CWIG2025 Program

September 17.2025, Wednesday

8:40-09:00	Opening ceremony
9:00-09:35	Lecture-style Session 1 (LS1) – PE (35mins) Moderators: Lopez Manuel, Marcelo Matinez Ferro 15 mins – Physiologic Effect of Pectus Excavatum - Becky Brown 15 mins – MIRPE: Effects on Cardiopulmonary Physiology and Quality of Life – Robert Obermeyer 5 min Q and A
9:40-10:20	Panel Discussion (PD) — PE World View (40mins) Moderator: Sadashige Uemura, Jose Ribas 10 mins Japanese Perspective – Sadashige Uemura 10 mins Turkish Perspective – Mustafa Yuksel 3 abstracts: 5 minute talk (15 mins) 5 min Q and A * No Q&A session follow each presentation
PD-1	CW250061 5 min talk Prevalence of Pectus deformities in School going children of Delhi and National Capital Region: A Cross Sectional, Observational Study Mohit Kumar Joshi, Department of Surgical Disciplines, All India Institute of Medical Sciences, New Delhi, India
PD-2	CW250104 5 min talk Decentralized Minimally Invasive Pectus Repair in Germany Caroline Fortmann, Hannover Medical School, Germany
PD-3	CW250108 5 min talk Minimally invasive treatment of pectus excavatum: 25 years of experience in Beijing, China Chenghao Chen, Department of Thoracic Surgery,

Coffee Break

10:45-11:35 Lecture-style Session 2 (PL2) — Recurrence and Redo (50mins)

Beijing Children's Hospital ,China

Moderators : Hisako Kuyama, Jean Marie Wihlm

15 min Redo after Nuss or Ravitch – Dawn Jaroszewski 15 min Management for Infection or Allergy – Hans Van Veer 15 min Surgical complications of Nuss – Eric de Loos 5 min Q and A

11:35-12:10

Lunch Time

12:10-12:35 Top 10 ranking Poster session 1 (TR-poster 1)

2-mins talk, 2 mins discussion

Moderators: Satoshi Ieir

P-1 CW250010 2-mins talk

Stabilizer Fixation versus Pericostal Suture Fixation in the Nuss Procedure

<u>Juma Obayashi,</u> Department of Pediatric Surgery, St. Marianna University School of Medicine, Kawasaki, Japan

P-2 CW250017 2-mins talk

Impact of the Nuss Procedure on Spinal CurvatureAcross Four Time Points"

<u>Jin Yong Jeong, College</u> of Medicine, The Catholic University of Korea

P-3 CW250046 2-mins talk

Cryoablation Versus Epidural Analgesia: Evaluating Clinical Benefits After the Nuss-Bar Procedure

Bram Pothof, Thoraxcentrum Twente, Medisch Spectrum Twente

P-4 CW250068 2-mins talk

A study on clinical characteristics and risk factors for the development of Surgical Site Infection after the Nuss procedure Ikumi Kimura, Department of Thoracic Surgery, Keio University School of Medicine, Tokyo, Japan

P-5 CW250132 2-mins talk

Thoracoscopic Repair of Harrison's Groove Using a Metal Implant Sunghoon Kim, University of California San Francisco

12:35 —13:25 Abstract Session1(AS1) — Evaluation (50mins)

3-minute talk, 2-minute Q&A 5-minute talk, 3-minute Q&A

Moderators - Shyam Kolvekar, Gerda Zijp

AS1-1 CW250097 3 min talk

Analysis of Costosternal Angle Changes in Patients who Underwent Minimally Invasive Repair of Pectus Excavatum

<u>Tunc Lacin, Marmara University, Faculty of Medicine, Department of Thoracic Surgery, Türkiye</u>

AS1-2 CW250036 5 min talk

Anterior-Posterior Insufficiency of the Chest Wall in Patients with Pectus Excavatum David M Notrica, Phoenix Children's Hospital, USA

