Caso clínico
Monoinfección

23/05/2014

Dra. Van den Eynde
Hospital de Bellvitge

Caso clínico: monoinfección

Varón de 65 años.

- HTA en tratamiento con enalapril 20 mg y amlodipino 10 mg.
- DM tipo 2 en tratamiento con metformina.
- Valvulopatía aórtica con Insuficiencia aórtica II.
- FA paroxística de reciente diagnóstico en tto con warfarina.
- Amaurosis casi total por desprendimiento retiniano.
- Hepatitis crónica por VHC genotipo 1b diagnosticada en 1994.

Caso clínico: monoinfección

Varón de 65 años.

• Hepatitis crónica por VHC genotipo 1b diagnosticada en 1994.

- Tratamiento en 2006 con Peg-IFN y RBV durante 48 semanas con Recidiva (PCR cualitativa negativa en semana 12, 24 y al final del tto).
- IL28B (CC).
- ARN-VHC 763.363 copias.
- Fibroscan 19.6.13: 12.4 kPa. (F3)
- AG: Hb 15.2, plaq 118000, L 4900, N 1900, ALT 101, ALB 4.1, creatinina 1.16, eGFR 73.

Caso clínico: monoinfección

EDAD	GEN	IL28B	Fibrosis	RESP.TTO
65	1b	CC	F3	RECIDIVA

- Comorbilidades
- Anticoagulación
- Amaurosis

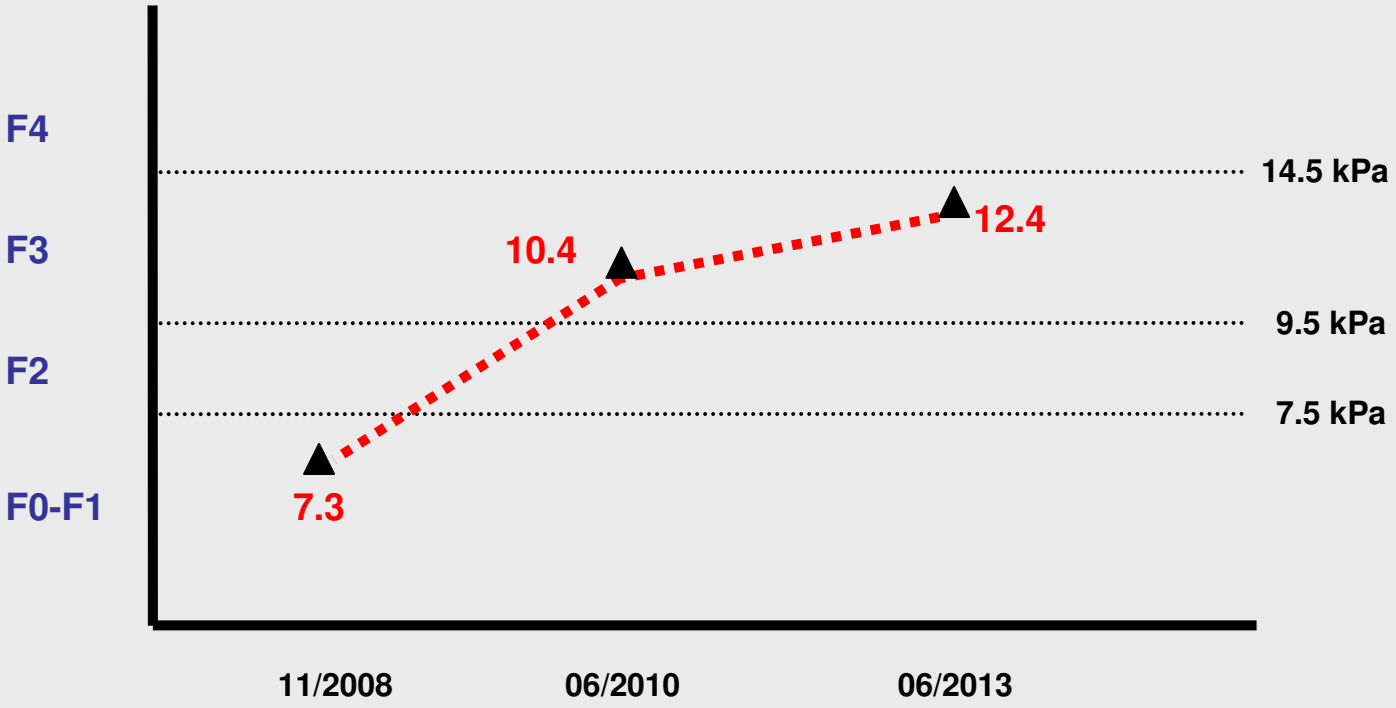
Es Junio de 2013. Que harías?

1. Esperar nuevos tratamientos libres de Interferon.
2. Solicitar uso compasivo de Sofosbuvir+RBV.
3. Tratamiento triple con Boceprevir/Telaprevir, Peg-IFN y RBV.

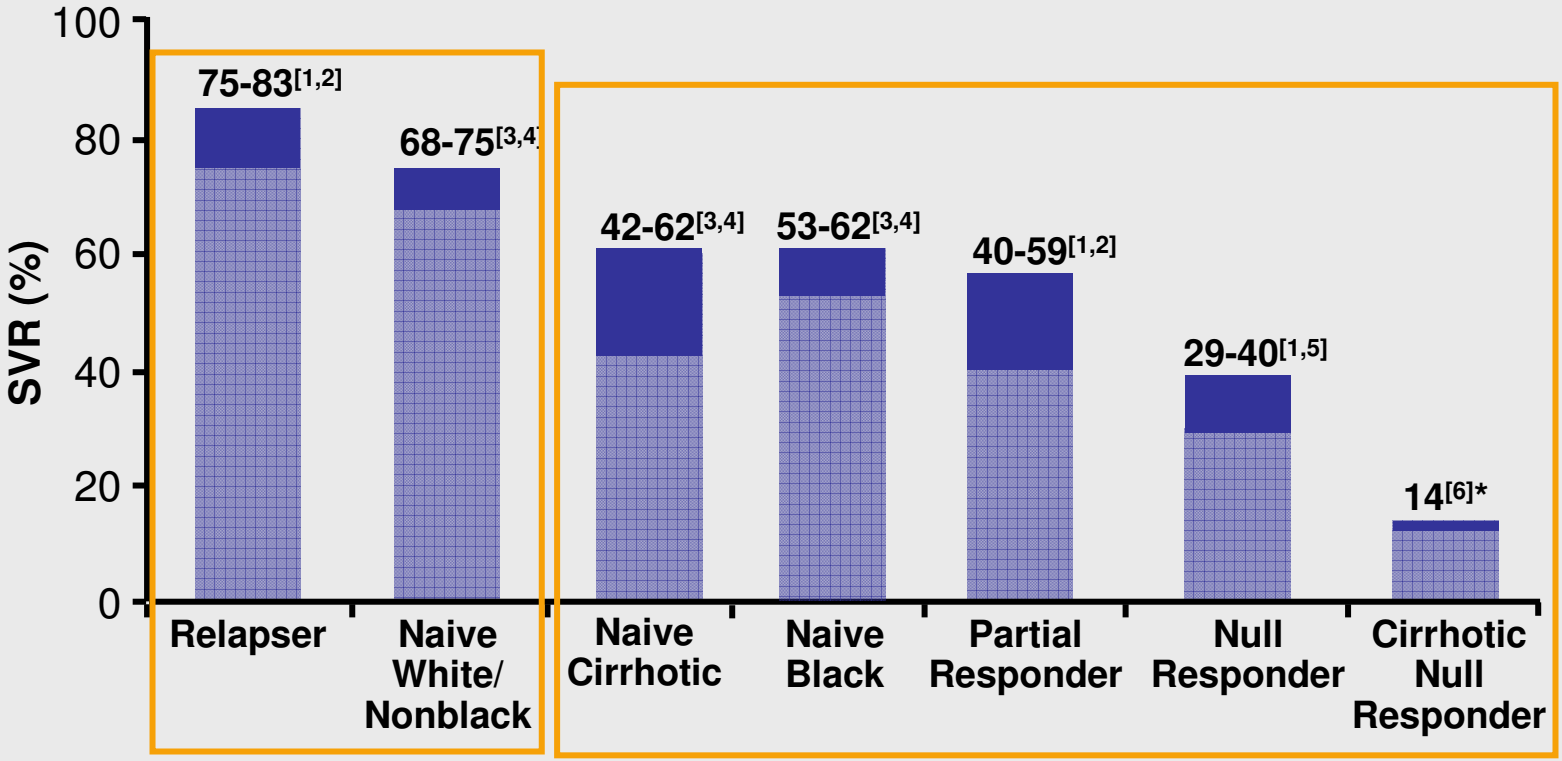
Caso clínico: monoinfección

EDAD	GEN	IL28B	Fibrosis	RESP.TTO
65	1b	CC	F3	RECIDIVA

Evolución de la fibrosis



Eficacia limitada de Telaprevir y Boceprevir en algunos subgrupos



*Pooled TVR arms of REALIZE trial.

