ReformúlaTe

TÍTULO DE LA SESIÓN
"DE BARCELONA NO TE IRÁS SIN SABER 10 COSAS MÁS"

Héctor Alonso Ramos
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Servicio de Farmacia Hospitalaria

Top 1 – Nirmatrelvir-ritonavir

Top 2 – Vasopresina

Top 3 – Inclisirán

Top 4 – iSGLT2 en ICFEp

Top 5 – Procainamida

Top 1 – Nirmatrelvir-ritonavir

Paciente de alto riesgo y enfermedad leve-moderada

Grupo 1. Personas inmunocomprometidas

Grupo 2. Personas no vacunadas* con >80 años

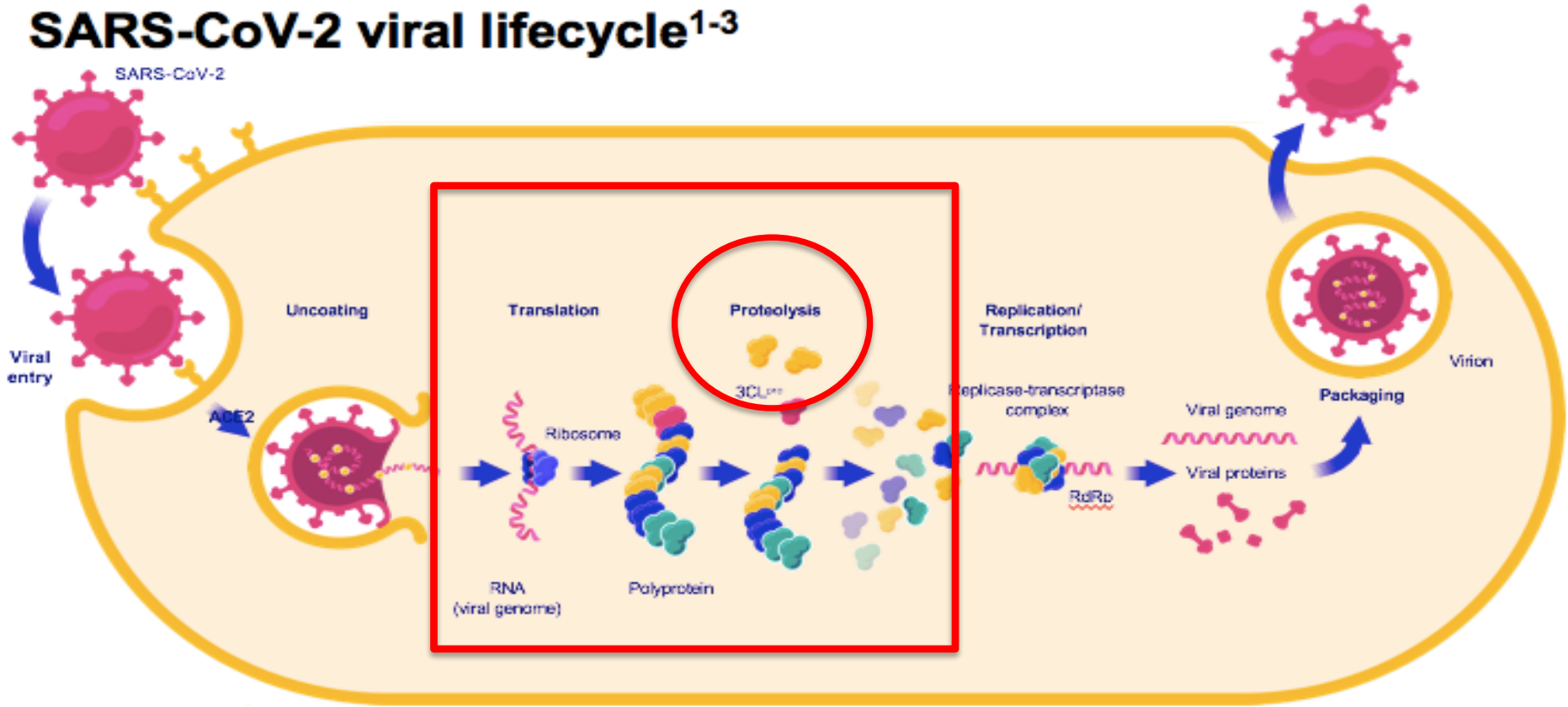
Grupo 3. Personas no vacunadas* >65 años y con al menos un factor de riesgo para progresión**

Grupo 4. Personas vacunadas (>6 m) y >65 años y con al menos un factor de riesgo para progresión**

* Sin pauta de vacunación completa ni COVID-19 en los 3 últimos meses.

** Factores de riesgo de progresión: ERC, EHC, Enfermedad neurológico y pulmonar crónica, enfermedad cardiovascular establecida, DM con complicaciones, IMC>35, IMC<18.5.

SARS-CoV-2 viral lifecycle[1-3]



The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 APRIL 14, 2022 VOL. 386 NO. 15

Oral Nirmatrelvir for High-Risk, Nonhospitalized Adults with Covid-19

Jennifer Hammond, Ph.D., Heidi Leister-Tebbe, B.S.N., Annie Gardner, M.P.H., M.S.P.T., Paula Abreu, Ph.D., Weihang Bao, Ph.D., Wayne Wisemandle, M.A., MaryLynn Baniecki, Ph.D., Victoria M. Hendrick, B.Sc., Bharat Damle, Ph.D., Abraham Simón-Campos, M.D., Rienk Pypstra, M.D., and James M. Rusnak, M.D., Ph.D., for the EPIC-HR Investigators*

- Mayoría de pacientes con variante delta

- Ninguna muerte en el brazo N-r (0 vs 12)

Variable principal: Proporción de pacientes con hospitalización por COVID-19 o muerte por cualquier causa (hasta el día 28).

	Paxlovid®		Placebo		Reducción absoluta del riesgo con respecto a placebo* [IC95%]	NNT [IC95%]
	Nº de Pacientes	Incidencia acumulada (%)	Nº de Pacientes	Incidencia acumulada (%)		
Serología Negativa	487	7 (1,4%)	505	58 (11,5%)	-10,25% (-13,2% a -7,21%)	10 (8 a 14)
Serología positiva	540	1 (0,2%)	528	8 (1,5%)	-1,34% (-2,45% a -0,23%)	75 (41 a 435)
Total	**1039**	**8 (0,8%)**	**1046**	**66 (6,3%)**	**-5,6% (-7,2% a -4%)**	**18 (14 a 25)**

N Engl J Med 2022;386:1397-408.

Oral Nirmatrelvir and Ritonavir (NMV-r, Paxlovid™) in Non-hospitalized Vaccinated Patients with Covid-19

Ganatra et al., 2022 | *Clinical Infectious Diseases*

IDSA Infectious Diseases Society of America

Retrospective Cohort

Is NMV-r treatment associated with improved clinical outcomes in high risk vaccinated adults with Covid-19 ?

Cohort 1: On NMV-r

N= 1130

Cohort 2(selected after propensity score matching): Not on NMV-r

N= 1130

Inclusion Criteria:Vaccinated, non-hospitalized Covid-19 adults not receiving any other antiviral therapy. TriNetX research network was used.

