

# "That this House believes disease staging should replace categorical grading of valve lesions."

**Opposition** 

Guy Lloyd MD FESC FBSE FRCP Clinical Director for Cardiovascular Diagnostics Barts Heart Centre

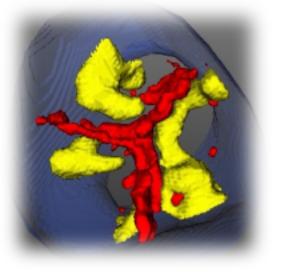


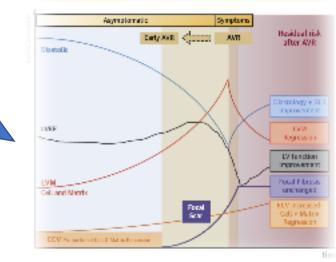


Cleveland Clinic

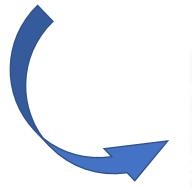


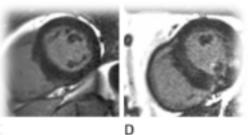


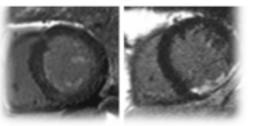


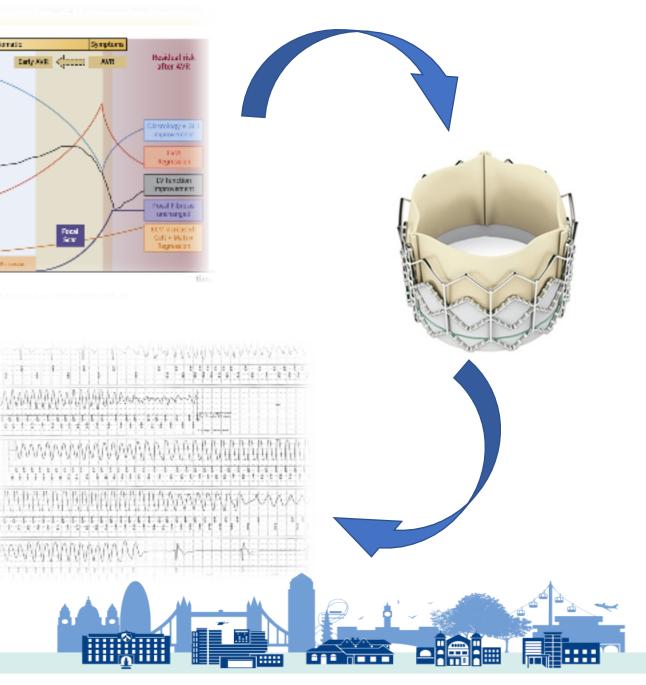


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		Stage 0	Stage 1	Singe 2	Singe 3	Stage 4
	Stages/Criteria	No Cardiac Damage	LV Damage	LA or Mitral Damage	Pulmonary Vasculature or Tricuspid Damage	RV Damage
			increased LV Mass Index >115 g/m² (Male) >95 g/m² (Female)	Indexed left atrial volume >34mL/m <sup>2</sup>	Systello Pulmonary hypertension 280 mmhg	Moderate-Severe right ventricular dyafunction
	Echocardiogram		E%' >14	Moderate-Severe mitral regungitation	Moderate-Severe tricuspid regurgitation	
			LV Ejection Fraction <50%	Aatal Florillation		

#### The Proposition

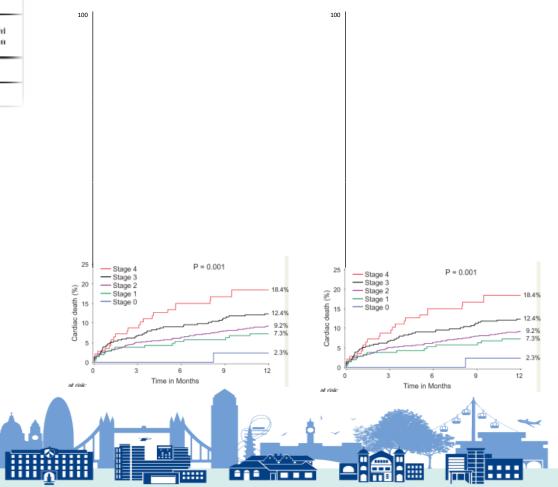
#### Aortic Stenosis Grading and Staging Classification

