (639) [a]
Completeness (%)	91.0 (69.7) [a]	98.4 (61.5) [a]
$\langle I/\sigma_I \rangle$	8.7 (1.8) [a]	16.2 (1.8) [a]
R_{sym}[b]	0.08 (0.38) [a, b]	0.04 (0.50) [a, b]
Z_a[c]	6	1
Refinement statistics		
Resolution (Å)	45.0 - 2.60	49.7 - 2.80
Reflections (total)	90,481	50,122
Reflections (test)	4,548	2,596
R_{cryst} (%)[d]	19.0 [d]	23.0 [d]
R_{free} (%)[e]	25.0 [e]	25.9 [e]
Average B-value (Å^2)	66.3	82.3
Wilson B-value (Å^2)	61.7	90.4
Protein atoms	23,502	7,093
Carbohydrate atoms	184	120
Waters	443	0
RMSD from ideal geometry		
Bond length (Å)	0.009	0.016
Bond angles (°)	1.23	1.78
Ramachandran statistics (%)[f]		
Favored	93.4	93.7
Outliers	1.8	0.2
PDB ID	3LZG	3LZF



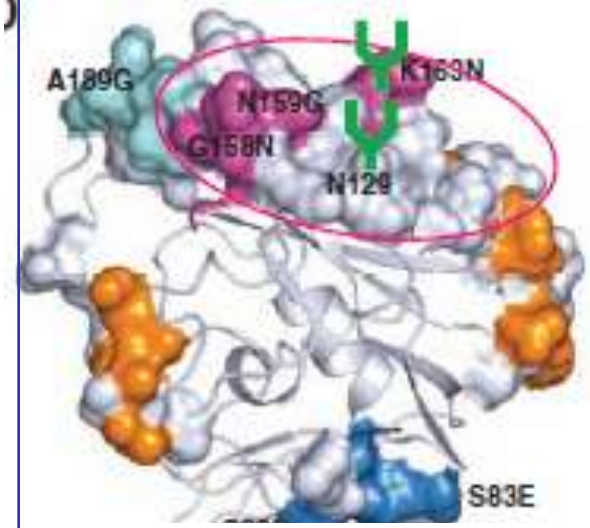


CA04/SC1918

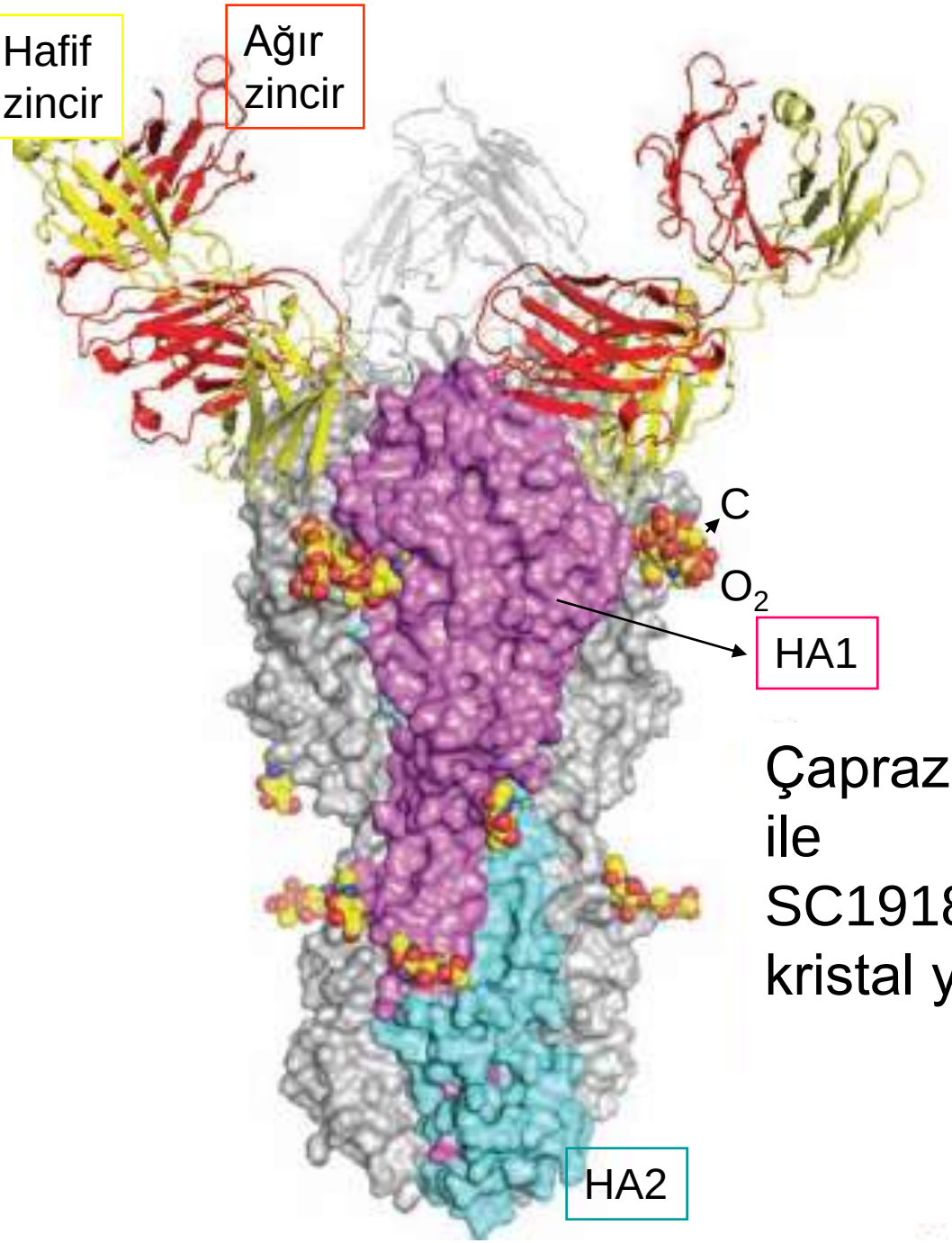
CA04 ile antijenik farklılıklar

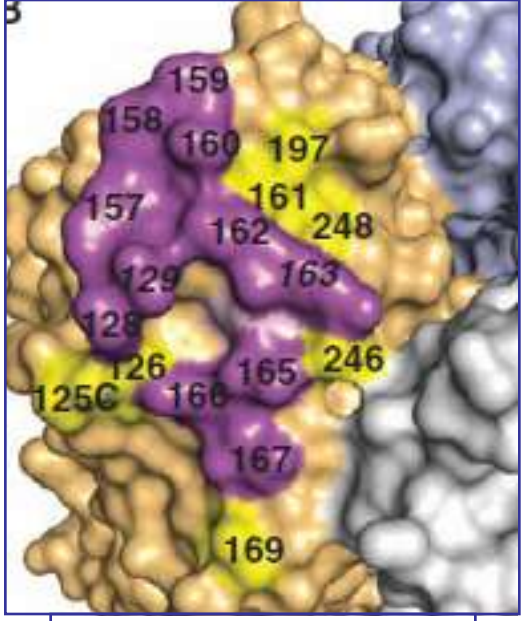


CA04/PR08



CA04/Brisbane07





SC1918 üzerinde 2D1'in ayak izi

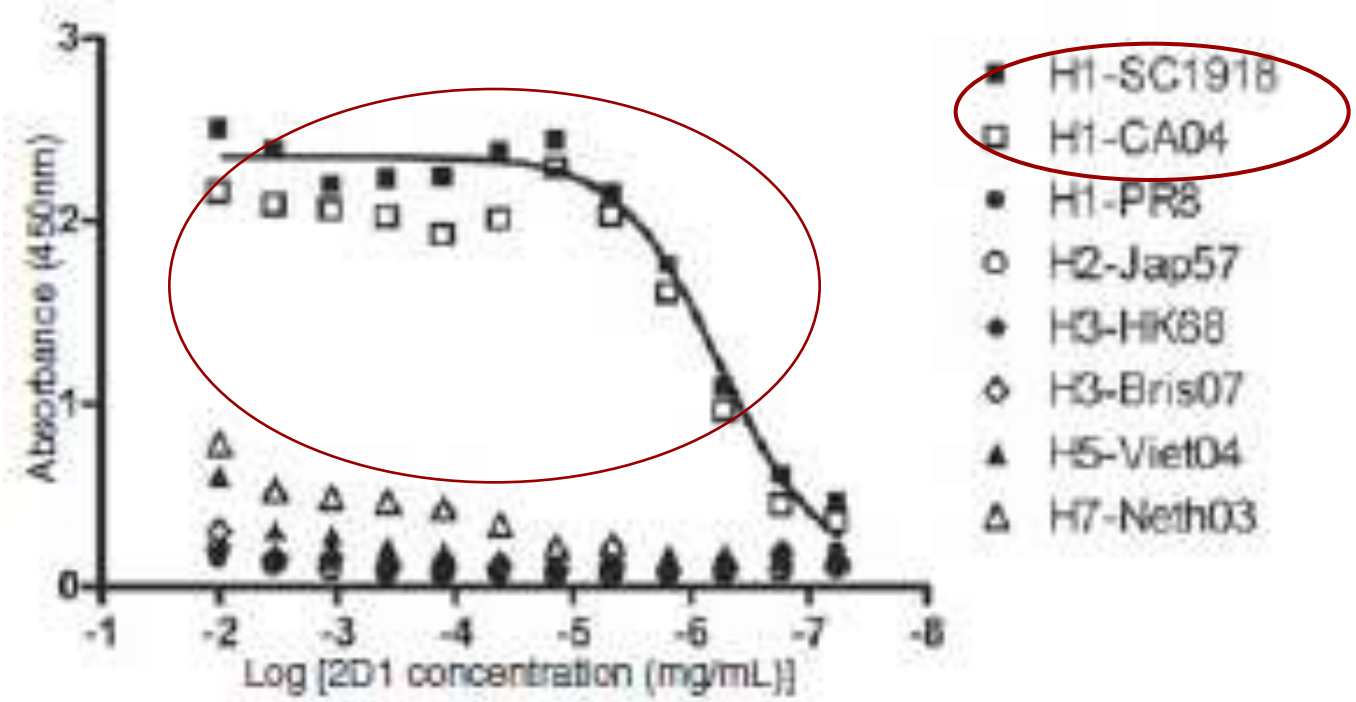
Çapraz-nötralizan 2D1 antikoru ile
SC1918 kompleksinin kristal yapısı

❑ *2D1 – HA paneli ile ELISA*