Primary Composite Outcome: All-cause ER visit, hospitalization or death within 30days

	Cohort-1	Cohort-2
	89 (7.87%); Relative Risk Reduction= 45%	163 (14.4%)

NNT: 15

p value <0.001

Secondary outcomes:

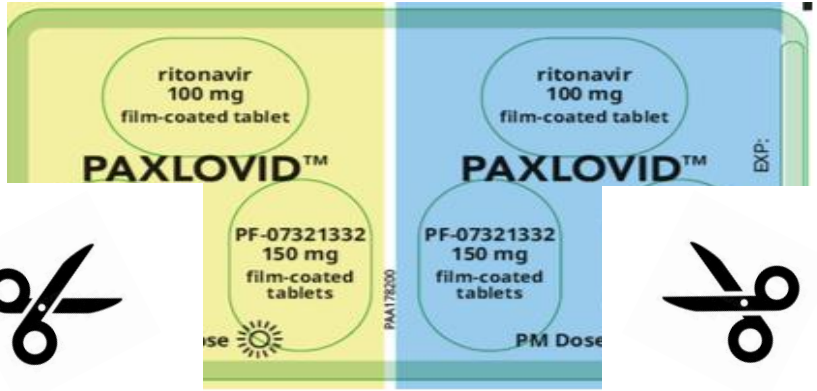
	Cohort-1	Cohort-2
Cardio-respi. symptoms	153 (13.5%);RRR=51%	309 (27.3%)
Pneumonia	27 (2.38%);RRR= 72%	92 (8.14%)
Radiology diagnostics	90 (7.9%);RRR= 45%	164 (14.5%)

p value <0.001

Conclusion :

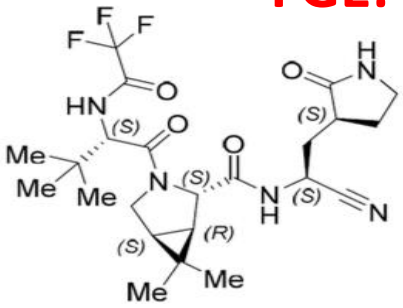
In non-hospitalized vaccinated high-risk patients with Covid-19, treatment with NMV-r was strongly associated with improved clinical outcomes and reduced resource utilization.

Outcomes	Nirmatrelvir-Ritonavir (n = 1130)	No Nirmatrelvir-Ritonavir (n = 1130)	Risk Difference	Relative Risk Reduction	Odds Ratio	E-Value of Odds Ratio	E-Value for Lower Confidence Interval of Odds Ratio	*P*
Primary composite outcomes								
All-cause ER visit, hospitalization, or death	89 (7.87%)	163 (14.4%)	−0.065 (−.091, −.040)	45%	0.507 (.386, .666)	3.36	2.37	<.001
Secondary outcomes								
Individual components of primary outcomes								
All-cause ER visit	83 (7.34%)	142 (12.5%)	−0.052 (−.077, −.028)	41%	0.552 (.415, .733)	3.02	2.07	<.001
All-cause hospitalization	10 (0.8%)	23 (2%)	−0.012 (−.021, −.002)	60%	0.430 (.204, .907)	4.08	1.44	.023
30-Day mortality	0	10 (0.8%)	−0.009 (−.014, −.003)	100%	...	...	...	.002
Symptoms								
Constitutional symptoms	72 (6.3%)	146 (12.9%)	−0.065 (−.090, −.041)	50%	0.459 (.341, .616)	3.78	2.63	<.001
Cardiorespiratory symptoms	153 (13.5%)	309 (27.3%)	−0.138 (−.171, −.105)	51%	0.416 (.336, .516)	4.24	3.29	<.001
Gastrointestinal symptoms	38 (3.3%)	89 (7.87%)	−0.045 (−.064, −.026)	57%	0.407 (.276, .601)	4.35	2.71	<.001
Nervous system and musculoskeletal symptoms	10 (0.8%)	25 (2.2%)	−0.013 (−.023, −.003)	59%	0.395 (.189, .826)	4.5	1.72	.011
Smell/taste alteration	10 (0.8%)	10 (0.8%)	0 (−.008, .008)	0	1 (.415, 2.412)	1	1	1
Complications								
Lower respiratory tract infection	27 (2.38%)	92 (8.14%)	−0.058 (−.076, −.039)	72%	0.276 (.178, .428)	6.71	4.1	.000
Arrhythmia	22 (1.9%)	43 (3.8%)	−0.019 (−.032, −.005)	50%	0.502 (.298, .845)	3.4	1.65	.008
Gastroenteritis/colitis/diarrhea	12 (1%)	13 (1.1%)	−0.001 (−.010, .008)	8%	0.922 (.419, 2.030)	1.39	1	.841
Anxiety/mood disorder	64 (5.6%)	114 (10%)	−0.044 (−.066, −.022)	44%	0.535 (.389, .735)	3.14	2.06	.000
Diagnostic testing utilization								
Radiology diagnostic tests	90 (7.9%)	164 (14.5%)	−0.065 (−.091, −.040)	45%	0.510 (.388, .669)	3.33	2.35	<.001
CV tests (echocardiogram and heart monitors)	10 (0.88%)	13 (1.1%)	−0.003 (−.011, .006)	25%	0.767 (.335, 1.757)	1.93	1	.530



FGE: 59-30

PF-07321332



COVID-19 iChart 17+
COVID-19 drug interactions
Liverpool Drug Interactions Group
Designed for iPad
★★★★★ 5.0 • 1 Rating
Free
View in Mac App Store ↗

Nirmatrelvir 150 mg + ritonavir 100 mg cada 12 h

NUESTRA EXPERIENCIA

NO INTERACCIONA:

Omeprazol
iECAs/ARA-2
Betabloqueantes
AAS
Furosemida
Metformina
iSGLT2
iSRS
Paracetamol
Ibuprofeno
Levotiroxina
Alopurinol

Tratamientos VALORADOS (N=213):

- ✓ **77% VALIDADOS**
- ✓ **14 tratamientos NO VALIDADOS por interacciones**
- ✓ **54% grupo 1 y 16% grupo 4**

INTERACCIONES MANEJADAS

Simvastatina/Atorvastatina
Sacubitril-valsartan/Amlodipino
Warfarina/Edoxaban
Morfina/Fentanilo
Diazepam/Alprazolam
Zolpidem
Trazodona
Tamsulosina

NUESTRA EXPERIENCIA-Manejo de interacciones

VALORAR la INTERACCIÓN FARMACOLÓGICA

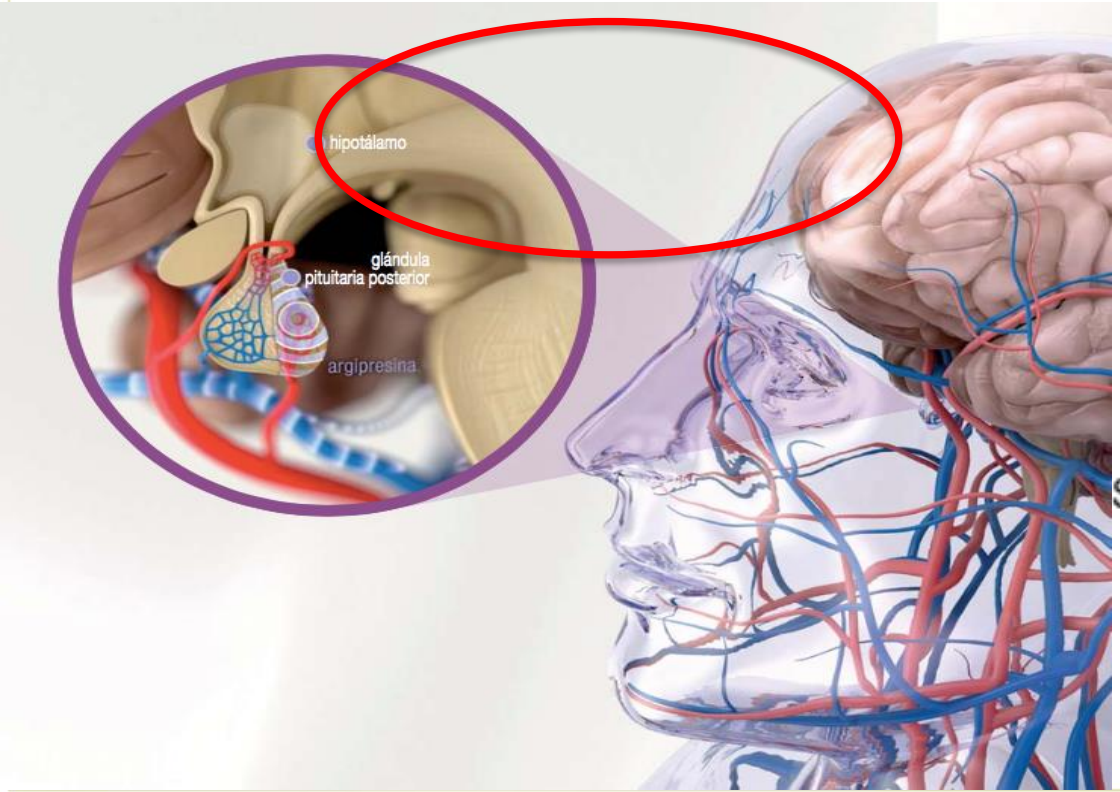
Simvastatina/Atorvastatina
Diazepam/Alprazolam/Zolpidem/Trazodona
Sacubitril-valsartan/Amlodipino
Warfarina/Edoxaban

