

Euro Heart Survey on Valvular Heart Disease

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on behalf of the Scientific Expert Committee

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Euro Heart Survey on VHD Inclusion Criteria

- **Age ≥ 18 years, *and***
- **Primary and significant valve disease** as defined by echocardiography :
 - AS = max. jet velocity ≥ 2.5 m/s.
 - MS = valve area $\leq 2\text{cm}^2$
 - MR = grade $\geq 2/4$
 - AR = grade $\geq 2/4$ *or,*
- **Diagnosis of suspected or definite endocarditis, *or,***
- **Previous valve intervention**

Enrollment and Data Analysis

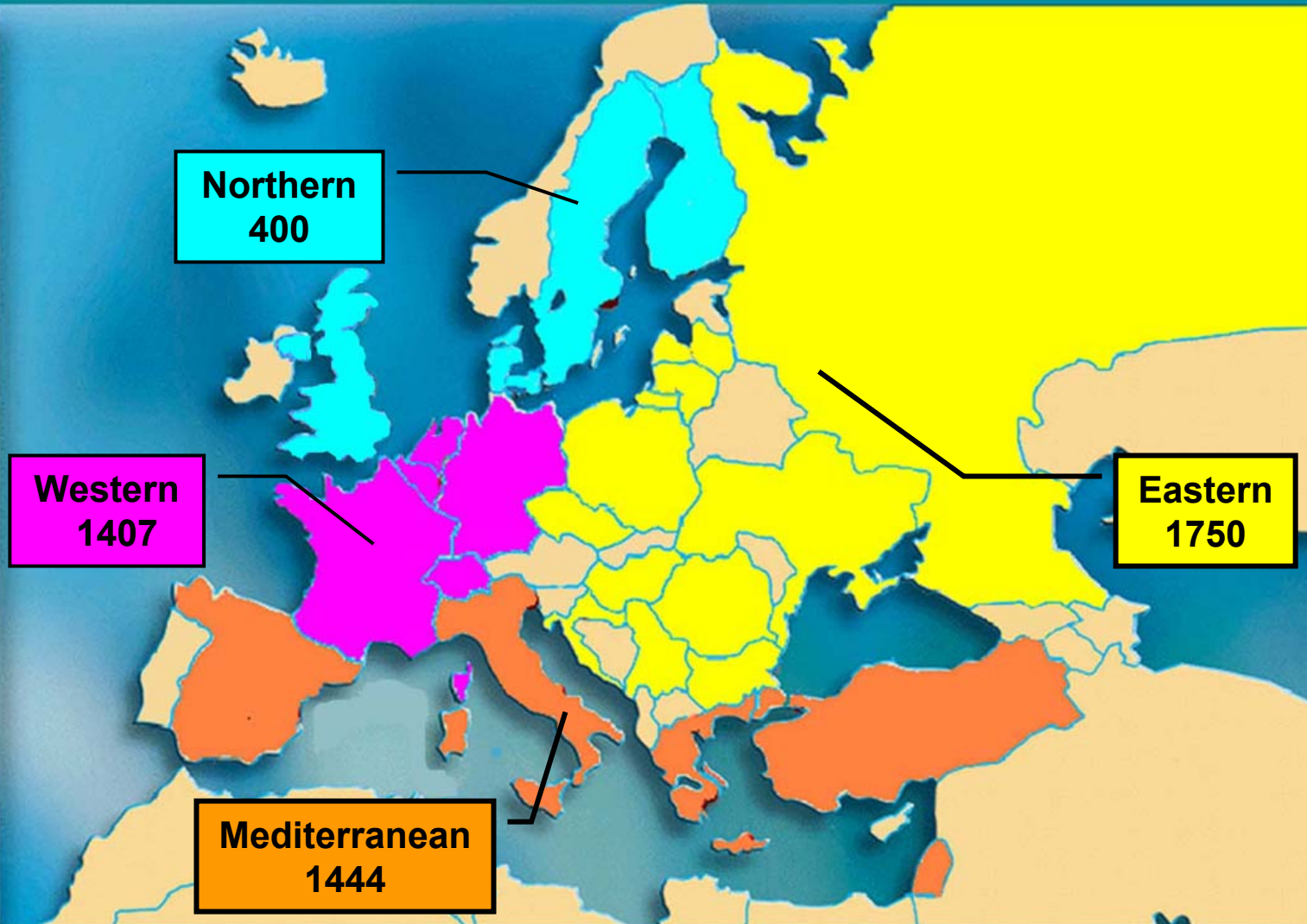
- **5001 patients included**
- **92 tertiary and community hospitals from 25 countries**
(including 76 volunteer centres)
- Electronic CRF filled by DCO and attending physician, and transmitted via Internet
- First patient in : April 1, 2001
Last patient in : July 31, 2001
Last patient out : August 31, 2001
Database locked : December 15, 2001

