



24<sup>th</sup> ANNUAL CONGRESS OF THE CHEST WALL INTERNATIONAL GROUP  
PHOENIX ADVANCED PECTUS COURSE 2024

## **ORAL ABSTRACT PROGRAM**

★ 5-minute presentation & 3 min Q&A

★ 3-minute presentation & 2 min Q&A

*The presenting author is in blue bold*

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### **Wednesday, October 23, 2024**

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#### **Abstract Session I - 0915**

*Moderators: Dr. Carolyn Russell & Dr. Chen Chenghao*

- ★ **Utilizing artificial intelligence for the prediction of cardiopulmonary improvement after Pectus Excavatum repair**  
**Juan M Farina**, Kena A Shawwaf, Rawan M Zeineddine, Andrew Saleeb, Dawn Jaroszewski
- ★ **Predicted Peak Oxygen Uptake as a cardiopulmonary function marker: Assessing disease impact in Pectus Excavatum**  
**Rebeccah L Brown**, Raphael Parrado, William Hardie, Adam Powell, Karla Foster, Todd M Jenkins, Victor F Garcia
- ★ **The electrocardiographic manifestations of Pectus Excavatum before and after surgical correction**  
**Andrew Saleeb**, Juan M Farina, Mohamed R Aly, Michael M Botros, Dawn Jaroszewski
- ★ **The effect of atrioventricular groove compression on cardiopulmonary function in patients with Pectus Excavatum**  
**Rebeccah L Brown**, Robert Fleck, Molly Carroll, Adam Powell, William Hardie, Karla Foster, Michael Taylor, Victor F Garcia
- ★ **Multidisciplinary assessment of standard low dose versus ultra-low dose chest CT scans for Pectus Excavatum imaging**  
**Charles T Hehman**, Shelby Aughtman, Turaj Vazifedan, Robert Obermeyer, Michael Goretsky
- ★ **Impaired right ventricular remodeling and function as assessed by cardiac MRI in adolescents with Pectus Excavatum**  
Sabrina Leong, **Mustafa Kabeer**, Jacqueline Hurley, Sunil Kamath, Lois Sayrs, Tricia Morphew, Pierangelo Renella

## Abstract Session II - 1634

Moderators: *Dr. Laurin Titze & Dr. Gerda Zijp*

- ★ **Revision after prior failed Pectus Excavatum repair: higher risks and greater complications than primary surgery**  
**Andrew Saleeb**, Kenan A Shawwaf, Mohamed R Aly, Michael M Botros, Ryan Seyed Moosavi, Rawan M Zeineddine, Jesse Lackey, Juan M Farina, Dawn Jaroszewski
- ★ **Does Pectus Carinatum cause dysfunction of exercise physiology?**  
**Christopher MR Satur**, Ian Cliff, Nick Watson
- ★ **Improving Quality of Life with Dynamic Compression Bracing in Patients with Pectus Carinatum**  
**Hendrik van Braak**, Sjoerd de Beer, LW Ernest van Heurn, Justin R de Jong
- ★ **Defining the optimal annual institutional case volume for minimally invasive repair of Pectus Excavatum: An evidence-based approach**  
**Jean Daemen**, Inez Cortenraad, Michael Kawczynski, Lori van Roozendaal, Karel WE Hulsewe, Yvonne LJ Vissers, Samuel Heuts, Eric de Loos
- ★ **Parks bridging bar Pectus system: Techniques to optimize functional and aesthetic results in 52 cases**  
**John DiFiore**
- ★ **Sternal elevation in Pectus Excavatum repair: Unilateral vs bilateral frame crane system**  
**Elise van Polen**, Nicky Janssen, Nadine A Coorens, Jean Daemen, Aimee JPM Franssen, Karel WE Hulsewe, Yvonne LJ Vissers, Eric de Loos
- ★ **Surgical treatment and outcomes of Pectus Arcuatum**  
**Rawan Zeineddine**, Juan M Farina, Kenan A Shawwaf, Andrew Saleeb, Dawn Jaroszewski
- ★ **Safety protocol for bar removal after the Nuss procedure Analysis of results after 5 years of implementation**  
**Joaquin Pedro Camacho**, Carolina Korzin, Pablo Andres Lobos, Marcelo Mauricio Urquizo, Gaston Ricardo Elmo
- ★ **Surgical Repair of Pectus Arcuatum: Long-Term Results**  
**Tunc Lacin**, Esra Yamansavci Sirzai, Nezhir Onur Ermerak, Haktan Uygur Onen
- ★ **Minimally invasive repair of Pectus Excavatum in adult patients: lessons learned in 63 cases**  
**Daniela Sanjurjo**, Matias Nicolas, Luzia Toselli, Alejandro Carmona, Facundo Giacosa, Gaston Bellia-Munzon