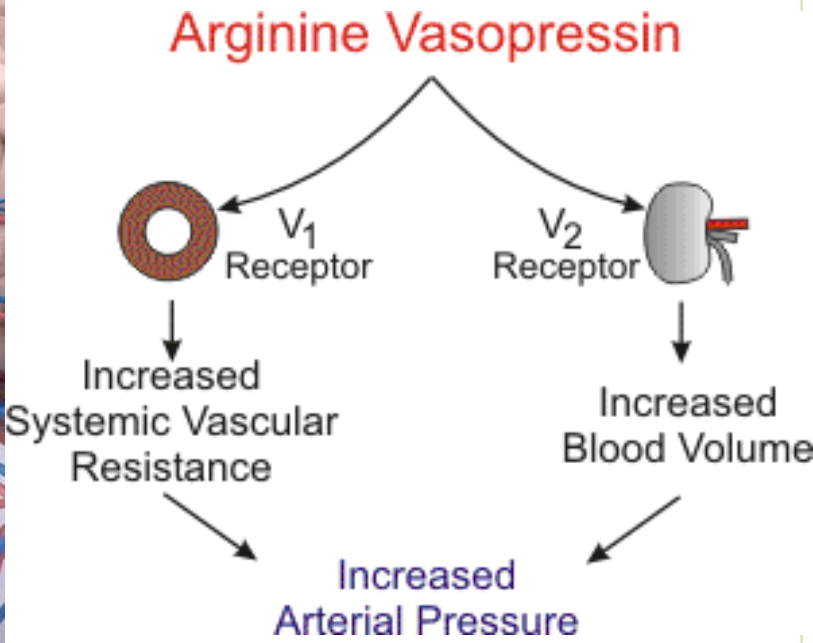
con la SITUACIÓN CLÍNICA:

Prevención 1ª vs ictus carotídeo
monoterapia vs politerapia SNC
monoterapia vs politerapia HTA
Alto riesgo vs bajo riesgo trombótico

RECOMENDACIÓN FARMACOTERAPÉUTICA

Top 2 – Vasopresina





Top 2 – Vasopresina

Surviving Sepsis Campaign: International Guidelines for Management of Sepsis and Septic Shock 2021

KEY WORDS: adults; evidence-based medicine; guidelines; sepsis; septic shock

Laura Evans[1]
Andrew Rhodes[2]
Waleed Alhazzani[3]
Massimo Antonelli[4]

Recommendations

37. For adults with septic shock, we **recommend** using norepinephrine as the first-line agent over other vasopressors. *Strong recommendation*

Dopamine. *High quality evidence*
Vasopressin. *Moderate-quality evidence*
Epinephrine. *Low-quality evidence*
Selepressin. *Low-quality evidence*
Angiotensin II. *Very low-quality evidence*

Remark:
In settings where norepinephrine is not available, epinephrine or dopamine can be used as an alternative, but we encourage efforts to improve the availability of norepinephrine. Special attention should be given to patients at risk for arrhythmias when using dopamine and epinephrine.

38. For adults with septic shock on norepinephrine with inadequate MAP levels, we **suggest** adding vasopressin instead of escalating the dose of norepinephrine.

Weak recommendation, moderate-quality evidence.

Remark:
In our practice, vasopressin is usually started when the dose of norepinephrine is in the range of 0.25—0.5 μg/kg/min.

39. For adults with septic shock and inadequate MAP levels despite norepinephrine and vasopressin, we **suggest** adding epinephrine.

Weak recommendation, low-quality evidence.

40. For adults with septic shock, we **suggest against** using terlipressin.

Weak recommendation, low quality of evidence.

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ESTABLISHED IN 1812 FEBRUARY 28, 2008 VOL. 358 NO. 9

Table 4. Rates and Risks of Death from Any Cause According to the Severity of Shock.*

Stratum	Norepinephrine Group	Vasopressin Group	P Value†	Absolute Risk Reduction (95% CI)	Relative Risk (95% CI)
	no./total no. (%)			%	
More severe septic shock					
28-day mortality	85/200 (42.5)	88/200 (44.0)	0.76	−1.5 (−11.2 to 8.2)	1.04 (0.83 to 1.3)
90-day mortality	105/199 (52.8)	103/199 (51.8)	0.84	1.0 (−8.8 to 10.8)	0.98 (0.81 to 1.18)
Less severe septic shock					
28-day mortality	65/182 (35.7)	52/196 (26.5)	0.05	9.2 (−0.1 to 18.5)	0.74 (0.55 to 1.01)
90-day mortality	83/180 (46.1)	69/193 (35.8)	0.04	10.4 (0.4 to 20.3)	0.78 (0.61 to 0.99)

Noradrenalina < 15 mcg/min

Surviving Sepsis Campaign: International Guidelines for Management of Sepsis and Septic Shock 2021

KEY WORDS: adults; evidence-based medicine; guidelines; sepsis; septic shock

Laura Evans[1]
Andrew Rhodes[2]
Waleed Alhazzani[3]
Massimo Antonelli[4]

Revisión sistemática (RCT=10):

- ✓ **Vasopresina disminuye mortalidad (RR, 0.91)**
- ✓ **No reduce necesidad de TRR.**
- ✓ **Sin diferencias en isquemia digital (RR, 1.01)**

…risks of digital ischemia (RR, 1.01; 95% CI, 0.99–9.81) or arrhythmias (RR, 0.88; 95% CI, 0.63–1.23). The threshold for adding vasopressin varied among studies and remains unclear. Starting vasopressin when norepinephrine dose is in the range of 0.25-0.5 μg/kg/min seems sensible (354).

Se recomienda iniciar vasopresina con dosis de noradrenalina de 0.25-0.5 mcg/kg/min

Controversia – Terlipresina

Surviving Sepsis Campaign: International Guidelines for Management of Sepsis and Septic Shock 2021

KEY WORDS: adults; evidence-based medicine; guidelines; sepsis; septic shock

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38. For adults with septic shock on norepinephrine with inadequate MAP levels, we **suggest** adding vasopressin instead of escalating the dose of norepinephrine.

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Weak recommendation, low-quality evidence

40. For adults with septic shock, we **suggest against** using terlipressin.

Weak recommendation, low quality of evidence.

