

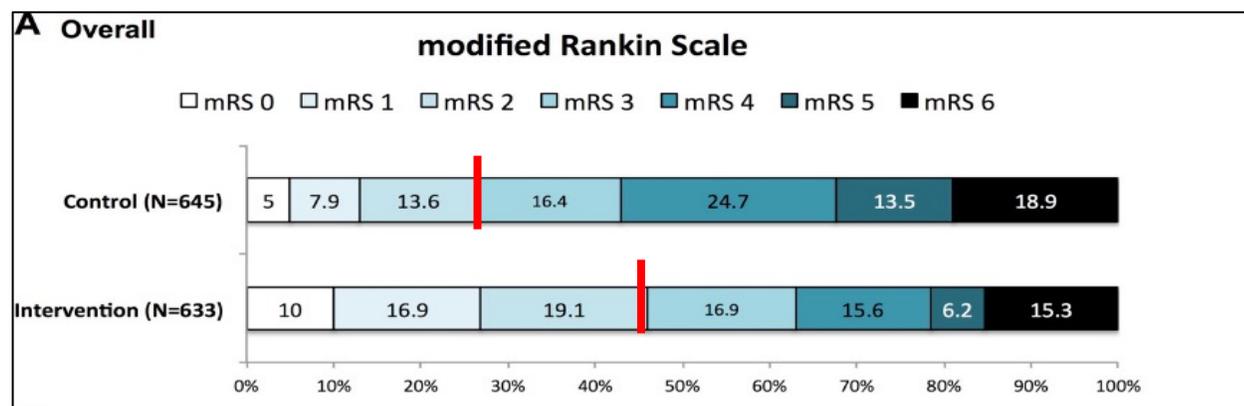
Disfunción endotelial y respuesta a tratamiento endovascular en ictus agudo

Seminario RICORS 3.7.2023

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EFICACIA DEL TTO ENDOVASCULAR EN ICTUS



$OR^*(mRS < 3) = 1.73 (1.43-2.09)$

$OR^*(mRS-1) = 2.49 (2.07-3.55)$

$NNT(mRS < 3) = 5$

$NNT(mRS-1) = 2.6$

- AUTONOMÍA 3M <50%
- RECANALIZACIÓN >90%-----RECANALIZACIÓN FÚTIL
- TRANSFORMACIÓN HEMORRÁGICA-40%

FUNCIÓN ENDOTELIAL E ICTUS

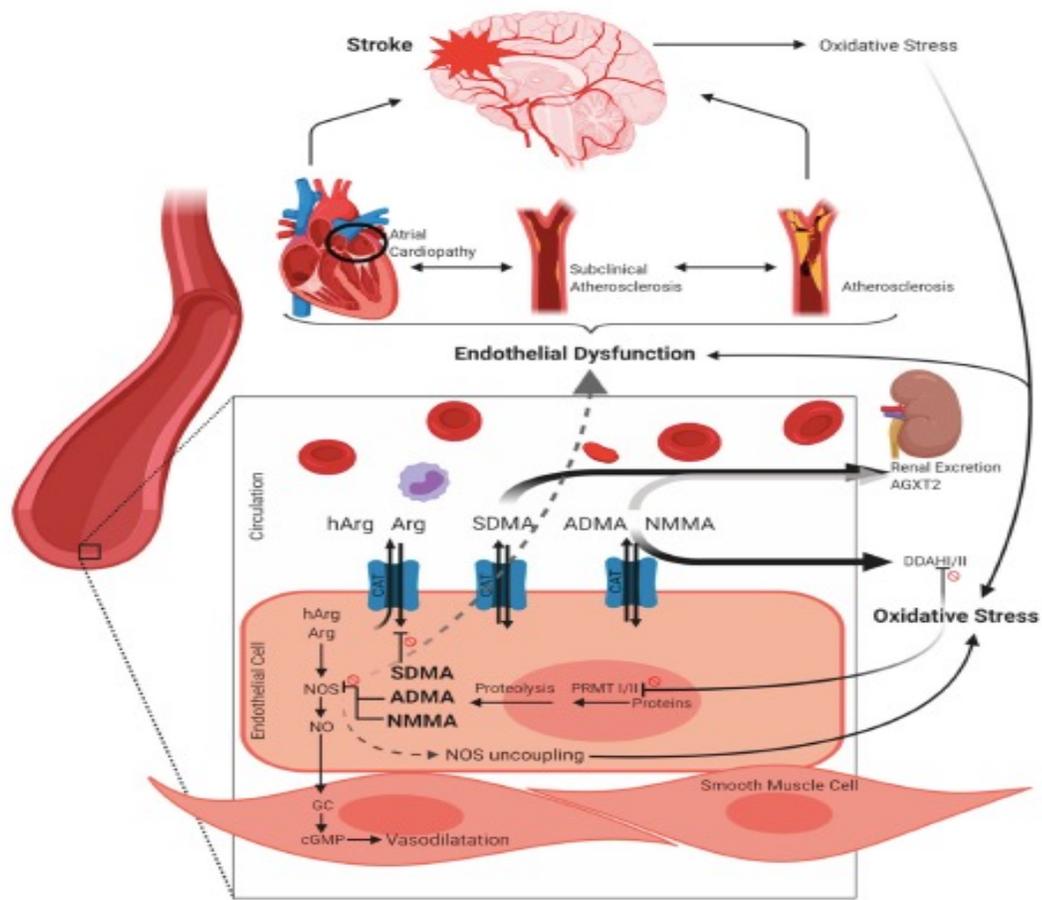
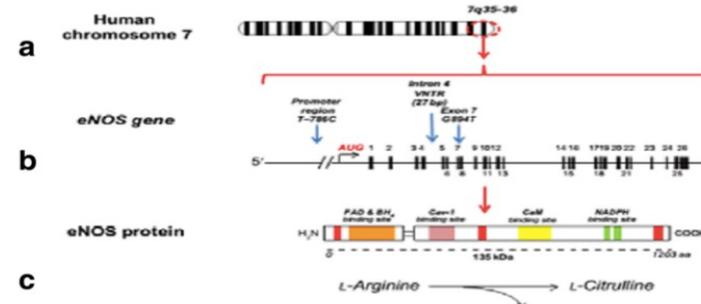
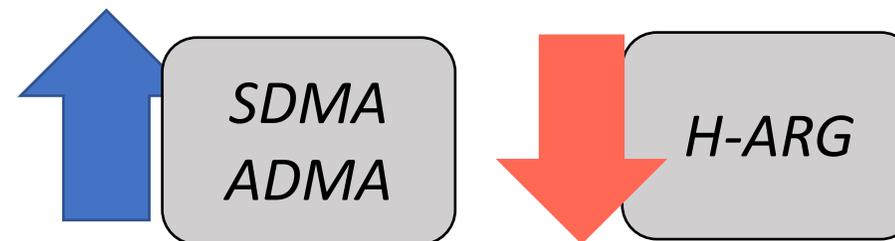


Figure 1. Overview on metabolism of arginine (Arg), homoarginine (hArg), asymmetric dimethylarginine (ADMA), symmetric dimethylarginine (SDMA) and monomethylarginine (NMMA) as well as putative links to cerebrovascular risk and disease. Prohibition of inhibitory relation. For further explanation see Section 2. The figure was

Grosse et al

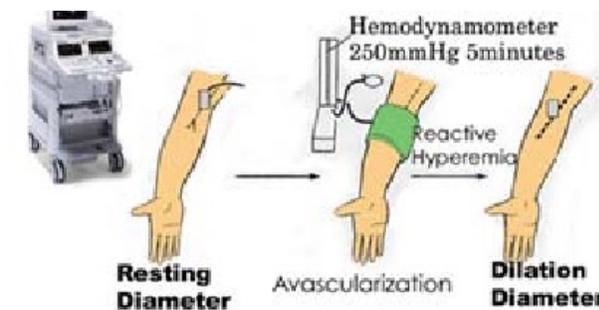


DISFUNCIÓN ENDOTELIAL:



FUNCIÓN ENDOTELIAL SÍSTÉMICA

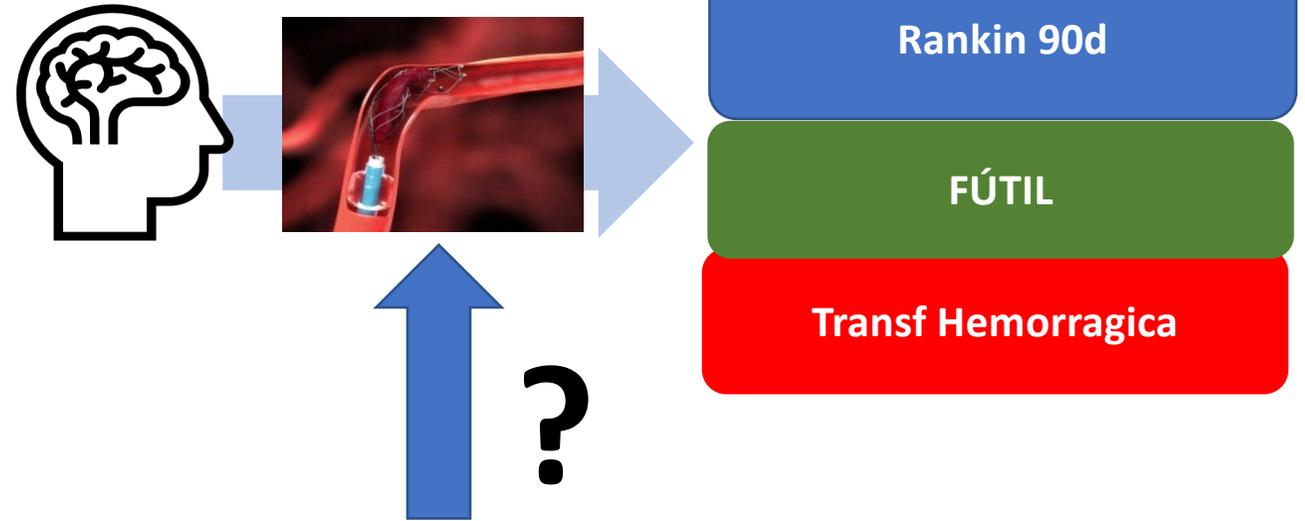
$$VMH = (d2 - d1 / d2) \times 100$$



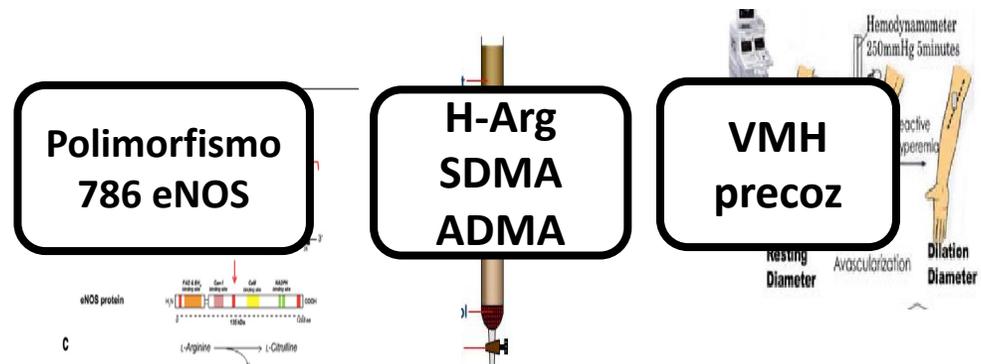
OBJETIVOS

Analizar si la función endotelial participa en la respuesta a TEV (RF y TH):

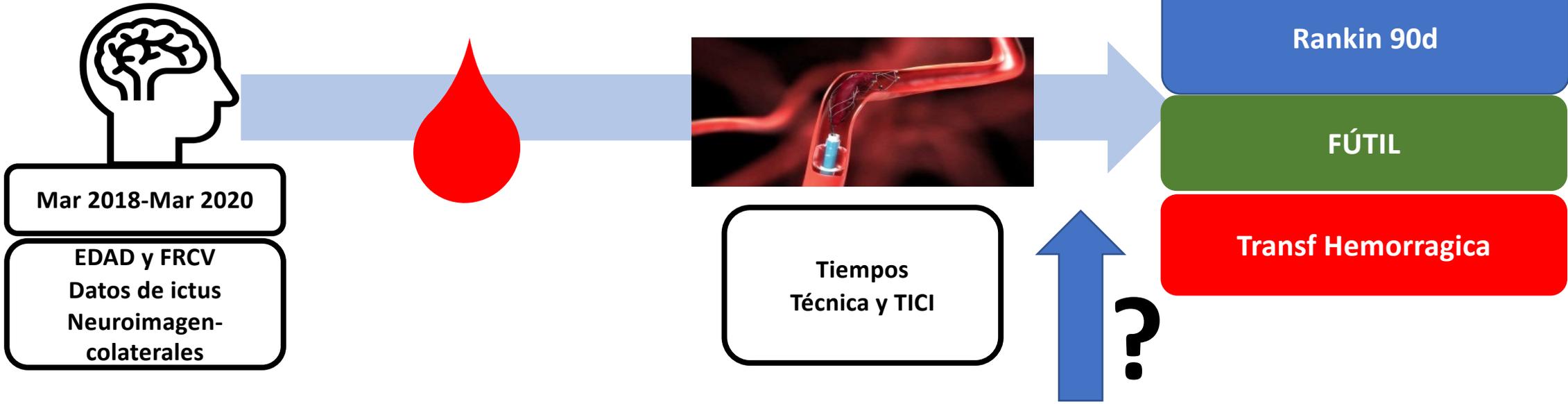
1. El polimorfismo ENOS y respuesta a TEV (RF Y TH)
2. La función endotelial sistémica (VMH) y respuesta a TEV (RF y TH)
3. Arginina y sus derivados en sangre pre-tratamiento y respuesta a TEV (RF Y TH)



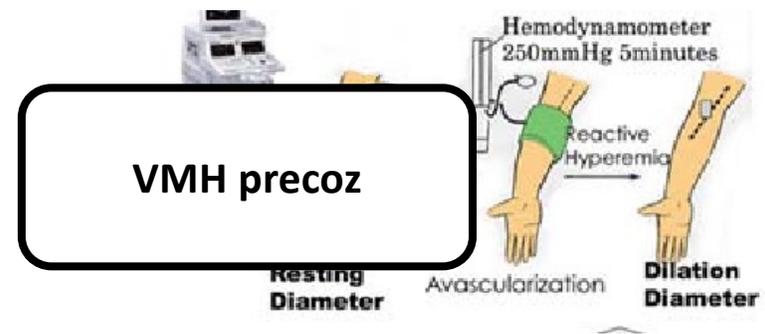
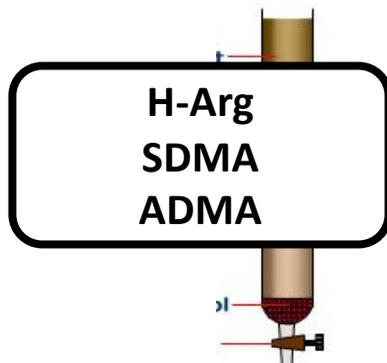
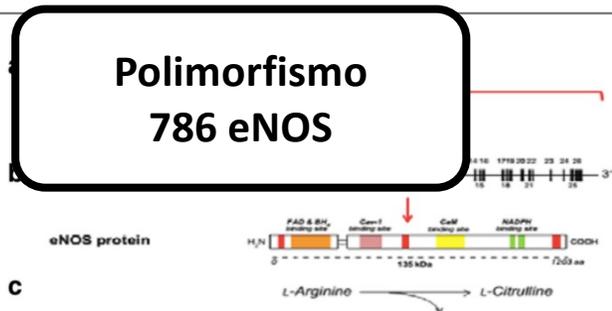
DISFUNCIÓN ENDOTELIAL



ESTUDIO HUD 2018-2020



DISFUNCIÓN ENDOTELIAL



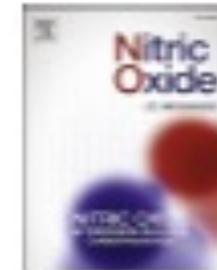
1.DISFUNCIÓN ENDOTELIAL- Polimorfismo 786eNOS- TH



Contents lists available at ScienceDirect

Nitric Oxide

Journal homepage: www.elsevier.com/locate/yniox



Endothelial NO synthase 786T/T polymorphism increases hemorrhagic transformation after endovascular thrombectomy

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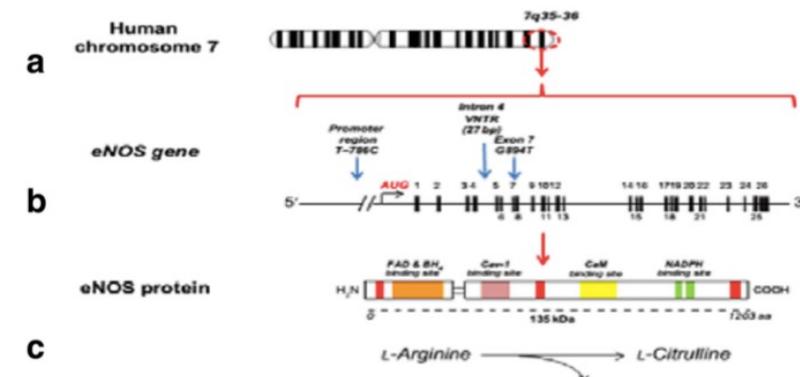
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ARTICLE INFO

ABSTRACT



1. Relación entre polimorfismo 786 NOS3

TH clasificación radiológica- 55 (46.6%)