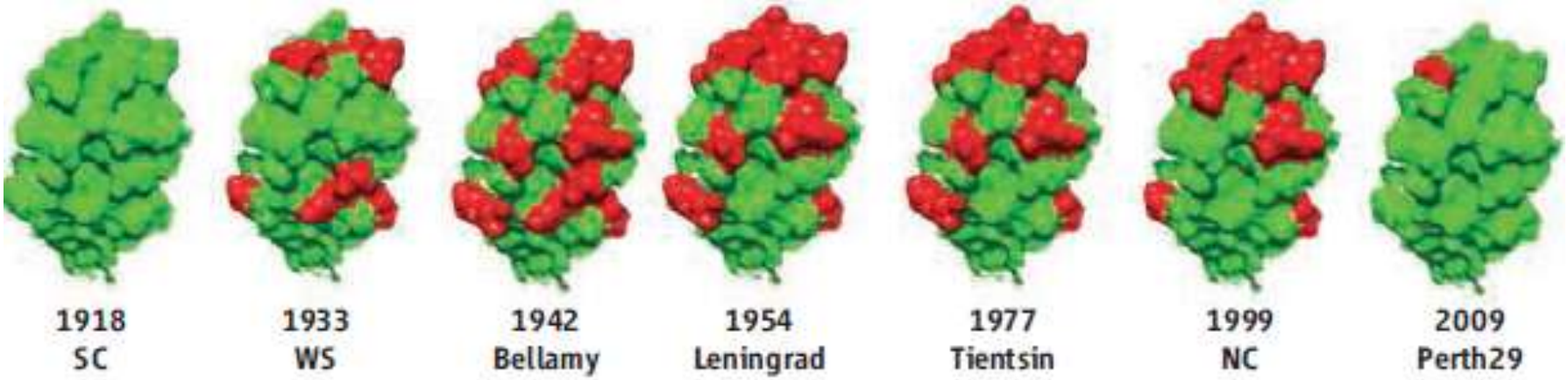
ELISA plaklarının saflaştırılmış HA proteinleri ile kaplanması

2D1 IgG panelinin sulandırılarak eklenmesi

Konjuge peroksidaz → TMB substratı → H2SO4 → 450nm



Antigenic site (number of residues)	Sa (13)	Total (50)	Total (%)	Sa (%)	Number of glycosylation sites in Sa
CA04 ile değişkenlik					
A/South Carolina/1/1918	1	10	20	7.7	0
A/Wilson-Smith/1933	3	18	36	23.1	1
A/Puerto Rico/8/34	5	23	46	38.5	0
A/Malaysia/54	7	28	56	53.8	1
A/Leninggrad/1954/1	5	27	54	38.5	3
A/Denver/57	6	27	54	46.2	3
AŞI izolatları A/USSR/90/77	5	27	54	38.5	3
A/Brazil/11/1978	5	27	54	38.5	3
A/Chile/1/1983	5	27	54	38.5	3
A/Singapore/6/1986	3	24	48	23.1	3
A/Bayern/7/1995	5	26	52	38.5	2
A/Beijing/262/1995	7	29	58	53.8	1
A/New Caledonia/20/99	5	25	50	38.5	2
A/Solomon Island/3/2006	5	25	50	38.5	2
A/Brisbane/59/2007	5	25	50	38.5	2
domuz A/swine/Iowa/15/1930	1	10	20	7.7	0
A/New Jersey/1976	1	10	20	7.7	0
A/swine/Ohio/511445/2007	2	6	12	15.4	0



"1918 virüsünden sonra, mutasyonlarla virüsler antikorlardan kaçmaya başladı. Pandemik 2009 virüsü ile saat tersine döndü"