Metanálisis del panel:

- ✓ **Terlipresina NO disminuye mortalidad (**95% CI, 0.70–1.13)
- ✓ **Aumenta los efectos adversos frente a noradrenalina.**
- ✓ **Aumenta significativamente la isquemia digital (12% vs 0.4%) e isquemia mesentérica.**

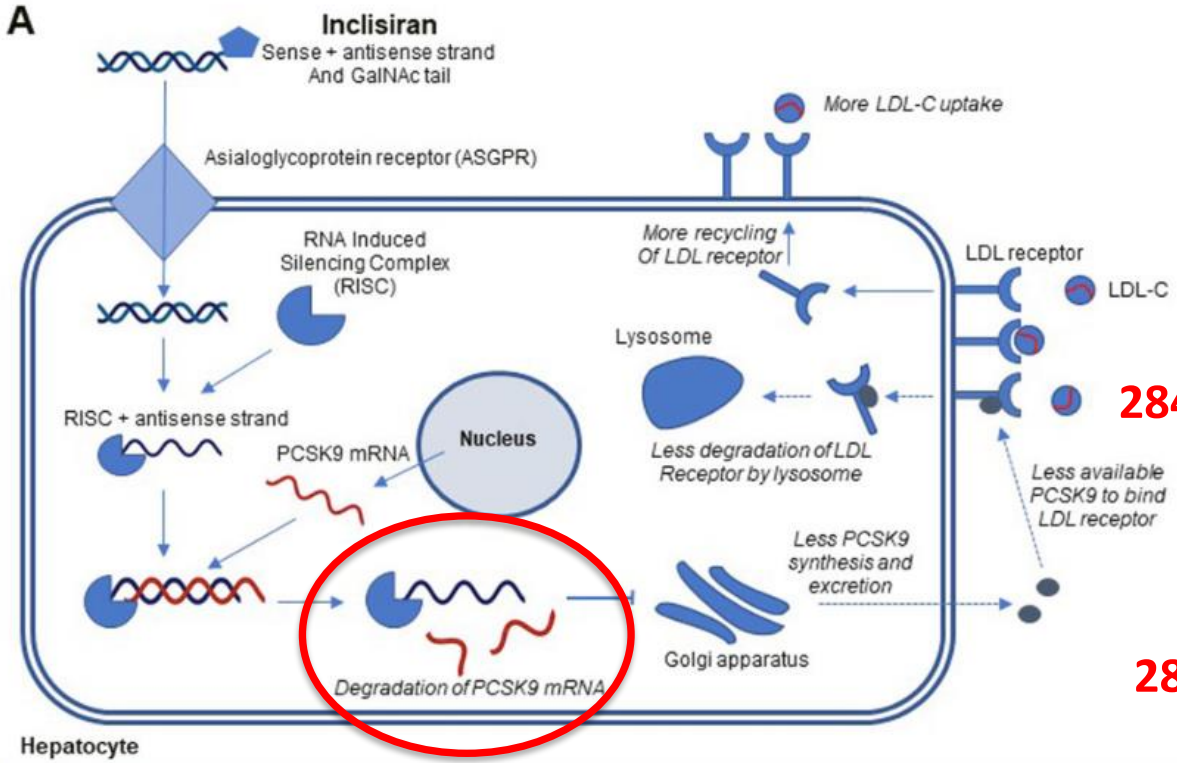
Top 2 – Vasopresina-TIPS

- ✓ Iniciar vasopresina en las primeras 6 h del shock séptico refractario
- ✓ Iniciar vasopresina con dosis de noradrenalina de 0.25-0.5 mcg/kg/min
- ✓ Incrementar dosis de vasopresina cada 15-20 min desde 0.01 hasta 0.03 UI/min
- ✓ Se recomienda retirar primero NA antes que vasopresina para evitar hipotensión
- ✓ Dilución de 40 UI de vasopresina en 50 mL de SF con estabilidad de 24 h.

Posología. Velocidades de infusión de acuerdo con las dosis recomendadas:

Dosis de Empressin/min	Dosis de Empressin/hora	Velocidad de infusión
0,01 U.I.	0,6 U.I.	0,75 ml/hora
0,02 U.I.	1,2 U.I.	1,50 ml/hora
0,03 U.I.	1,8 U.I.	2,25 ml/hora

Top 3 – Inclisirán



284 mg SUBCUTÁNEO día 1

284 mg SUBCUTÁNEO a los 90 días

284 mg SUBCUTÁNEO c/6 meses

Cardiovascular Research (2020) 116, e136–e139

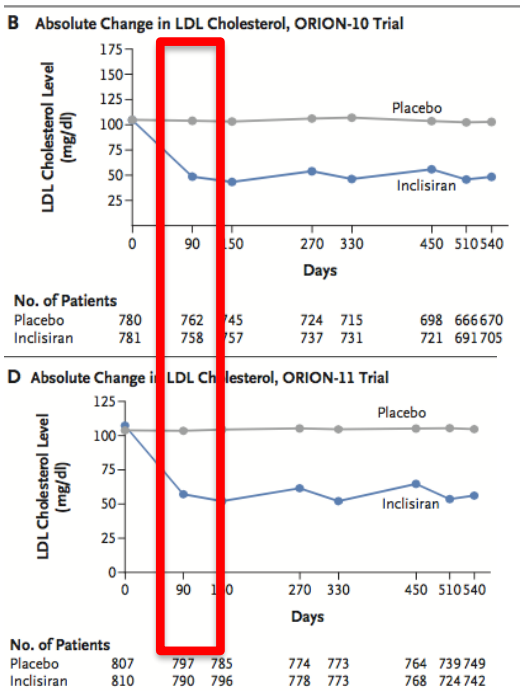
The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Two Phase 3 Trials of Inclisiran in Patients with Elevated LDL Cholesterol

Kausik K. Ray, M.D., M.Phil., R. Scott Wright, M.D., David Kallend, M.D., Wolfgang Koenig, M.D., Lawrence A. Leiter, M.D., Frederick J. Raal, Ph.D., Jenna A. Bisch, B.A., Tara Richardson, B.A., Mark Jaros, Ph.D., Peter L.J. Wijngaard, Ph.D., and John J.P. Kastelein, M.D., Ph.D., for the ORION-10 and ORION-11 Investigators*

N Engl J Med 2020;382:1507-19.