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**Thursday, October 24, 2024**

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**Abstract Session III - 1300**

*Moderators: Dr. Joel Dunning & Dr. Jeffrey Zitsman*

- ★ **3D scanning as a comprehensive assessment tool in management of Pectus Carinatum: Report of 267 patients**  
**Juan Facundo Giacosa**, Luzia Toselli, Daniela Sanjurjo, Gaston Bellia-Munzon, Marcelo Martinez-Ferro
- ★ **Eight years of expertise with the sandwich technique for asymmetric Pectus Carinatum and Excavatum-Carinatum complex**  
**Laura Garcia Martinez**, Luzia Toselli, Gaston Ricardo Elmo, Ana Lain Fernandez, Daniela Sanjurjo, Manuel Lopez-Paredes, Gaston Bellia-Munzon
- ★ **Surgical management of Pectus Excavatum and Carinatum in Australia: A descriptive analysis of the Medicare Benefits Schedule database 2000 -2024**  
**Milena Simic**, Carolyn Russell, Bruce G Currie
- ★ **Chest wall reconstruction utilizing OviTex® Reinforced Tissue Matrix: Early single centre experience**  
**Hanan Hemead**, James Barr, James DC Bedford, Eustace Fontaine
- ★ **Nitinol clip and mesh repair of visceral herniation through intercostal muscle defects**  
**Pieter van Huijstee**, Jelle Arie Nieuwstraten
- ★ **Precision surgery: Navigating thoracic wall tumor removal with advanced planning and intraoperative guidance**  
**Joaquin Pedro Camacho**, Lucas Ritacco, Pedro Andres Lobos, Marcelo Mauricio Urquizo, Gaston Ricardo Elmo
- ★ **Vacuum bell therapy for Pectus Excavatum: Retrospective analysis of 1578 patient**  
**Nezih Onur Ermerak**, Aleyna Guctekin, Tunc Lacin, Mustafa Yuksel
- ★ **Determination of nutritional status and evaluation of the effect of telenutrition on body image in patients with Pectus Excavatum**  
Sevde Kahraman, **Hasan Ersoz**, Mehmet Ozgur Kuzdan, Emine Sayici, Reyhan Mirza, Hatice Sena Ozgenc

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**Friday, October 25, 2024**

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**Abstract Session IV - 0852**