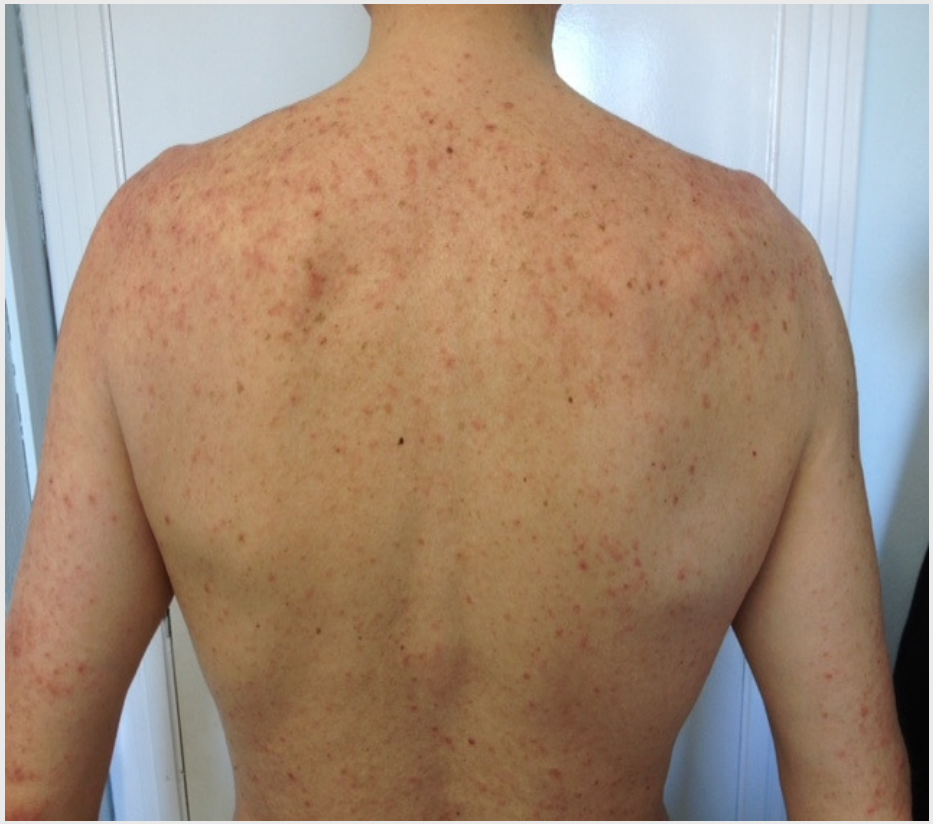
1. Zeuzem S, et al. N Engl J Med. 2011;364:2417-2428. 2. Bacon BR, et al. N Engl J Med. 2011;364:1207-1217.
3. Jacobson IM, et al. N Engl J Med. 2011;364:2405-2416. 4. Poordad F, et al. N Engl J Med. 2011;364:1195-1206. 5. Bronowicki J, et al. EASL 2012. Abstract 11. 6. Zeuzem S, et al. EASL 2011. Abstract 5.

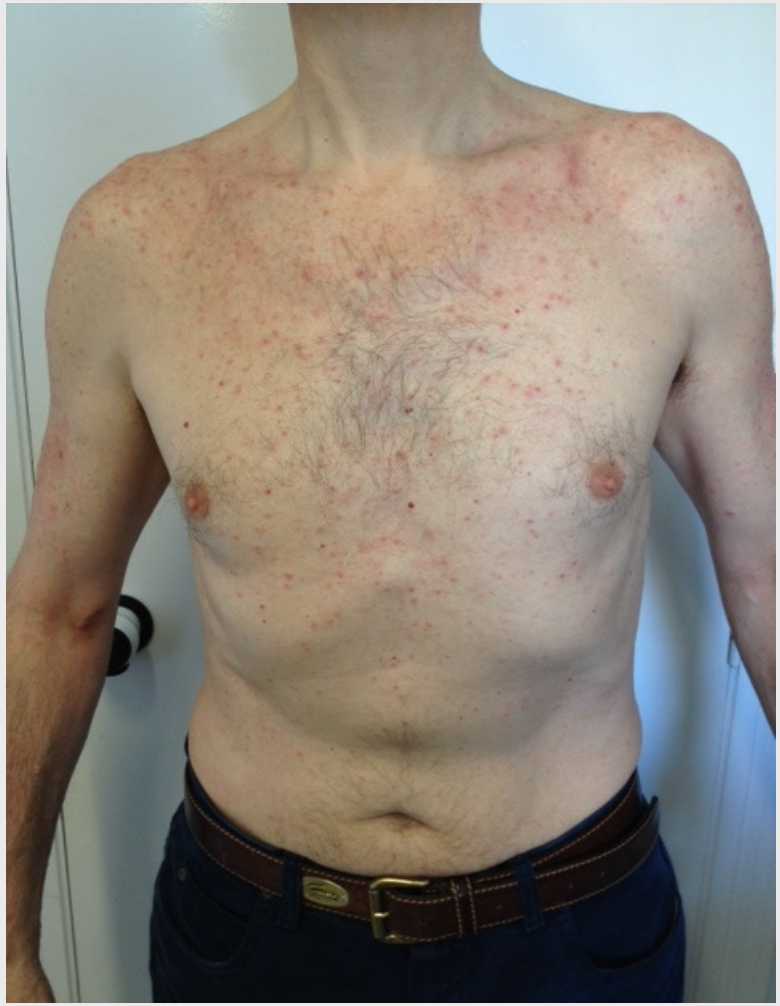
Caso clínico: monoinfección

EDAD	GEN	IL28B	Fibrosis	RESP.TTO
65	1b	CC	F3	RECIDIVA

7/10/2013: Inicia tratamiento con Peg-IFN alfa-2a 180 mcg/sem, RBV 1000 mg/d, Telaprevir 1125 mg cada 12 h.