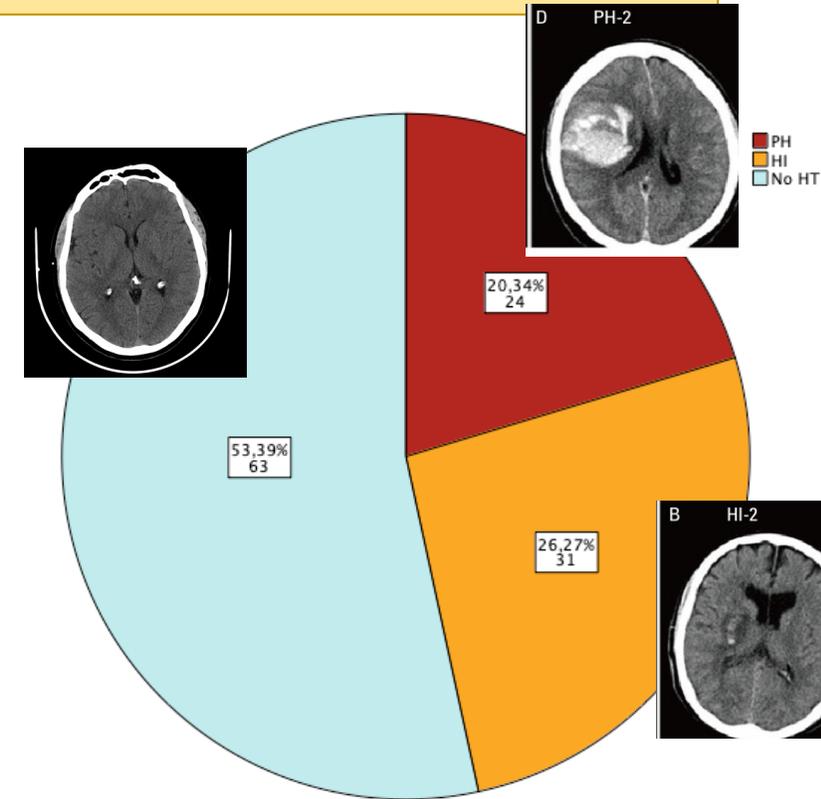
	TODOS
N (%)	118
Edad, media (sd)	75.9 (11.2)
Mujeres, n(%)	64 (54.2)
NIHss al ingreso, media (SD)	17-0 (11.5-21)
FB iv, n (%)	29 (24.6)
Recanalización TICI 2b-3, n(%)	111 (94.9)
Autónomo a 90 días, n (%) (n=116)	50 (43.1)
Muerte a 90 días, n (%)	19 (16.4)



ACM1 78 (66.1%)

TICA 23 (19.5%)

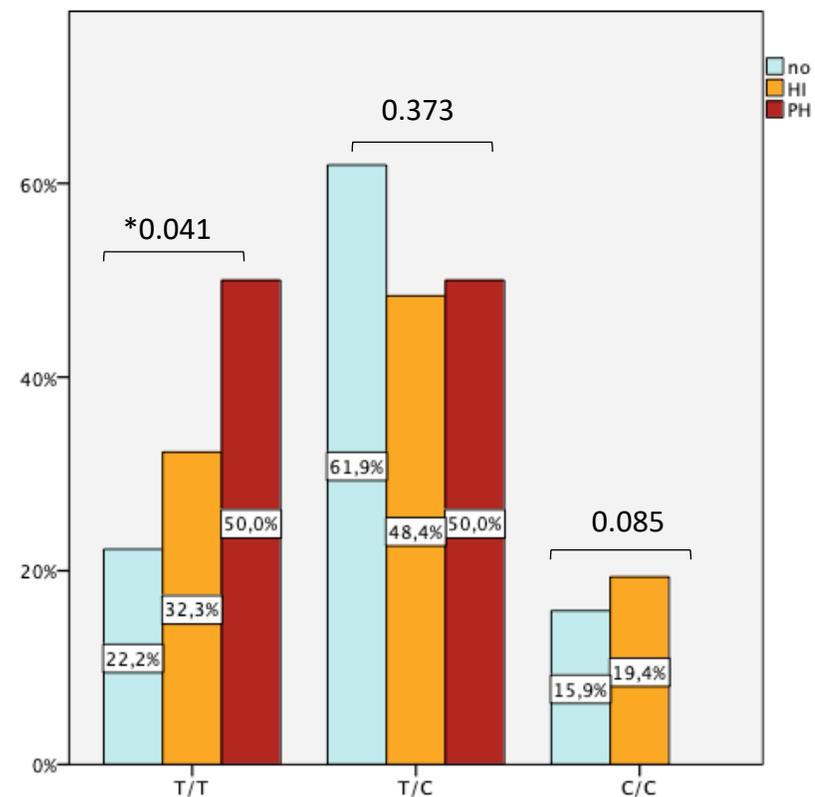
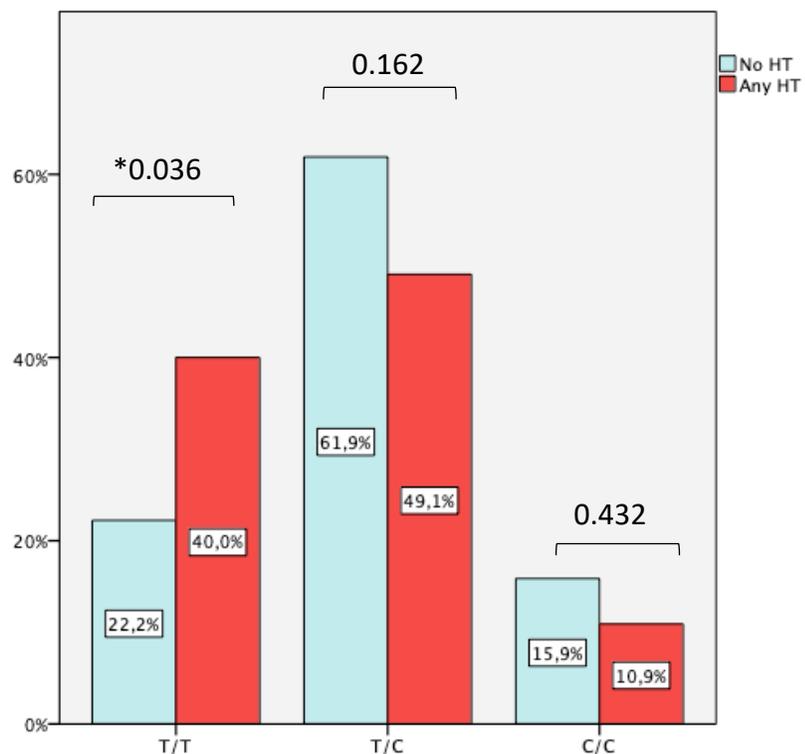
Tandem 17 (14.4%)



TH sintomática- 13 (11%)



1. Relación entre polimorfismo 786 NOS3 y TH y subtipos

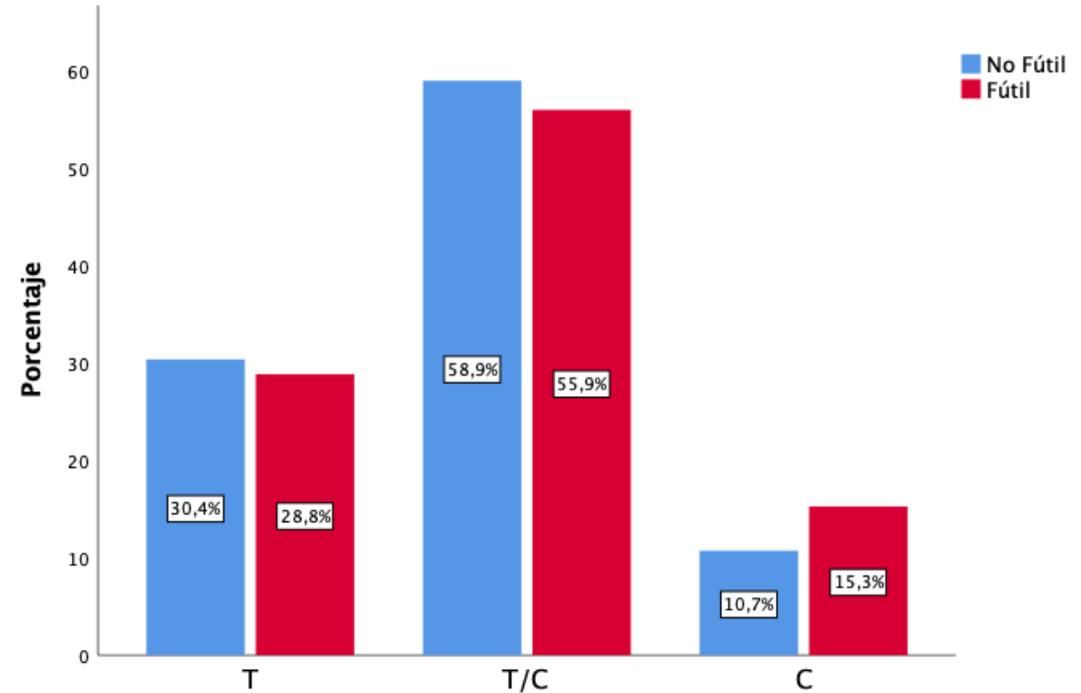


	Total	Non- HT	Any HT	p value	aOR (IC 95%)	P value
N (%)						
TT, n (%)	36 (30.5)	14 (22.2)	22 (40.0)	0.036	4.33 (1.33-14.1)	0.015
T/C, n (%)	66 (55.9)	39 (61.9)	27 (49.1)	0.162		
CC, n (%)	16 (13.6)	10 (15.9)	6 (10.9)	0.432		

Análisis multivariante incluyendo Rankin previo, gravedad del ictus (NIHss), uso de Fbiv, cambios isquémicos precoces en TAC (ASPECTs), buen estado de colaterales (escala Tan), glucemia al ingreso y tiempo inicio-recanalización con TH como variable dependiente.