Jon COHEN

www.sciencemag.org **SCIENCE** VOL 327 26 MARCH 2010
Published by AAAS

January 2010 | Volume 5 | Issue 1 |

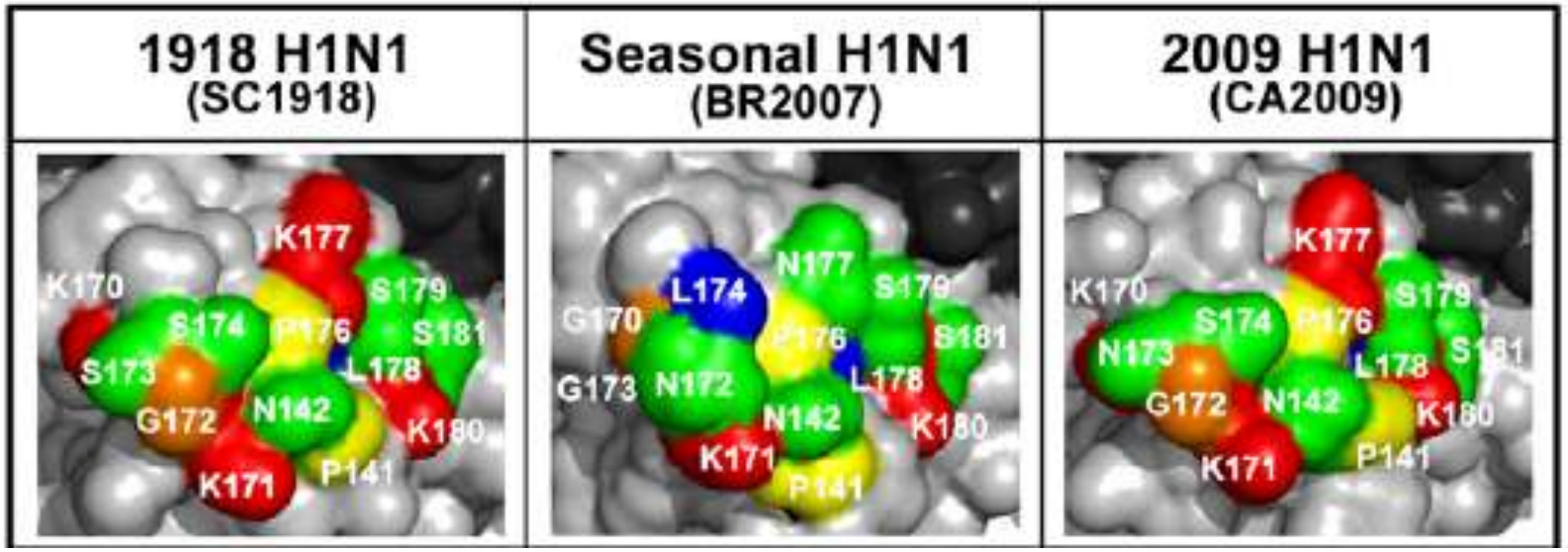
PLoS one

Predicting the Antigenic Structure of the Pandemic (H1N1) 2009 Influenza Virus Hemagglutinin

Manabu Igarashi[1], Kimihito Ito[1], Reiko Yoshida[1], Daisuke Tomabechi[1], Hiroshi Kida[1,2,3], Ayato Takada[1]*

1 Department of Global Epidemiology, Hokkaido University Research Center for Zoonosis Control, Sapporo, Japan, **2** Department of Disease Control, Graduate School of Veterinary Medicine, Hokkaido University, Sapporo, Japan, **3** OIE Reference Laboratory for Highly Pathogenic Avian Influenza, Sapporo, Japan

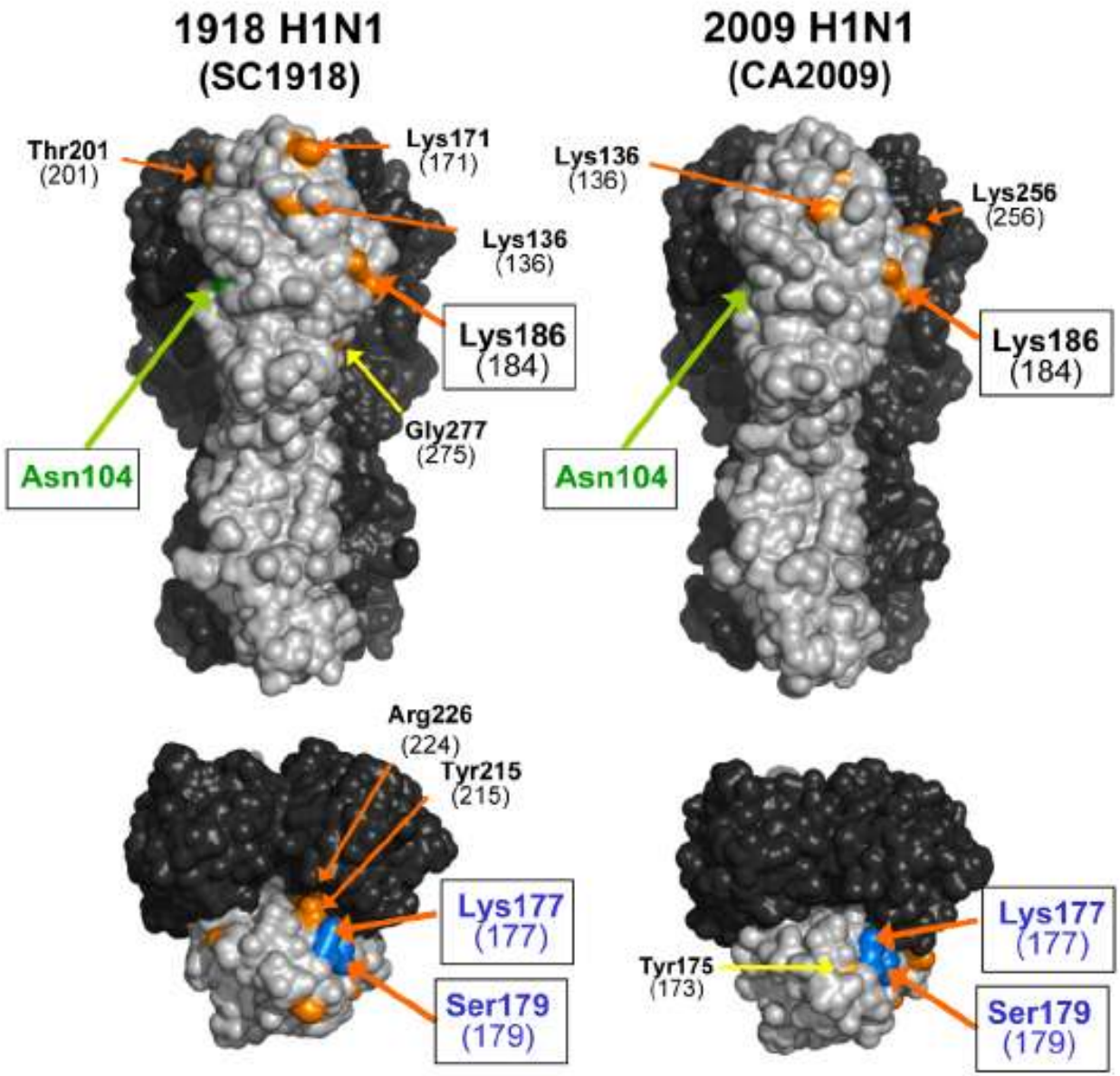
Sa



Sonuç;