Sem 2: Rash





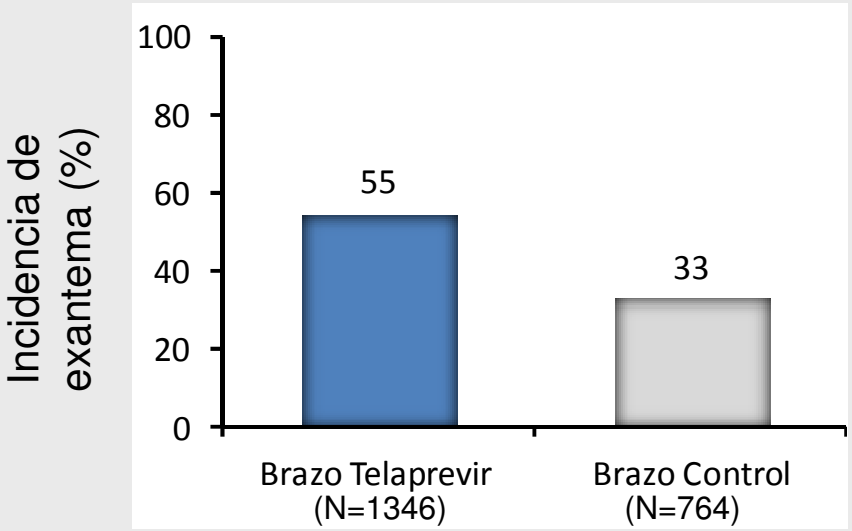
Caso clínico: monoinfección

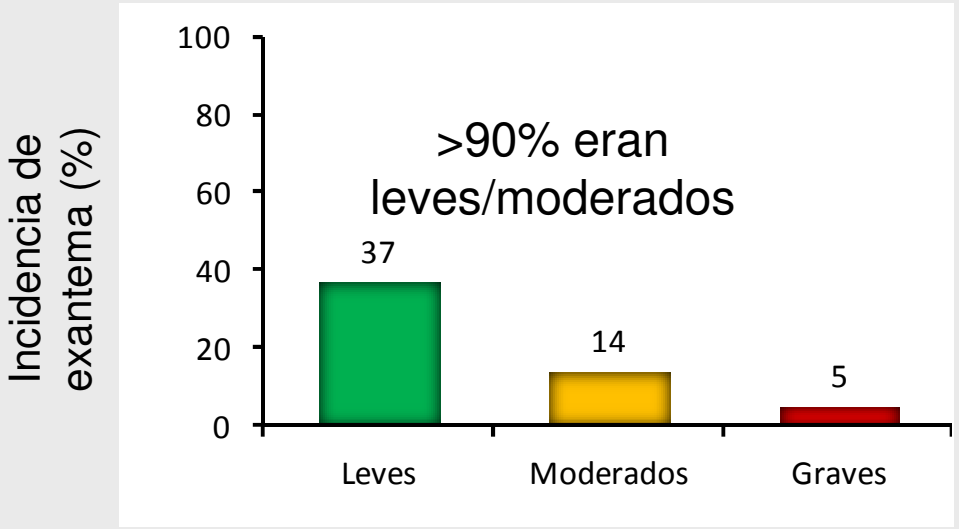
EDAD	GEN	IL28B	Fibrosis	RESP.TTO
65	1b	CC	F3	RECIDIVA

Ante este rash en semana 2. Que harías?

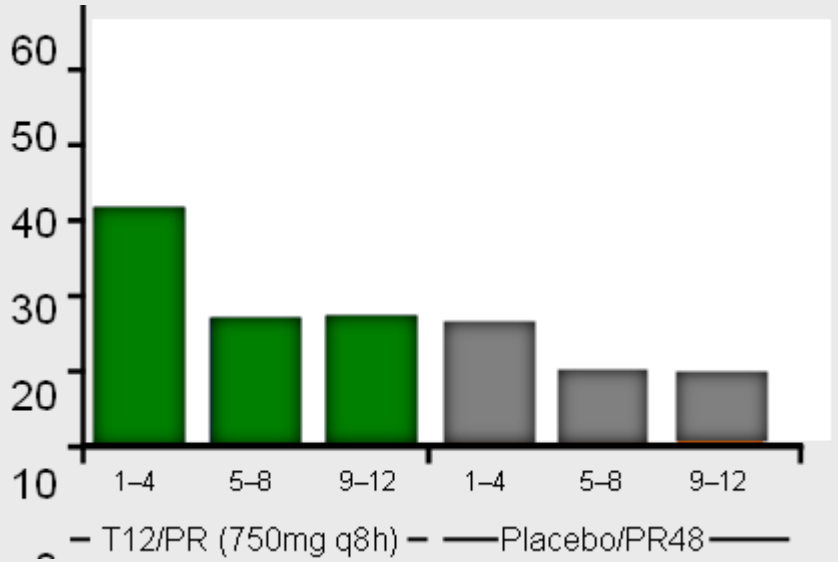
1. Ha presentado un rash muy precozmente, no podrá llegar a semana 12, suspendería todo el tratamiento.
2. Ha presentado un rash muy precozmente, no podrá llegar a semana 12, suspendería Telaprevir y continuaría Peg-IFN y RBV.
3. Iniciaría tratamiento con corticoides tópicos+antihistamínicos y seguiría el tratamiento.
4. De momento nada, vigilar.

Incidencia de Reacciones Cutáneas (Estudios fase II y III)





- Típicamente pruriginosa y eccematosa, afectando <30% de la superficie corporal
- Progresión infrecuente (< del 10% de los casos)
- La interrupción de TVR no suele ser necesaria.
- CORTICOIDES tópicos y ANTIHISTAMÍNICOS sistémicos
- Pueden ocurrir en cualquier momento durante el tratamiento con Telaprevir aunque el 50% comienzan durante las primeras 4 semanas.



http://www.fda.gov/downloads/AdvisoryCommittees/CommitteesMeeting. Materials/Drugs/AntiviralDrugsAdvisoryCommittee/UCM252562.pdf;

Gradación de las reacciones dermatológicas según gravedad

- **Grado 1 (Leve):** erupción cutánea localizada o erupción cutánea con distribución limitada (hasta varios lugares aislados en el cuerpo).

  La interrupción de telaprevir generalmente NO es necesaria

- **Grado 2 (Moderada):** erupción difusa que abarca ≤50% de la superficie corporal.

  La interrupción de telaprevir generalmente NO es necesaria.
  Si la interrupción es necesaria por progresión, se recomienda suspender primero telaprevir y, si no se observa mejoría en 7 días, suspender ribavirina.

- **Grado 3 (Grave):** erupción extendida a >50% de la superficie corporal o asociada con síntomas sistémicos significativos, ulceración de mucosas, lesiones en escarapela, desprendiento epidérmico.

  Suspender telaprevir
  Si la reacción cutánea no mejora a los 7 días de suspender TVR (o antes, si la reacción cutánea empeora), se debe interrumpir ribavirina

- **Grado 4 (SCAR):** término general para cuadros dermatológicos graves relacionados con exposición a fármacos, que pueden estar asociados a una significativa morbilidad.

  Suspensión permanente de todos los fármacos: telaprevir, ribavirina, peginterferón

TELAPREVIR no se debe volver a administrar una vez ha sido suspendido

Caso clínico: monoinfección

EDAD	GEN	IL28B	Fibrosis	RESP.TTO
65	1b	CC	F3	RECIDIVA

	TVR initiation	wk 2	wk 3	wk 4					
Hemoglobin, mg/dL	15.2	13.8	12.5						
White blood cells, x10E^6/L	4900	3900	3200						
Neutrophils, x10E^6/L	1900	1400	1200						
Platelets, x10E^6/L	118000	110000	131000						
HCV-RNA , IU/mL	763363								
Plasma Creatinine, mg/dL	1.16	1.42	1.42						
eGFR, mL/min	73	56	57						
Urine analysis	Neg	Neg							
ALT, IU/L	101	65							

Sem 3: TA 98/60, astenia. STOP amlodipino.