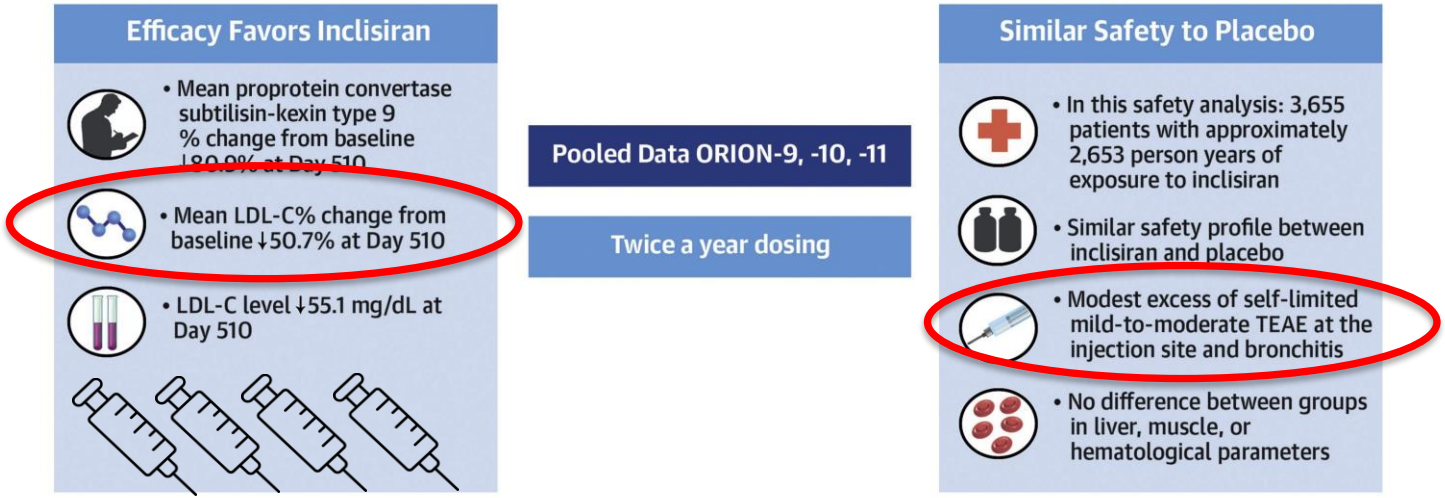


RRR: 52.3 %

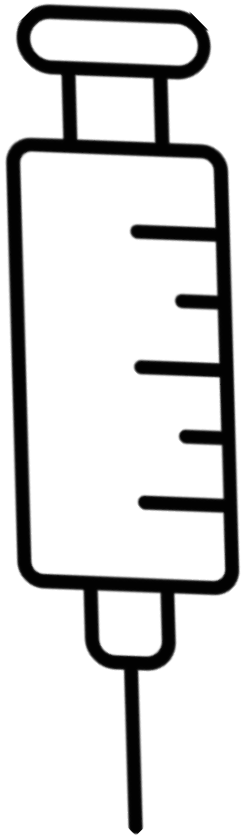
RRR: 49.9 %

Pacientes con alto riesgo cadiovascular y LDLc >100 mg/dL

CENTRAL ILLUSTRATION: Inclisiran With Summary About Safety and Efficacy



Wright, R.S. et al. J Am Coll Cardiol. 2021;77(9):1182-93.



- ✓ **Reacciones en el lugar de inyección: 8,2% vs 1,8%**

Reacciones leves o moderadas, transitorias y sin secuelas:

- ✓ **Reacción en el lugar de inyección: 3.1%**
- ✓ **Dolor en el lugar de inyección: 2.2%.**
- ✓ **Eritema en el lugar de inyección: 1.6%.**
- ✓ **Erupción en el lugar de inyección: 0.7%.**

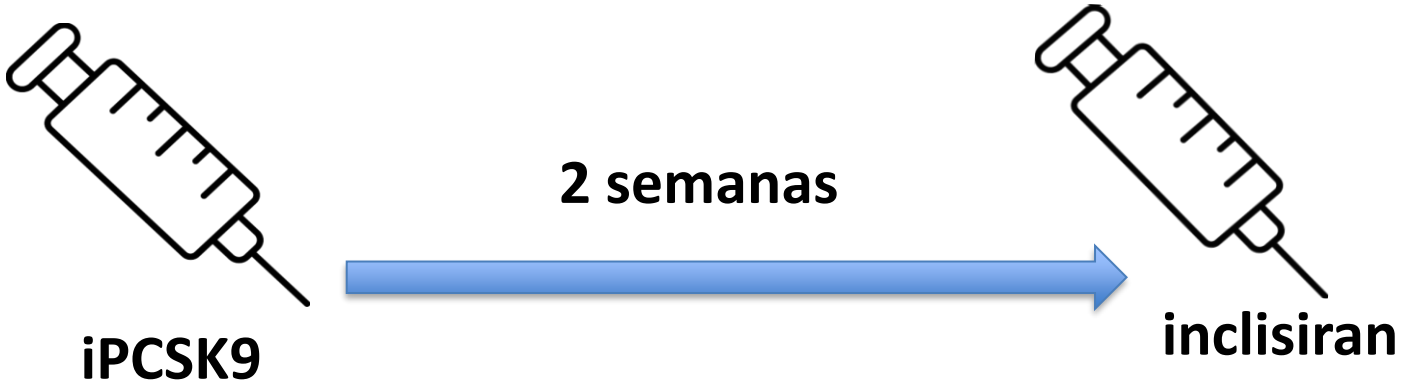
Top 3 – Inclisirán

Está indicado en adultos con **hipercolesterolemia primaria (heterocigótica familiar y no familiar) o dislipidemia mixta,** como adyuvante de la dieta:

- **en combinación con una estatina o una estatina** y otros tratamientos hipolipemiantes en pacientes que no consiguen alcanzar los objetivos de C-LDL con la dosis máxima de una estatina o,
- **sola o en combinación con otros tratamientos hipolipemiantes** en pacientes que son intolerantes a las estatinas, o para aquellos para los que las estatinas están contraindicadas.

Top 3 – Switching de PCSK9 a inclisirán

- ✓ Administrar inclisirán 2 semanas después de la última dosis del anticuerpo monoclonal inhibidor de PCSK9



Top 3 –¿Posicionamiento de inclisirán?

Fármacos en monoterapia o en combinación	Reducción teórica del cLDL (%)
Estatina de intensidad baja	30
Estatina de intensidad moderada	40
Estatina de intensidad alta	50
Ezetimiba	20
Inhibidor de PCSK9	60
Estatina de intensidad baja + ezetimiba	44
Estatina de intensidad moderada + ezetimiba	52
Estatina de intensidad alta + ezetimiba	60
Estatina de intensidad baja + inhibidor de PCSK9	72
Estatina de intensidad moderada + inhibidor de PCSK9	76
Estatina de intensidad alta + inhibidor de PCSK9	80
Estatina de intensidad baja + ezetimiba + inhibidor de PCSK9	78
Estatina de intensidad moderada + ezetimiba + inhibidor de PCSK9	80
Estatina de intensidad alta + ezetimiba + inhibidor de PCSK9	84

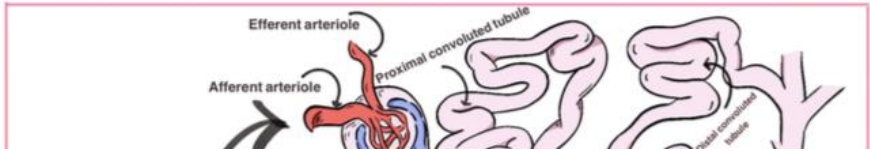
¡YA LO VEREMOS!

inclisirán reduce LDLc un 51%

¿inclisirán reduce LDLc un 70%?

¿inclisirán reduce LDLc un 80%?

Top 4 – iSGLT2 en ICFEp



Inhibición de reabsorción de Na+ (diuresis osmótica):

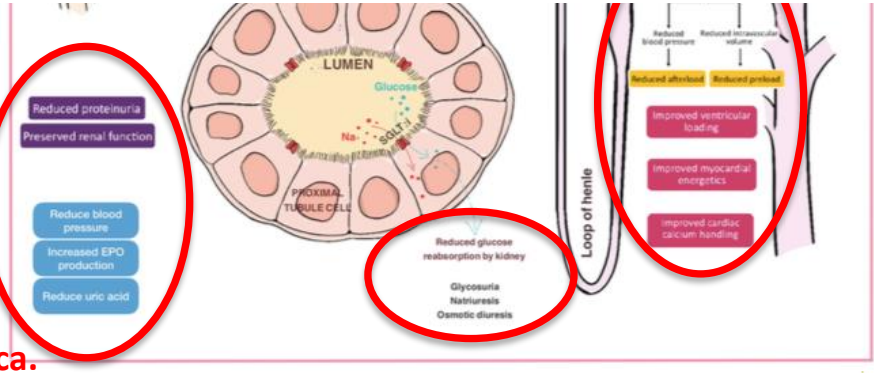
- ✓ Disminuye sobrecarga de volúmen.
- ✓ Disminuye la presión sanguínea.
- ✓ Disminuye la precarga y postcarga.
- ✓ Mejora el llenado ventricular y el REMODELADO CARDÍACO.