- *2009 ve 1918 virüslerinin HA üst bölgesindeki amino asit dizileri arasında %80 benzerlik olmasına karşın, çapraz nötralizasyonun nedeni →*

- HA ***Sa*** bölgesindeki antijenik benzerlik, 2009 influenza pandemisine karşı yaş ile ilişkili immüniteyi açıklamaktadır
- *1918 -2009 virüslerinde bu bölgede benzerlik %95; mevsimsel virüslerle <%75*
- HA üst bölgesindeki **glikozilasyon bölgeleri** immünite farklılığı yaratır (Ab yanıtından kaçış)



***N*-glikozilasyon adayı amino asidler**

PLoS one

Igarachi M, et al., 2010

- ***2009 pandemik virüsü, viral evrim ile ilgili yeni kavram getirdi***
  - ***Geriye dönüş***

- ***Yeni aşılama stratejileri, aşı üretimi***
  - *1918 pandemik virüsünün geçirdiği evrelere bakmak gerekir*
  - *Yapay olarak glikozillenmiş aşılar (butik aşılar?)*

Jon COHEN

www.sciencemag.org SCIENCE VOL 327 26 MARCH 2010
Published by AAAS

HEPATOLOGY, Vol. 000, No. 000, 2010

Inhibition of Hepatitis C Virus Replication Using Adeno-Associated Virus Vector Delivery of an Exogenous Anti–Hepatitis C Virus MicroRNA Cluster

Xiao Yang,[1] Virginia Haurigot,[1] Shangzhen Zhou,[1] Guangxiang Luo,[2] and Linda B Couto[1]

From the [1]Division of Hematology and Center for Cellular and Molecular Therapeutics, Children's Hospital of Philadelphia, Philadelphia, PA; [2]Department of Microbiology, Immunology, and Molecular Genetics, University of Kentucky College of Medicine, Lexington, KY.

Received June 24, 2010; accepted August 2, 2010.

Nature **391**, 806-811 (19 February 1998) | doi:10.1038/35888;
Received 16 September 1997; Accepted 24 November 1997

Potent and specific genetic interference by double-stranded RNA in *Caenorhabditis elegans*

Andrew Fire[1], SiQun Xu[1], Mary K. Montgomery[1], Steven A. Kostas[1,2], Samuel E. Driver[3] & **Craig C. Mello**[3]

Carnegie Institution of Washington, Department of Embryology,
115 West University Parkway, Baltimore, Maryland 21210, USA
Biology Graduate Program, Johns Hopkins University,
3400 North Charles Street, Baltimore, Maryland 21218, USA
Program in Molecular Medicine, Department of Cell Biology,
University of Massachusetts Cancer Center,
Two Biotech Suite 213, 373 Plantation Street, Worcester, Massachusetts 01605, USA

2006'da Nobel aldılar

NATURE |VOL 411 | 24 MAY **2001** |www.nature.com

letters to nature

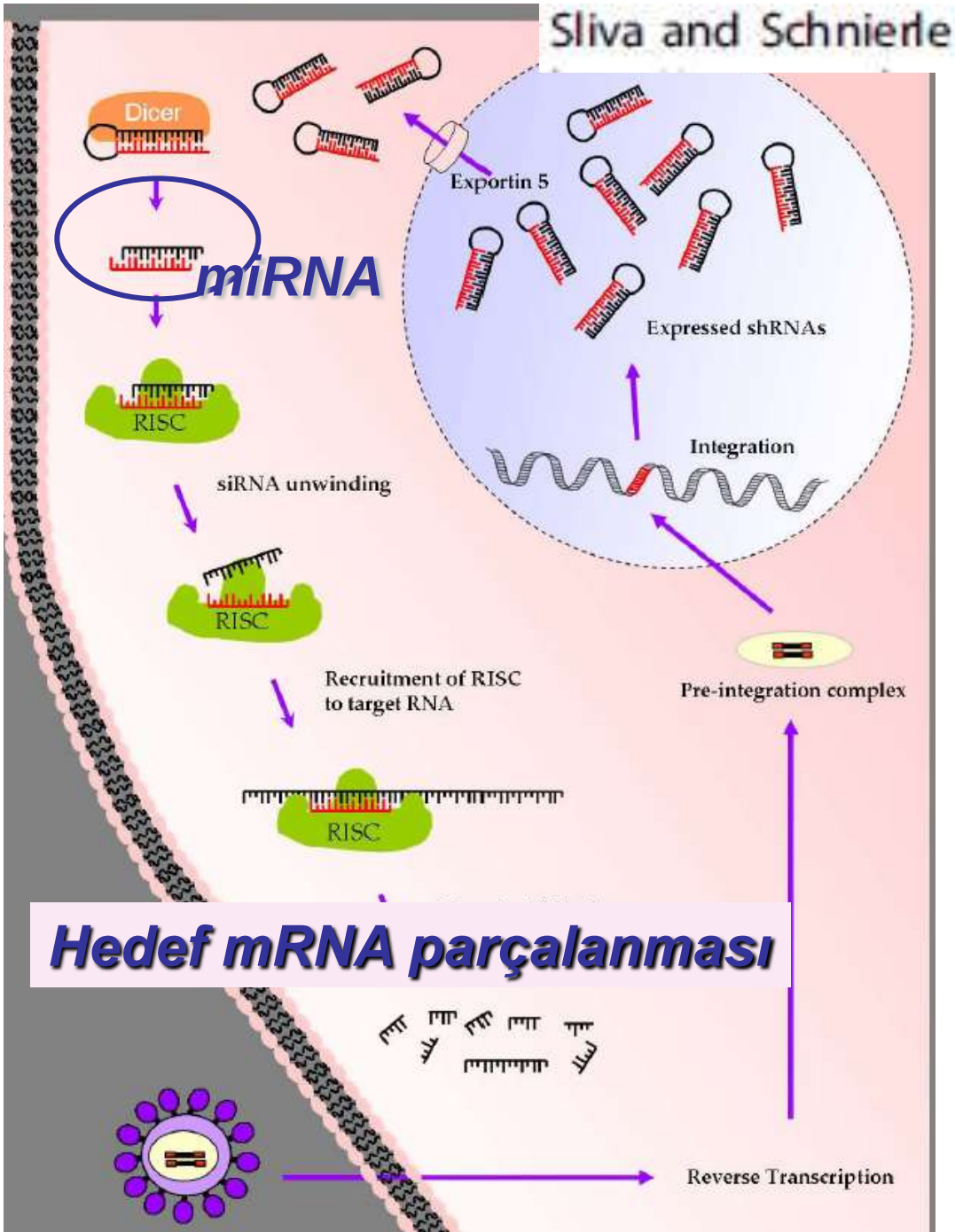
Duplexes of 21-nucleotide RNAs mediate RNA interference in cultured mammalian cells

Sayda M. Elbashir, Jens Harborth², Winfried Lendeckel*, Abdullah Yalcin*, Klaus Weber² & Thomas Tuschl**