Caso clínico: monoinfección

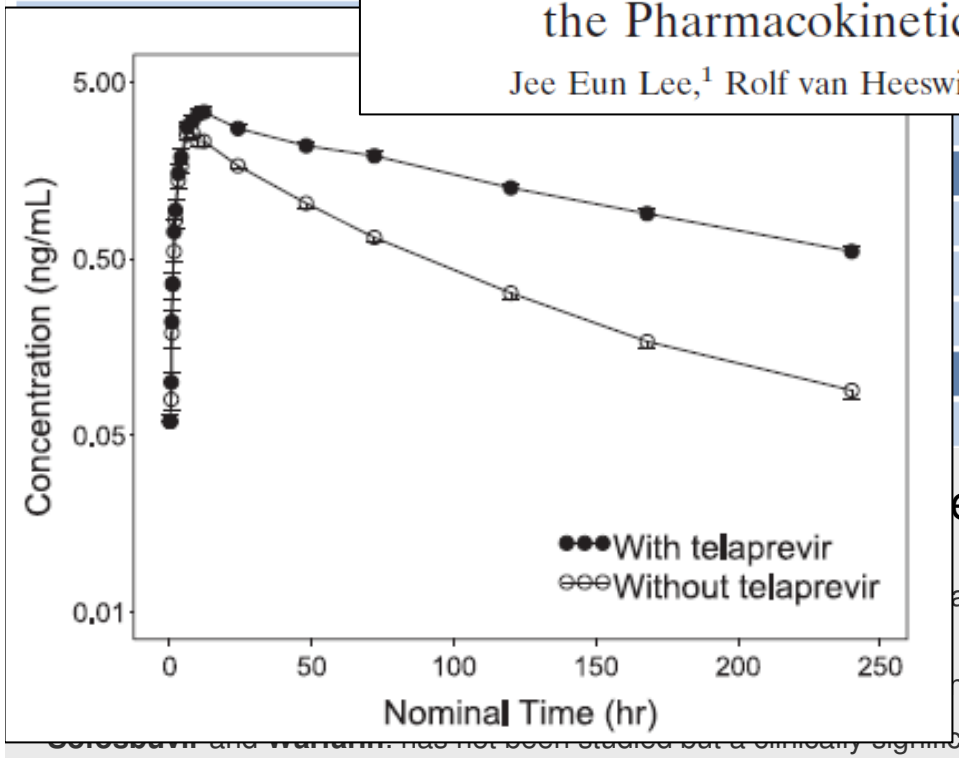
EDAD	GEN	IL28B	Fibrosis	RESP.TTO

Interac

ANTIMICROBIAL AGENTS AND CHEMOTHERAPY, Oct. 2011, p. 4569–4574 Vol. 55, No. 10
0066-4804/11/$12.00 doi:10.1128/AAC.00653-11

Effect of the Hepatitis C Virus Protease Inhibitor Telaprevir on the Pharmacokinetics of Amlodipine and Atorvastatin[▽]

Jee Eun Lee,[1] Rolf van Heeswijk,[2] Katia Alves,[1] Frances Smith,[1] and Varun Garg[1]*



Anti-coagulant & Anti-platelet			
	Boceprevir	Sofosbuvir	Telaprevir
	n/a	◻	n/a
	◻	n/a	◻
	n/a	◻	n/a
	Boceprevir	Sofosbuvir	Telaprevir
	◇	◇	◇

e 3 meses.

ay increase concentrations of amlodipine. Amlodipine is a weak inhibitor

ntrations. Monitor INR closely.

cant interaction is unlikely.

Telaprevir and **Amlodipine**: **increased amlodipine Cmax by 27% and AUC by 2.79-fold.** Use with caution and consider a dose reduction for amlodipine. A clinically significant effect on telaprevir is unlikely.

Telaprevir and **Warfarin**: Coadministration may alter warfarin concentrations. Monitor INR.

Caso clínico: monoinfección

EDAD	GEN	IL28B	Fibrosis	RESP.TTO
65	1b	CC	F3	RECIDIVA

	TVR initiation	wk 2	wk 3	wk 4					
Hemoglobin, mg/dL	15.2	13.8	12.5	10					
White blood cells, x10E^6/L	4900	3900	3200	3800					
Neutrophils, x10E^6/L	1900	1400	1200	2000					
Platelets, x10E^6/L	118000	110000	131000	117000					
HCV-RNA , IU/mL	763363			65					
Plasma Creatinine, mg/dL	1.16	1.42	1.42	1.86					
eGFR, mL/min	73	56	57	43					
Urine analysis	Neg	Neg							
ALT, IU/L	101	65		36					

Sem 3: TA 98/60, astenia. STOP amlodipino.

Sem 4: TA 100/55, astenia, náuseas, deterioro de la función renal.

Caso clínico: monoinfección

EDAD	GEN	IL28B	Fibrosis	RESP.TTO
65	1b	CC	F3	RECIDIVA

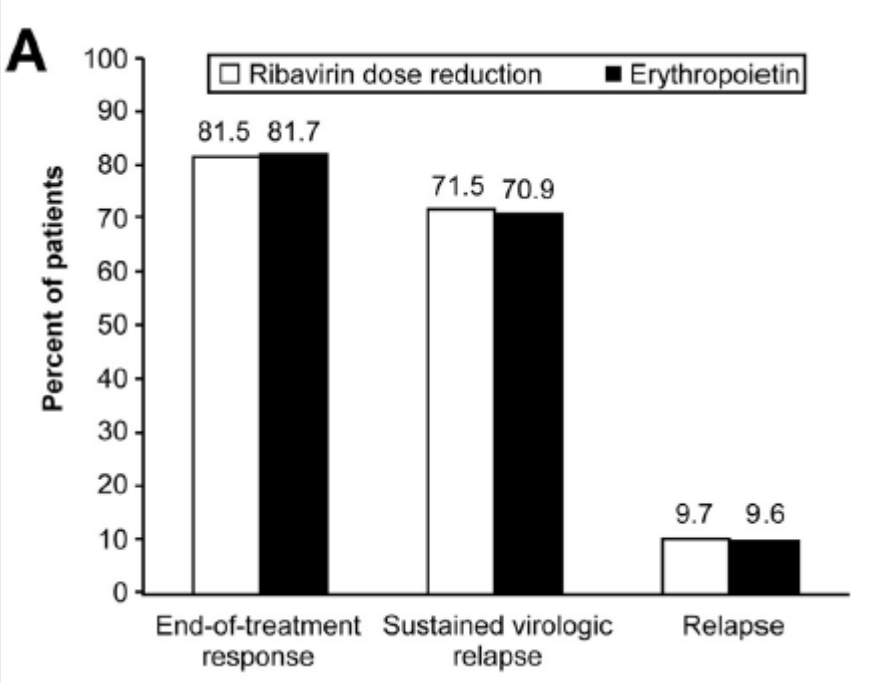
Sem 4: Anemia y empeoramiento de la función renal.
Que harías?

1. Suspender todo el tratamiento.
2. Suspender Telaprevir y continuar Peg-IFN 180 mcg/sem y RBV 1000 mg/d.
3. Suspender Telaprevir, bajar RBV a 800 mg/d y Peg-IFN 180 mcg/sem.
4. Seguir igual, este tratamiento no provoca insuficiencia renal y hay que mantener dosis altas de RBV para lograr la curación.

GASTROENTEROLOGY 2013;145:1035–1044

Effects of Ribavirin Dose Reduction vs Erythropoietin for Boceprevir-Related Anemia in Patients With Chronic Hepatitis C Virus Genotype 1 Infection—A Randomized Trial

FRED POORDAD,[1] ERIC LAWITZ,[1] K. RAJENDER REDDY,[2] NEZAM H. AFDHAL,[3] CHRISTOPHE HÉZODE,[4] STEFAN ZEUZEM,[5] SAMUEL S. LEE,[6] JOSE LUIS CALLEJA,[7] ROBERT S. BROWN, JR.,[8] ANTONIO CRAXI,[9] HEINER WEDEMEYER,[10] LISA NYBERG,[11] DAVID R. NELSON,[12] LORENZO ROSSARO,[13] LUIS BALART,[14] TIMOTHY R. MORGAN,[15] BRUCE R. BACON,[16] STEVEN L. FLAMM,[17] KRIS V. KOWDLEY,[18] WEIPING DENG,[19] KENNETH J. KOURY,[19] LISA D. PEDICONE,[19] FRANK J. DUTKO,[19] MARGARET H. BURROUGHS,[19] KATIA ALVES,[19] JANICE WAHL,[19] CLIFFORD A. BRASS,[19] JANICE K. ALBRECHT,[19] and MARK S. SULKOWSKI,[20] for the Protocol 6086 Investigators



RBV Dose Reduction for First-line Anemia Management Did Not Impact SVR

- 82% of RBV dose reduction group vs 62% in EPO group did not require secondary anemia intervention

Ribavirin Dose Modification in Treatment-naïve and Previously Treated Patients Who Received Telaprevir Combination Treatment: No Impact on Sustained Virologic Response in Phase 3 Studies