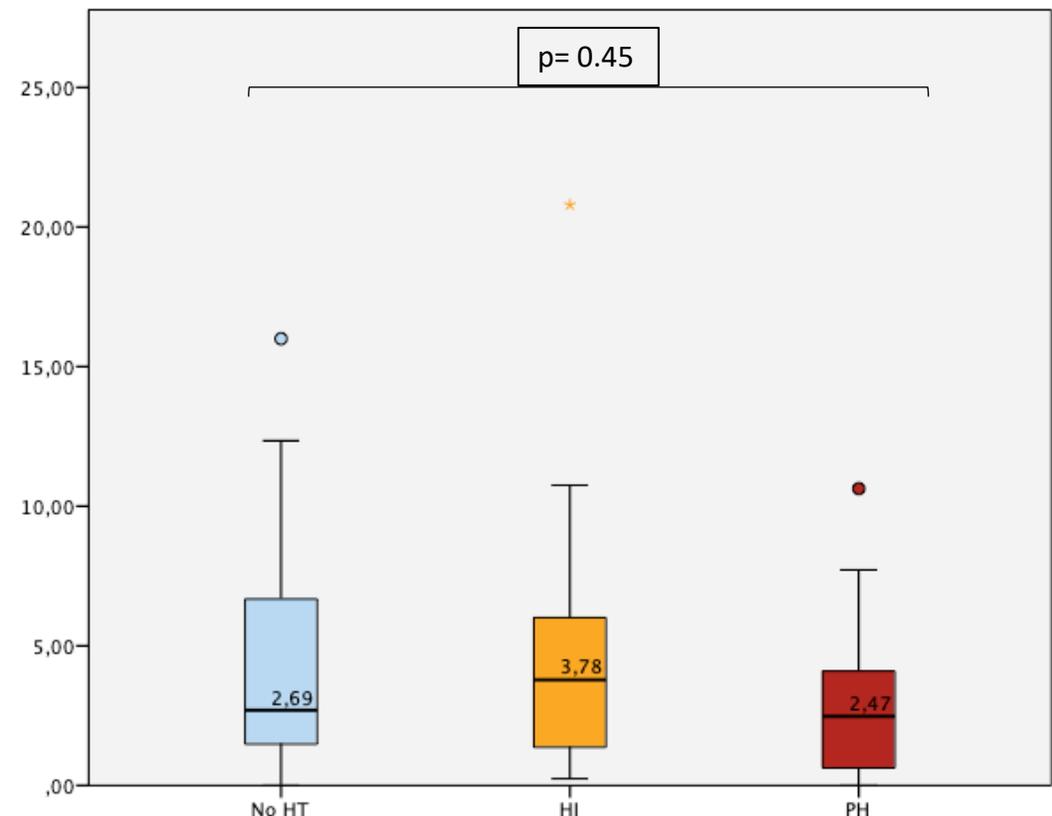
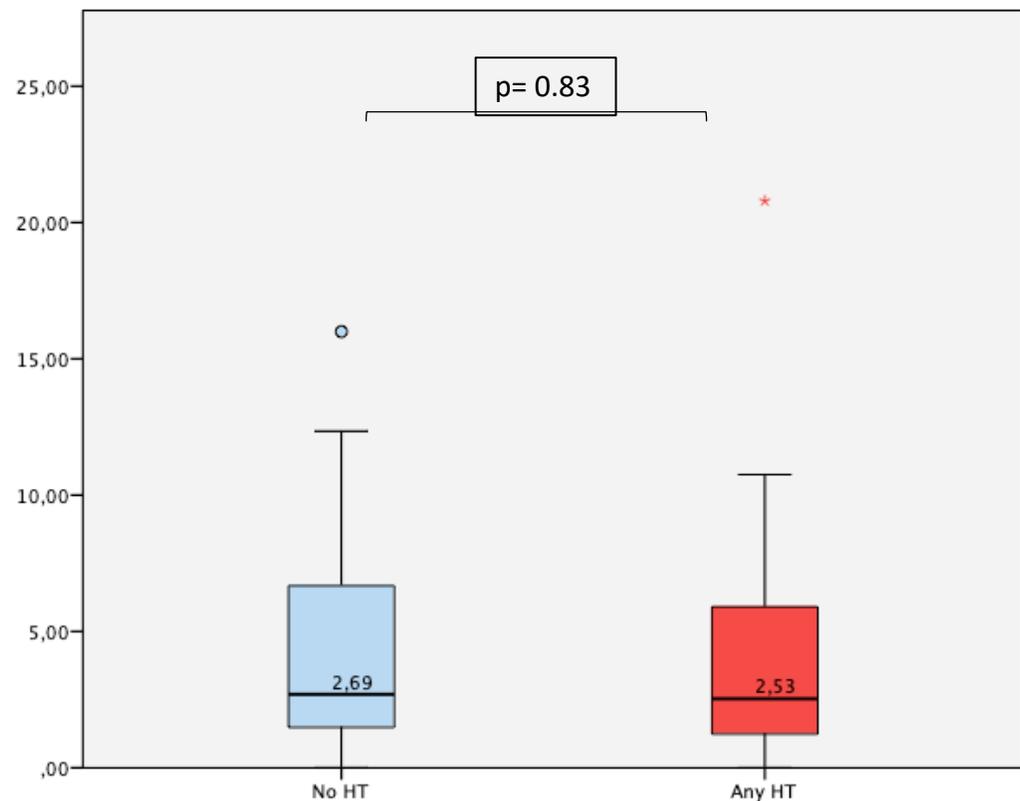
Relación entre polimorfismo 786 NOS3 y Recanalización fútil



	Total	Non- RF	RF	p value
N (%)				
TT, n (%)	34 (29,6)	17 (30.4)	17 (28.8)	
T/C, n (%)	66 (74.4)	33 (58.9)	33(55.9)	
CC, n (%)	15 (13.0)	6 (10.7)	9 (15.3)	0.77

No relación entre polimorfismo 786NOS3 y recanalización fútil

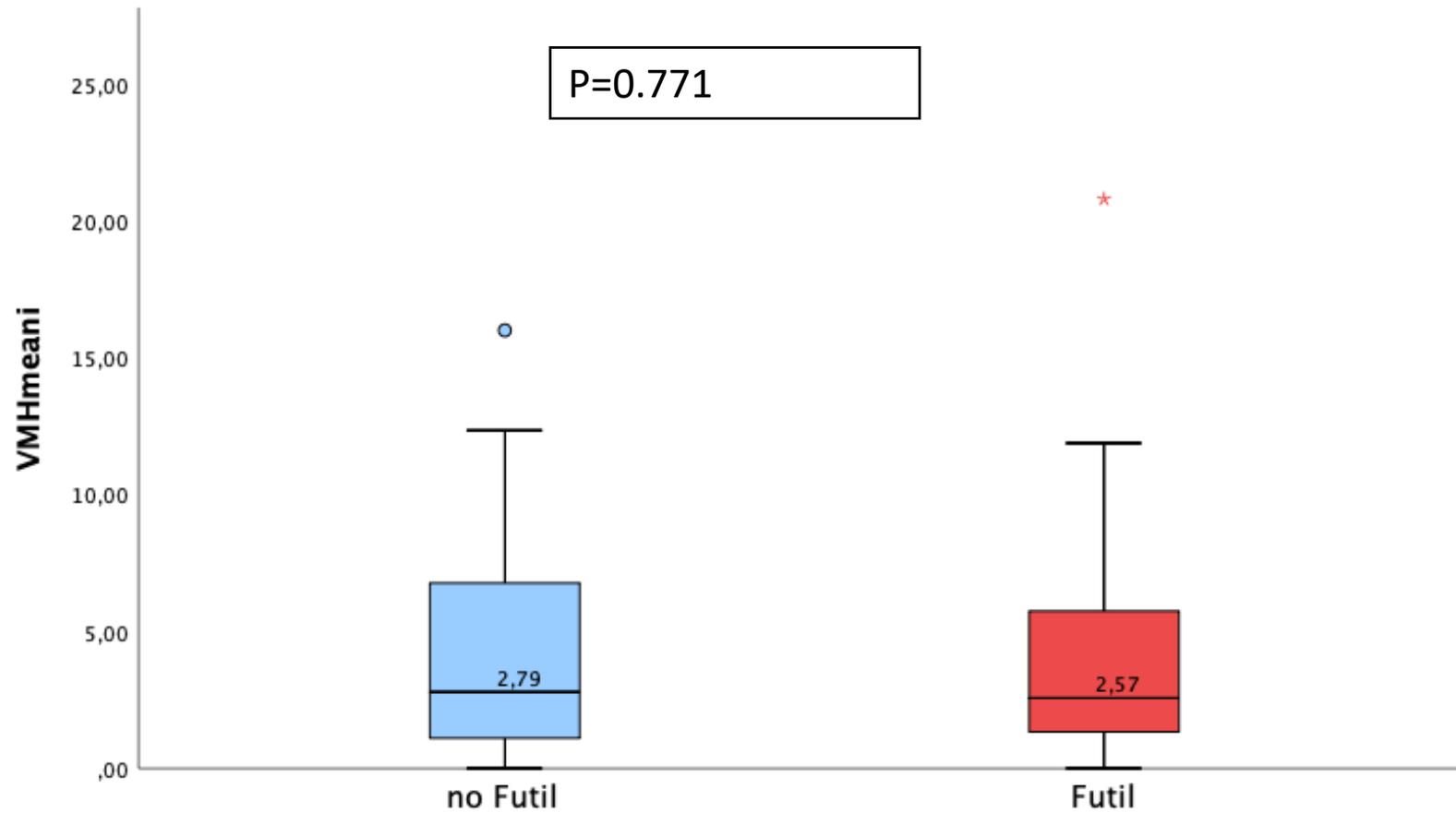
2. TH- FUNCIÓN ENDOTELIAL SISTÉMICA—VMH n=94