Reducción de la presión sanguínea renal:

- ✓ Reduce la proteinuria.
- ✓ Aumenta la producción de EPO.
- ✓ Preserva la función renal a medio-largo plazo.

Inhibición de reabsorción de glucosa (glucosuria):

- ✓ Mejora el control glucémico.
- ✓ Disminuye la presión sanguínea.
- ✓ Produce pérdida de peso.
- ✓ El uso de ácidos grasos mejora la carga energética miocárdica.



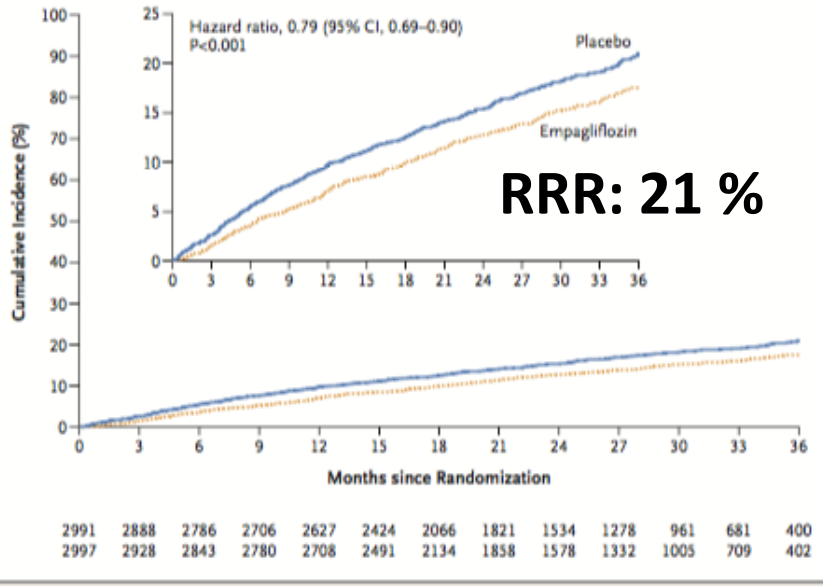
Top 4 – EMPAGLIFLOZINA

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 OCTOBER 14, 2021 VOL. 385 NO. 16

Empagliflozin in Heart Failure with a Preserved Ejection Fraction

S.D. Anker, J. Butler, G. Filippatos, J.P. Ferreira, E. Bocchi, M. Böhm, H.-P. Brunner–La Rocca, D.-J. Choi, V. Chopra, E. Chuquiure-Valenzuela, N. Giannetti, J.E. Gomez-Mesa, S. Janssens, J.L. Januzzi, J.R. Gonzalez-Juanatey, B. Merkely, S.J. Nicholls, S.V. Perrone, I.L. Piña, P. Ponikowski, M. Senni, D. Sim, J. Spinar, I. Squire, S. Taddei, H. Tsutsui, S. Verma, D. Vinereanu, J. Zhang, P. Carson, C.S.P. Lam, N. Marx, C. Zeller, N. Sattar, W. Jamal, S. Schnaidt, J.M. Schnee, M. Brueckmann, S.J. Pocock, F. Zannad, and M. Packer, for the EMPEROR-Preserved Trial Investigators*



RRR: 21 %

Figure 1. Primary Outcome, a Composite of Cardiovascular Death or Hospitalization for Heart Failure.
The estimated cumulative incidence of the primary outcome in the two groups is shown. The inset shows the same data on an expanded y axis.

Empagliflozina 10 mg/24h

IC con FE>40% (NIHA II-IV)

DM2 y no diabéticos

FGE> 25 mL/min

N Engl J Med 2021;385:1451-61.

Top 4 – EMPAGLIFLOZINA

Subgroup	Empagliflozin	Placebo	Hazard Ratio (95% CI)
	no. of patients with events/total no.		
Overall	415/2997	511/2991	0.79 (0.69–0.90)
Diabetes at baseline			
Yes	239/1466	291/1472	0.79 (0.67–0.94)
No	176/1531	220/1519	0.78 (0.64–0.95)
LVEF at baseline			
<50%	145/995	193/988	0.71 (0.57–0.88)
≥50% to <60%	138/1028	173/1030	0.80 (0.64–0.99)
≥60%	132/974	145/973	0.87 (0.69–1.10)
Age			
<70 yr	134/1066	152/1084	0.88 (0.70–1.11)
≥70 yr	281/1931	359/1907	0.75 (0.64–0.87)
Estimated GFR (CKD-EPI) at baseline			
≥60 ml/min/1.73 m²	152/1493	189/1505	0.81 (0.65–1.00)
<60 ml/min/1.73 m²	263/1504	321/1484	0.78 (0.66–0.91)

acebo

npagliflozin

FE: 40-50%

>70 años

FGE <60 ml/min

Top 4 – DAPAGLIFLOZINA

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Dapagliflozin in Heart Failure with Mildly Reduced or Preserved Ejection Fraction

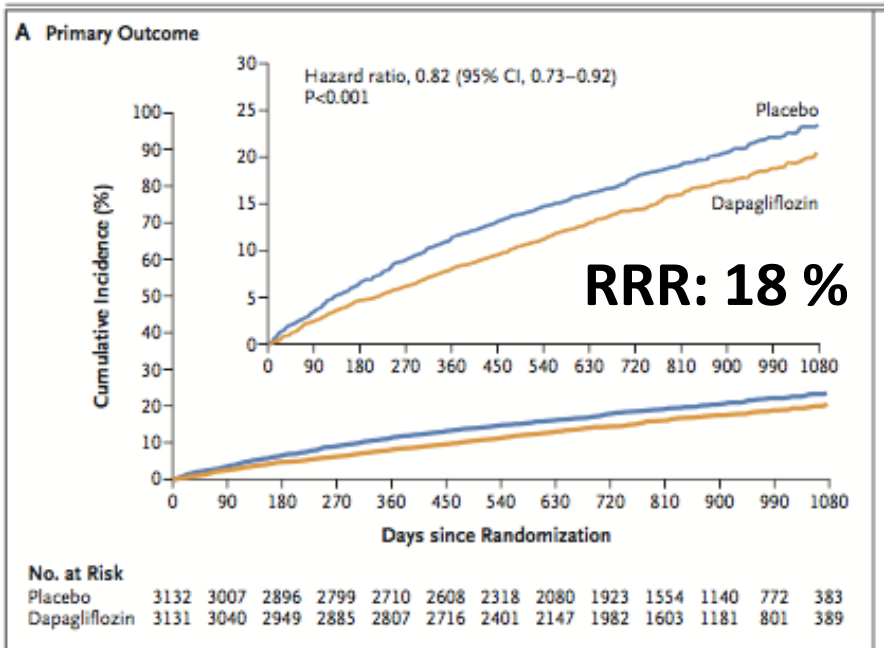
S.D. Solomon, J.J.V. McMurray, B. Claggett, R.A. de Boer, D. DeMets, A.F. Hernandez, S.E. Inzucchi, M.N. Kosiborod, C.S.P. Lam, F. Martinez, S.J. Shah, A.S. Desai, P.S. Jhund, J. Belohlavek, C.-E. Chiang, C.J.W. Borleffs, J. Comin-Colet, D. Dobreanu, J. Drozdz, J.C. Fang, M.A. Alcocer-Gamba, W. Al Habeeb, Y. Han, J.W. Cabrera Honorio, S.P. Janssens, T. Katova, M. Kitakaze, B. Merkely, E. O'Meara, J.F.K. Saraiva, S.N. Tereshchenko, J. Thierer, M. Vaduganathan, O. Vardeny, S. Verma, V.N. Pham, U. Wilderäng, N. Zaozerska, E. Bachus, D. Lindholm, M. Petersson, and A.M. Langkilde, for the DELIVER Trial Committees and Investigators*

Dapagliflozina 10 mg/24h

IC con FE>40% (NIHA II-IV)

DM2 y no diabéticos

FGE> 20 mL/min



N Engl J Med 2022;387:1089-98.