AS1-3 CW250062 5 min talk

HIGHER THAN EXPECTED PREVALENCE OF PECTUS DEFORMITIES IN NEWBORNS: A PROSPECTIVE OBSERVATIONAL STUDY Elif Betul Keskin Cetinkaya, Department of Pediatrics, Sancaktepe Ilhan Varank Training and Research Hospital, Türkiye

AS1-4 CW250063 5 min talk

Mechanisms of Posture-related Cardiovascular Compression in Pectus Excavatum Evaluated by Upright and Supine MDCT-Comparison with Healthy Subjects-Takahiro Suzuki, Division of Thoracic Surgery, Department of

<u>Takahiro Suzuki,</u> Division of Thoracic Surgery, Department of Surgery, Keio University School of Medicine, Tokyo, Japan

AS1-5 CW250136 5 min talk

Echocardiographic Evaluation of Patients with Pectus Excavatum:
A Retrospective Cohort Analysis
Cecilia Villa Etchegoyen, Department of Cardiovascular and
Thoracic Surgery, Mayo Clinic, Phoenix, Arizona, USA

AS1-6 CW250115 5 min talk

Why Some Chests Resist Elevation: The Roles of Age, BMI, and Titanic Index
Juan Facundo Giacosa, Clinica Mi Pectus, Argentina

13:30 – 14:05 Abstract Session2(AS2) – PEX Function (35 mins)

3-minute talk, 2-minute Q&A 5-minute talk, 3-minute Q&A

Moderators - Carolyn Russel, Michele Torre

AS2-1 CW250057 3 min talk

Measurement of the three-dimensional cardiopulmonary volumetric ratio before and after sternocostal elevation

Ryuta Fukai, Shonan Kamakura General Hospital, Department of General Thoracic Surgery, Japan

AS2-2 CW250051 5 min talk

Measuring The Impact of Pectus Excavatum in Cardiopulmonary Function Using O2 Pulse as a Marker

<u>Rebeccah Brown,</u> Raphael H Parrado, University of Florida College of Medicine, USA

AS2-3 CW250093 5 min talk

Assessment of Right Ventricular Function in Children with Pectus Excavatum Using Real-Time Three-Dinmensional and Speckle - Tracking Echocardiography

<u>Jinghua Jiao</u>, Department of Thoracic Surgery, Beijing Children's Hospital, China

AS2-4 CW250113 3 min talk

Cardiopulmonary characteristics of pectus excavatum patients with lower versus higher exercise performance Mustafa Kabeer, CHOC,USA

AS2-5 CW250083 3 min talk

The Nuss Procedure Improves Ventilatory Efficiency: A
Retrospective Evaluation of a Japanese Cohort Using
Cardiopulmonary Exercise Testing
Tatsuo Nakaoka, Department of Pediatric Surgery, Osaka
Metropolitan University Guraduate School of Medicine, Japan

14:10-14:35 Abstract Session3 (AS3) - Tumor and Trauma-(25mins)

3-minute talk, 2-minute Q&A

Moderators – PJ Van Huijstee, Maira Kalil Fernandes

AS3-1 CW250013 3 min talk

Minimally invasive approach for rib fractures: a multi center 10 year experience, Feasibility and Safety
Miquel Martinez, ABC MEDICAL CENTRE, Mexico

AS3-2 CW250130 3 min talk

Timing of Surgical Rib Fixation and Its Impact on Clinical Outcomes: A Retrospective Analysis

<u>Cenk BALTA,</u> Antalya City Hospital, Department of Thoracic Surgery, Antalya, Turkey.

AS3-3 CW250053 3 min talk

Modified sternal wiring technique for closing clamshell incision in lung transplantation patients in Costa Rica.

