

12th International Symposium on Marfan, Loeys-Dietz, Vascular Ehlers-Danlos and Related Syndromes (Day 1)

Sunday, October 4, 2026

Diamante AB/Floor 0

15-minute slot = 8-minute presentation + 7-minute discussion

8:00 AM Welcome and Opening Remarks
Josephine Grima, Bart Loeys, Peter Byers

SESSION #1: Basic & Translational Studies in Vascular Ehlers-Danlos Syndrome
Moderators: Peter Byers; University of Washington; USA and Xavier Jeunemaitre; University Paris Descartes; France

8:15 AM Sex Differences in Aortopathy, Arteriopathy, and Mortality in Vascular Ehlers-Danlos Syndrome
Tiffany Lian; Oregon Health & Science University; USA

8:30 AM Femoral Artery Access for Endovascular Intervention in Vascular Ehlers-Danlos Syndrome: Outcomes, Complications, and Technical Considerations
Tiffany Lian; Oregon Health & Science University; USA

8:45 AM Beyond Collagen Deficiency: Genotype-Specific Extracellular Matrix Alterations in Vascular Ehlers-Danlos Syndrome
Apoorva Bhandari; Oregon Health & Science University; USA

9:00 AM Ciprofloxacin causes lethal arterial complications in a mouse model of vascular Ehlers-Danlos syndrome
Scott LeMaire; Geisinger College of Health Sciences; USA

9:15 AM Manufacturer-specific effects of celiprolol in vEDS mice: Implications for clinical translation
Janine Meienberg; Swiss Foundation for People with Rare Diseases; Switzerland

9:30 AM GLP-1 Analogue in Hereditary Aortopathy: Effects of Liraglutide on the Aortic Wall in a Murine Model of Vascular Ehlers-Danlos Syndrome
Máté Csonka; Semmelweis University; Hungary

9:45 AM Intraluminal pressure at aortic rupture in a mouse model of vascular Ehlers-Danlos syndrome
Roland Stengl; Semmelweis University; Hungary

10:00–10:30 AM BREAK

SESSION #2: Mechanistic and Pathogenic Studies in Animal Models
Moderators: Bart Loeys; University of Antwerp; USA and Mark Lindsay; Massachusetts General Hospital; USA

10:30 AM Key Signaling Events Linking Extracellular Matrix to Aortic Disease in Marfan Syndrome
Miguel R. Campanero; Centro de Biología Molecular Severo Ochoa; Spain

10:45 AM TREM-1 aggravates Marfan syndrome aortopathy
Luna Chetrit; Université Paris Cité, Inserm, PARCC; France

11:00 AM Perivascular inflammation is critically involved in the progression of aortic aneurysms formation in Marfan syndrome
Hiroki Yagi; The University of Tokyo; Japan

11:15 AM Chromatin and Transcriptional Profiling Reveal Senescence Pathways as Therapeutic Targets in Loeys-Dietz Syndrome
Elena MacFarlane; Johns Hopkins School of Medicine; USA

11:30 AM	Striking phenotypical difference between Ipo8 knock-out mouse models on different genetic backgrounds explored by RNA-sequencing Lucia Bucciolì; University of Antwerp; Belgium
11:45 PM	Pain hypersensitivity and spinal redox-neuroinflammatory signaling in Fbn1C1041G/+ mice Francesc Jiménez-Altafó; Autonomous University of Barcelona; Spain
SESSION #3: Pharmacological and Therapeutic Intervention Strategies <i>Moderators: Gustavo Egea; University of Barcelona; Spain and Arturo Evangelista; Vall d'Hebron University Hospital; Spain</i>	
12:00 PM	Targeting fibronectin accumulation reverses Marfan syndrome-related aortic disease in mice Iván Alarcón Ruíz; Centro de Biología Molecular Severo Ochoa (CBM-CSIC); Spain
12:15 PM	Multi-targeted oxidative stress pathways as a complementary strategy to current medical treatment against aortopathy progression in Marfan Syndrome Gerard Merino; Universitat de Barcelona; Spain
12:30-2:00 PM	LUNCH
2:00 PM	Opposing Cardiovascular Phenotypes in Fibrillinopathies: A Platform for Drug Target Discovery in Marfan Syndrome Eline Vanaken; University of Antwerp; Belgium
2:15 PM	Targeting oxidative stress with allopurinol attenuates cardiovascular remodeling in Marfan syndrome Rodrigo Barbosa de Souza; Faculdade Santa Marcelina; Brazil
2:30 PM	A Novel Transforming Growth Factor- β Vaccine for Aortic Aneurysm Formation in a Mouse Model of Marfan Syndrome Shun Okamura; The University of Tokyo Hospital; Japan
SESSION #4: Biomarkers, Modifiers and iPSC Studies <i>Moderators: Catherine Boileau; Paris Cité University; France and Lynn Sakai; Oregon Health & Science University; USA</i>	
2:45 PM	KLF15, a protective factor for thoracic aortic aneurysm in Marfan syndrome Bart Loeys; University of Antwerp; Belgium
3:00 PM	Decoding Marfan syndrome cardiomyopathy using advanced stem cell-derived heart models Emiel Van Wetter; Ghent University; Belgium
3:15 PM	Marfan iPSC-vascular smooth muscle cells (vSMCs) model aortic aneurysm by recapitulating their pathogenic phenotypic switching events enabling target identification to curb chondrogenesis in Marfan aortas Deeti Shetty; University of Cambridge; United Kingdom
POSTER SESSION	
3:30-5:30 PM	Room: Barcelona A&B - Floor 0