Euro Heart Survey on Valvular Heart Disease



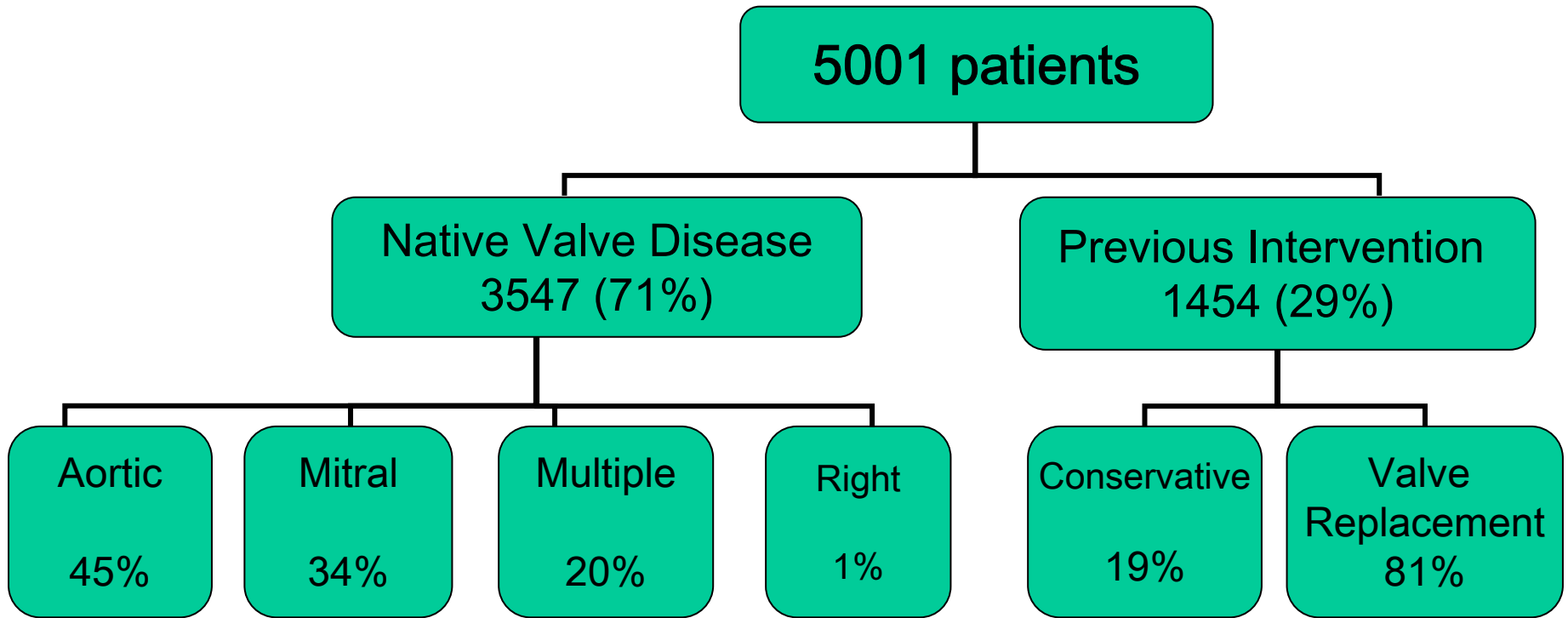