No relación entre VMH y transformación hemorrágica

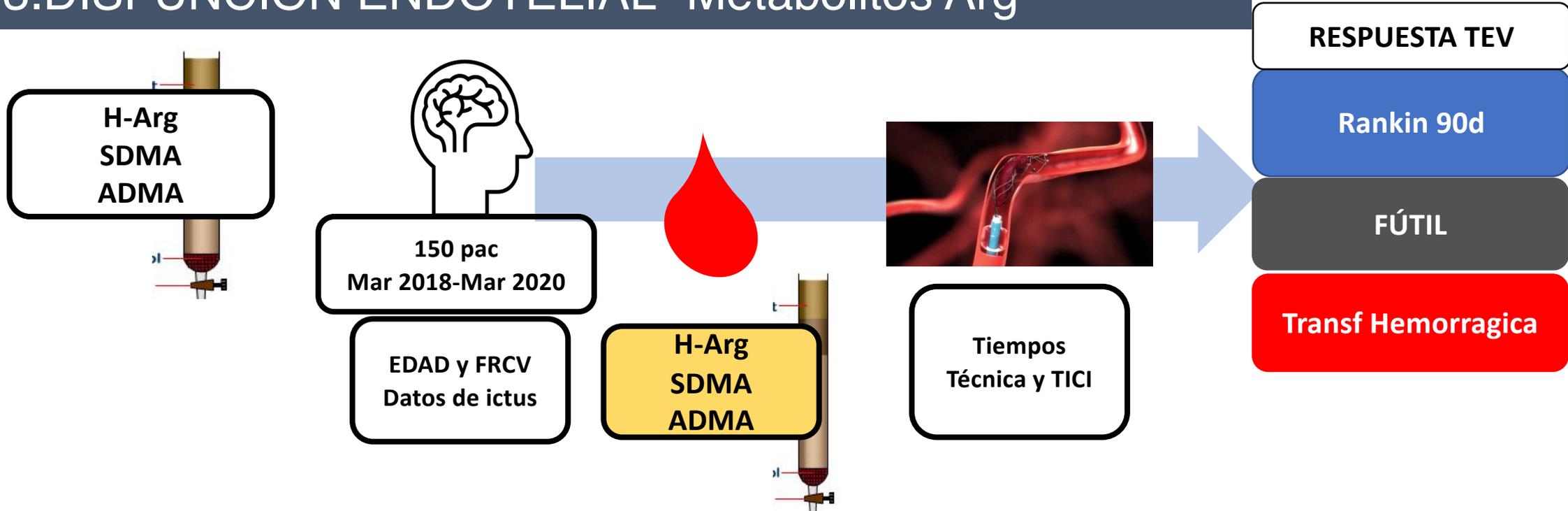


2.RF- FUNCIÓN ENDOTELIAL SISTÉMICA—VMH n=93



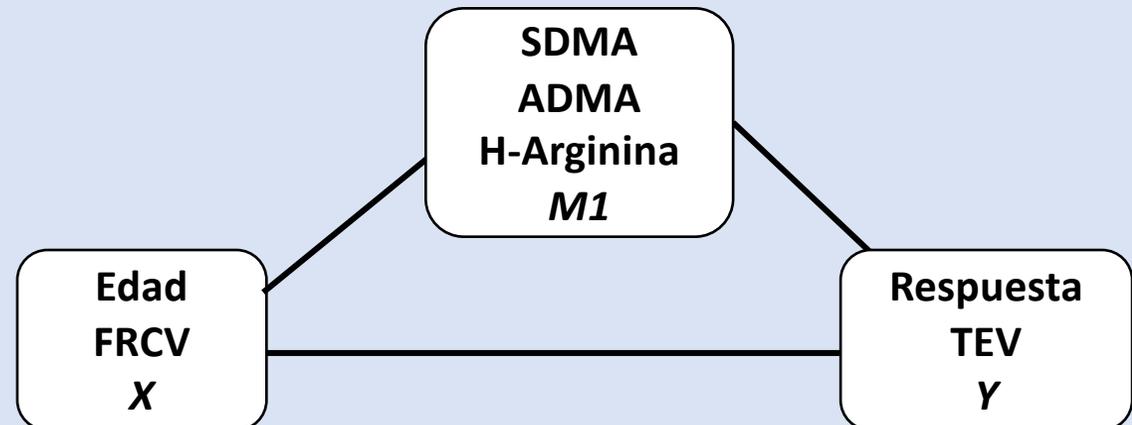
No relación entre VMH y recanalización fútil

3.DISFUNCIÓN ENDOTELIAL- Metabolitos Arg



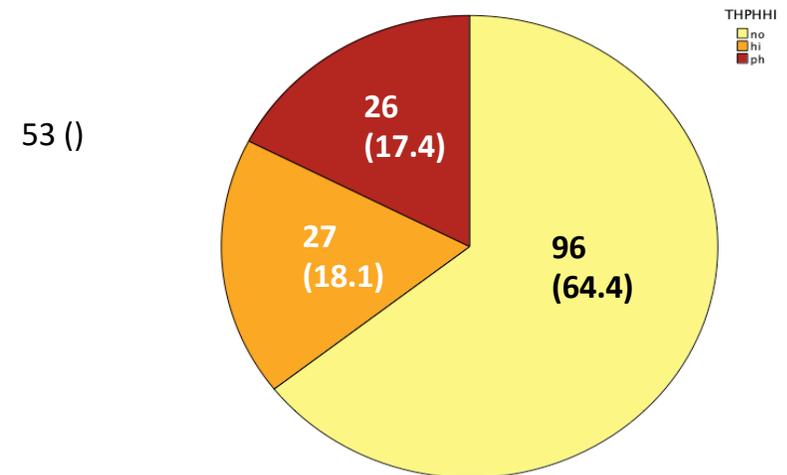
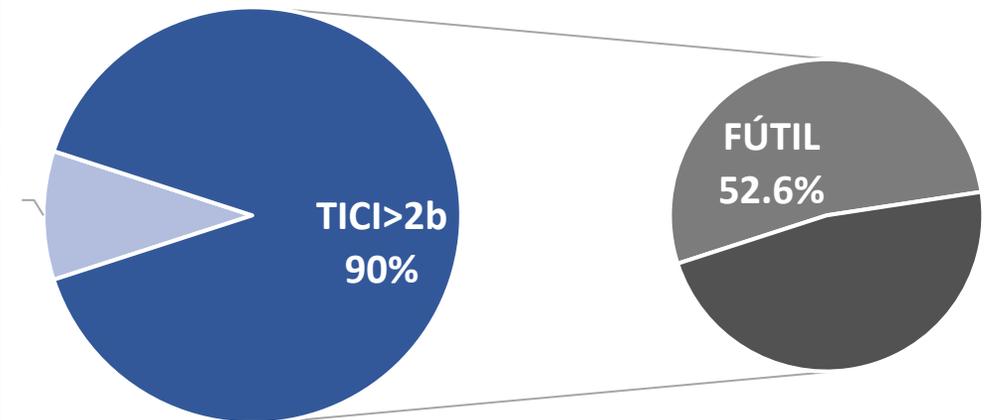
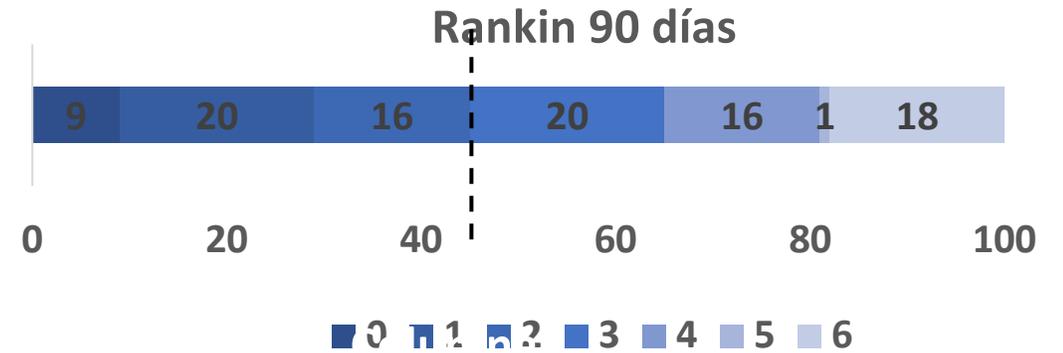
ANÁLISIS ESTADÍSTICO

- Edad y FRCV—respuesta a TEV
- H-Arg, SDMA y ADMA--- respuesta TEV
- Análisis de mediación



