Abstract session: Different outcomes for various biological materials in AVR Moderated by T. Folliguet, Creteil

Panellist(s): S. Canovas, Murcia | Thursday 14th October | 09:00–10:30 | Room 116–117

Aortic Valve Replacement is a core topic for Cardiac Surgery. A wide range of topics will be discussed in this session, from SVD to Ross procedure, passing through different devices analysis.

Presentations

Structural Valve Deterioration after Surgical Aortic Valve Replacement with the Trifecta and the 09:00 EDWARDS INTUITY Valve - Long Term Results P. Werner et al.

- Peri-operative Platelet Reduction after Aortic Bioprosthesis Implantation: Results from the 09:15 PORTRAIT Study F. Jiritano et al.
- Avoiding oversizing in sutureless valves leads to lower transvalvular gradients and less 09:30 permanent pacemaker implants postoperatively D. Szecel et al.
- Outcomes After Surgical AVR: Does The Strategy Matter? A large retrospective cohort study 09:45 V. Caruso et al.
- Ross procedure outcomes following previous aortic valve intervention in the adult population 10:00 A. C. Visan et al.

First in human experience with a novel 3-dimensional single-piece aortic valve 10:15 J. Van Puyvelde et al.

Key Takeaways

- Single center retrospective and prospective trial with 1118 patients, who underwent SAVR with either a Trifecta (n=346) or an EDWARDS INTUITY (n=772) valve: 8 years of follow up.
- · Primary endpoint: SVD. Secondary endpoint: mortality and reoperations.
- Results: significantly higher SVD for Trifecta (n=23) vs. EDWARDS INTUITY (n=4) (p<0.0001). Valve type was an independent risk factor for reoperations. Reoperations, among others, was identified as independent risk for mortality.
- Conclusions: There seems to be a rapid increase of observed SVDs in the Trifecta group starting at 6 years after surgery. These results need to be taken into consideration when performing bio-SAVR.



Abstract session: The conundrum of non degenerative mitral regurgitation: looking for a solution!

Moderated by N/A Panellist(s): N/A | Thursday 14th October | 14:15–15:45 | Room 113

The speakers will discuss different aspects of non degenerative mitral regurgitation, such as subvalvular techniques, papillary muscles repositioning, annulus calcification, and other important topics related to this disease.

Presentations

B. Sohn et al.

14:15	Improved long-term outcome after standardized subvalvular mitral valve repair for functional mitral regurgitation type IIIb J. Pausch et al.
14:24	Intraoperative Echocardiographic Assessment of Mitral Valve Translocation <u>E. Strauss et al.</u>
14:33	Fate of moderate secondary mitral regurgitation in patients undergoing aortic valve surgery for severe aortic regurgitation <u>B. Del Forno et al.</u>
14:42	Secondary mitral regurgitation due to isolated annular dilatation: the role and impact of atrial fibrillation <u>G. Freitas Coutinho et al.</u>
14:51	Regional LV Re-remodeling after subannular repair in type IIIb mitral regurgitation Girdauskas et al.
15:00	The results of various treatment options for type IIIb ischemic mitral insufficiency in the mid-term postoperative period M. Latyshev et al.
15:09	Biomechanical engineering analysis of an acute papillary muscle rupture disease model using a novel 3D-printed left heart simulator <u>M. Marin-Cuartas et al.</u>
15:18	The choice of surgical approach to calcific/rheumatic mitral valve disease <u>M. A. Deja et al.</u>
15:27	Impact of extensive mitral annular calcification in mitral valve replacement: A propensity score- matching analysis

Key takeaways

- In this presentation, the results of subvalvular mitral valve repair for case of functional MR type IIIb will be discussed.
- 105 patients operated for severe functional mitral regurgitation type IIIb.
- Primary endpoint: death or recurrent MR at least 2 two years postoperatively.
- · Conclusions: Isolated annuloplasty is associated to increased rates of recurrent MR and is not able to improve prognosis. Standardized relocation of both papillary muscles, together with mitral annuloplasty, improved the long-term prognosis compared to isolated annuloplasty.

Key takeaways

- 63 patients operated for severe functional mitral regurgitation type IIIb.
- Primary endpoint: to assess the correlation between the papillary muscle to mitral valve distance (PMAD) and the left ventricle (LV) size.
- Conclusions: in these patients the PMAD is significantly correlated to the LV size, so it can be used as indicator of LV-remodeling and papillary muscles displacement. The bilateral papillary muscle repositioning results in a significant postoperative PMAD reduction compared to isolated MV annuloplasty.

Click here for more information on the EACTS 2021 scientific programme.

Abstract session: Problems and concerns related to the choice of an optimal aortic valve substitute

Moderated by N. Bonaros, Innsbruck Panellist(s): T. Bourguignon, Tours | Thursday 14th October | 14:15–15:45 | Room 111

Several devices are available for aortic valve replacement. In this session the speakers will discuss the performance and comparison of some of them, illustrating their different experiences.