12th International Symposium on Marfan, Loeys-Dietz, Vascular Ehlers-Danlos and Related Syndromes (Day 2)

Monday, October 5, 2026

Diamante AB/Floor 0

15-minute slot = 8-minute presentation + 7-minute discussion

SESSION #5: Imaging, Diagnostics and AI Tools

Moderators: Gisela Teixidó Turà; Vall d'Hebron University Hospital; Spain and Siddharth Prakash; The University of Texas Health Science Center at Houston; USA

8:00 AM	Development of an AI-Powered Mobile Application for Point-of-Care Facial Phenotyping in Heritable Thoracic Aortic Disease David Murdock; The University of Texas Health Science Center at Houston; USA
8:15 AM	Quantitative 3D Aortic Shape Analysis Detects Heritable Thoracic Aortic Disease in Non-Dilated Aortas Yogesh Karnam; University of Wisconsin-Madison; USA
8:30 AM	Discriminative value of cardiovascular magnetic resonance-derived pulse wave velocity for aortic dissection in Marfan syndrome Simon D'hulst; Ghent University Hospital; Belgium
8:45 AM	Nanoparticle Contrast-enhanced Computed Tomography of Aortopathy and Cardiac Abnormalities in a Mouse Model of Marfan Syndrome Ketan Ghaghada; Texas Children's Hospital / Baylor College of Medicine; USA
9:00 AM	3D Facial Image-based Morphometric Phenotyping for Diagnosis and Risk Stratification in Heritable Thoracic Aortopathies Alex Buchner Beaudet; University of Calgary; Canada

SESSION #6: Genetic Determinants of Disease Variability

Moderators: Marlies Kempers; Radboud University; the Netherlands and Julie De Backer; Ghent University; Belgium

9:15 AM	From Variant to Vessel: Patient-Specific VSMC Dysfunction Mirrors Aortopathy Severity Pepijn Saraber; Maastricht University; the Netherlands
9:30 AM	Gene and Sex-Specific Risk for First Aortic Events in Heritable Thoracic Aortic Disease: Insights from the Montalcino Aortic Consortium (MAC) Ernesto Calderon Martinez; The University of Texas Health Science Center at Houston; USA
9:45 AM	High-Throughput Functional Profiling of Arterial Fragility Genes Reveals Shared Mechanisms of Extracellular Matrix Dysfunction and Vascular Instability Emily Bramel; The Broad Institute of MIT and Harvard; USA
10:00 AM	SMAD4 Gain-of-Function Disrupts TGF- β and Flow Sensing Pathways in Aortic Hypoplasia Emily Bramel; The Broad Institute of MIT and Harvard; USA

10:15–10:45 AM BREAK

SESSION #7: Patient Experiences, Quality of Life, and Patient-centered Care

Moderators: Mary Sheppard; University of Kentucky; USA and Gretchen MacCarrick, Johns Hopkins University; USA

10:45 AM	Impact of Attention Deficit Disorder (ADHD) Among Children with Marfan Syndrome: A Multicenter Study from CLARITY Andrea Vosberg; Oregon Health & Science University; USA
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11:00 AM Employment status and socioeconomic deprivation among adults with Marfan syndrome is related to aortic dissection but not with preventive aortic surgery
Olivier Milleron; Hôpital Bichat; France

11:15 AM None of Our Doctors Know About This: Stakeholder Perspectives on the Gaps Between Clinical Recommendations and Real-World Care in Heritable Connective Tissue Disorders
Catherine Isadora Côté; Université de Montréal; Canada

