



*Athletes with VHD:
sports eligibility & restrictions*

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Luik, Friday 26 Sept 2025

VHD in Athletes: 'Mission Impossible'?



Case: ♀ 61y – Competitive Running / Bicycling

168 cm, 56 kg, BMI 19,8

2x PreSyncope
During Bicycling

Unexplained Fatigue



“Asymptomatic Severe AS”

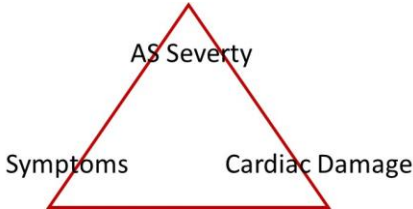
VATS AVR
“Magna Ease 25”



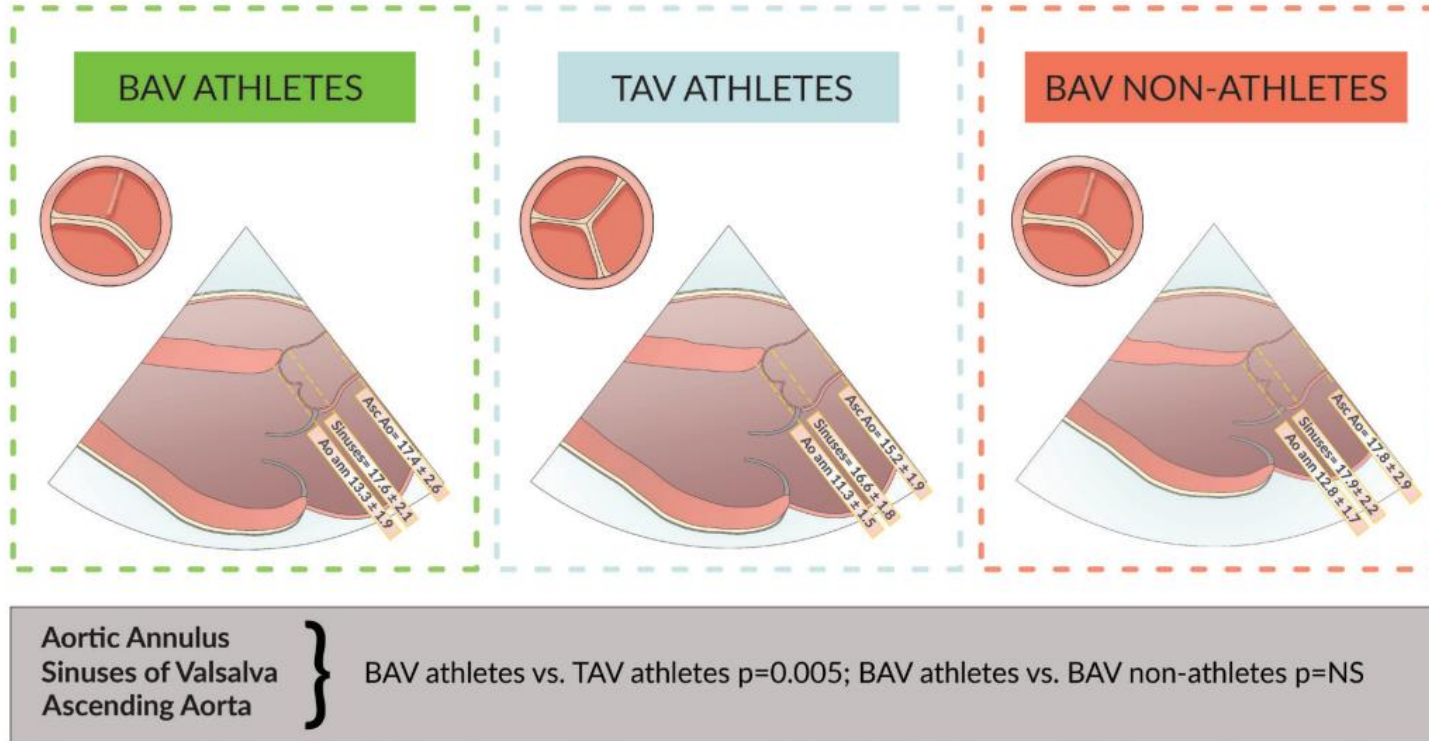
“Asymmetric Tricuspid”

	5/2020	12/2020	12/2021	6/2022	12/2022	5/2023	5/2024	1/2025	2/2025	5/2025
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PG/MG (mmHg)	71/46	68/41	77/42	79/46			81/50			21/11
AVA (cm2)	1,2	1,2	1,0	0,9			0,9			2,0
EF (%)	59		61				60			
GLS		-20,9		-22,3			-19,2			
VO2 _{max} (ml/min/kg)	33,8		37,3	35,4	35,1	35,4	35,1		25,6	35,7
Predicted (%)	137		153	146	145	146	145		108	153
mPAP/CO	1,76						1,86			
MRI	no DE		no DE				DE bas AS med Lat			
CT-Angio Ao Asc (mm)	39			38					39	
Holter	SVES, VES						SVES, VES			