Presentations

- Prospective Randomized comparison Of prosthetic Valve Effective orifice area: One-year analysis 14:15 of two bovine PERIcardial valves (PROVE-PERI trial); An interim analysis S. H. Sohn et al.
- Mechanical vs. bioprosthetic aortic valve replacement in patients younger than 70 years of age, a 14:24 hazard ratio meta-analysis D. Leviner et al.
- Outcomes of rapid deployment aortic valve replacement in combined surgery. Results from the 14:33 **RADAR Registry** V. Bautista et al.
- Analysis of incidence and reasons for re-intervention after aortic valve replacement using the Trifecta 14:42 aortic bioprosthesis A. Fard et al.
- Clinical relevance of patient-prosthesis mismatch after aortic valve replacement: mechanical vs 14:51 biological prosthesis M. Matkovic et al.
- Size-matched comparison between Perceval and PERIMOUNT valves: analysis of early 15:00 transvalvular gradients A. Zientara et al.

Key takeaways

- The speaker will report the latest data from the RADAR registry, focused on patients (n: 370), implanted with rapid deployment (RD) valves combined with other surgical procedures.
- · Conclusions: combined surgery shows no significant differences in terms of perioperative morbidity or mortality, haemodynamics, midterm survival (3 years FU). RD valves could become a useful tool for combined procedures where surgical times are expected to be prolonged.

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- · 128 propensity matched pairs of patients implanted with Perceval or PERIMOUNT valves.
- Conclusion: despite the expectations, the mean gradients weren't lower for Perceval respect Perimount. However, there could be some limitations as: learning curve, oversizing, smaller annulus for Perceval size S respect Perimount size 21mm.
- · Perceval showed similar permanent pacemaker implantation and clinical outcomes than Perimount.

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Several devices are available for aortic valve replacement. In this session the speakers will discuss the performance and comparison of some of them, illustrating their different experiences.

Presentations

- 15:09 Hancock II vs. St Jude Trifecta vs. Carpentier-Edwards PERIMOUNT Magna vs. Magna Ease valves: what do we know after 10 years? Results of COMPARE SAVR Study R. Litwinowicz et al.
- 15:18 65 years is an appropriate cut off age for bio-prosthetic valves in the Aortic position -20 years experience with over 2000 patients S. Guha et al.
- 15:27 Should Rapid-deployment Bioprostheses Become The First Choice In Patients With Severe Aortic Stenosis? Propensity Score Analysis Of EDWARDS INTUITY vs Magna Ease valves D'Onofrio et al.

Key takeaways

- This presentation will focus on the results from the COMPARE-SAVR study, a comparison of Hancock II, Carpentier-Edwards PERIMOUNT Magna, Carpentier-Edwards PERIMOUNT Magna Ease and Trifecta valves.
- · Five years FU, real world, retrospective, single center study with 1589 patients.
- Conclusions: Trifecta, Magna, and Magna Ease had similar 5-year mortality rates, whereas the Hancock II valve was associated with a significantly higher mortality rate and was identified as an independent risk factor for fatal events.

Key takeaways

- · Data from 375 consecutive patients who underwent AVR with either EDWARDS INTUITY or Magna Ease valves, will be presented.
- Conclusions: EDWARDS INTUITY valve had similar early clinical outcomes, in particular the permanent pacemaker implantation rate was similar to Magna Ease valve. EDWARDS INTUITY showed better haemodynamics, shorter surgical times and ICU stay. It might be considered the first choice, especially in patients with a small aortic annulus.

Abstract session: Hot topics in transcatheter valve treatment Moderated by N/A Panellist(s): F. Musumeci, Rome | Thursday 14th October | 16:00–17:30 | Room 114

A broad overview of transcatheter valves topics will be provided in this session. From valve-in-valve procedures to devices performance and their comparison.

Presentations

- 16:00 Impact of high-pressure balloon aortic valvuloplasty on the hydrodynamic result after valve-in-valve procedure <u>N. Sadat et al.</u>
- 16:09 Impact of different valve-in-valve positions on the hydrodynamic performance of the newest generation selfexpanding transcatheter heart valve <u>N. Sadat et al.</u>
- 16:18 Effects of an obliquely implanted THV on the aortic flow field
 <u>P. Marx et al.</u>