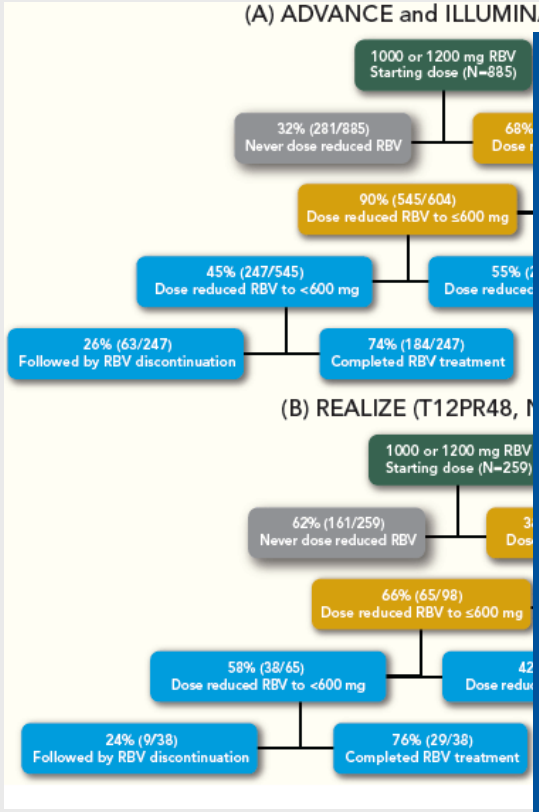
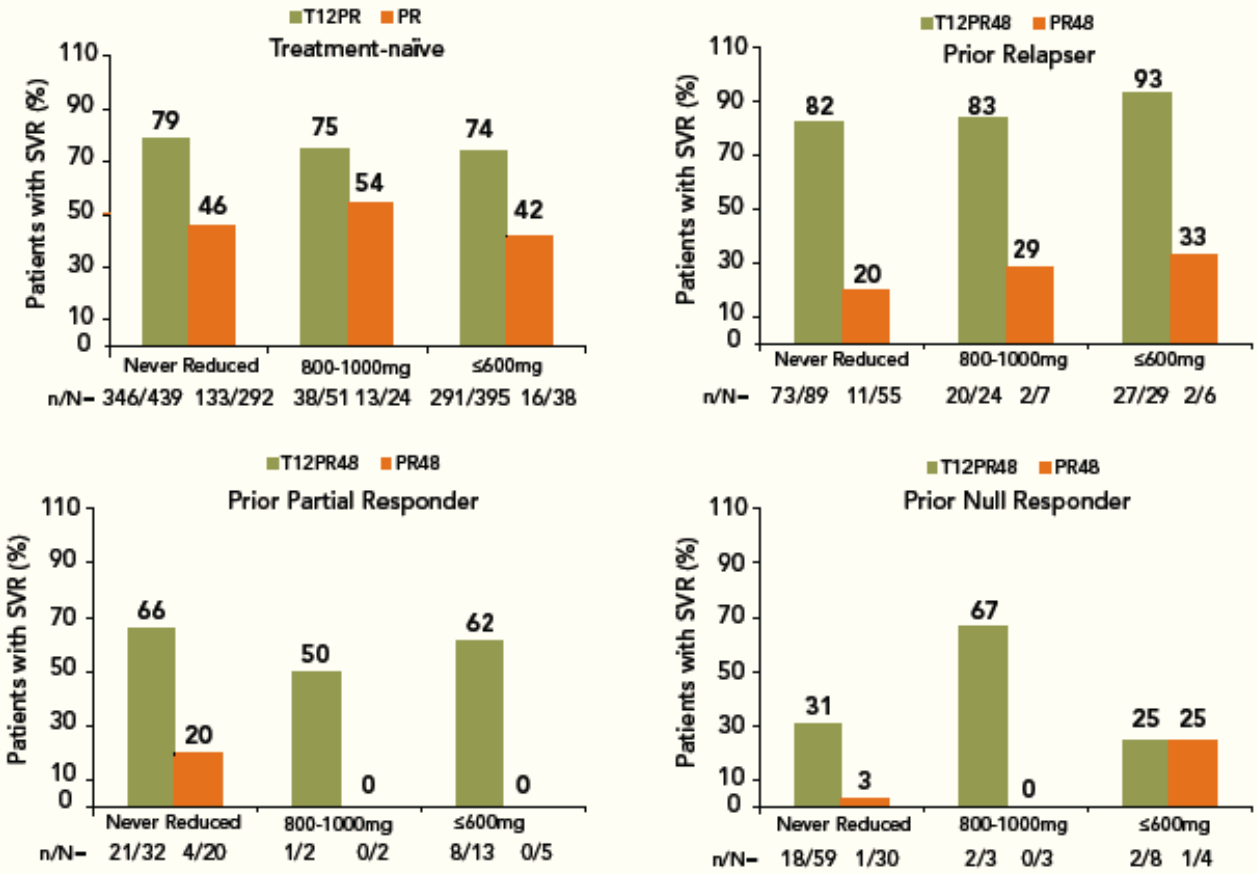


Figure 3: Overall Proportion of Treatment-naïve Patients, and Patients with Prior Relapse, Prior Partial, and Prior Null Response with SVR According to Minimum Ribavirin Dose/Day During the Telaprevir Treatment Phase



Sulkowski M.S. EASL 47th, 2012. Barcelona, Spain. Abstract 1162

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1. **Renal impairment** during the treatment of **telaprevir** with peginterferon and ribavirin in patients with chronic hepatitis C.
   Fukuda K, Imai Y, Hiramatsu N, Irishio K, Igura T, Sawai Y, Kogita S, Makino Y, Mizumoto R, Matsumoto Y, Nakahara M, Zushi S, Kajiwara N, Oze T, Kawata S, Hayashi N, Takehara T.
   Hepatol Res. 2013 Sep 5. doi: 10.1111/hepr.12229. [Epub ahead of print]
   PMID: 24033816 [PubMed - as supplied by publisher]
   Related citations

2. Reply to: **Renal impairment** is frequent in chronic hepatitis C patients under triple therapy with **telaprevir** or boceprevir.
   Véronique LR, Paul C, Chanlina V, Marie E.
   Hepatology. 2013 Sep 3. doi: 10.1002/hep.26730. [Epub ahead of print] No abstract available.
   PMID: 24002912 [PubMed - as supplied by publisher]
   Related citations

3. **Renal impairment** is frequent in chronic hepatitis C patients under triple therapy with **telaprevir** or boceprevir.
   Mauss S, Hueppe D, Alshuth U.
   Hepatology. 2013 Jun 28. doi: 10.1002/hep.26602. [Epub ahead of print]
   PMID: 23813604 [PubMed - as supplied by publisher]
   Related citations

4. **Telaprevir**: pharmacokinetics and drug interactions.
   Garg V, Kauffman RS, Beaumont M, van Heeswijk RP.
   Antivir Ther. 2012;17(7):1211-21. doi: 10.3851/IMP2356. Epub 2012 Sep 7. Review.
   PMID: 22954756 [PubMed - indexed for MEDLINE]
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y Concept]
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- [Pharmacovigilance update]. PubMed
- acute renal failure telaprevir (2) PubMed

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Renal impairment during the treatment of telaprevir with peginterferon and ribavirin in patients with chronic hepatitis C

Manuscript type: Original Article

Kazuto Fukuda MD, PhD [1)], Yasuharu Imai MD, PhD [1)], Naoki Hiramatsu MD, PhD [2)], Keiko Irishio [3)], Takumi Igura MD, PhD [1)], Yoshiyuki Sawai MD, PhD [1)], Sachiyo Kogita MD [1)], Yuki Makino MD [1)], Rui Mizumoto MD [1)], Yasushi Matsumoto MD [1)], Masanori Nakahara MD, PhD [1)], Sinichiro Zushi MD, PhD [1)], Nobuyuki Kajiwara MD, PhD [4)], Tsugiko Oze MD, PhD [2)], Sumio Kawata MD, PhD [5)], Norio Hayashi MD, PhD [6)], Tetsuo Takehara MD, PhD [2)]

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25 pacientes VHC 1

TVR 12+PR

TVR dosis (14 ptes.2250 vs.11ptes.1500 mg/d)

	Basal	Día 7	p
Clearance (mL/min/1.73m2)	84.4 ± 21.2	69.9 ± 17.6	P<0.001
Creatinina	0.78 ± 0.19	0.90 ± 0.21	P<0.001
Cistatina C	1.03 ± 0.15	1.21± 0.25	P<0.001