* Department of Cellular Biochemistry; and ² Department of Biochemistry and Cell Biology, Max-Planck-Institute for Biophysical Chemistry, Am Fassberg 11, D-37077 GoÈttingen, Germany

Table 1 Current Clinical Trials for siRNA Therapeutics

Disease	Mode of administration	Status
Age-related macular degeneration (AMD)	Topical	Phase II
Respiratory syncytial virus (RSV)	Local/direct	Phase II
Liver cancer (HCC and others)	Systemic	Phase I
Hepatitis B Virus (HBV)	Systemic	Phase I
Solid tumors	Systemic/local	Phase I
Acute renal failure	Systemic	Phase I
Diabetic macular edema	Topical	Phase II
Metastatic melanoma	Local/direct	Phase I
Pachyonychia congenita	Topical	Phase Ia/b
High cholesterol	Systemic	Phase I
Asthma	Systemic	Phase II
HIV	Direct	Phase I/II



- RNA interferansını sağlayan küçük RNA

(siRNA, shRNA, miRNA) yollarının sonunda

- RNA dupleksinin bir sarmalı RNA tarafından indüklenen susturucu kompleksin (***RISC***) içine girer
- Arganout proteinleri

→ mRNA parçalanması

→ mRNA translasyonu baskılanması

HEPATOLOGY, Vol. 000, No. 000, 2010

Inhibition of Hepatitis C Virus Replication Using Adeno-Associated Virus Vector Delivery of an Exogenous Anti–Hepatitis C Virus MicroRNA Cluster

- ***Eksojen anti-HCV virüs mikroRNA kümesi***
- ***Adeno-ilişkili virüs vektörü ile taşıma***
- ***HCV replikasyonunun inhibisyonu***

- ***AMAÇ:***

HCV enfeksiyonunda, bir tedavi strateji seçeneği tasarlanması

- ***miRNA kümeleri***

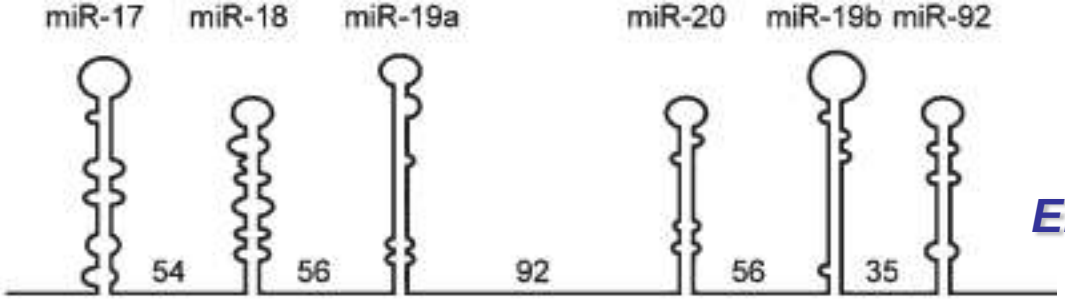
→ Çok sayıda etkin RNAi (ngelleyici RNA) salınımı

→ RNAi dirençli HCV mutant gelişiminin engellenmesi

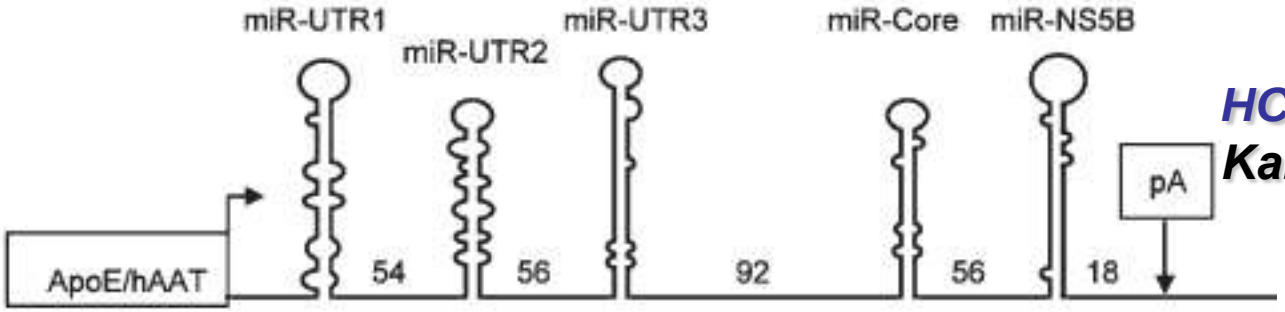
Eksojen multipleks miRNA platformu

- ✓ Endojen miR-17-92 kümesi modifiye edildi
- ✓ Kümenin ilk beş olgun RNA'sı
- → HCV'yi hedefleyen inhibitör RNA'larla değiştirildi

Anti-HCV miRNA	HCV Target sequence	Location in HCV 1b	Endogenous miRNA Replaced
miR-UTR1	CCAUAGUGGUCUGCGGAAC	138-156	miR-17, miR-18
miR-UTR2	AAAGGCCUUGUGGUACUGCCU	274-294	miR-17, miR-18
miR-UTR3	AGGUCUCGUAGACCGUGCA	321-339	miR-19A
miR-Core	AACCUCAAAGAAAAACCAAAC	358-378	miR-20
miR-NS5B	GACACUGAGACACCAAUUGAC	7983-8003	miR-19B



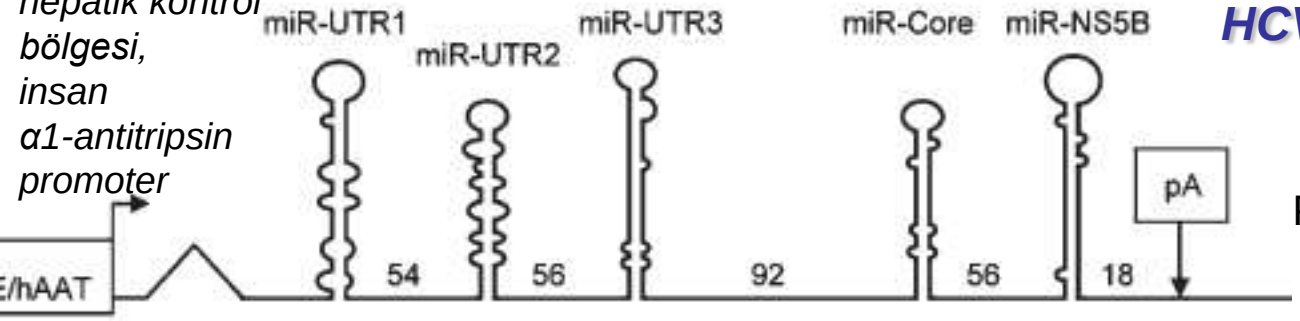
Endojen miR-17-92 kümesi



HCV- miRNA kümesi 1

Karaciğere özgü "promoter"