 Redo aortic valve replacement versus valve-in-valve transcatheter aortic valve replacement: a national propensity
- 16:27 matched analysis <u>F. Gatta et al.</u>
- 16:36 Transcatheter Aortic Valve Replacement in Extremely Large Annuli: Results from the Michigan Transcatheter Aortic Valve Replacement Quality Collaborative S. Leung Wai Sang et al.
- 16:45 Comparison of Outcomes and Cost Between Low-risk Transcatheter and Mini-thoracotomy Aortic Valve Replacement: A Propensity-Matched Analysis
- 16:54 Comparison between Acurate Neo and Acurate Neo 2 transcatheter heart valves: A single-center experience <u>J. Rychter et al.</u>
- 17:03 Minimally-invasive mitral valve surgery after failed transcatheter mitral valve repair <u>S. Akansel et al.</u>
- 17:12 Concomitant Transapical Transcatheter Aortic and Mitral Valve Intervention in Inoperable Patients: A Report of a Multidisciplinary Treatment Protocol <u>S.-E. Shehada et al.</u>

Abstract session

Click here for more information on the EACTS 2021 scientific programme.

Abstract session: The latest on degenerative mitral regurgitation Moderated by S. Livesey, Southampton Panellist(s): P. Davierwala, Leipzig | Thursday 14th October | 16:00–17:30 | Room 113

The minimally invasive approach to degenerative mitral regurgitation and its long-term results will be the focus of this session.

Presentations

- 3-dimensional fully endoscopic versus video-assisted minimally invasive mitral valve surgery: 16:00 A propensity score matched comparison M. Kofler, et al.
- 16:09 Long-term results of mitral repair with complete semi-rigid rings or posterior flexible bands in patients with Barlow's disease B. Del Forno, et al.
- 16:18 Coaptation length predicts early and late durability following mitral repair F. Hage, et al.
- Effects of mitral valve repair on ventricular arrhythmias in patients with severe mitral regurgitation and Barlow's 16:27 disease
 - G. Ascione, et al.
- 16:36 Significance of mitral annular disjunction to avoid coronary artery injury during mitral valve surgery Kuroda, et al.
- Three technical additions improve outcome and operative times in minimally invasive mitral surgery 16:45 N. Bonaros, et al.
- 16:54 Commissural closure to treat severe mitral regurgitation: standing the test of time D. Carino, et al.
- 17:03 Non-robotic endoscopic minimally invasive mitral valve repair: a 20-year single-centre experience N. Feirer, et al.
- 17:12 Minimally invasive mitral valve surgery in patients with previous cardiac surgery M. Lim, et al.

Focus session: Matching the best substitute for a ortic valve replacement to the patient

Moderated by R. de Paulis, Rome | F. Casselman, Aalst

Panellist(s): I. Chirichilli, Rome | M. Piñón, Vigo | Friday 15th October | 10:00–11:30 | Room 116-117

The best aortic valve substitute will be discussed in this session. From mechanical valves to Ross procedure to biological valves and TAVI, their advantages and disadvantages will be reviewed on different scenarios.

Presentations

- 10:00 Surgical Aortic Valve Replacement in patients under the age of 60 A prospective, multicenter real-world registry in Europe and Canada R. de Paulis, et al.
- 10:15 Mechanical versus biological prosthesis for aortic valve replacement: is there still any age limit? T. Walther, Frankfurt
- 10:26 What to do in a 54-year old patient? Mechanical AVR L. Menicanti, San Donato Milanese
- What to do in a 54-year old patient? Biological AVR 10:37 O. Wendler, London
- 10:48 What to do in a 54-year old patient? Ross operation I. El-Hamamsy, New York
- The role of TAVI in the younger patient 10:49 S. Bleiziffer, Munich
- 11:11 What to do in a 54-year old patient in dialysis? T. Bourguignon, Tours
- Survival and complications after AVR: are early results the determining factor? 11.23 J. J. Takkenberg, Rotterdam

Focus session

Infective Endocarditis

Moderated by F. Santini, Genoa Panellist(s): R. Klautz, Leiden | Friday 15th October |10:00–11:30 | Room 114

Infective endocarditis is the focus of this session. The speakers will present different strategies to tackle endocarditis. **Presentations**

- 10:00 Intraoperative hemoadsorption reduces sepsis-related death in all-comers undergoing surgery for infective leftsided endocarditis J. M. Kališnik, et al.
- 10:09 Cryopreserved aortic homografts for complex aortic valve or root endocarditis: a 28-year experience <u>A. Galeone, et al.</u>
- 10:18 Mechanical versus biological valve prostheses for active left-sided infective endocarditis <u>A. Kahrovic, et al.</u>
- 10:27 Early versus delayed surgery in patients with infective endocarditis and stroke <u>J. Jahn, et al.</u>
- 10:36 Dismal prognosis of patients with operative indication without surgical intervention in active infective endocarditis <u>*M. Van Hemelrijck*</u>, et al.
- 10:45 The only currently active endocarditis registry in Germany Insights into risk factors for early mortality <u>J. Albes, et al.</u>
- 10:54 "Endocarditis in Tavi population" Denmark
- 11:03 Surgery for infectious endocarditis following TAVR- are we overestimating the risk ? <u>S. Saha, et al.</u>
- 11:03 Pulmonary Valve Neocuspidization and Tricuspid Valve Replacement in intravenous drug abusers with Infective Endocarditis: report of two cases

 B. Todurov, et al.

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Abstract

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Recent opportunities in AVR

Moderated by F. Barili, Cuneo, T. Bourguignon, Tours Panellist(s): R. Yadav, London | Saturday 16th October | 08:30–10:00 | Room 116-117

This session will provide an overview of the latest techniques and cutting-edge technologies in Aortic Valve Replacement.