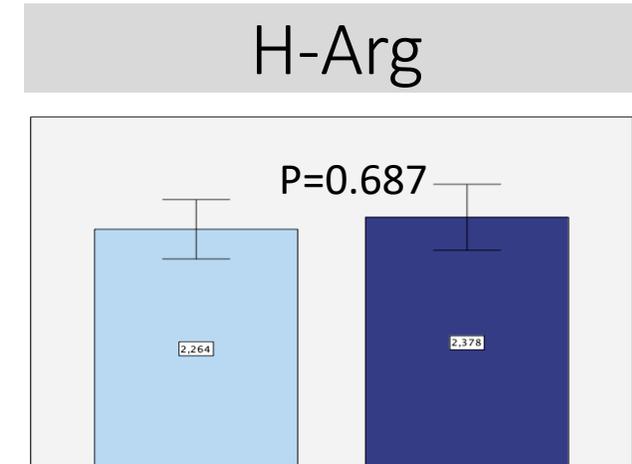
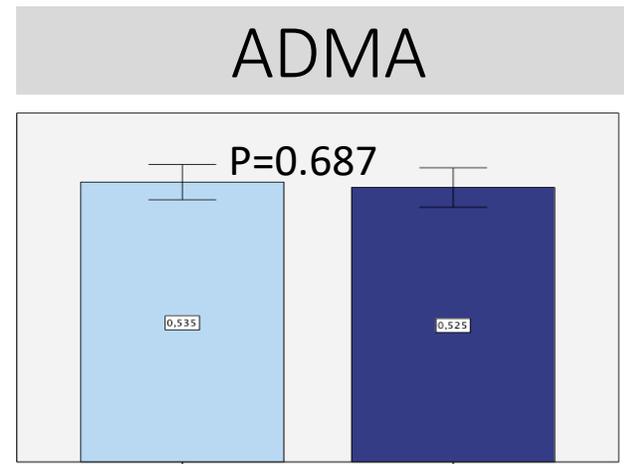
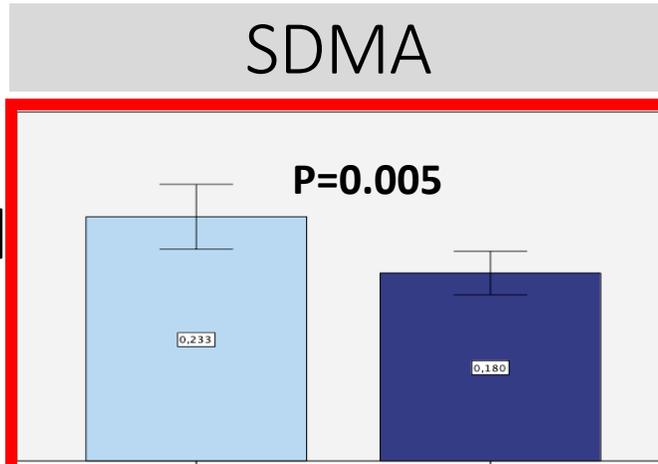
RESULTADOS

n	150
Edad, media (ds)	75.4 (11.7)
Mujer, n (%)	76 (50.7)
FRCV	
0	20 (13.3)
1	54 (36.0)
2	42 (28.0)
>=3	34 (22.7)
NIHss ingreso, mediana (RIC)	15 (8-20)
Fibrinolisis iv	41 (27.3)
TICA/ACM1, n(%)	96 (64)
Tiempo i-ingle, media (ds)	244 (186)
Tiempo I-recan, media (ds)	299 (192)
Recanalización TICI>2b, n (%)	135 (90)
Transfor Hemorr, n (%)	53 (35.3)
Autonomo 90d, n (%)	67 (44.7)

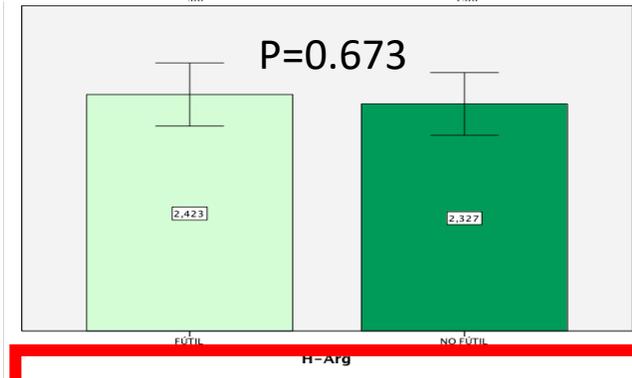
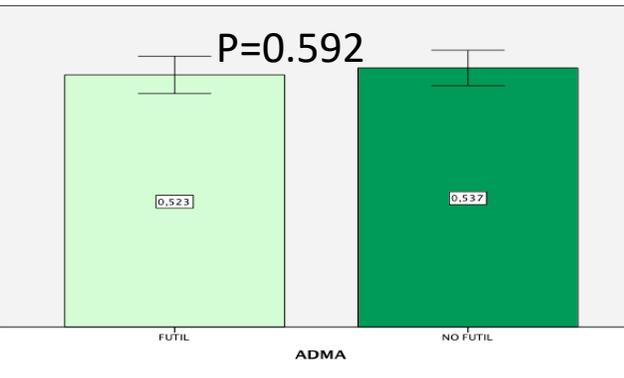
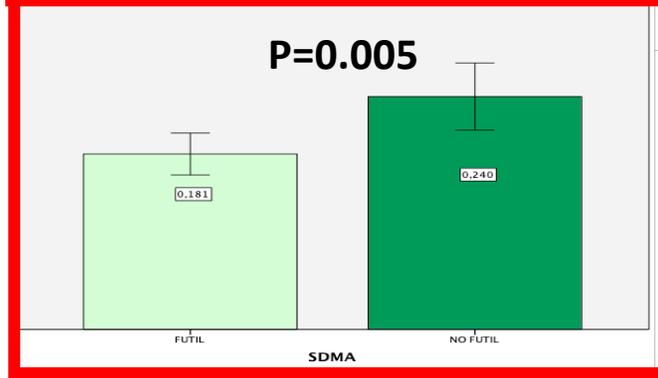


3. Metabolitos Arg y respuesta a TEV

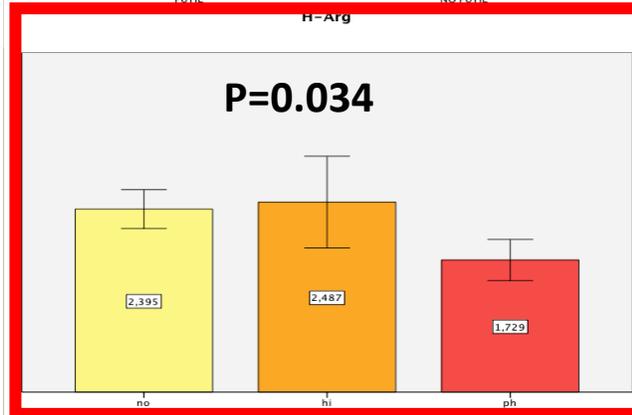
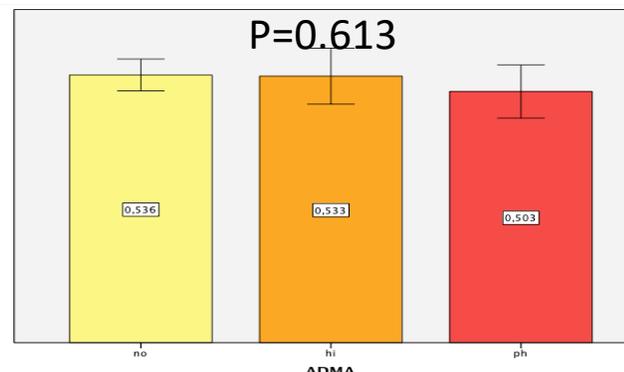
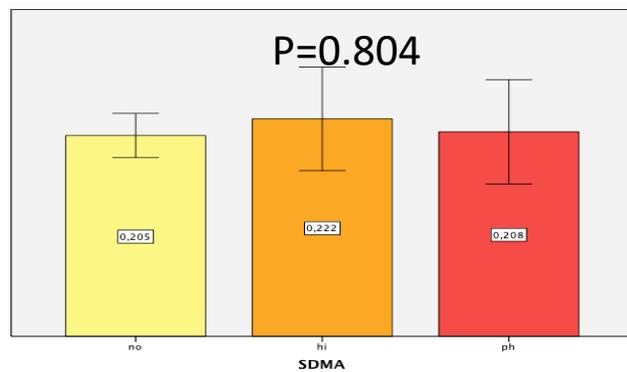
Autónomo
90d