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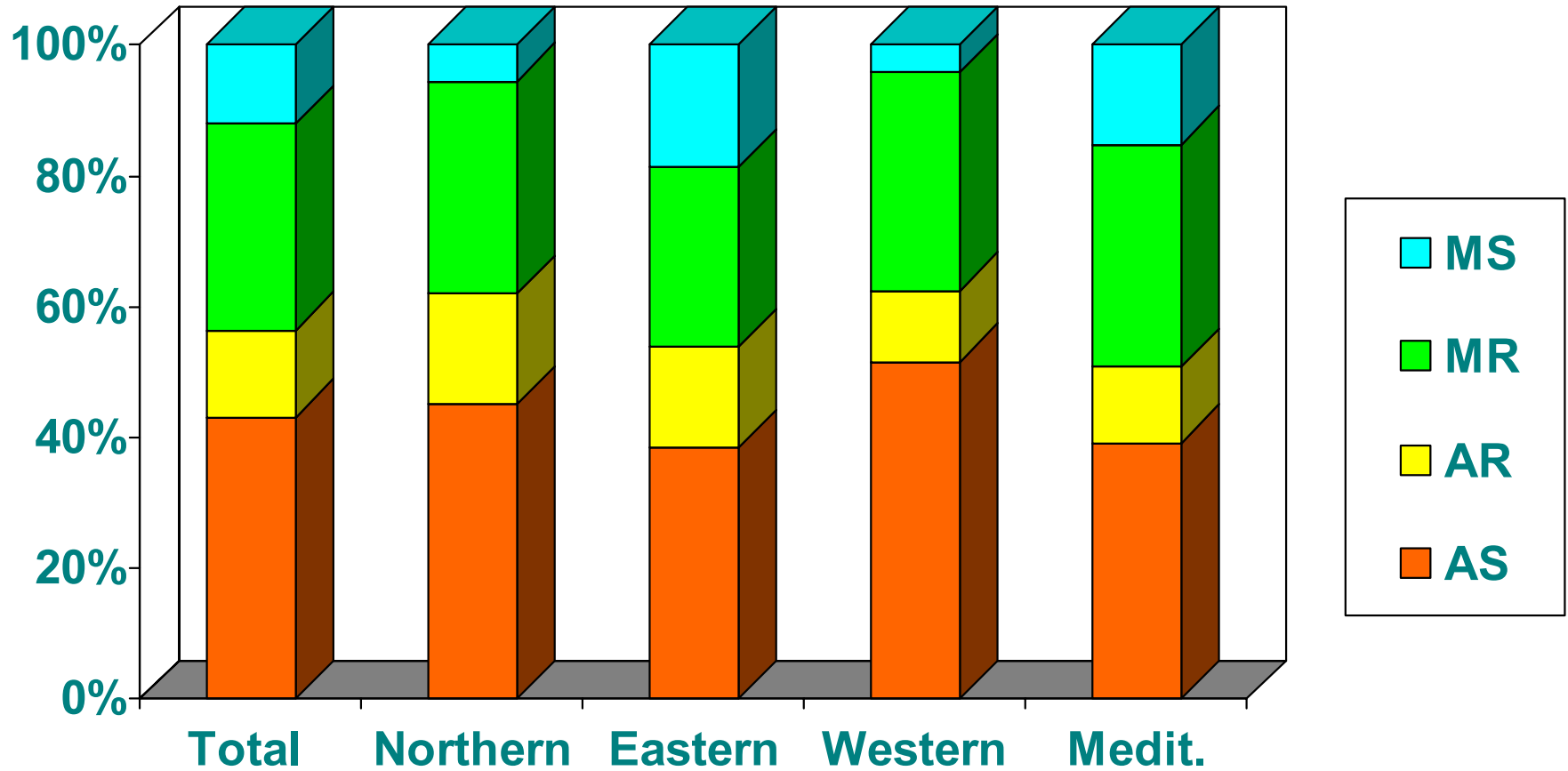