*Moderators: Dr. Sungsoo Lee & Dr. Jae-O Bae*

- ★ **Can chronic pain after Minimal Invasive Repair of Pectus Excavatum (MIRPE) be caused by low grade infection?**  
**Pieter Van Huijstee**, Jesse Romsom, Gerda Zijp
- ★ **Postoperative analgesia after minimally invasive repair of Pectus Excavatum; A systematic review and network meta-analysis**  
**Elise van Polen**, Jean Daemen, Chiel J Franssen, Austin Isabella, Aimee JPM Franssen, Karel WE Hulsewe, Yvonne LJ Vissers, Eric de Loos
- ★ **Cryoanalgesia in patients undergoing surgical stabilization of rib fractures: a comparative study**  
**Matias Nicolas**, Alejandro Carmona, Luzia Toselli, Gaston Bellia-Munzon
- ★ **Preliminary results of intercostal nerve cryoablation versus thoracic epidural analgesia for minimally Invasive Nuss Repair of Pectus Excavatum: A randomized clinical trial (ICE-trial)**  
**Elise van Polen**, Jean Daemen, Nicky Janssen, Aimee Franssen, Karel WE Hulsewe, Yvonne LJ Vissers, Eric de Loos
- ★ **An easier way to determine where to put multiple bars in Pectus Excavatum repair: The "No-brainer" XI Bar approach at 6-5-4 intercostal spaces**  
**Hyung Joo Park**, Gongmin Rim, Kwanyong Hyun, Seung Keun Yoon
- ★ **Do cardiac and pulmonary volumes regain their capacity after Pectus Excavatum repair? A volumetric measurement study**  
Gongmin Rim, **Kwanyong Hyun**, Seung Keun Yoon, Hyung Joo Park
- ★ **Use of percutaneous cryoanalgesia in pain management after open repair of pectus deformities: A preliminary report**  
**Mateusz Ciopinski**, Anna Szumowska, Michat Marciniak, Krzysztof Bogucki, Piotr Kalicinski
- ★ **First report of enduring cardiac decompression assessed with MRI after bar removal in Pectus Excavatum patients**  
**Luzia Toselli**, Maxroxia Vallee, Gaston Rodriguez-Granillo, Daniela Sanjurjo, Gaston Ricardo Elmo, Gaston Bellia-Munzon, Marcelo Martinez-Ferro

- ★ **Early bar removal after MIRPE: Indications, outcome and recurrence in a multicenter international retrospective study**  
**Stephan Rohleder**, Luisa Maria Frankenbach, Evgenij Werner, Tunc Lacin, Mustafa Yuksel, Nezhir Onur Emerak
- ★ **Upper sternal cleft associated with congenital heart defect - single stage surgical correction**  
**Pavol Omanik**, Marek Nothart, Pavel Valentik, Fadi Sabateen, Matej Nosal, Babala Jozef

### **Abstract Session V - 1241**

*Moderators: Dr. Nezhir Onur Emerak & Dr. Benjamin Padilla*

- ★ **Analysis of the clinical presentation pattern of scoliosis associated with funnel chest**  
**Chen Chenghao**, Tian Chen, Qi Zeng, Na Zhang, Jie Yu, Dong Yan, Changqi Xu, Dingyi Liu, Qian Zhang, Xu Zhang
- ★ **Proposal of a new semi-automated volumetric thoracic index for the evaluation of severity in Pectus Excavatum**  
**Rosella Tro**, Martini Simona, Nicola Stagnaro, Virginia Sambuceti, Michele Torre, Marco Massimo Fato
- ★ **Does a high Haller Index impact outcomes in Pectus Excavatum repairs**  
**Rawan M Zeineddine**, Kenan A Shawwaf, Juan M Farina, Mohamed R Aly, Dawn Jaroszewski
- ★ **Beyond the Chest: A novel approach to assess cardiovascular strain in Pectus Excavatum patients**  
**Rosella Tro**, Daniele Randazzo, Nicola Stagnaro, Michele Torre, Marco Massimo Fato
- ★ **Efficacy of the Nuss procedure in patients with asymmetric Pectus Excavatum**  
**Kaito Yano**, Kyohei Masai, Yu Okubo, Kaoru Kaseda, Tomoyuki Hishida, Keisuke Asakura
- ★ **Alternative treatment of Pectus Excavatum - the method of choice?**  
Rustem Yakubovich Hayaliev, **Viktor Markushin**, Sodikjon Abdusalomov, Sharif Rakhimiy
- ★ **An early drop in pressure does not correlate with a higher success rate in Pectus Carinatum patients using a dynamic compression system**  
Cecilia Gigena, **Luzia Toselli**, Maxroxia Vallee, Daniela Sanjurjo, Gaston Bellia-Munzon