Top 4 – DAPAGLIFLOZINA

FE: >50%

FGE <60 mL/min

Table 2. Primary and Secondary Cardiovascular Outcomes and Safety Outcomes in the Overall Population.*

Variable	Dapagliflozin (N=3131)		Placebo (N=3132)		Hazard or Rate Ratio or Win Ratio (95% CI)	P Value
	values	*events/ 100 patient-yr*	*values*	*events/ 100 patient-yr*		
Efficacy outcomes						
Primary composite outcome — no. (%)	512 (16.4)	7.8	610 (19.5)	9.6	0.82 (0.73–0.92)	<0.001
Hospitalization for heart failure or an urgent visit for heart failure	368 (11.8)	5.6	455 (14.5)	7.2	0.79 (0.69–0.91)	NA
Hospitalization for heart failure	329 (10.5)	5.0	418 (13.3)	6.5	0.77 (0.67–0.89)	NA
Urgent visit for heart failure	60 (1.9)	0.9	78 (2.5)	1.1	0.76 (0.55–1.07)	NA
Cardiovascular death†	231 (7.4)	3.3	261 (8.3)	3.8	0.88 (0.74–1.05)	NA
Secondary outcomes						
Total no. of worsening heart failure events and cardiovascular deaths‡	815	11.8	1057	15.3	0.77 (0.67–0.89)	<0.001
Change in KCCQ total symptom score at mo 8§	—	—	—	—	1.11 (1.03–1.21)	0.009
Mean change in KCCQ total symptom score at mo 8 among survivors	—	—	—	—	2.4 (1.5–3.4)	NA
Death from any cause — no. (%)	497 (15.9)	7.2	526 (16.8)	7.6	0.94 (0.83–1.07)	NA

iSGLT2– Efectos secundarios

Empagliflozin	Placebo
(n=2996)	(n=2989)
N (%)	N (%)

1. Glucemia<200 mg/dL
2. Cetonuria/hipercetonemia
3. pH<7.35

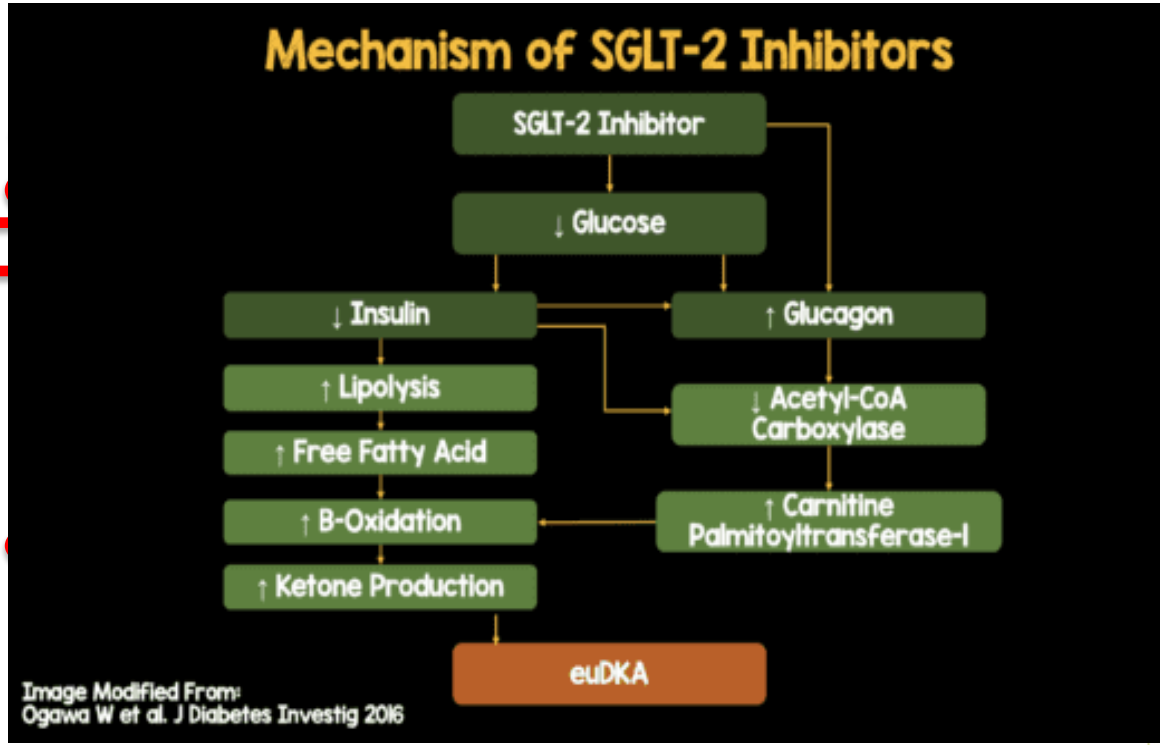
✓ Hipotensión
✓ FRA

CETOACIDOSIS EUGLUCÉMICA

FACTORES DE RIESGO:

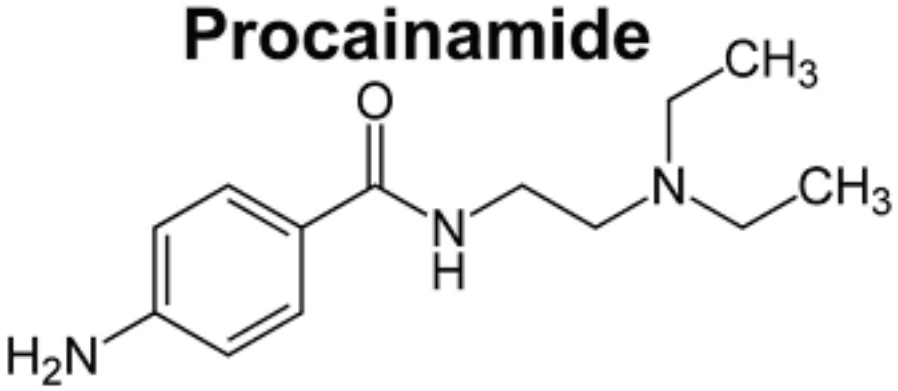
✓ Disminución insulina.
✓ Deplección de volúmen.
✓ ITU
✓ Enfermedad grave concurrente
✓ Infección genital
✓ Disminución de dosis de insulina.
✓ Alcoholismo.