Investigating Centres

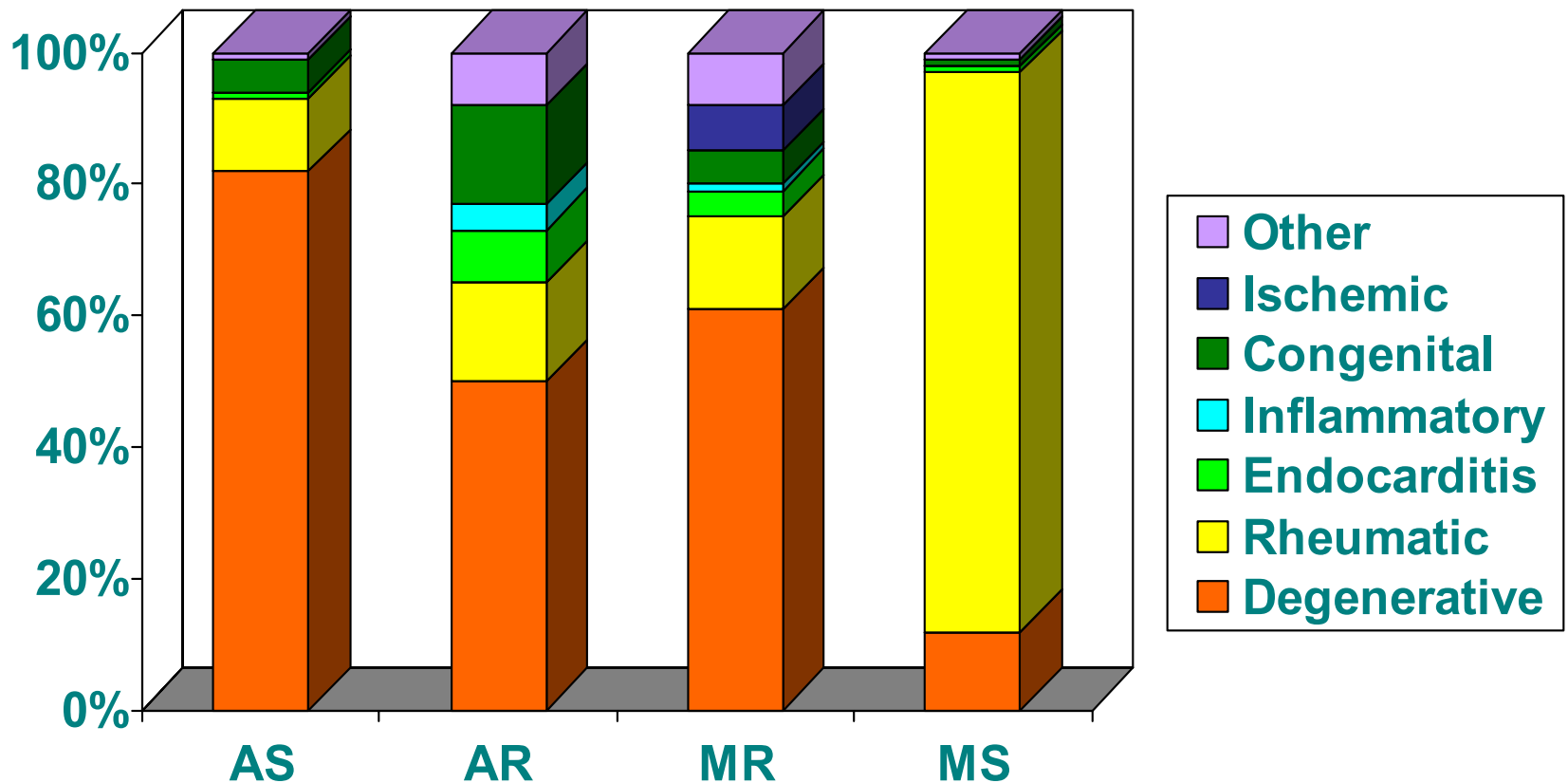
Type of VHD



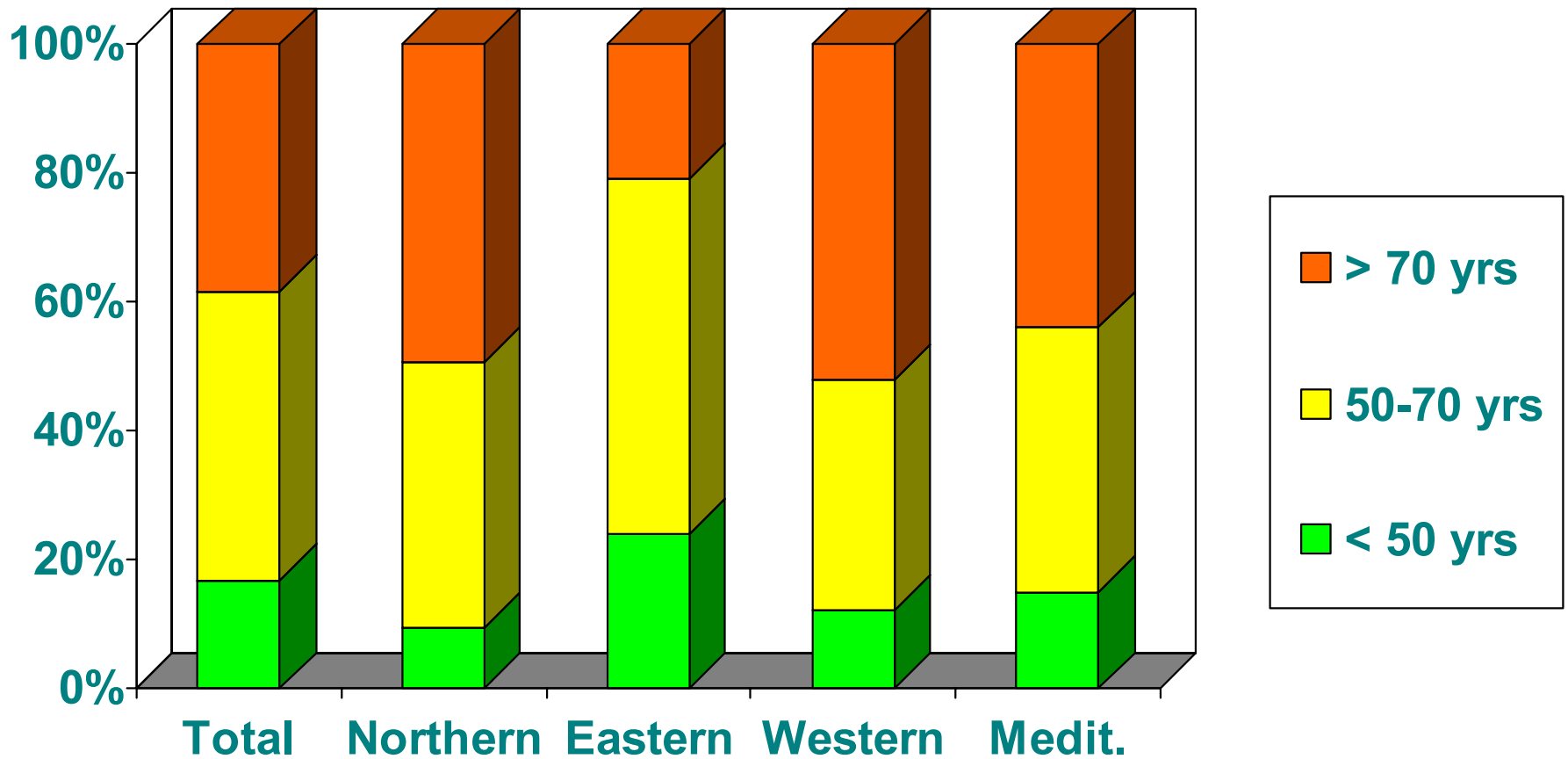