Albert Bolanos Cubillo, Hospital Dr Rafael Angel Calderon Guardia , Costa Rica

AS3-4 CW250141 3 min talk

Chest Wall Reconstructions in extended resections Long term follow-up

Olavo R Rodrigues, Universidade de Mogi das Cruzes, Brasil

AS3-5 CW250096 3 min talk

Myopericytoma of the Sternum A Rare Pediatric Case Report and Literature Review

<u>Jinghua Jiao</u>, Department of Thoracic Surgery, Beijing Children's Hospital, China

14:35–15:10 Lecture-style Session 3(LS3) – PC and Vacuum Bell (35 mins)

Moderators - Frank-Martin Haeker, Kazunori Ohama

10 mins – Double Plate Technique – Sungsoo Lee

10 mins – Treatment of Pectus Carinatum in Adolescents – Sjoerd de Beer

10 mins – Vacuum Bell technique – Luzia Toselli 5 mins Q and A

15:30 -16:00 Abstract Session4 (AS4)- QOL and Screening (30 mins)

3-minute talk, 2-minute Q&A 5-minute talk, 3-minute Q&A

Moderators – David Notrica, Satoshi Takagi

AS4-1 CW250031 3 min talk

Time Heals: The Impact of Waiting Times on Pediatric Patients' Decisions to Decline Pectus Surgery

<u>Hendrik van Braak,</u> Department of Pediatric Surgery, Emma Kinderziekenhuis, Amsterdam University Medical Center, Meibergdreef 9, 1105AZ Amsterdam, The Netherlands

AS4-2 CW250091 3 min talk

Compression of ChatGPT-4o and Gemini 1.5 answers to questions about pectus treatment from the patient perspective Esra Yamansavci Sirzai, Health Sciences University Dr.Suat Seren Chest Diseases and Chest Surgery Training and Research, Turkey

AS4-3 CW250081 5 min talk

Psychosocial Determinants of Health-Related Quality of Life in Children with Chest Wall Deformities: A Mediation Analysis Yujia Wu, Department of Thoracic Surgery, National Center for Childrens Health, Beijing Children's Hospital, Capital Medical University, China

AS4-4 CW250124 5 min talk

Establishing a Regional Screening Program for Pectus Deformities in Primary School Students: Preliminary Results

Nezih Onur Ermerak, Marmara University Department of Thoracic Surgery, Turkey

16:00–16:35 Japanese Session (JP) (35 mins)

7 speakers, 3 min talk, 2 min Q and A

Moderators - Masahiko Noguchi, Donald Nuss

JP-1 CW250082 3 min talk

Investigation of Thoracic Deformities Associated with Bifid Ribs in Pediatric Patients.

Yoshie Sasaki, Gunma Childrens Medical Center

JP-2 CW250138 3 min talk

Analysis of clinical characteristics regarding Nuss procedure after congenital heart surgery with median sternotomy.

Kyosuke Tatsuta, Department of Pediatric Surgery, Japan Community Healthcare Organization Kyusyu Hospital.

JP-3 CW250078 3 min talk

Nuss procedure with retrosternal incision.

<u>Akihiro Shimotakahara,</u> Tokyo Metropolitan Childrens Medical Center

JP-4 CW250055 3 min talk

Correction of Asymmetric Pectus Excavatum by the Nuss Procedure: Strong Initial Overcorrection May Be Required for Symmetry.

Takashi Kochi, Plastic and Reconstructive Surgery, Sendai City

Hospital

JP-5 CW250039 3 min talk

A case of Marfan syndrome after liver transplantation in which infection control is difficult after the Nuss procedure.

<u>Atsuhisa Fukuta, Department of Pediatric Surgery, Faculty of Medical Sciences, Kyushu University</u>

JP-6 CW250072 3 min talk

A Case of Pectus Carinatum Treated with a Combination of the Modified Nuss Procedure and Sterno-Costal Elevation.

<u>Takeaki Kajiwara, Department of Plastic and Reconstructive Surgery, Karatsu Red Cross Hospital</u>

JP-7 CW250077 3 min talk

Reconstruction of Chest Wall and Breast Deformities in Poland Sequence Using Latissimus Dorsi Flap and Free fat injection. Shotaro Suzuki, Department of Plastic, Reconstructive and Aesthetic Surgery, Fukuoka University Hospital.