Presentations

- 08:30 New and future tissues for biological aortic valve prostheses B. Meuris, Leuven
- 08:45 Optimized wrapping of the autograft with a Dacron conduit R. de Paulis, Roma
- 09:00 Updates on tissue engineered valves for aortic valve replacement M. Y. Emmert, Berlin
- 09:15 How to fix the graft in PEARS procedure : with or without CPB J. A. Hoschtitzky, Manchester
- 09:30 Sutureless aortic valves in isolated and combined procedures: 13 years of experience in 785 patients <u>*M. Lamberigts*, et al.</u>
- 09:45 Modified Ozaki procedure for annular enlargement C. Baird, Boston

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Focus session

Evidence & Trial Updates

Moderated by N/A Panellist(s): N. Freemantle, London | Saturday 16th October | 10:15–12:15 | Room 116-117

Several clinical trials updates will be presented in this session, from the GARY to the Excel and UK TAVI registries.

Presentations

- EXCEL at 5 Years: The Surgeons Perspective 10:15 D. Taggart, Oxford
- 10:30 Left-main RCT trials, at 5 yr and 10 yrs follow-up: Cardiologist perspectives
- 10:45 Coronary Artery Bypass Grafting versus Medical Therapy in Patients with Stable Coronary Artery Disease
- 11:00 UK TAVI - 1-year Clinical Trial Results B. Prendergast, London
- 11:15 STS-ACC TVT Registry: TAVI trends and complication rates in low risk patients J. Bavaria, Philadelphia
- 11:30 The German Aortic Valve Registry: 5 Years findings in low-risk patients F. Beyersdorf, Freiburg
- 11:45 Do LAAOS III results change the practice patterns in cardiac surgery? R. Whitlock, Hamilton
- 12:00 How would a neutral martian see the evidence?

Edwards Lifesciences

Plenarv

Abstract session: 2021 EACTS/ESC Guidelines for the management of valvular heart disease: Meet the task force members

Moderated by F. Beyersdorf, Freiburg

Panellist(s): P. Myers, Genève, R. Sádaba, Pamplona | Saturday 16th October | 12:30–14:00 | Room 111

In this session the speakers will provide an overview of the updated guidelines for the treatment of the heart valve disease.

Presentations

- General remarks 12:30 R. de Paulis, Roma.
- 12:45 Aortic stenosis: Evaluation and indications for intervention B. Prendergast, London
- 13:00 Aortic stenosis: Mode of intervention in symptomatic and asymptomatic patients A. Jeppsson, Gothenburg
- Primary and secondary mitral regurgitation: Evaluation and indications for intervention 13:15 V. Delgado, Leiden
- 13:30 Primary and secondary mitral regurgitation: Mode of intervention and follow-up M. De Bonis, Milan
- 13:45 Prosthetic choice, antithrombotic therapies and other guidelines highlights M. Milojevic, Rotterdam

Abstract session: Late breaking clinical trials

Moderator N/A Panellist(s): N/A | Saturday 16th October | 16:00–17:30 | Room 111

During this session you will receive the latest updates from many important clinical trials focused on different diseases and treatments.

Presentations

- 16:00 First in human study of Patient-Specific Cardiac Support Net for dilated cardiomyopathy T. Akita, et al.
- 16:15 Cytokine hemoadsorption during cardiac surgery vs standard surgical care for infective endocarditis: results from a multicentre, randomised, controlled trial M. Diab, et al.
- 16:30 Remote Ischemic Preconditioning in Coronary Artery Bypass Surgery: Long-Term Prognostic Benefit in a Single-Center Randomised Double-Blinded Controlled Trial M. Thielmann, et al.
- 16:45 The Limited Access Aortic Valve Replacement (LIAR) Trial: a Randomized Controlled Clinical Trial Comparing Quality of Life and Postoperative Pain after Limited Access and Conventional Aortic Valve Replacement I. Klop, et al.
- 17:00 Surgical Aortic Valve Replacement With a Stented Pericardial Bioprosthesis: 5-Year Outcomes R. Klautz, et al.
- 17:15 Selective β-blocker therapy and long-term outcome after coronary artery bypass grafting M. Lindgren, et al.

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