Single Native Valve Disease



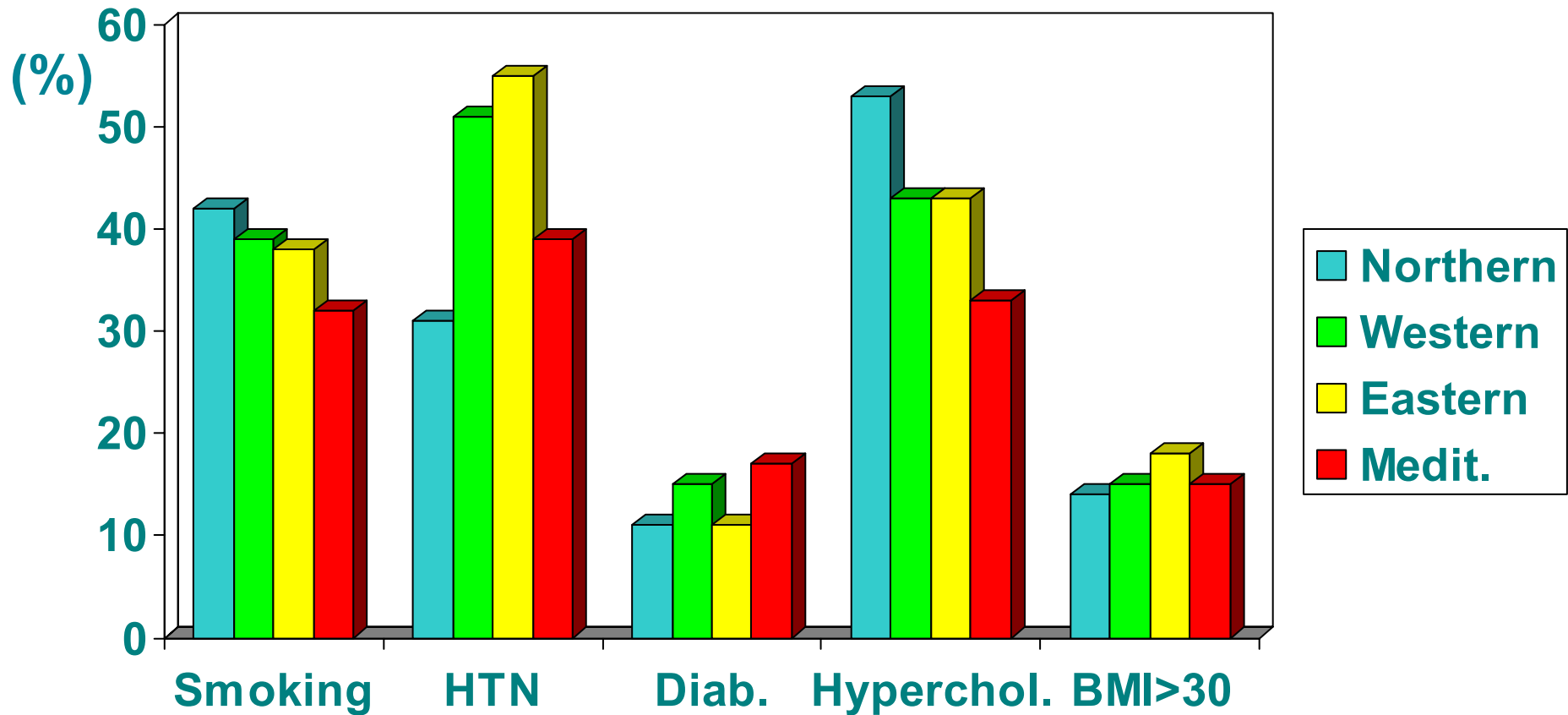
Single Native Valve Disease Etiology



Age



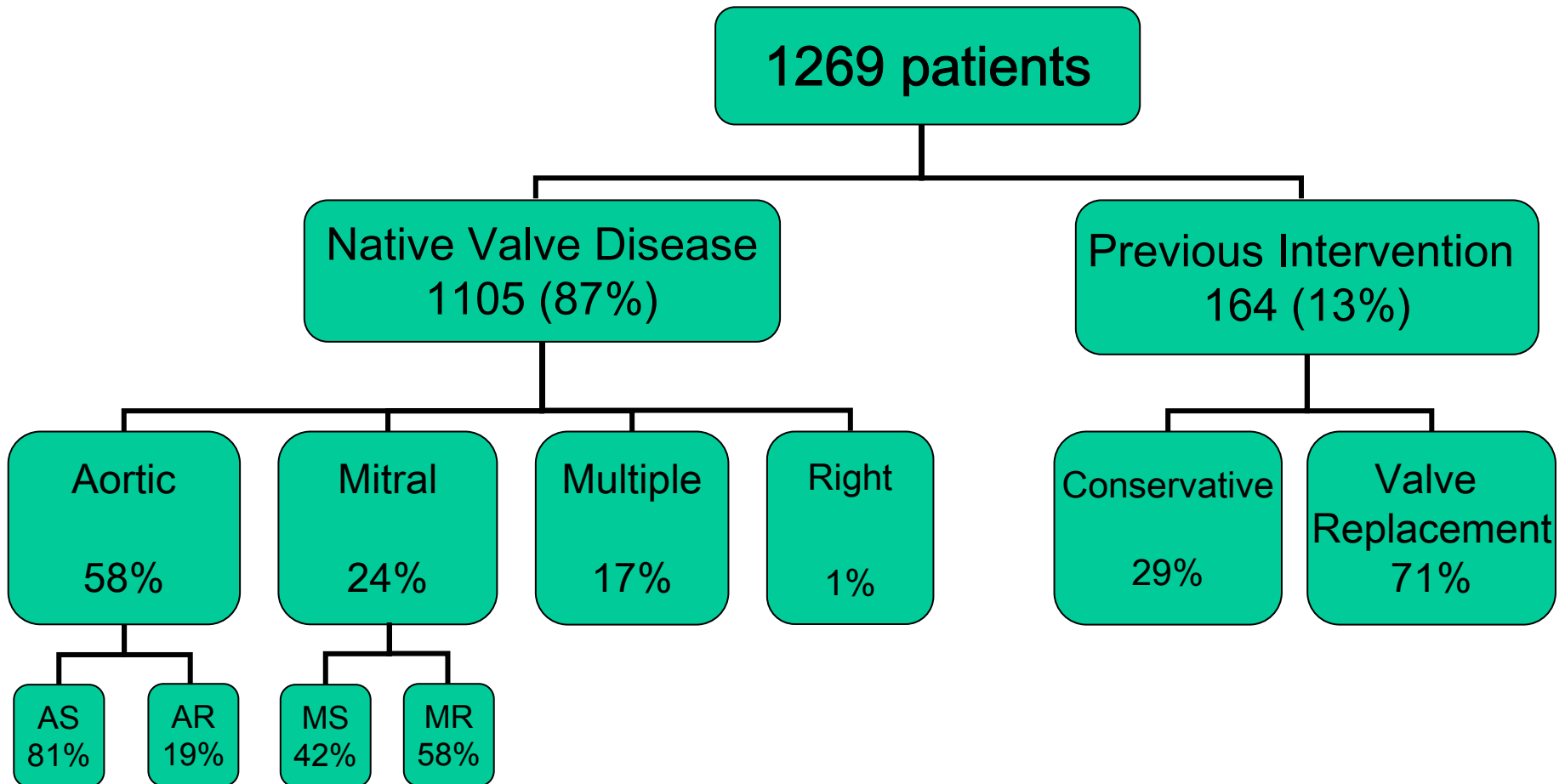
Cardiovascular Risk Factors



Coronary Artery Disease

	CAD Present (%)	1-VD (%)	2-VD (%)	3-VD (%)	Left Main (%)
Northern	57	16.5	14	26	0.5
Eastern	37	14	11.5	11	0.5
Western	40	14	11	14	1
Mediterranean	35	12.5	11	9	2.5
Total	39	14	11	13	1