JP-8 CW250037 3 min talk

Vacuum Bell Therapy for Pectus Excavatum -How to Maintain Motivation-

<u>Kazunori Ohama,</u> Kanazawa Medical University, Department of Pediatric Surgery

16:40 -17:10 Abstract Session5 (AS 5) - Bar size selection-(30mins)

3-minute talk, 2-minute Q&A 5-minute talk, 3-minute Q&A

Moderators – Caroline Fortmann, Cheng hao Chen

AS5-1 CW250119 3 min talk

Discrepancies in Bar Quantity Selection for the Nuss Procedure: A Single-Center Retrospective Analysis and Development of a Preoperative Assessment Model

<u>YiTsun Chen,</u> Department of Thoracic Surgery, Beijing Children's Hospital, China

AS5-2 CW250116 5 min talk

Establishing a clinical guideline for pectus bar sizing based on age and body habitus stratified data

<u>Rajkamal Vishnu</u>, Cleveland Clinic Pectus and Chest Wall Institute, Cleveland Clinic Children's Hospital, Cleveland, OH, USA

AS5-3 CW250088 5 min talk

Application of Deep Neural Networks to Predict Surgical Outcomes and Optimize Nuss Bar Selection in Pectus Excavatum: Preliminary Study

<u>Younggi Jung,</u> Department of Thoracic and Cardiovascular Surgery, Korea University Anam Hospital, Korea University College of Medicine, Seoul, Republic of Korea, Korea

Move to Zenkoji by bus, welcome reception

18:00 Welcome Party

September 18,2025, Thursday

08:30-9:10 Thematic Session1 endored by Surgical Spine Scoliosis (Pannel Discussion) (with 2 abstracts)

*This session is made possible generous support from Surgical Spine, without honorarium or promotional involvement.

Moderators - Kyohei Masai, Slawmir Zacha

15 mins June Takahashi - Treatment of Scoliosis

2 abstracts

10 min discussion

TS1-1 CW250092 8 min talk

Surgical Approaches to Effectively Treating Pectus Excavatum Associated with Scoliosis.

<u>Tunc Lacin</u>, Marmara University, Faculty of Medicine, Department of Thoracic Surgery, Turkey

TS1-2 CW250122 8 min talk

Impact of Nuss surgery on scoliosis: What Should Be Considered? Ana Lain Fernandez, Hospital Universitari Vall de Hebron, Spain

9:15 – 9:40 Abstract Session6(AS6) -Pectus Carinatum-(25 mins)

3-minute talk, 2-minute Q&A 5-minute talk, 3-minute Q&A

Moderators - Horacio Abramson

AS6-1 CW250049 3 min talk

Pectus Carinatum Bracing: Key Factors in Success and Dropout Mustafa Yuksel, Demiroglu Bilim University, Department of Thoracic Surgery, Turkey

AS6-2 CW250114 3 min talk

Repair of Mixed Type Pectus Deformity Using The Sandwich Technique

<u>Aleyna Gultekin Aridas</u>, Marmara University, Faculty of Medicine, Department of Thoracic Surgery, Turkey

AS6-3 CW250069 5 min talk

The fully thoracoscopic repair of Pectus Carinatum. Operative technique and 15 year review of surgical outcomes

<u>David Perez-Alonso</u>, Department of Thoracic Surgery. Hospital Universitario Insular de Gran Canaria. Spain

AS6-4 CW250089 5 min talk

Minimally Invasive Surgery for Pectus Carinatum Correction: A Retrospective Single-Center Study JIE YU, Beijing Children's Hospital, China

9:45 – 10:35 Thematic Session2(TS2) endored by Solve

Debate-optimal timing for sugery-(50 mins), 10 mins panel discussion

*This session is made possible generous support from Solve, without honorarium or promotional involvement.

Moderators – Manuel Lopez, Masahiko Noguchi

Early intervention (<10 yo)
10 min Pro: Hyung Joo Park
10 min Pro: Lisa McMahon
10 min Con: Robert Obermeyer

10 min Con: Tunc Lacin

Coffee Break

10:55—11:40 Top 5 ranking abstracts-(45 mins)

5-minute talk, 3-minute Q&A

Moderators – Luzia Toselli, Lisa McMahon

TR-oral -1 CW250012 5 min talk

INTERNATIONAL SURVEY ON THE MANAGEMENT OF PECTUS EXCAVATUM: IS THERE A CONSENSUS?