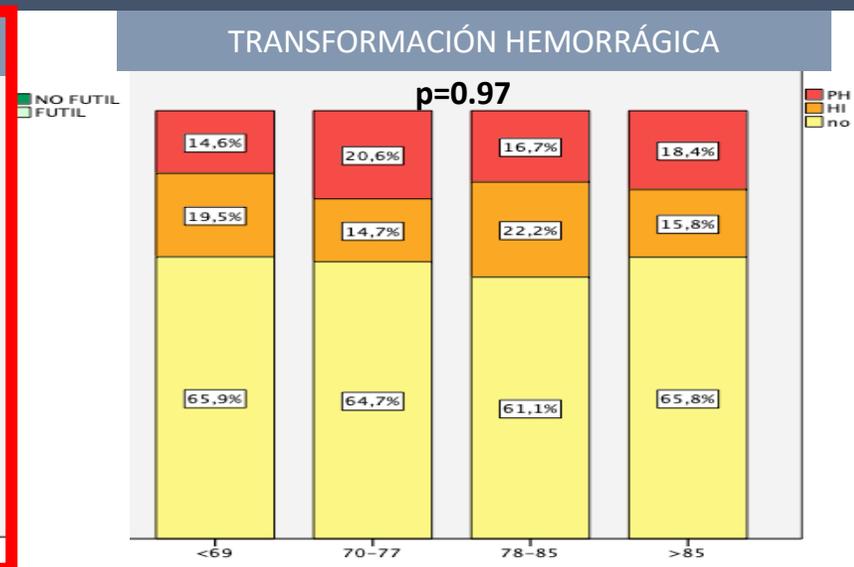
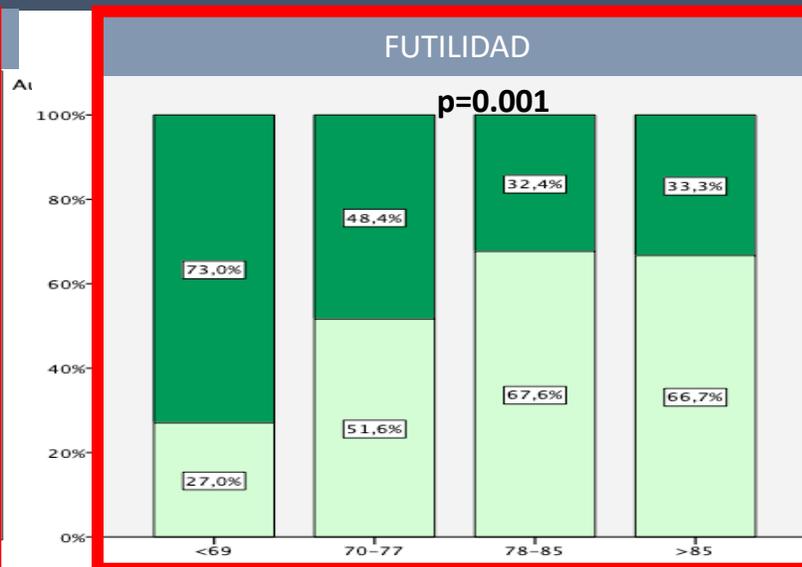
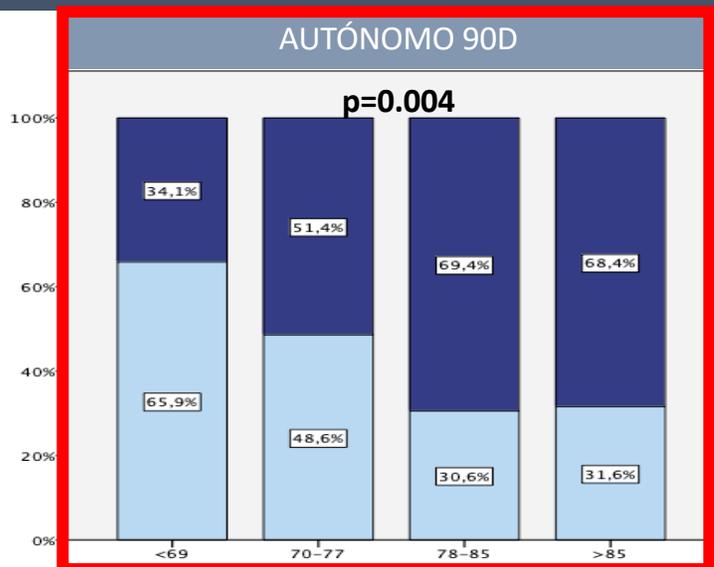
Futilidad



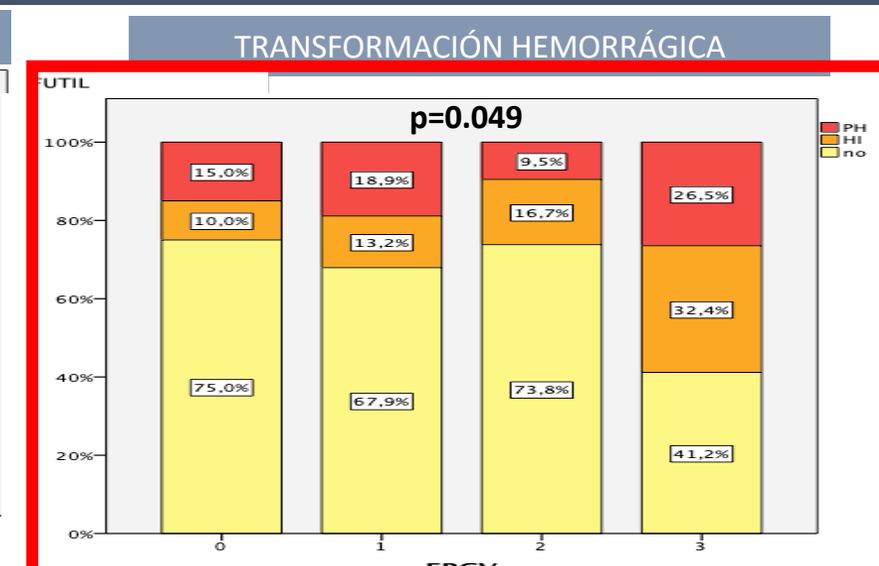
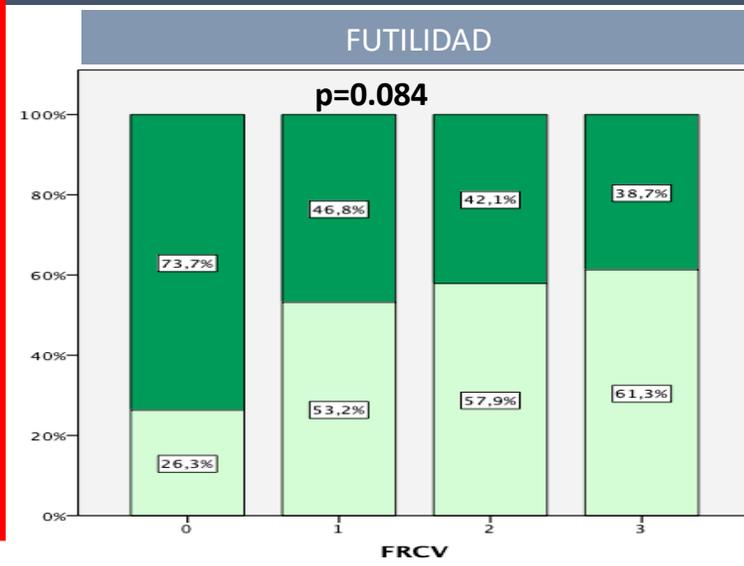
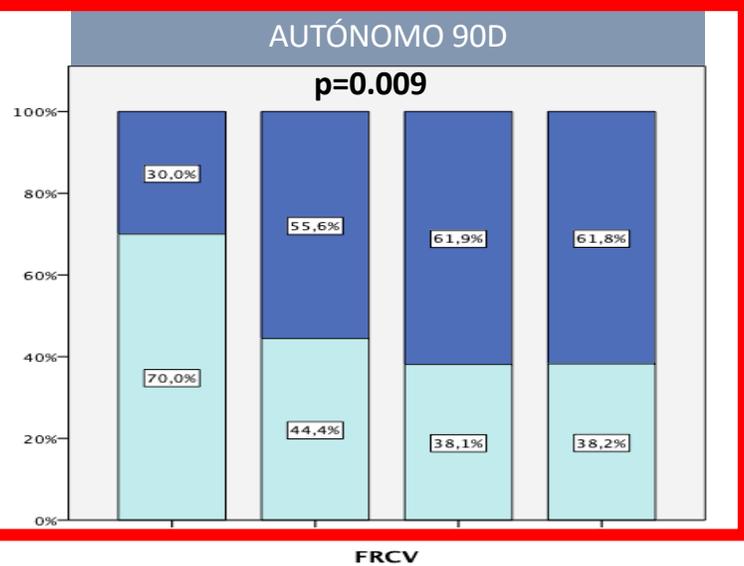
Transform
hemorrágica