Interventions Performed



Pre-operative Symptoms

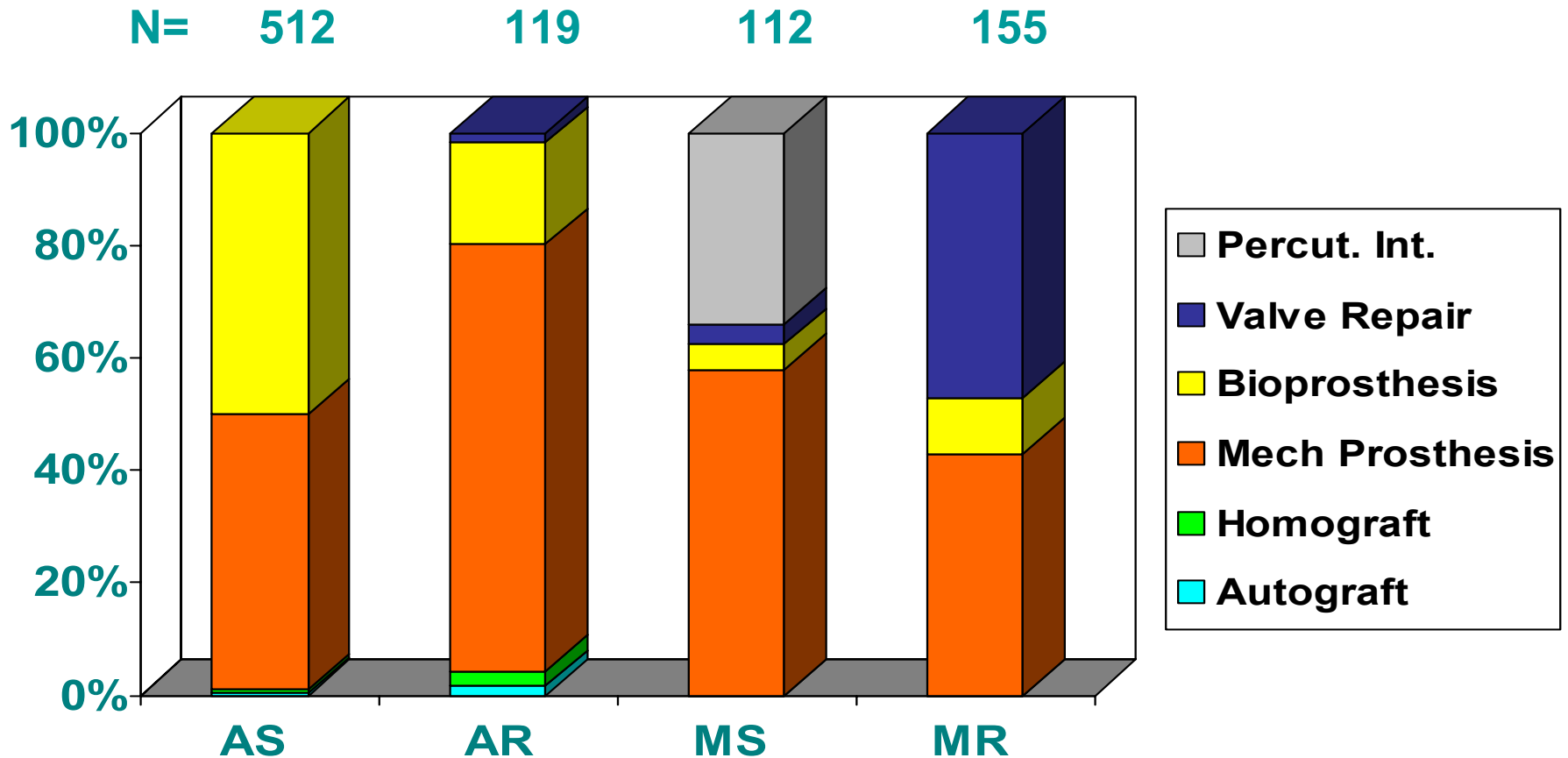
	NYHA Class (%)			
	I	II	III	IV
Aortic Stenosis	16	37	39	8
Aortic Regurgitation	21	32	36	11
Mitral Stenosis	15	21	59	5
Mitral Regurgitation	15	28	42	15

Pre-operative Investigations

Regional Variation

	TEE (%)	Stress Test (%)	Cath. (R+L) (%)	Coronary Angio (%)
Northern	36	11	46 (17)	85
Eastern	24	4.5	57 (28)	80
Western	39	9.9	72 (54)	91
Mediterranean	19	6.4	63 (30)	83
Total	29	7.5	63 (40)	85

Type of Intervention Native Valve Disease



30-Day Mortality

Comparison with Surgical Registers

	STS 2001	UKCSR 99-2000	EHS 2001
Aortic valve replacement no CABG	3.7	3.1	2.7
Aortic valve replacement + CABG	6.3	7	4.3
Mitral valve repair no CABG	2.2	2.8	0
Mitral valve replacement no CABG	5.8	6.2	1.7
Mitral valve repair or replacement + CABG	10.1	8.6	8.2
Multiple valve replacement (with or without CABG)	7.2	11.4	6.5

Infective Endocarditis

- Management during the acute phase is comparable to the most recent registries, however it can be improved :absence of blood cultures before Rx in 29% of pts.
- Prophylaxis is not adequate :
 - among the patients with IE, 50% with known VHD did not receive prophylaxis during a procedure at risk
- Education should be improved :
 - only 30 to 50% are followed by dentist
 - 50 to 75% have received education

Anticoagulation

- *Education of patients only performed in 22 % of pts.*
- *Use of combination ASA + Vit K antagonists in only 9 % of pts. after valve replacement (grade IIa in ACC/AHA guidelines)*
- *In patients with bioprosthesis or valve repair, Vit K antagonists are not continued up to the third post-op month in 60-70 % of pts. (grade I in ACC/AHA guidelines)*
- *High use of LMWH (41%) in the early post operative period*

Scientific Expert Committee

- Alec Vahanian, France, *Chairman*
- Bernard Lung, France, *Research Fellow*
- J-L. Vanoverschelde, Belgium
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