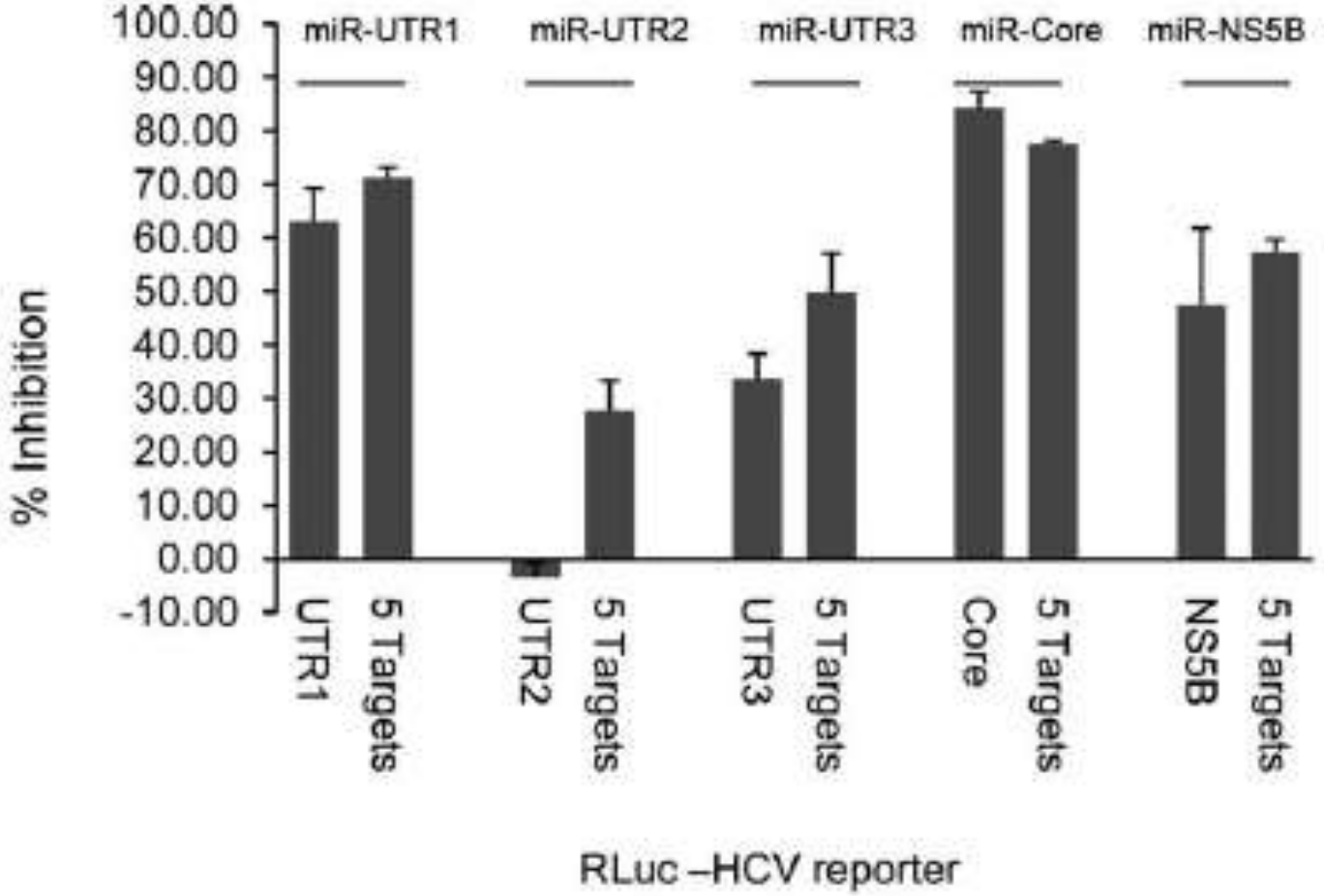
İnsan apolipoprotein E hepatik kontrol bölgesi, insan α1-antitripsin promoter