SESSION #8: Phenotypic Studies and Outcomes

Moderators: Fleur S. van Dijk; Royal Brompton & Harefield NHS Foundation Trust; United Kingdom and Shaine Morris ; Texas Children's Hospital; USA

11:30 AM Longitudinal Aortic Growth in Individuals with Filamin A Deficiency
Christopher Spence; Texas Children's Hospital / Baylor College of Medicine; USA

11:45 AM Myocardial Recovery after Mitral Valve Surgery in Children with Marfan Syndrome: A Multicentre European Study
Simon D'hulst; Ghent University Hospital; Belgium

12:00 PM Aortic Events After Proximal Thoracic Aortic Repair in Heritable Thoracic Aortic Disease: Insights from the Montalcino Aortic Consortium
Ernesto Calderon Martinez; The University of Texas Health Science Center at Houston; USA

12:15 PM Longitudinal Aortic Root Growth and Outcomes in Pediatric Marfan Syndrome Compared by Baseline Dilation Status: A Multicenter Study From CLARITY
Bita Salamat; Texas Children's Hospital; USA

12:30-2:00 PM LUNCH

SESSION #9: Genotype-Phenotype Correlations

Moderators: Kathryn Holmes; Oregon Health & Science University; USA and Dianna Milewicz; The University of Texas Health Science Center at Houston; USA

2:00 PM Loss-of-function variants in ADAMTS6: a novel syndrome with heart defect, thoracic aortic aneurysm and neurodevelopmental features
Carine Le Goff; Inserm; France

2:15 PM Beyond Aortic Disease: Preliminary Evidence of Myocardial Dysfunction and Arrhythmias in Pediatric HTAD
Simon D'hulst; Ghent University Hospital; Belgium

2:30 PM Gene-Specific Enrichment of Bicuspid Aortic Valve in Heritable Thoracic Aortic Disease: Insights from the Montalcino Aortic Consortium
Siddharth Prakash; The University of Texas Health Science Center at Houston; USA

SPECIAL SESSION: Valentin Fuster; The Mount Sinai Hospital; General Director of Spain's National Center for Cardiovascular Research (TBD)
Moderator: Kim Eagle ; University of Michigan; USA

2:45 PM The Future of Cardiovascular Research: Opportunities and Innovations for the Next Decade

POSTER SESSION

3:15-5:15 PM Room: Barcelona A&B - Floor 0

Joint Session of the Genetic Aortic Network and the ESC Aortic and Peripheral Artery Working Group (Day 1)

Tuesday, October 6, 2026

Diamante AB/Floor 0

8:00 AM Welcome and Introduction
Josephine Grima; The Marfan Foundation; USA
Kim Eagle; University of Michigan; USA
Arturo Evangelista; Vall d'Hebron University Hospital; Spain

8:10 AM KEYNOTE: Genomic Editing for Genetically-Triggered Arteriopathies
Mark Lindsay; Massachusetts General Hospital; USA

8:20 AM Discussion

SESSION #1: Acute Aortic Syndrome Management

Moderator: Jose Fernando Rodriguez Palomares; Vall d'Hebron University Hospital; Spain

8:30 AM DEBATE: Ascending Aortic Dilatation Management - ESC Position
Alessandro Della Corte; University of Campania "L. Vanvitelli"; Italy

8:40 AM DEBATE: Ascending Aortic Dilatation Management - AHA Position
Elaine Tseng; University of California San Francisco; USA

8:50 AM Discussion

9:00 AM TEVAR Before Discharge in Uncomplicated Descending Aorta Dissection
Arturo Evangelista; Vall d'Hebron University Hospital; Spain

9:10 AM Risk and Outcomes of Type B Dissection in Marfan Syndrome
Nupoor Narula; Weill Cornell Medicine; USA

9:20 AM The Impact of Time Spent Normotensive on Surgically Managed Aortic Dissection Outcomes
Andrew Huang; University of Michigan; USA

9:30 AM 30 Years of Patient Care and Management
Guillaume Jondeau; Hôpital Bichat-Claude Bernard; France

9:40 AM Discussion

9:50 AM Break

SESSION #2: Maternal and Aortic Health: Insights into Pregnancy in HTAD

Moderators: Alan Braverman; Washington University in St. Louis School of Medicine; USA & Gisela Teixido Turà; Vall d'Hebron University Hospital; Spain

10:10 AM The Pregnancy Roadmap with Aortopathy and the Unmapped Territories Between: Comparison of ESC and ACC/AHA Guidelines - ESC Position
Julie De Backer; Ghent University; Belgium