<u>Ufuk Ates</u>, Ankara University, Faculty of Medicine, Department of Pediatric Surgery, Turkey

TR-oral -2 CW250018 5 min talk

Impact of Age on Surgical Results for Symmetric Pectus Excavatum Patients: A Propensity Score Matched Comparative Study

<u>Seung Keun Yoon,</u> Department of Thoracic and Cardiovascular Surgery, Seoul St. Marys Hospital, College of Medicine, The Catholic University of Korea, Seoul, Republic of Korea, Korea

TR-oral -3 CW250070 5 min talk

Exercise-induced ectopy and its relationship to cardiopulmonary fitness, cardiac function, and radiographic markers of severity in patients with pectus excavatum

Reheasel L. Rrown, Cincippati Children's Hagnital Medical Center

Rebeccah L Brown, Cincinnati Children's Hospital Medical Center, USA

TR-oral -4 CW250075 5 min talk

Exercise-Induced Right Ventricular Compression in Pectus Excavatum: Insights from an Exercise Cardiac CMR study Najdat Tracy, Department of Thoracic Surgery, University Hospitals Leuven, Belgium, Belgium

TR-oral -5 CW250102 5 min talk

Pectus Implant Stainless-Steel Abrasion in the Pleural Cavity Induces Systemic Metal Contamination in Mice Caroline Fortmann, Hannover Medical School, Germany

11:40 Commemorative Photo Time

12:05 – 12:50 PP/HBM luncheon

12:30—12:50 Top 10 ranking Poster session2 (20 mins)

_2-mins presentations, 2 mins discussion *Moderator –Takashi Kochi*

P-6 CW250038 2 min talk

OUTCOMES OF PROLONGED RETAINING PECTUS BARS AND PATIENTS' PERSPECTIVES BEHIND

Mustafa Yuksel, Demiroglu Bilim University, Department of

P-7 CW250065 2 min talk

Thoracic Surgery

Bridging the Gap in Pectus Excavatum Care: A QI Project on Preand Postoperative Physical Therapy Integration Rebecca L Brown, Cincinnati Childrens Hospital Medical Center

P-8 CW250074 2 min talk

The impact of surgery for pectus excavatum on pulmonary function

<u>Kyohei Masai, Department of Surgery</u>, Division of Thoracic Surgery, Keio University School of Medicine, Tokyo, Japan

P-9 CW250085 2 min talk

Is Multiple-Bar Repair Safe in Pediatric Pectus Excavatum?
A Comparative Study with the Adult Population
Gongmin Rim, CHA Bundang Medical Center, CHA University,
Seongnam, South Korea

P-10 CW250103 2 min talk

Severe Pectus Excavatum and cardiac surgery: Sequential repair to ensure safety

Ana Lain Fernandez, Hospital Universitari Vall de Hebron

12:55 – 13:30 Abstract Session7(AS7) - Pectus Technique-(35 mins)

3-minute talk, 2-minute Q&A

Moderators – Sjoerd de Beer, Nezih Onur Ermerak

AS7-1 CW250019 3 min talk

Surgical Considerations for Platythorax and Pectus Excavatum with Anterior-Posterior Insufficiency David M Notrica, Phoenix Children's Hospital, USA

AS7-2 CW250086 3 min talk

The Flarebuster: A Critical Adjunct for Inferior Chest Wall Remodeling in Pectus Excavatum Repair Gongmin Rim, CHA Bundang Medical Center, CHA University, Seongnam, South Korea, Korea

AS7-3 CW250105 3 min talk

Modified Nuss Procedure: Auxillary Subxiphoid Incision Haktan Uygar ONEN, Marmara University , Turkey

AS7-4 CW250127 3 min talk

Minimally Invasive Repair of Pectus Patients who Require Re-Correction

<u>Haktan Uygar ONEN,</u> Marmara University, Faculty of Medicine, Department of Thoracic Surgery, Turkey