HCV- miRNA kümesi 1 +intron

Poliadenilasyon sinyali

HCV- miRNA kümesi 1 +intron

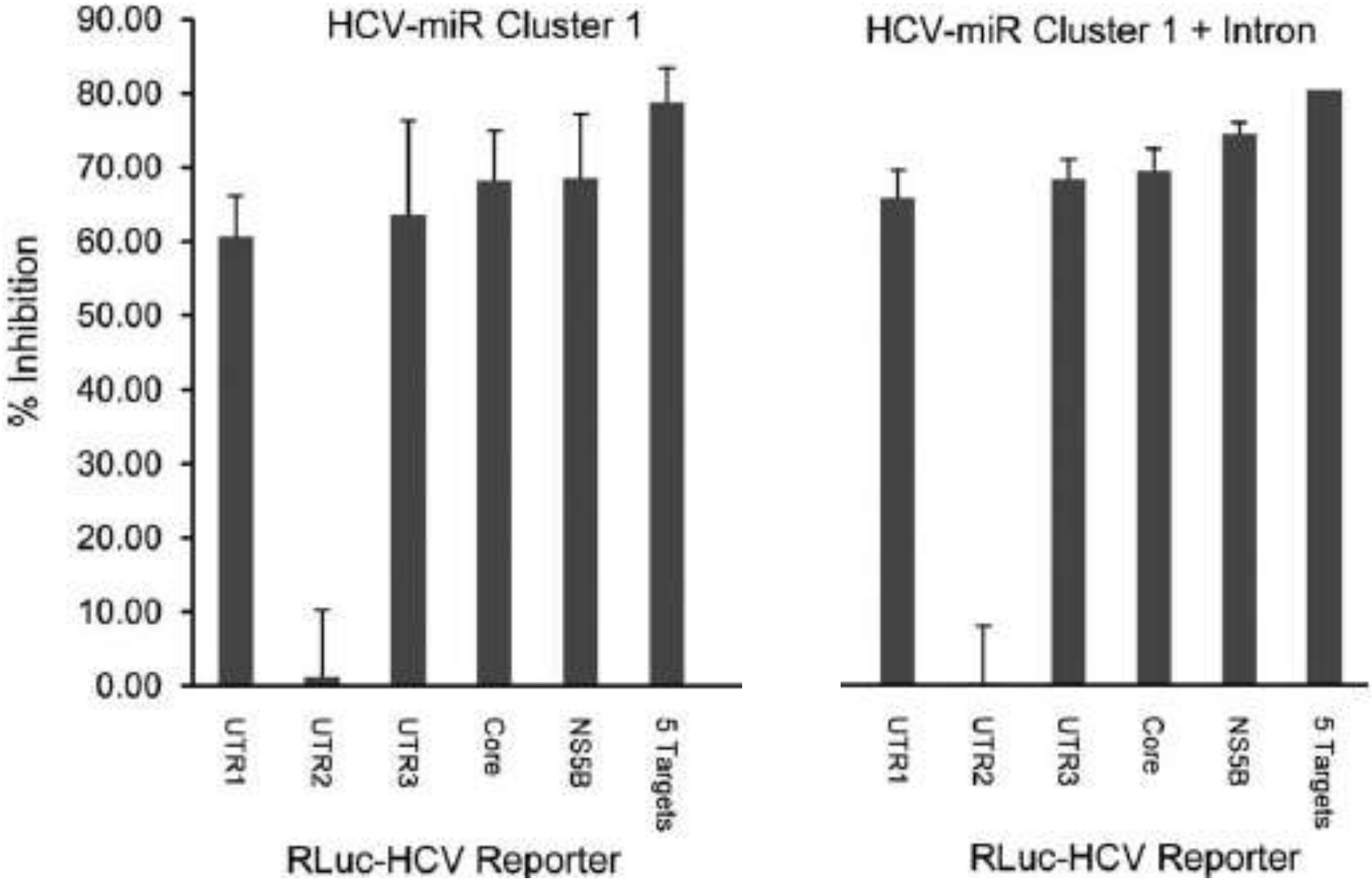


RLuc-HCV raportör plasmidlerinin HCV'yi hedefleyen miRNA'larla inhibisyonu

-Huh-7 hücrelerinde –

-İnhibisyon: pUC19 kontrolü ile karşılaştırılarak

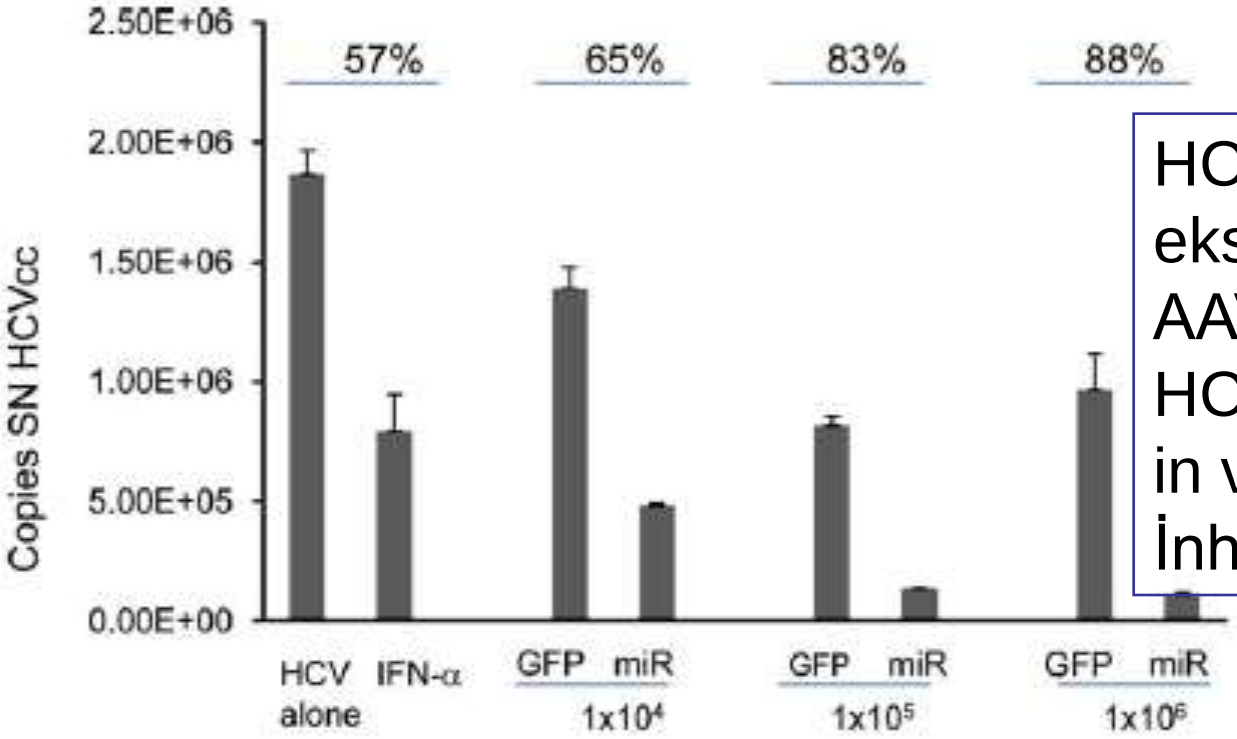
-Normalizasyon: ateş böceği lusiferazı (FFLuc) ile



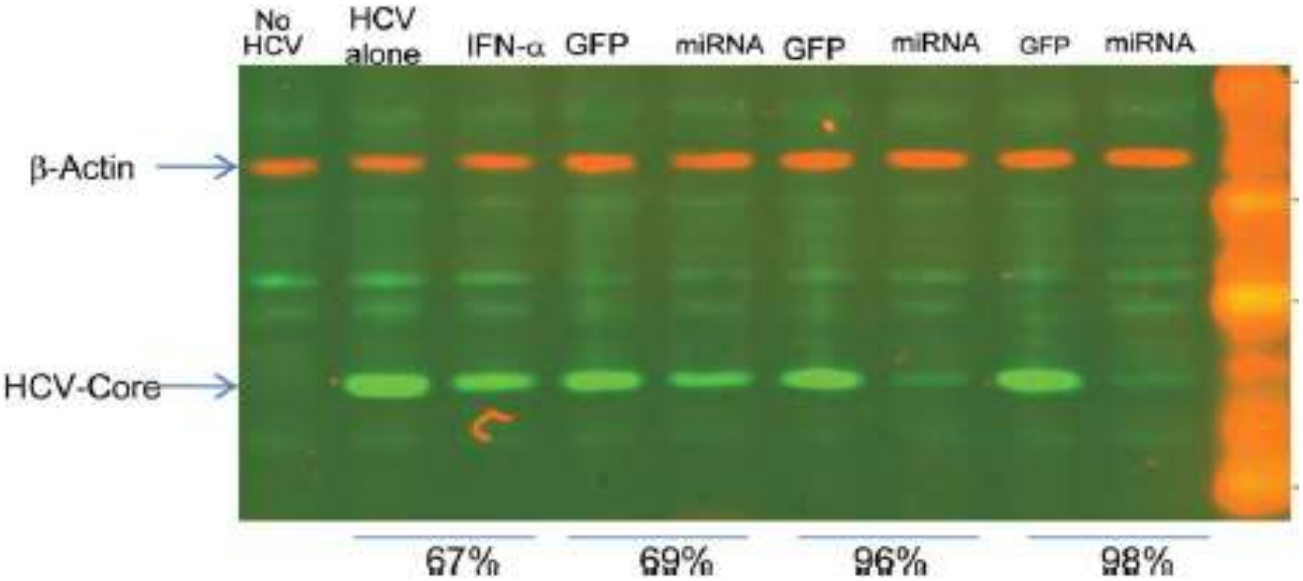
RLuc-HCV raportör plasmidlerinin HCV'yi hedefleyen miRNA'larla in vitro inhibisyonu