10:20 AM The Pregnancy Roadmap with Aortopathy and the Unmapped Territories Between: Comparison of ESC and ACC/AHA Guidelines - ACC/AHA Position
Melissa Russo; Brown University; USA

10:30 AM Discussion

10:40 AM Registry of Pregnancy and Cardiac Disease III (ROPAC III) Update
Julie De Backer; Ghent University; Belgium

10:50 AM	Contraceptive Practices and Patterns: A Comparison between Aortopathy and Congenital Heart Disease Individuals Melissa Russo; Brown University; USA
11:00 AM	Reproductive Decision-Making in Marfan Syndrome: Our Center's Experience Patricia Muñoz-Cabello; Vall d'Hebron University Hospital; Spain
11:10 AM	Discussion
SESSION #3: Imaging and Engineering Frontiers <i>Moderator: Arturo Evangelista; Vall d'Hebron University Hospital; Spain</i>	
11:20 AM	How to Measure the Aortic Root Using Multimodality Jose Fernando Rodriguez-Palomares; Vall d'Hebron University Hospital; Spain
11:30 AM	New Tools to Improve Aorta Growth Rate Reproducibility Andrea Guala; Vall d'Hebron University Hospital; Spain
11:40 AM	Personalized 3D Aortic Z-Scores Identify Heritable Aortopathy from a Single CTA Carlos Alberto Campello Jorge; University of Wisconsin-Madison; USA
11:50 AM	Discussion
12:00 PM	Predicting Aortic Dissection Using Advanced Image Analysis Nick Burris; University of Wisconsin-Madison; USA
12:10 PM	Descending Aortic Distensibility Is Not Associated with Development of Type B Dissection in Marfan Syndrome Nick Burris; University of Wisconsin-Madison; USA
12:20 PM	Discussion
12:30 PM	Publications & Career Reflections Arturo Evangelista; Vall d'Hebron University Hospital; Spain
12:40-2:00 PM	LUNCH
SESSION #4: Emergency and Critical Care Management of Acute Aortic Syndrome <i>Moderators: Marion Hofmann Bowman and Rob Pena; University of Michigan; USA</i>	
2:00 PM	Ruling Out AAS in the Emergency Department (ADvISED and AORTAs Algorithms) Rob Pena; University of Michigan; USA
2:10 PM	Evaluation and Care of (Suspected) AAS in the Emergency Department Colin Greineder; University of Michigan; USA
2:20 PM	Biomarkers for Predicting ICU Mortality for Medically-Managed Type B Dissections Marion Hofmann Bowman; University of Michigan; USA
2:30 PM	Emergency Department Care for VEDS Patients Sherene Shalhub; Oregon Health & Science University; USA
2:40 PM	Discussion
SESSION #5: AI Applications: From Genes to Populations	
2:50 PM	Linking Genetics and AI-derived Aortic Phenotypes from Clinical Imaging Tooraj Mirshahi; Geisinger Health; USA
3:00 PM	Creation of Aortic Digital Twin Technology for Prognosis in Loeys-Dietz Syndrome Bharath Ambale Venkatesh; Johns Hopkins Medicine; USA

3:10 PM	AI-Driven Facial Recognition of HTAD Cases David Murdock; The University of Texas Health Science Center at Houston; USA
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3:20 PM	AortaGPT: An AI-Enabled Clinical Decision Support Platform for Heritable Thoracic Aortic Diseases Siddharth Prakash; The University of Texas Health Science Center at Houston; USA
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3:30 PM	Discussion
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POSTER SESSION	
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4:00-6:00 PM	Room: Barcelona A&B - Floor 0
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Joint Session of the Genetic Aortic Network and the ESC Aortic and Peripheral Artery Working Group (Day 2)

Wednesday, October 7, 2026

Diamante AB/Floor 0

8:00 AM Marfan Foundation Partnerships
Josephine Grima; The Marfan Foundation; USA

8:05 AM Patient to Physician Perspective on Living with an Aortopathy
Geoff Lester; Monash University; Australia

SESSION #6: Insights from Registries: Research To Improve Clinical Outcomes
Moderators: Dianna Milewicz; The University of Texas Health Science Center at Houston; USA and Shaine Morris; Texas Children's Hospital; USA

8:10 AM Modeling of Timing of Aortic Replacement (CLARITY)
Shaine Morris; Texas Children's Hospital; USA

8:20 AM Prevalence of Developmental and Psychological Concerns Among Children with Aortopathy.
(CLARITY)
Kathryn Holmes; Oregon Health & Science University; USA