AS7-5 CW250106 3 min talk

Lipofilling in Chest Wall anomalies. Maria Victoria Romanini, Istituto Giannina Gaslini, Italy

AS7-6 CW250117 3 min talk

"Free Sandwich" Technique: A Novel Personalized Surgical Approachfor Asymmetric Pectus Excavatum in Children

	Qi Zeng, Department of Thoracic Surgery, Beijing Children's Hospital, China
AS7-7	Move to Poster
13:40 -14:25	Dry lab 1 (Group 1 member) 6 tables, 10 min each
14:30 -15:15	Dry lab 2 (Group 2 member) 6 tables, 10 mins each
15:20 -16:05	Abstract Session8 (AS 8) - PEX study-(45 min) 3-minute talk, 2-minute Q&A 5-minute talk, 3-minute Q&A Moderators - Joel Dunning, Tomohisa Nagasao
AS8-1	CW250129 3 min talk Evaluation of the Content and Quality of YouTube Videos Discussing MIRPE: Do We Need Peer Review for Better Quality? Aleyna Gultekin Aridas, Marmara University Department of Thoracic Surgery ,Turkey
AS8-2	CW250060 3 min talk Surgical Repair of Pectus Excavatum in Patients with Previous Intrathoracic Operations Naoko Uga, The University of Osaka Graduate School of Medicine, Department of Pediatric Surgery ,Japan
AS8-3	CW250067 3 min talk Is open repair for chest deformities outdated or state of the art? <u>Hiroshi Iida</u> , Shonankamakura General Hospital ,Japan
AS8-4	CW250120 3 min talk Impact of Different Bar Placement Techniques in Minimally Invasive Repair of Pectus Excavatum on Thoracic Morphology: A Retrospective Cohort Study YiTsun Chen, Department of Thoracic Surgery, Beijing Children's Hospital, China

AS8-5

CW250066 5 min talk

Reinforcement of Thoracic Thickness Using the Cross-Bar Technique in Pectus Excavatum: A Comparative Study

MASAHIKO NOGUCHI, Department of Plastic and Reconstructive Surgery, Nagano Children Hospital ,Japan

AS8-6 CW250029 5 min talk

Anterior chest wall response to Nuss bar removal in adolescents with pectus excavatum

<u>Pavol Omanik,</u> Pediatric Surgery Department, National Institute of Children Diseases, Bratislava, Slovakia

AS8-7 CW250064 5 min talk

Tension-releasing procedures improve outcomes of Nuss procedure for PE in adult population. A computational study with clinical applicability.

<u>DAVID PEREZ</u>, Department of Thoracic Surgery. Hospital Universitario Insular de Gran Canaria. Spain

16:10 -16:40 Abstract Session9 (AS 9) Pain control 1-(30 min)

3-minute talk, 2-minute Q&A 5-minute talk, 3-minute Q&A

Moderators – Sungsoo Lee, Jowita Biernawaska

AS9-1 CW250040 3 min talk

Predictors for Postoperative Pain in Pediatric Patients undergoing the Nuss Procedure for Pectus Excavatum

<u>Sayaka Matsumoto,</u> Department of Pediatric Surgery, The University of Osaka, Japan

AS9-2 CW250041 5 min talk

Current Practices in Perioperative Pain Management Following the Nuss Procedure; a CWIG-survey

<u>Elise J. van Polen, Zuyderland Medical Center, Heerlen, The Netherlands</u>

AS9-3 CW250048 5 min talk

The Bridge Technique: Addressing Bar Rotation Challenges Amidst Enhanced Postoperative Mobility in the Cryoanalgesia Era Luzia Toselli, Clinica Mi Pectus, Buenos Aires, Argentina,

AS9-4 CW250079 5 min talk

Risk factors of Acute Postoperative Pain Following the Surgery of Pectus Excavatum

<u>Kaito yano,</u> Department of Surgery, Division of Thoracic Surgery, Keio University School of Medicine, Tokyo, Japan

16:45 – 17:45 Thematic Session3(TS-3) endored by Zimmer BioMed Japan Older age Treatment (Pannel Discussion) -(60 mins)

*This session is made possible generous support from Zimmer BioMed Japan, without honorarium or promotional involvement.