Hepatol Res. 2013 Sep 5. doi: 10.1111/hepr.12229. [Epub ahead of print]

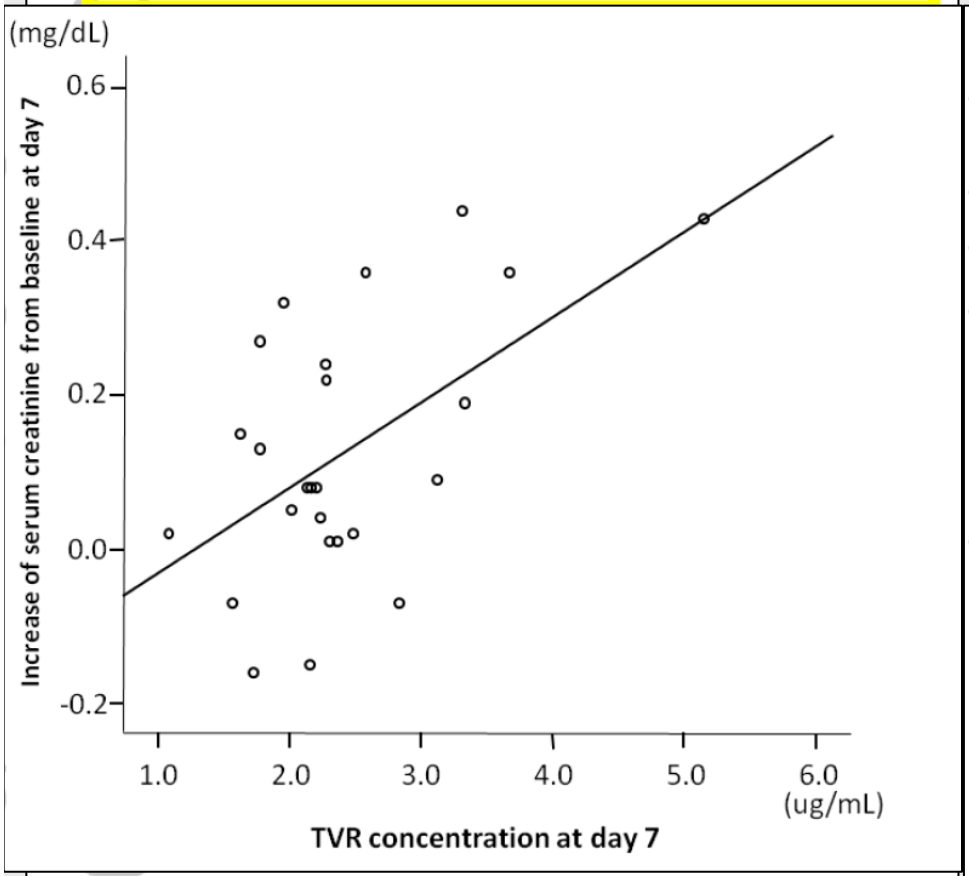
Fukuda et al.

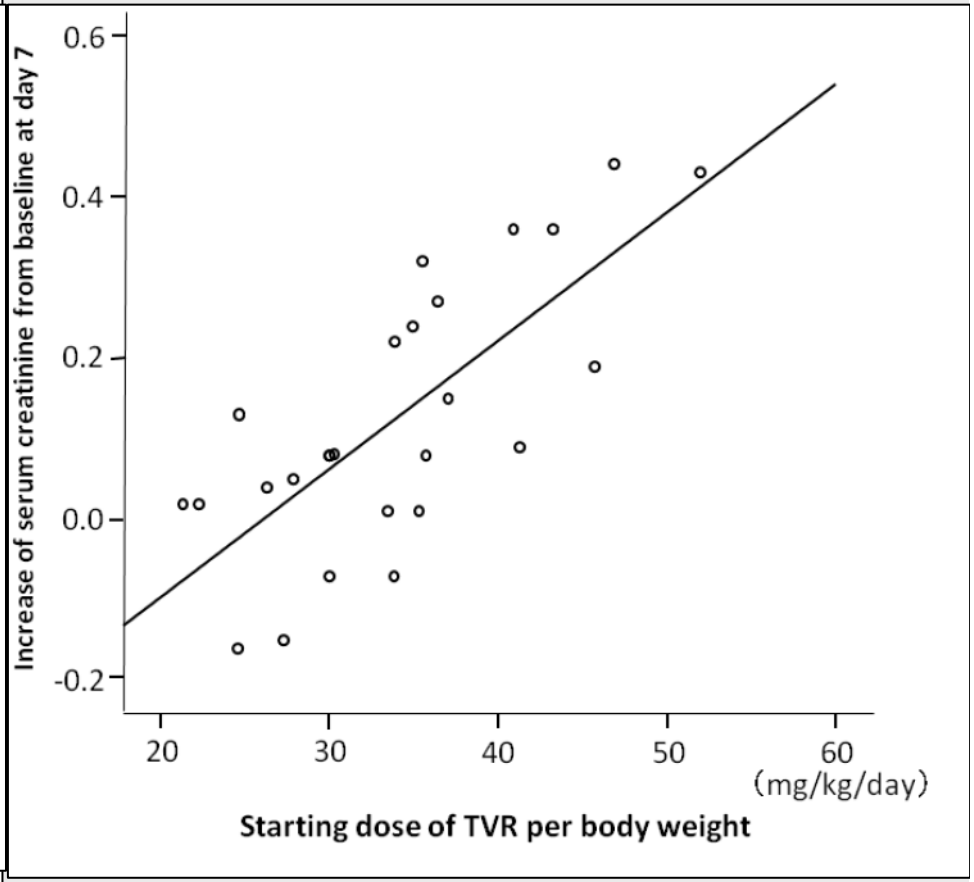
Renal impairment during the treatment of telaprevir with peginterferon and ribavirin in patients with chronic hepatitis C

25 pacientes VHC 1

TVR 12+PR

TVR dosis (14 ptes.2250 vs.11ptes.1500 mg/d)





- Los niveles de creatinina y cistatina C se correlacionaron con los de TVR en suero el día 7.
- Al estratificar por dosis TVR/Kg peso, sólo en pacientes con dosis inicial de TVR >33 mg/Kg/día el cambio en el aclaramiento renal fue significativo.

Hepatol Res. 2013 Sep 5. doi: 10.1111/hepr.12229. [Epub ahead of print]

Hepatology

HEP-13-0973

Renal impairment is frequent in chronic hepatitis C patients under triple therapy with telaprevir or boceprevir

Table 1: Baseline demographics

	Dual therapy N=109	Boceprevir N=211	Telaprevir N=575
Mean age (years)	41,6 +/-11.5	48.9 +/- 10.5	48.5+/-11.0
Female sex	39%	39%	33%
Body mass index (kg/m^2), mean ± SD	25.4 ± 4.2	27.0 ± 5.0	26.4 ± 4.4
smoking	53%	50%	41%
Median creatinine (mg/dL)	0,8	0,8	0,8
eGFR >60- 90 ml/min	25%	31%	24%
eGFR >90 ml/min	75%	69%	76%
ALT U/L mean ± SD	110.± 63	89 ± 61	97 ± 81
HCV-RNA ≤400.000 IU/mL	49,5%	28,6%	23,4%
Arterial hypertension	9%	26%	16%
Diabetes mellitus	2%	9%	7%
APRI Score >1.5	12%	17%	18%

895 pacientes tto VHC

(TVR 575, BOC 211 y PR 109)

	TVR+PR	BOC+PR	PR
Week 12			
Clearance reduction to <60 mL/min/1.73m2	38/575 (6.6%) (p<0.05)	10/211 (4.7%) (p<0.05)	1/109 (0.9%)
Week 24			
Clearance reduction to <60 mL/min/1.73m2	5/398 (1.3%)	5/113 (4.4%)	1/80 (1.3%)

Factores asociados con el descenso del aclaramiento renal:

- Creatinina basal
- TVR o BOC vs. PR
- HTA

Mauss S.Hepatology. 2013 Jun 28. doi: 10.1002/hep.26602.[Epub ahead of print]

Hepatology

Reply to: Renal impairment is frequent in chronic hepatitis C patients under triple therapy with telaprevir or boceprevir.