- ★ **Life threatening spontaneous pneumothorax after Pectus Excavatum repair due to buffalo chest: Are congenital blebs an underestimated risk factor?**  
**Michele Torre**, Marco Agamennone, Lena Federica, Vittorio Guerriero
- ★ **Thoracoscopic intercostal nerve thermal radiofrequency ablation (INTRA) for postoperative pain relief after the Nuss procedure. Is it safe and effective?**  
**Sadashige Uemura**, Tatsuo Nakaoka,
- ★ **Vacuum bell therapy for Pectus Excavatum: Long-term experience at a single center**  
**Shelby Aughtman**, Robert Obermeyer, Michael Goretsky, Jamie Golden, Charles T Hehman
- ★ **Importance of immediate postoperative pneumothorax after MIRPE**  
**Sungsoo Lee**

### Abstract Session VI - 1432

*Moderators: Dr. John DiFiore & Dr. Mark Molitor*

- ★ **15 years of vacuum bell therapy for pectus excavatum: long-term outcomes and influencing factors**  
**Hendrik van Braak**, Sjoerd de Beer, Youssef al Ghouch, Sander Zwaveling, Matthijs WN Oomen, LW Ernest van Heurn, & Justin R de Jong
- ★ **Clinical study and genetic analysis of patients with chest wall deformities associated with Marfan syndrome and Loeys-Dietz syndrome**  
**Jie Yu**, Qi Zeng, Chenghao Chen, Nan Zhang, Jiao Jinghua
- ★ **Just a Number: Haller Index does not correlate with severity of Pectus Excavatum symptoms and impact on quality of life**  
**Madelyn McArthur**, Gheed Murtadi, Kelly Bartkus, Rachael Cohen, Donna Koo, Megan Zaiyi Chiu, Farokh Demehri
- ★ **PurePectus Bars: Learning Curve**  
**Kristin Rassam**, Mark Molitor, David Notrica, Craig Egan, Jae-O Bae, Ramin Jamshidi, Benjamin Padilla, Anthony Ferrantella, James Prieto, Lisa McMahon
- ★ **Results of vacuum therapy in Pectus Excavatum patients**  
**Esra Yamansavci Sirzai**, Tunc Lacin, Nezih Onur Ermerak, Necati Citak, Ahmet Ucvet
- ★ **Effect of vacuum bell therapy on subcutaneous fat of chest wall in patients with Pectus Excavatum**  
**Qian Zhang**, Qi Zeng, Chen Chenghao, Na Zhang, Jie Yu

- ★ **Innovative surgical repair of severe Pectus Carinatum using 3d surgical planning and advanced rib fixation techniques**  
Christopher Clinker, Rami M Shorti, Jack Scaife, David Notrica, Thomas W White, [Katie Russell](#)

### **My Nightmares - 1522**

*Moderators: Dr. Hyung Joo Park & Dr. Dawn Jaroszewski*

★ *8-minute presentation & 4 min Q&A*

- ★ **Pulmonary mucormycosis eroding the chest wall: Reports of a rare case and challenges in management**  
[Joshi Mohit Kumar](#), Rajinder Parshad
- ★ **Disaster preparedness: Getting ready for potential cardiac injury during MIRPE in a patient with previous sternotomy**  
[Matias Nicolas](#), Alejandro Carmona, Juan Carlos Climente, Luzia Toselli, Daniela Sunjurjo, Gaston Bellia-Munzon
- ★ **My Biobridge nightmare**  
[Dawn Jaroszewski](#)
- ★ **The Sternum Strikes Back! – Hammock stitching to the rescue for a rigid sternum**  
[Megan Zaiyi Chiu](#), Donna Koo, Tom Jaksic, Farokh Demehri
- ★ **A year of pain: Painfulness after initial Nuss**  
[Jeffrey Zitsman](#)