Grade/Stage	Stage 0	Stage 1	Stage 2	Stage 3	Stage 4
	No cardiac damage	LV damage	LA-Mitral damage	PA-Tricuspid damage	RV damage
Grade 0					
(V <sub>max</sub> <2 m/s)					
Grade 1					
(V <sub>max</sub> 2.0-2.9 m/s; MG <20					
mm Hg)					
Grade 2					
(V <sub>max</sub> 3.0-3.9 m/s; MG 20-					
39mm Hg)					
Grade 3					
(AVA \$1.0 cm <sup>2</sup> or AVAi \$0.6					
om²/m²; V <sub>max</sub> 24.0 m/s,					
MGk40 mm Hg)					



# Staging classification of aortic stenosis based on the extent of cardiac damage

Philippe Généreux<sup>1,2,3</sup>, Philippe Pibarot<sup>4</sup>, Björn Redfors<sup>1,5</sup>, Michael J. Mack<sup>6</sup>, Raj R. Makkar<sup>7</sup>, Wael A. Jaber<sup>8</sup>, Lars G. Svensson<sup>8</sup>, Samir Kapadia<sup>8</sup>, E. Murat Tuzcu<sup>8</sup>, Vinod H. Thourani<sup>9</sup>, Vasilis Babaliaros<sup>9</sup>, Howard C. Herrmann<sup>10</sup>, Wilson Y. Szeto<sup>10</sup>, David J. Cohen<sup>11</sup>, Brian R. Lindman<sup>12</sup>, Thomas McAndrew<sup>1</sup>, Maria C. Alu<sup>13</sup>, Pamela S. Douglas<sup>14</sup>, Rebecca T. Hahn<sup>1,13</sup>, Susheel K. Kodali<sup>1,13</sup>, Craig R. Smith<sup>13</sup>, D. Craig Miller<sup>15</sup>, John G. Webb<sup>16</sup>, and Martin B. Leon<sup>1,13</sup>\*

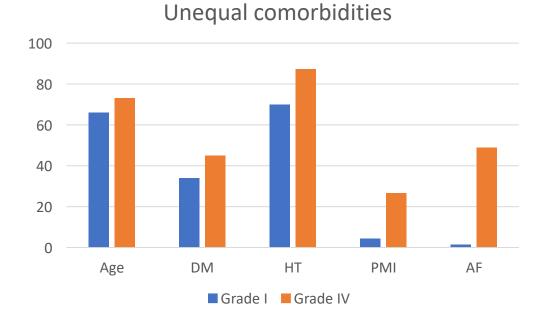


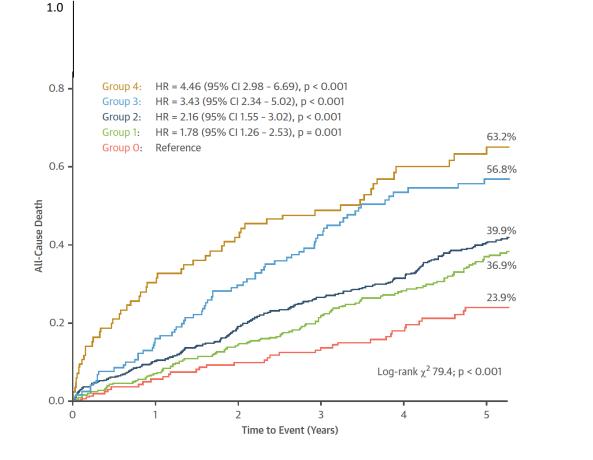
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#### ORIGINAL RESEARCH

#### Prognostic Implications of Associated Cardiac Abnormalities Detected on Echocardiography in Patients With Moderate Aortic Stenosis

Mohammed Rizwan Amanullah, MBBS,<sup>a,e</sup> Stephan Milhorini Pio, MD,<sup>b,e</sup> Arnold C.T. Ng, MBBS, PhD,<sup>C</sup> Kenny Y.K. Sin, MBBS,<sup>d</sup> Nina Ajmone Marsan, MD, PhD,<sup>b</sup> Zee Pin Ding, MBBS,<sup>a</sup> Martin B. Leon, MD,<sup>e</sup> Philippe Généreux, MD,<sup>f</sup> Victoria Delgado, MD, PhD,<sup>b</sup> See Hooi Ewe, MBBS, PhD,<sup>a</sup> Jeroen J. Bax, MD, PhD<sup>b</sup>