Loustaud-Ratti Véronique[1,2], MD, Carrier Paul[1], MD, Vong Chanlina[1], MD, Essig Marie[3,4], MD, PhD.

- TVR inhibe trasportador renal OCT2 interfiriendo en la secreción de creatinina a nivel del túbulo distal e incrementando secundariamente la concentración de creatinina en suero.
- Este efecto es reversible cuando cesa la inhibición del transportador por parte de TVR

Biochemical Pharmacology xxx (2012) xxx–xxx

Contents lists available at SciVerse ScienceDirect

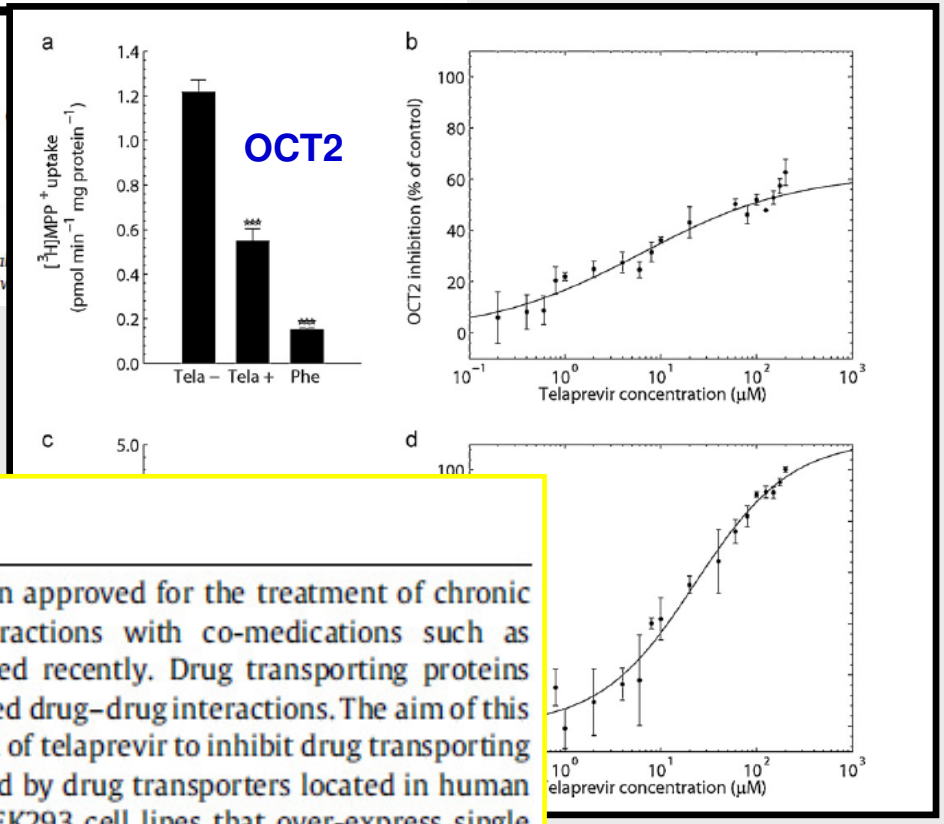
Biochemical Pharmacology

journal homepage: www.elsevier.com/locate/biochempharm

Interaction of the antiviral drug telaprevir with renal drug transporters

Annett Kunze [a], Jörg Huwyler [b], Gian Camenisch [a], Heike Gutmann [a,*]

[a] Division of Drug Metabolism and Pharmacokinetics, Drug–Drug Interactions Section, Novartis Institutes for BioMedica
[b] Department of Pharmaceutical Sciences, Division of Pharmaceutical Technology, University of Basel, CH-4056 Basel, Sv



ABSTRACT

Telaprevir is a new, direct-acting antiviral drug that has been approved for the treatment of chronic hepatitis C viral infection. First data on drug–drug interactions with co-medications such as cyclosporine, tacrolimus and atorvastatin have been reported recently. Drug transporting proteins have been shown to play an important role in clinically observed drug–drug interactions. The aim of this study was therefore to systematically investigate the potential of telaprevir to inhibit drug transporting proteins. The effect of telaprevir on substrate uptake mediated by drug transporters located in human kidney and liver was investigated on a functional level in HEK293 cell lines that over-express single transporter. Telaprevir was shown to exhibit significant inhibition of the human renal drug transporters OCT2 and MATE1 with IC_{50} values of 6.4 μM and 23.0 μM, respectively, whereas no inhibitory effect on OAT1 and OAT3 mediated transport by telaprevir was demonstrated. Liver drug transporters were inhibited with an IC_{50} of 2.2 μM for OATP1B1, 6.8 μM for OATP1B3 and 20.7 μM for OCT1. Our data show that telaprevir exhibited significant potential to inhibit human drug transporters. In view of the inhibitory potential of telaprevir, clinical co-administration of telaprevir together with drugs that are substrates of renal or hepatic transporters should be carefully monitored.

- O
- M
- O
- O

proximal.

ulo contorneado distal.

•OATPs: membrana basolateral hepatocitos.

664LB Telaprevir Increases Ribavirin Toxicity Through eGFR Decrease in HIV-HCV Coinfected Patients

Laurent Cotte[1,2], Aurélie Barrail-Tran[3,4], Corine Vincent[5], Marc-Antoine Valantin[6,7], Isabelle Fournier[5], Karine Lacombe[8], Stéphane Chevaliez[9,10], Jean-Pierre Aboulker[5], Anne-Marie Taburet[3,4], Jean-Michel Molina[11,12]

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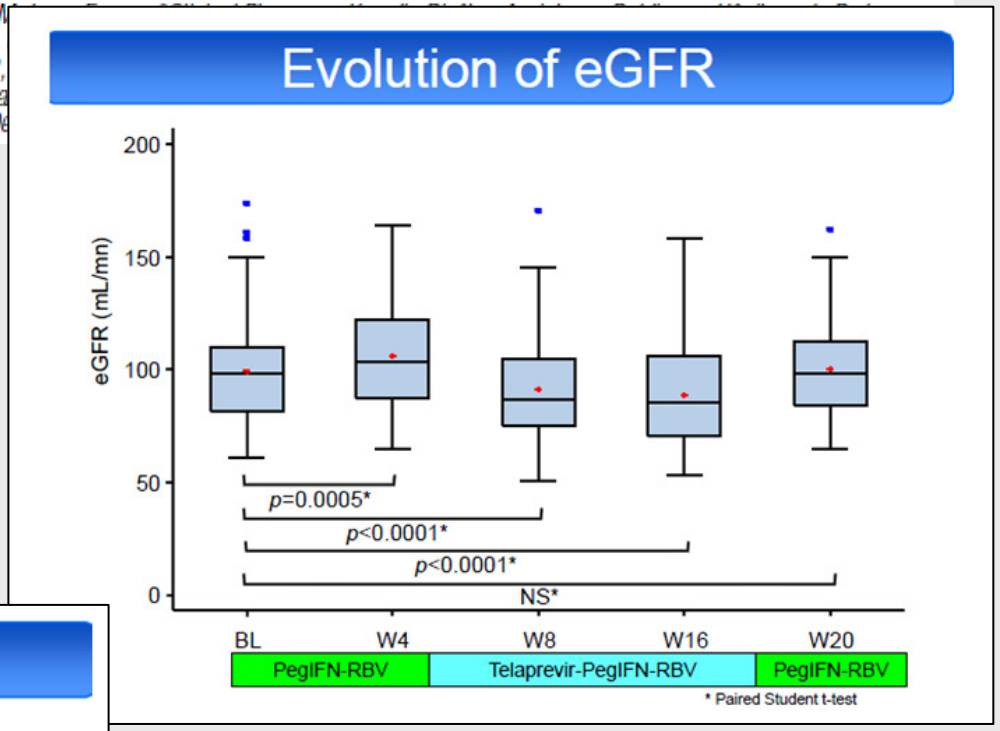
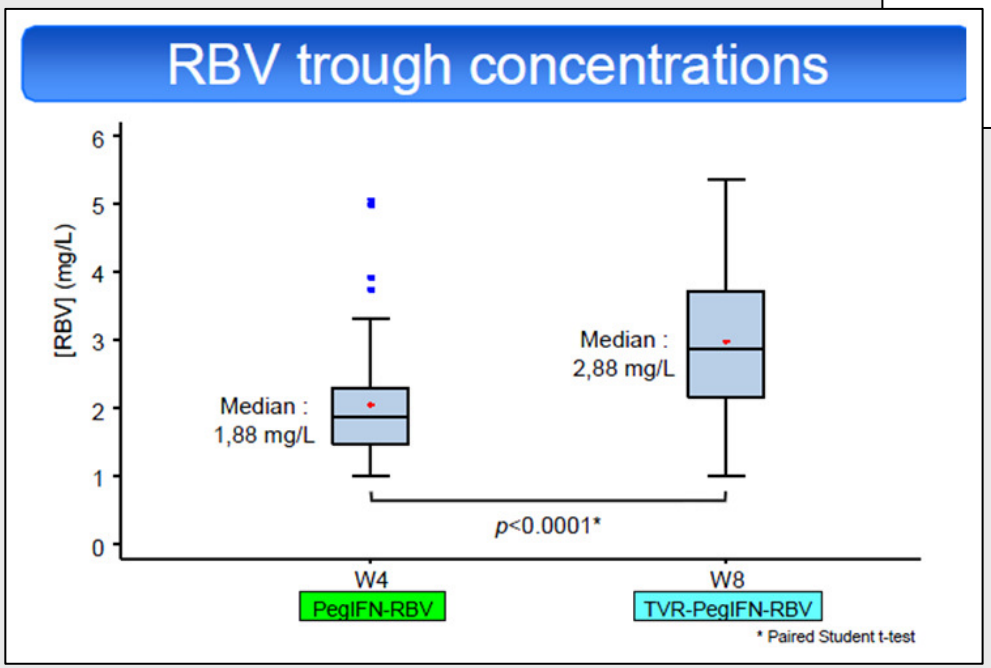
Descenso del aclaramiento renal e incremento de la concentración de RBV con TVR