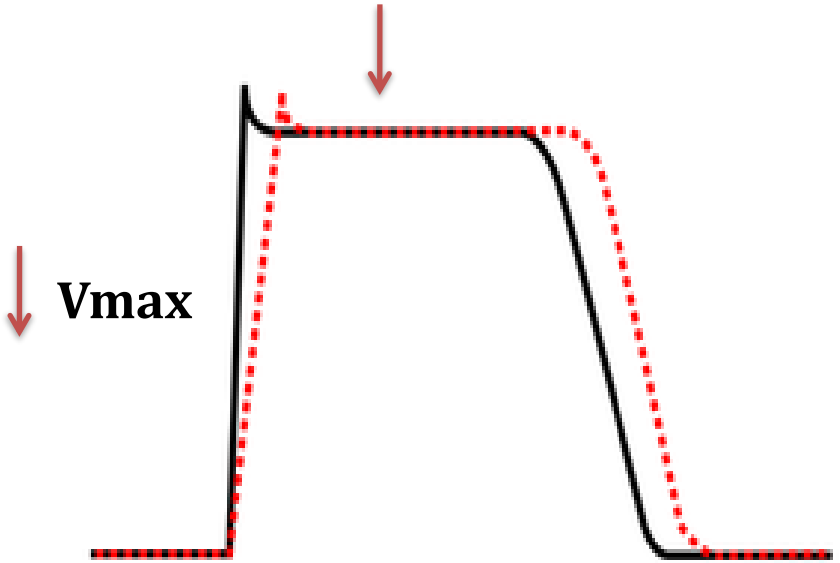
1) HIDRATACIÓN: 1-1.5 L en 1 h.
2) INSULINA 0.1 ui/kg/h
3) SG10% a 125 mL/h
4) Potasio 10-20 mEq/L



Top 5 – Procainamida

Prolonga la duración del potencial de acción, el QRS y el QTc





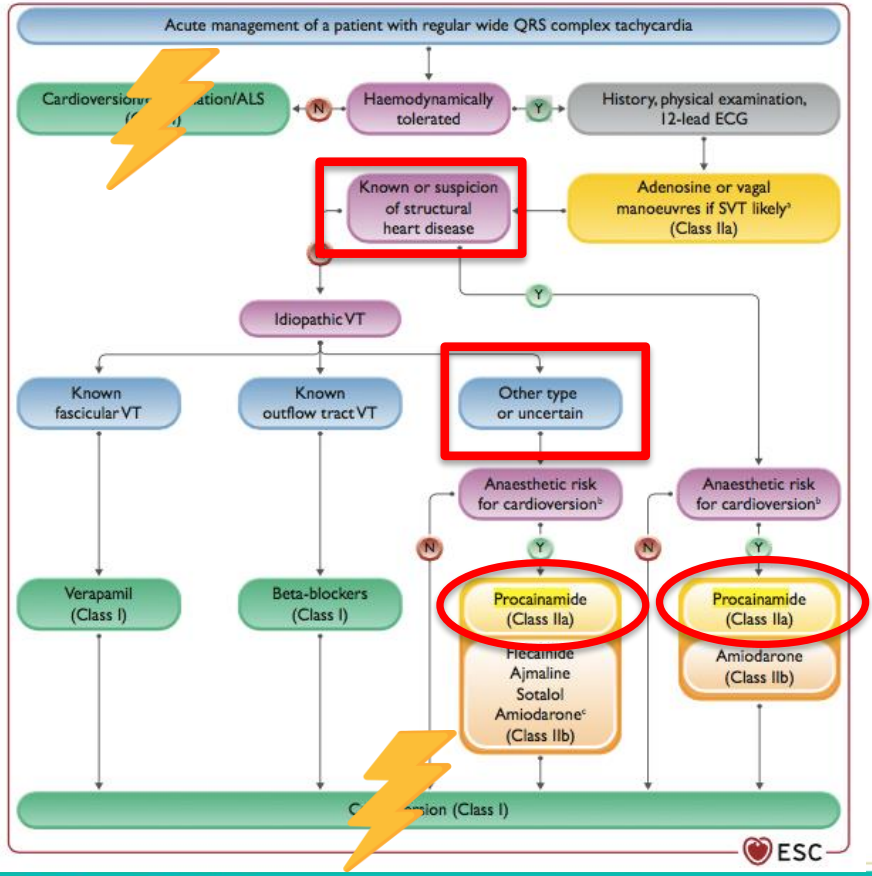
ESC European Society of Cardiology
European Heart Journal (2022) **00**, 1–130
https://doi.org/10.1093/eurheartj/ehac262

ESC GUIDELINES

2022 ESC Guidelines for the management of patients with ventricular arrhythmias and the prevention of sudden cardiac death

Developed by the task force for the management of patients with ventricular arrhythmias and the prevention of sudden cardiac death of the European Society of Cardiology (ESC)

Endorsed by the Association for European Paediatric and Congenital Cardiology (AEPC)



European Heart Journal (2022) 00, 1–130

Table 4 **New recommendations in 2022**

Recommendations	Class
Treatment of VA. General aspects	
DC cardioversion is recommended as the first-line treatment for patients presenting with tolerated SMVT provided that the anaesthetic/sedation risk is low.	I
Optimal medical treatment including ACE-I/ARB/ARNIs, MRAs, beta-blockers, and SGLT2 inhibitors is indicated in all heart failure patients with reduced EF.	I
Implantation of a cardioverter defibrillator is only recommended in patients who have an expectation of good-quality survival >1 year.	I
In patients presenting with a haemodynamically tolerated SMVT and known or suspected SHD, intravenous procainamide should be considered.	IIa
In patients presenting with a haemodynamically tolerated SMVT in the absence of an established diagnosis, intravenous amiodarone may be considered.	IIb

Procainamida NO DEBE usarse en:

- ✓ **Insuficiencia cardíaca grave.**
- ✓ **Síndrome coronario agudo.**
- ✓ **Enfermedad renal terminal**

European Heart Journal
doi:10.1093/eurheartj/ehw230

CLINICAL RESEARCH
Arrhythmia/electrophysiology

Randomized comparison of intravenous procainamide vs. intravenous amiodarone for the acute treatment of tolerated wide QRS tachycardia: the PROCAMIO study

Mercedes Ortiz[1†], Alfonso Martín[2], Fernando Arribas[3], Blanca Coll-Vinent[4], Carmen del Arco[5], Rafael Peinado[6] and Jesús Almendral[1*†], on Behalf of the PROCAMIO Study Investigators

–Dosis PROCAMIO–

Procainamida 10 mg/kg IV en 20 min

Amiodarona 5 mg/kg en 20 min

Table 5 Safety and efficacy of study drugs in patients with structural heart disease

	All patients ($n = 49$)	Procainamide ($n = 26$)	Amiodarone ($n = 23$)	*P*
Major cardiac adverse events during study period	13 (26)	3 (11)	10 (43)	0.017
Total adverse events during study period	19 (38)	8 (31)	11 (48)	0.22
Time to adverse event (min)	17 ± 10	19 ± 13	16 ± 7	0.6
Tachycardia termination during study period	26 (53)	17 (65)	9 (39)	0.069
Time to tachycardia termination (min)	15 ± 10	15 ± 11	16 ± 5	0.9
Total adverse events during the observation period	13 (26)	6 (23)	7 (30)	0.56

Top 5 – Procainamida-TIPS

- ✓ Dosis de carga 10 mg/kg en 50 mL de SG5% en 20 min
- ✓ Perfusión de 2-6 mg/min: 1-2g en 500 mL de SG5%
- ✓ Velocidad máxima 50 mg/min
- ✓ Parar la perfusión si QRS >50%

EFECTOS ADVERSOS CARDÍACOS: hipotensión, bradicardia, prolongación del QTc

Efectos adversos extracardíacos: rash, lupus, agranulocitosis, mialgia, vasculitis

Top 1 – Nirmatrelvir-ritonavir

Top 2 – Vasopresina

Top 3 – Inclisiran **(NO FINANCIADO)**

Top 4 – iSGLT2 en ICFEp **(NO FINANCIADO)**

Top 5 – Procainamida

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sefh
Sociedad Española
de Farmacia Hospitalaria

Gracias por su atención

Gràcies per la seva atenció

Eskerrik asko zure arretagatik

Grazas pola súa atención