SPREAD MULTICENTER INTERNATIONAL PROJECT:
SPORT PRACTICE AND ITS EFFECTS ON BICUSPID AORTIC VALVE DISEASE



- In BAV, no differences between athletes and non-athletes in AV function or dimensions
- Athletes with BAV have greater LV volumes and LV mass
- Competitive sports may cause a greater LV remodelling in BAV

Sport Practice and its Effects on aortic size and valve function in bicuspid Aortic valve Disease: a cross-sectional report from the SPREAD study

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ESC

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of Cardiology

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ESC GUIDELINES

2020 ESC Guidelines on sports cardiology and exercise in patients with cardiovascular disease

The Task Force on sports cardiology and exercise in patients with cardiovascular disease of the European Society of Cardiology (ESC)

	Aortic stenosis ^c		
	Recommendation	Class ^a	Level ^b
Severe	Participation in all recreational sports/exercise involving <u>low intensity</u> , if desired, may be considered in individuals with <u>LVEF ≥ 50%</u> and normal <u>BP response during exercise</u> .	IIb	C
	Participation in competitive or recreational sports/exercise of moderate and high intensity is <u>not recommended</u> .	III	C

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“Aortic Disease”

	Low risk
Diagnosis	<ul style="list-style-type: none"> Aorta <40 mm in BAV or tricuspid valve Turner syndrome without aortic dilatation
Advice	<ul style="list-style-type: none"> All sports permitted with preference for endurance over power sports
Follow-up	Every 2–3 years

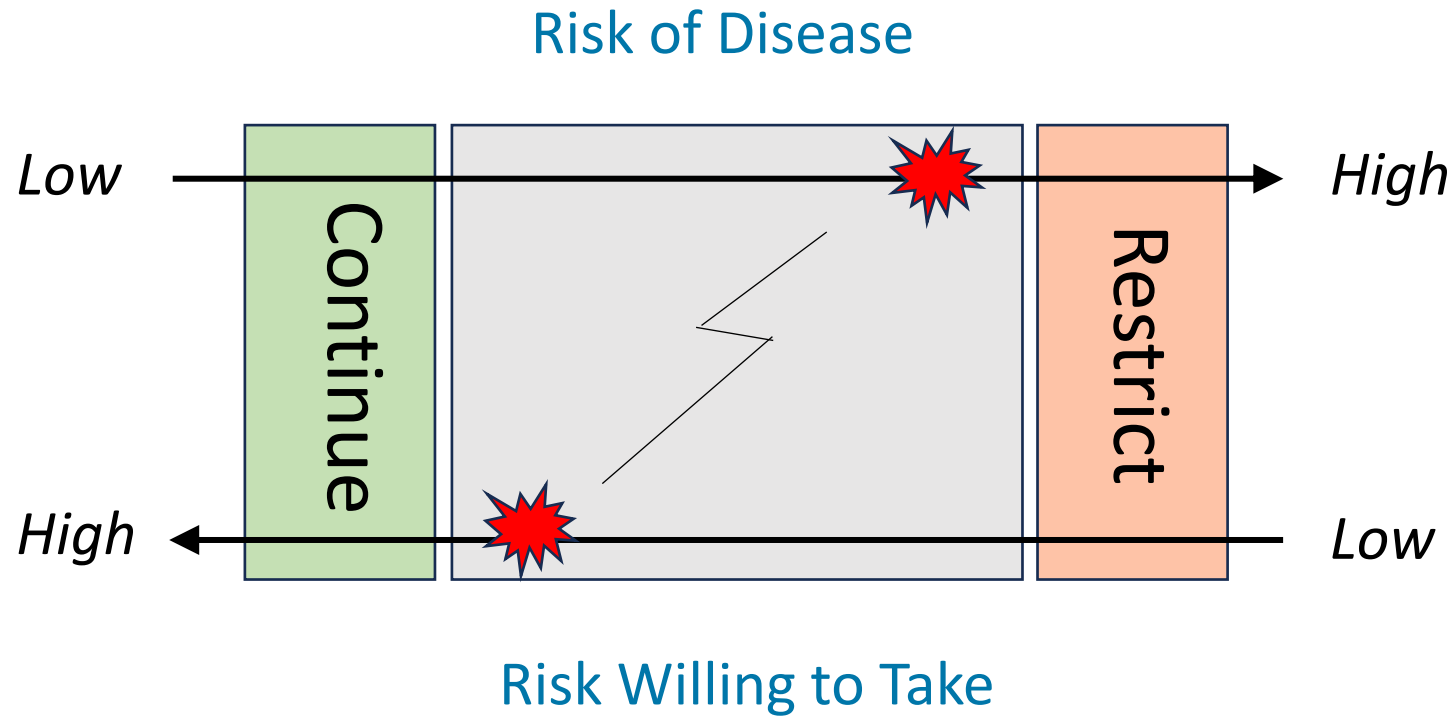
Recommendations for exercise and participation in sports in individuals with aortic pathology

Recommendations	Class ^a	Level ^b
Prior to engaging in exercise, risk stratification, with careful assessment including advanced imaging of the aorta (CT/CMR) and exercise testing with blood pressure assessment is recommended.	I	C
Regular follow-up including risk assessment is recommended.	I	C

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Decision Dilemma



Adapted from Aaron Bagish