eGFR basal 97.9 mL/mn [81.4-110]
eGFR w4 103.4 mL/mn [87.4-122.1]
eGFR w8 86.3 mL/mn [74.8-104.5]





Caso clínico: monoinfección

EDAD	GEN	IL28B	Fibrosis	RESP.TTO
65	1b	CC	F3	RECIDIVA

	TVR initiation	wk 2	wk 3	wk 4	wk 5	wk 7	wk 12	w 24	wk 36
Hemoglobin, mg/dL	15.2	13.8	12.5	10		8.8	9.8	10.1	10
White blood cells, x10E^6/L	4900	3900	3200	3800		3300	3100	3800	3600
Neutrophils, x10E^6/L	1900	1400	1200	2000		1800	1600	2000	1900
Platelets, x10E^6/L	118000	110000	131000	117000		97000	103000	102000	113000
HCV-RNA , IU/mL	763363			65	N.D.				
Plasma Creatinine, mg/dL	1.16	1.42	1.42	1.86	1.6	1.44			1.2
eGFR, mL/min	73	56	57	43	49	56			68
Urine analysis	Neg	Neg							
ALT, IU/L	101	65		36	32	41			39

STOP TVR+IFN+RBV

REINICIO IFN+RBV

Sem 3: TA 98/60, astenia. STOP amlodipino.

Sem 4: TA 100/55, astenia, náuseas, deterioro de la función renal.

Ecografía RV normal.

Caso clínico: monoinfección

EDAD	GEN	IL28B	Fibrosis	RESP.TTO
65	1b	CC	F3	RECIDIVA

	TVR initiation	wk 2	wk 3	wk 4	wk 5	wk 7	wk 12	w 24	wk 36
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STOP TVR+IFN+RBV

REINICIO IFN+RBV

Caso clínico: monoinfección

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Platelets, x10E^6/L	118000	110000	131000	117000		97000	103000	102000	113000
HCV-RNA , IU/mL	763363			65	N.D.		N.D.	<30	
Plasma Creatinine, mg/dL	1.16	1.42	1.42	1.86	1.6	1.44			1.2
eGFR, mL/min	73	56	57	43	49	56			68
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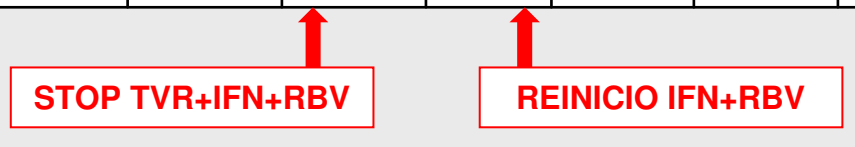

Caso clínico: monoinfección

EDAD	GEN	IL28B	Fibrosis	RESP.TTO
65	1b	CC	F3	RECIDIVA

En semana 24 ARN-VHC <30. Que harías?

1. Nada, la cantidad de virus es muy baja.
2. Suspendería todo el tratamiento. Se trata de un fracaso viral.
3. Confirmar con una nueva determinación que no se trate de un fracaso tipo breakthrough.

Uso e interpretación de los niveles de ARN-VHC: LLOQ vs. LLOD

HEPATOLOGY, Vol. 55, No. 4, 2012

Clinical Relevance of Detectable but Not Quantifiable Hepatitis C Virus RNA During Boceprevir or Telaprevir Treatment

Patrick R. Harrington,[1] Wen Zeng,[2] and Lisa K. Naeger[1]

AASLD PRACTICE GUIDELINE

An Update on Treatment of Genotype 1 Chronic Hepatitis C Virus Infection: 2011 Practice Guideline by the American Association for the Study of Liver Diseases

Marc G. Ghany,[1] David R. Nelson,[2] Doris B. Strader,[3] David L. Thomas,[4] and Leonard B. Seeff[5]*

Recommendations:

18 An HCV assay with a lower limit of quantification of equal to or less than 25 IU/mL and a limit of HCV RNA detection of approximately 10-15 IU/mL should be used for monitoring response to therapy and decision making during triple therapy. Class 2a, Level A.

19. Response-guided therapy should only be considered when no virus is detected by a sensitive assay four weeks after initiation of the HCV protease inhibitor. Class 1, Level A.

Response-guided therapy

- **TELAPREVIR:**

Sem 4 LLOQ (<25) but detected: Recidiva 28%

- **BOCEPREVIR:**

Sem 8 LLOQ (<25) but detected: Recidiva 17%

SVR 15-20% menor que los pacientes indetectables

Caso clínico: monoinfección

EDAD	GEN	IL28B	Fibrosis	RESP.TTO
65	1b	CC	F3	RECIDIVA

Cinética viral

	TVR initiation	wk 2	wk 3	wk 4	wk 5	wk 7	wk 12	w 24	wk 36
Hemoglobin, mg/dL	15.2	13.8	12.5	10		8.8	9.8	10.1	10
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HCV-RNA , IU/mL	763363			65	N.D.		N.D.	<30	N.D.
Plasma Creatinine, mg/dL	1.16	1.42	1.42	1.86	1.6	1.44			1.2
eGFR, mL/min	73	56	57	43	49	56			68
Urine analysis	Neg	Neg							
ALT, IU/L	101	65		36	32	41			39

LLOQ (<20,<25,<30) vs. LLOD (NOT DETECTABLE)

Caso clínico: monoinfección

EDAD	GEN	IL28B	Fibrosis	RESP.TTO
65	1b	CC	F3	RECIDIVA

Varón de 65 años.

- Hepatitis crónica por VHC genotipo 1b.

- ARN-VHC 763.363 copias.

- RVR (casi).

- Anemia, deterioro del filtrado renal reversible tras suspender Telaprevir en sem 4. Inhibición del OCT2?

- Interacción con amlodipino.

- Ongoing: Indetectable en semana 36 (desde semana 5).

Muchas gracias