Edad -- respuesta a TEV

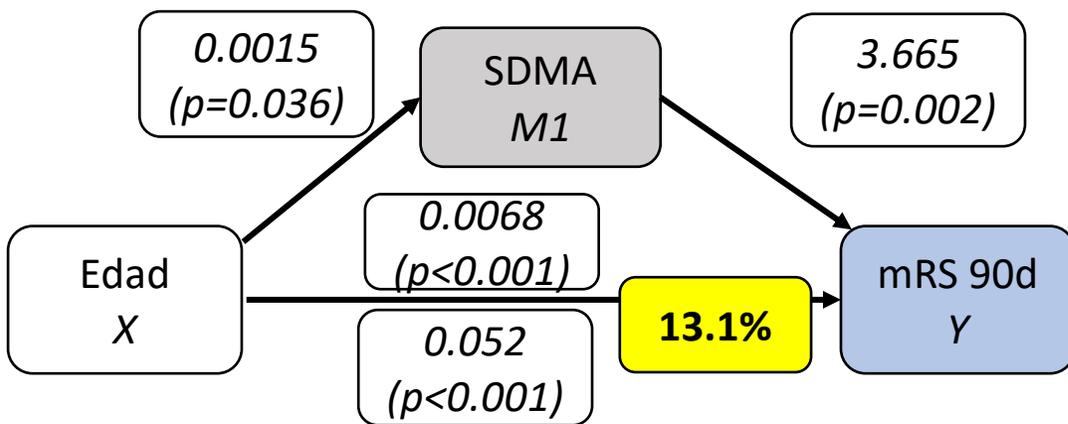
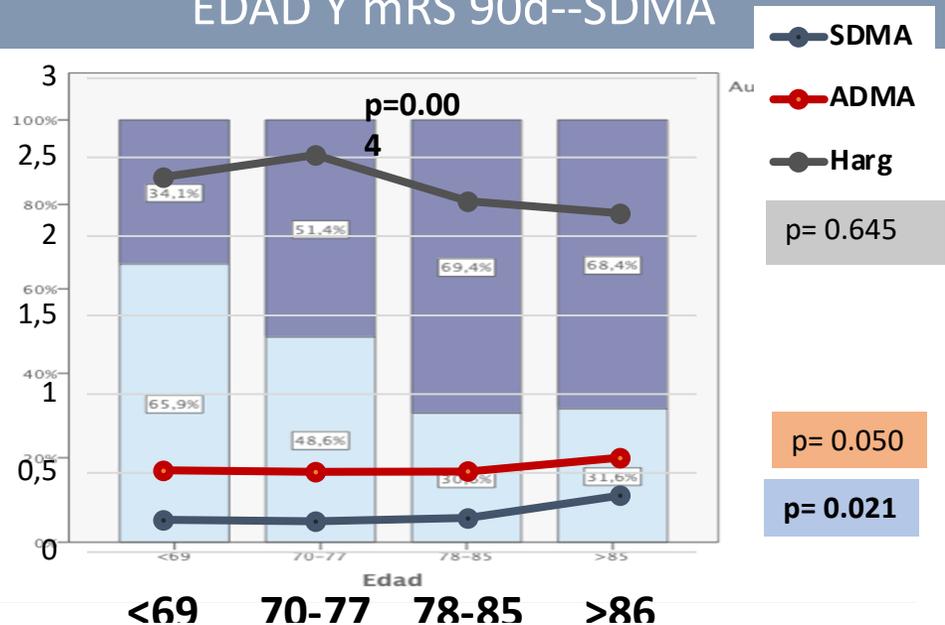


FRCV y respuesta a TEV



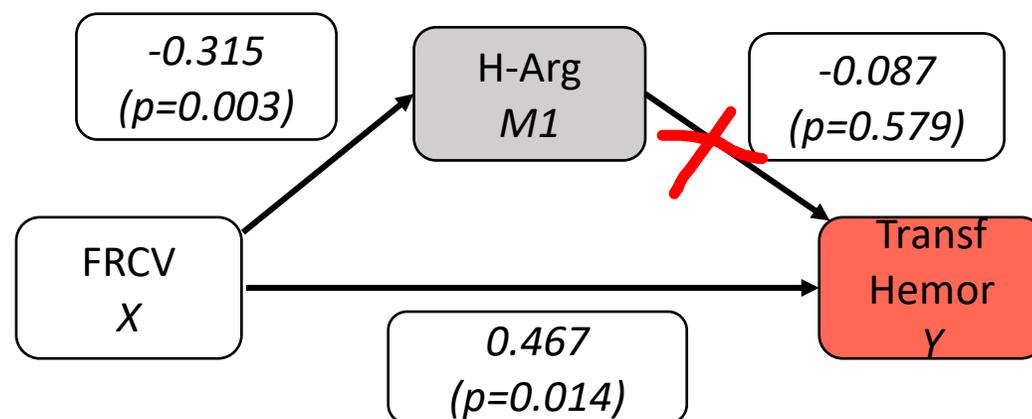
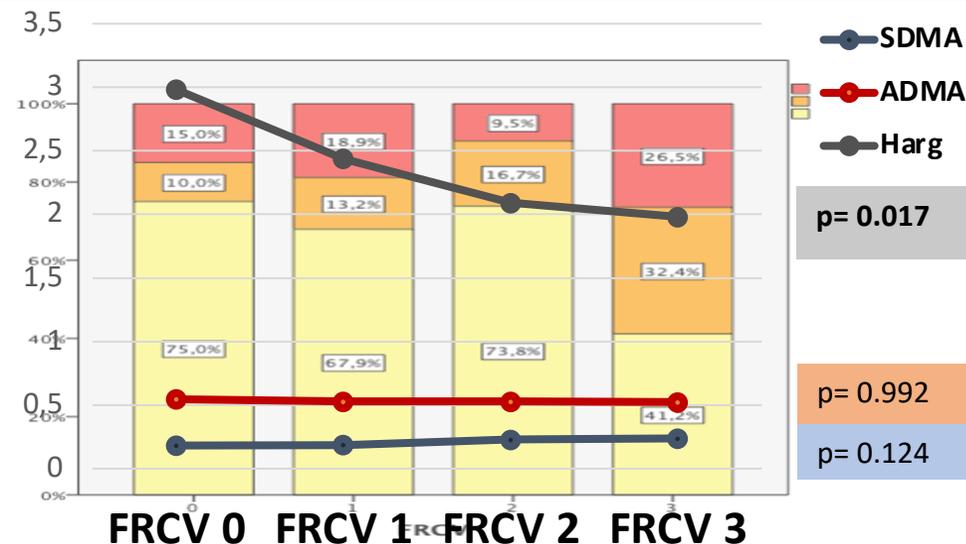
3. Metabolitos Arg y respuesta a TEV. Análisis mediación

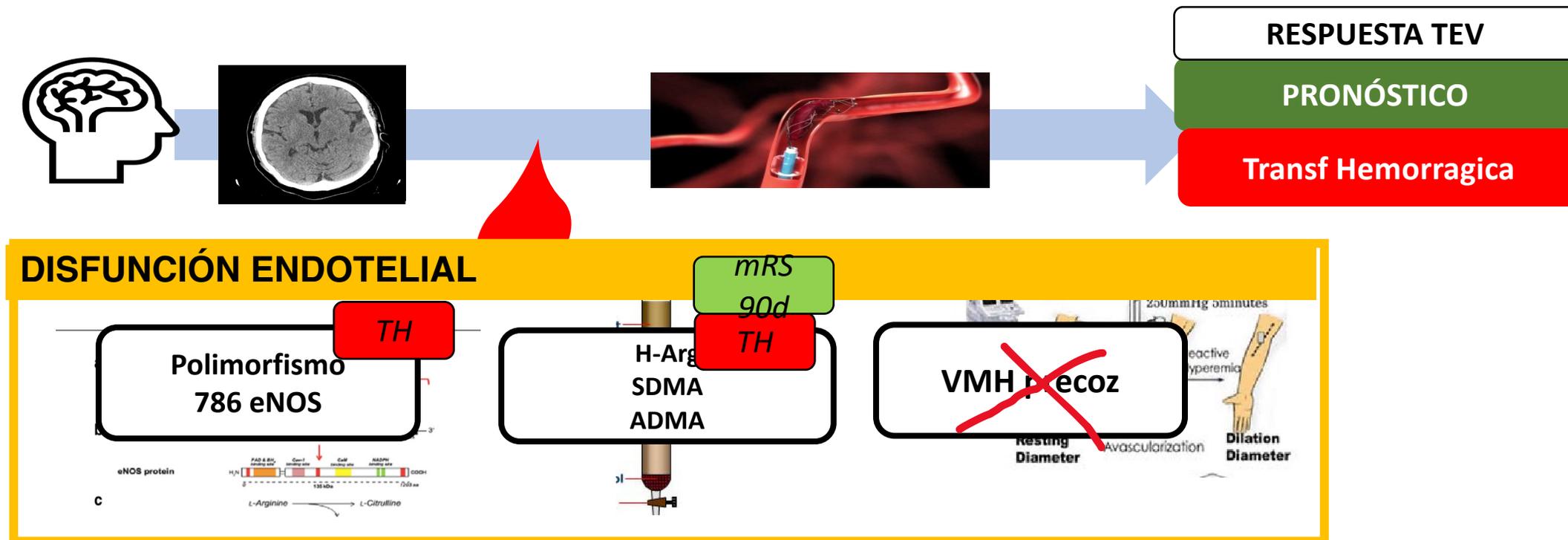
EDAD Y mRS 90d--SDMA



*ajustado por NIHs y tiempo inicio-recanalización

FRCV Y Transf Hemorrágica—H-Arg





1. Variantes genéticas que afectan a la vía del NO como el polimorfismo - 786 NOS3 podrían contribuir a la variabilidad interindividual observada en el desarrollo de TH en ictus agudo
2. No relación con la función endotelial sistémica medida mediante VMH (limitaciones)
3. H-Arg y sus derivados ADMA y SDMA median en la disfunción endotelial subyacente a una peor respuesta al TEV

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