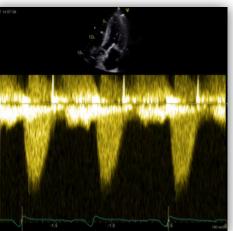


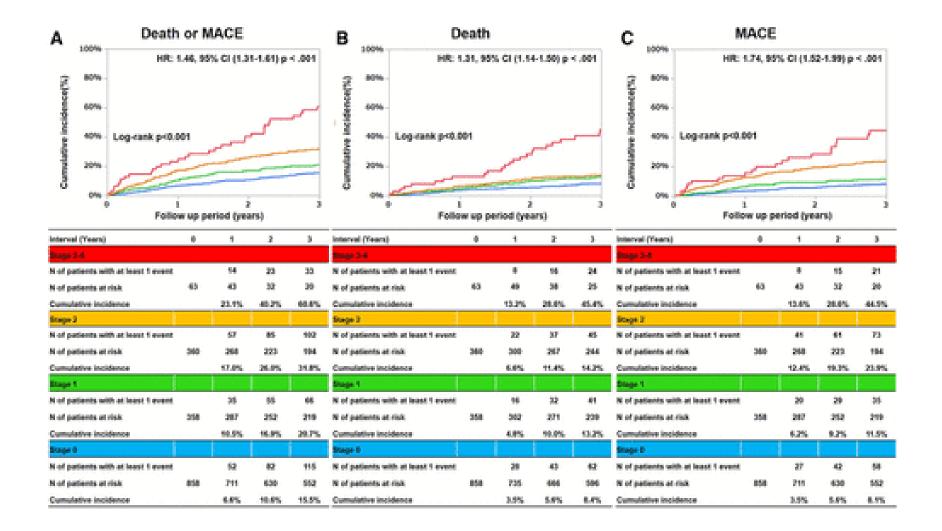




## Aortic stenosis stage 4 ...... and some stuff?







# Staging Cardiac Damage in Patients With Hypertension

Yuta Seko, Takao Kato ⊠, Masayuki Shiba, Yusuke Morita, Yuhei Yamaji, Yoshizumi Haruna, Eisaku Nakane, Tetsuya Haruna and Moriaki Inoko

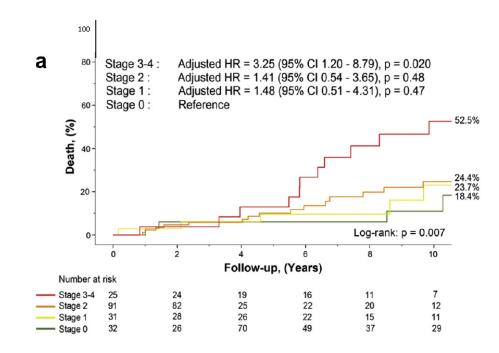


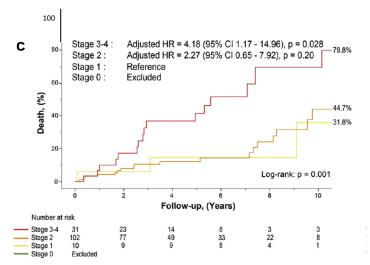
**Original Research** 

### Cardiac Damage Staging Classification in Asymptomatic Moderate or Severe Primary Mitral Regurgitation

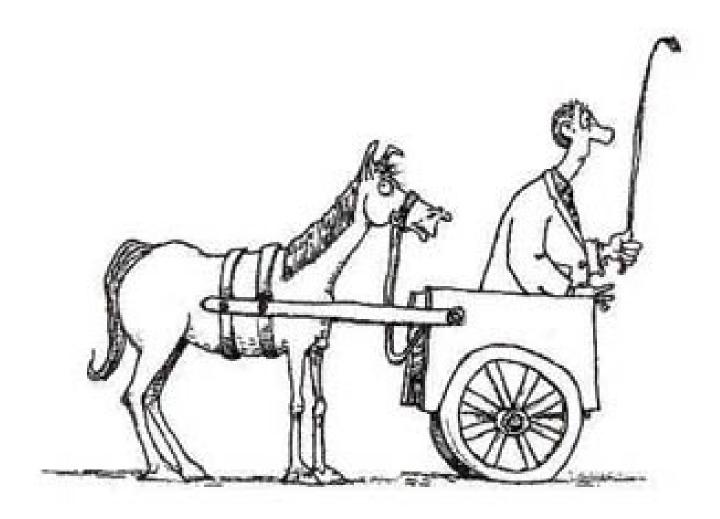
Jérémy Bernard, MSc<sup>a,1</sup>, Alexandre Altes, MD<sup>b,1</sup>, Marlène Dupuis, MSc<sup>a</sup>, Oumhani Toubal, MD<sup>a</sup>, Haïfa Mahjoub, MD, PhD<sup>a</sup>, Lionel Tastet, MSc<sup>a</sup>, Nancy Côté, PhD<sup>a</sup>, Marie-Annick Clavel, DVM, PhD<sup>a</sup>, Hélène Dumortier, MD<sup>b</sup>, Jean Tartar, MD<sup>b</sup>, Kim O'Connor, MD<sup>a</sup>, Mathieu Bernier, MD<sup>a</sup>, Jonathan Beaudoin, MD<sup>a</sup>, Sylvestre Maréchaux, MD, PhD<sup>b,\*</sup>, Philippe Pibarot, DVM, PhD<sup>a,\*</sup>

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