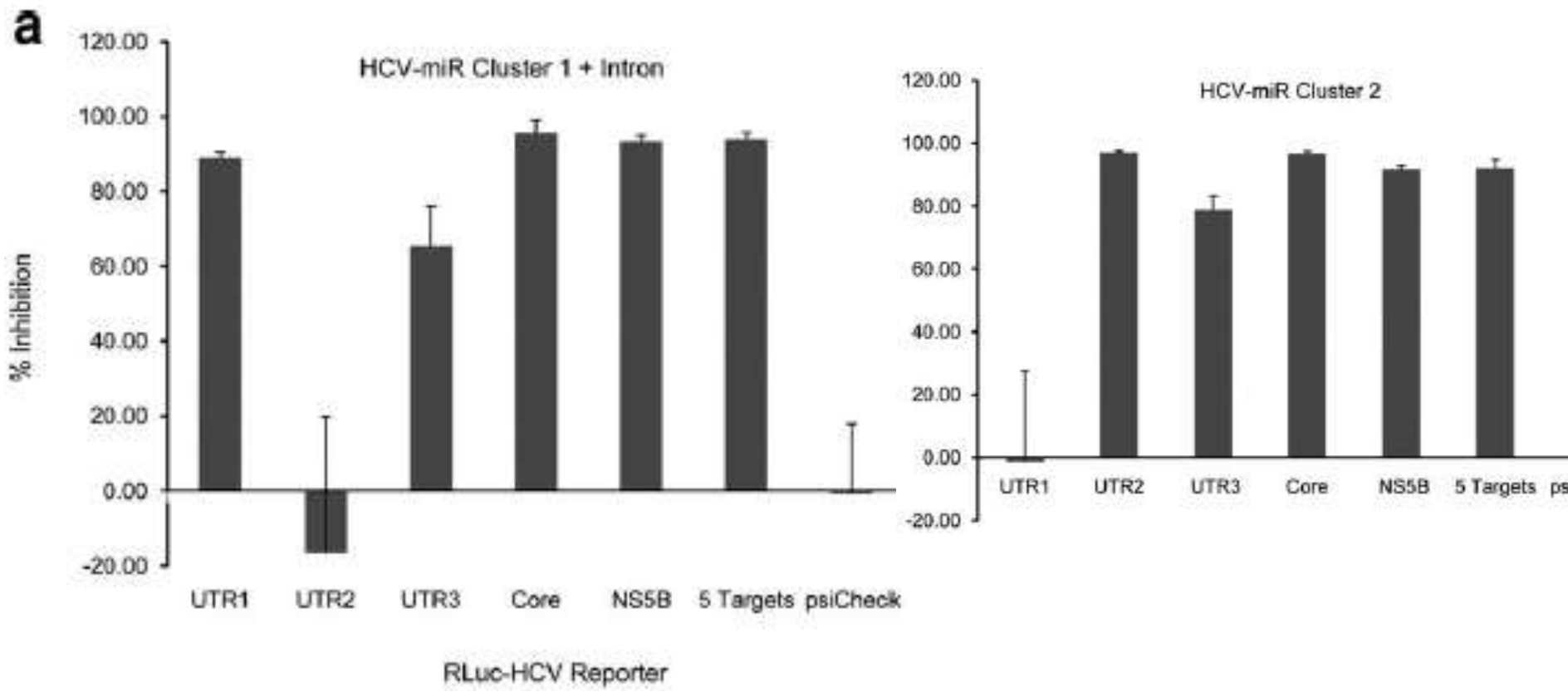
-Huh-7 hücrelerinde –

-İnhibisyon: pUC19 kontrolü ile karşılaştırılarak



HCV-miRNA-kümesi eksprese eden AAV vektörleri, HCVcc replikasyonunu in vitro İnhibe ediyor





RLuc-HCV raportör plasmidlerinin HCV'yi hedefleyen miRNA'larla **in vivo** inhibisyonu

SONUÇ olarak;

- ✓ ***scAAV vektörlerinden eksprese edilen miRNA kümesi***

→**HCV replikasyonu inhibe ediyor** *(in vitro) (%98)*

→**HCV gen susturulmasını indüklüyor** *(in vitro, in vivo)(%93)*

- ✓ ***AAV8-HCV-miR-kümesi 1 vektörü toksisite oluşturmadı***

- ❖ ***HCV tedavi rejimlerinde geçerli bir seçenek olabilir***

Ek notlar

- Huh-7.5 sistemlerinde test edilen HCV RNA düzeyi, kronik enfekte insan hepatositlerindekinden 50 kat fazla
- Eksprese edilen miRNA/hücre düzeyi yüksek
- AAV vektörleri, karaciğerde aylar – yıllarca kalabilir → miRNA ekspresyonu
- *Önceden enfekte olmuş hepatositler yarar sağlamasa da: enfekte olmamış hepatositler korunabilir*

❑ ***İnsan hepatosit-ksenograft modelleri, enfekte şempanzelerde ileri değerlendirmeleri hak ediyor***

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Therapeutic Silencing of MicroRNA-122 in Primates with Chronic Hepatitis C Virus Infection

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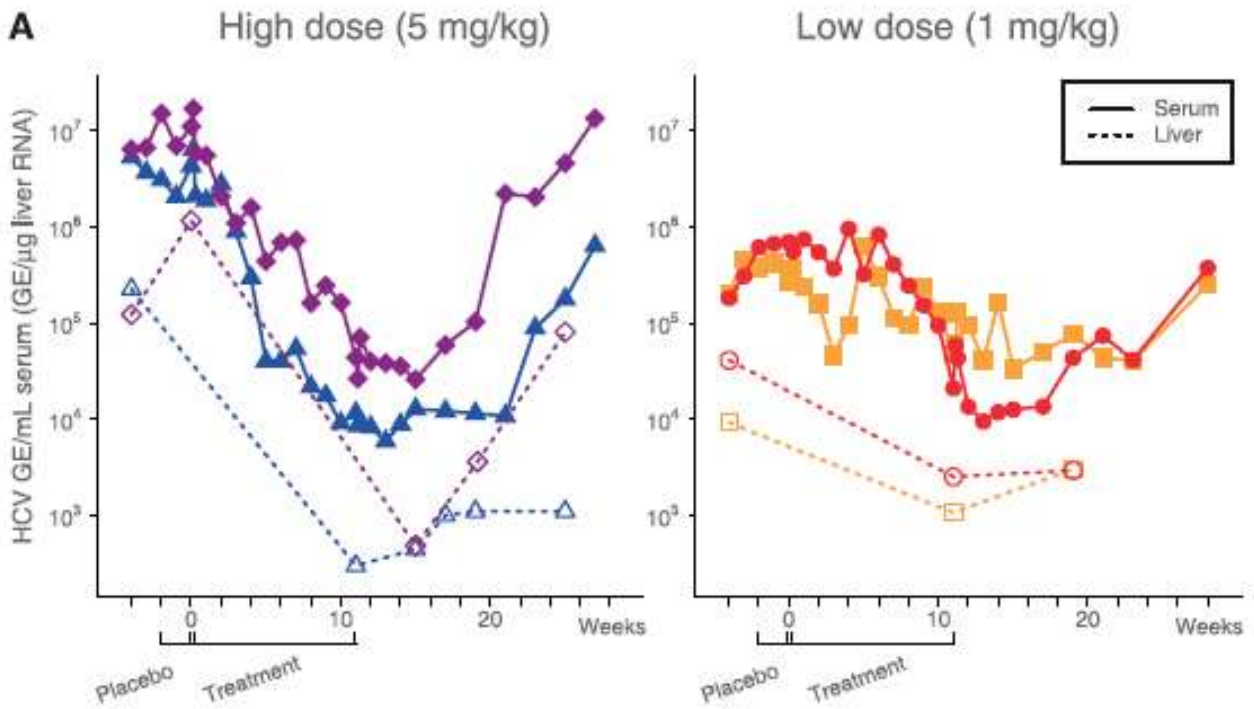

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