8:30 AM Previously Unrecognized Syndromic Aortopathies Identified by Postmortem Whole Genome
Sequencing in Fatal Aortic Dissection
Ellen Hostetler; The John Ritter Foundation for Aortic Health; USA

8:40 AM Discussion

8:50 AM Gene-Based Management for Heritable Thoracic Aortic Disease: Translation to Physicians and
Patients (MAC)
Siddharth Prakash; The University of Texas Health Science Center at Houston; USA

9:00 AM Risk Score for Thoracic Aortic Disease: Genetic Modifier of Aortic Outcomes in Heritable Thoracic
Aortic Disease (MAC)
Dianna Milewicz; The University of Texas Health Science Center at Houston; USA

9:10 AM Genetic Determinants of Aortic Complications After Elective Proximal Aneurysm Repair: Insights from
the Montalcino Aortic Consortium (MAC)
Ernesto Caldron Martinez; The University of Texas Health Science Center at Houston; USA

9:20 AM Discussion

9:30 AM SMAD3 Dataset of 200+ Participants
Anji Yetman; University of Nebraska; USA

9:40 AM Insights from the Spanish Network on Genetic Aortic Disease (REPAG): Advancing Aortic Risk
Prediction and Sex-Specific Prognosis
Gisela Teixidó-Turà; Vall d'Hebron University Hospital; Spain

9:50 AM Thoracic Aortic Disease with Bicuspid Aortic Valve: Limited Contribution of Genetic Testing
Pauline Arnaud; Hôpital Bichat; France

10:00 AM Discussion

10:10 AM BREAK

SESSION #7: Modern Surgical Strategies Across the Aortic Arch and Thoracoabdominal Aorta
Moderators: John Eleftherides; Yale University; USA and Bo Yang; University of Michigan; USA

10:30 AM	Bicuspid Aortic Valve Surgery in Women Bo Yang; University of Michigan; USA
10:40 AM	What Every Surgeon Should Know about Vascular Ehlers Danlos Syndrome Sherene Shalhub; Oregon Health & Science University; USA
10:50 AM	Surgical Advances in Endo-Bentall Procedure Mehrdad Ghoreishi; Johns Hopkins University; USA
11:00 AM	Discussion
11:10 AM	Open Aortic Arch Surgery: Current Surgical Strategies Maral Ouzounian; University of Toronto; Canada
11:20 AM	Modern Surgical Strategies Across the Aortic Arch and Thoracoabdominal Aorta Sherene Shalhub; Oregon Health & Science University; USA
11:30 AM	Thoracoabdominal Aortic Repair: Technical Nuances & Outcomes Rafael Rodriquez Lecoq; Vall d'Hebron University Hospital; Spain
11:40 AM	Discussion

SESSION #8: Thrivorship: Incorporating Exercise and Improving Mental Health
Moderator: Mary Sheppard; University of Kentucky; USA

11:50 AM	Home-based Exercise after Aortic Dissection: Lessons Learned From a Pragmatic Randomized Trial. Siddharth Prakash; The University of Texas Health Science Center at Houston; USA
12:00 PM	The Aorta in Athletes Alan Braverman; Washington University in St. Louis School of Medicine; USA
12:10 PM	From Tragedy to Prevention: Caring for the Family After Post-Mortem Aortic Dissection Diagnosis Rajani Aatre; University of Michigan; USA
12:20 PM	Discussion
12:30 PM	Lunch

SESSION #9: Pediatric Aortopathy Management
Moderator: Shaine Morris; Texas Children's Hospital; USA

2:00 PM	Pediatric Transition in Aortopathy Mary Sheppard; University of Kentucky; USA
2:10 PM	Exercise Considerations and Limitations: Parent Experience with Schools Kathryn Holmes; Oregon Health & Science University; USA
2:20 PM	Prophylactic Irbesartan Therapy in Young Patients with Bicuspid Aortopathy: Aortic Growth Rates from a New England Collaborative Registry Jonathan Flyer; University of Vermont; USA
2:30 PM	Challenges in Medical Therapy for Pediatric Aortopathies: What is the Current Evidence and How Do We Gather More Evidence? Ron Lacro; Boston Children's Hospital; USA
2:40 PM	Cardiovascular Outcomes and Survival in Patients with Neonatal Marfan Syndrome Christopher Spence; Texas Children's Hospital / Baylor College of Medicine; USA
2:50 PM	Discussion

3:00 PM

Summary and Conclusion
Kim Eagle; University of Michigan; USA