Moderators - Sadashige Uemura/Mustafa Yuksel

15 mins Rib Osteotomy with Nuss in Adults – Hisako Kuyama 15 mins Difficulties in addressing adult patients – Dawn Jaroszewski

15 mins Cosmetic perspectives in adult pectus patients –Tomohisa Nagasao

15 mins – Adult Pectus Patients – Vladimir Kuzmichev

September 19,2025, Friday

8:30 – 9:05 Abstract Session10(AS 10) – Complications and infection(35 mins)

5-minute talk, 3-minute Q&A *Moderators- Sergio Sesia*

AS10-1 CW250020 5 min talk

Current Management of Skin Reactions and Infections After Nuss

Procedure: A Survey Among CWIG Surgeons

Noah Sesia, Faculty of Medicine, University of Freiburg, Germany

AS10-2 CW250030 5 min talk

Nuss Bar Infections: Surgical Risk Factors and Management

Strategies

<u>Hendrik van Braak</u>, Department of Pediatric Surgery, Emma Kinderziekenhuis, Amsterdam University Medical Center, Meibergdreef 9, 1105AZ Amsterdam, The Netherlands

AS10-3 CW250139 5 min talk

Surgical Site Infections in Adult Pectus Repair Rawan Zeineddine Mayo Clinic Arizona ,USA

AS10-4 Move to Poster

9:10—9:40 Abstract Session11(AS11) – Pain2 –(30 mins)

3-minute talk, 2-minute Q&A 5-minute talk, 3-minute Q&A

Moderators -

Ana Lain Fernandez, Gaston Federico Bellia Munzon

AS11-1 CW250052 5 min talk

Prospective randomized trial of efficacy and safety of erector spinae catheter and intercostal cryoablation protocols after pectus surgery: Interim analysis

Rebeccah L Brown, Cincinnati Children's Hospital Medical

Center ,USA

AS11-2 CW250094 5 min talk

Impact of 2-site cryoablation on pain control after the Nuss procedure

Cecilia Gigena Heitsman, Cleveland Clinic, USA

AS11-3 CW250095 5 min talk

Non-Inferiority of 1-Minute Versus 2-Minute Cryoanalgesia Cycles During Minimally Invasive Repair of Pectus Excavatum (MIRPE): A Propensity Score-Matched Analysis

<u>Francesco Donati,</u> Clinica Mi Pectus, Capital Federal, Buenos Aires, Argentina.

9:40 – 10:10 Abstract Session12 (AS 12) – Complications – (30 mins)

3-minute talk, 2-minute Q&A 5-minute talk, 3-minute Q&A

Moderators- Joel Dunning, Pavol Omanik

AS12-1 CW250027 3 min talk

Antibiotic treatment for chronic pain following minimal invasive repair of pectus excavatum.

<u>Jesse Romsom</u>, Haga Ziekenhuis , Netherlands

AS12-2 CW250054 3 min talk

Another source of near-fatal bleeding - late-onset hemothorax six weeks after uneventful minimal invasive repair of pectus excavatum

<u>Kai-Uwe Kleitsch</u>, Department of Pediatric Surgery, Chest Wall Unit, Children's Hospital of Eastern Switzerland, St. Gallen, Switzerland

AS12-3 CW250110 3 min talk

Costo-clavicular Space: A Risk Zone for Brachial Plexus Injury in Pectus Repair?

Hyung Joo Park, Cleveland Clinic , USA

AS12-4 CW250112 5 min talk

Pleural Effusion After MIRPE: Steroids Fail to Show Benefit in a 446-P atient Retrospective Study

Luzia Toselli, Clinica Mi Pectus, Buenos Aires, Argentina

AS12-5 CW250025 5 min talk

Evaluating the Cumulative Complication Risk during the Surgical Treatment Course of Pectus Excavatum; a Single-Center Analysis. Elise J. van Polen, Zuyderland Medical Center, Heerlen, The Netherlands

Coffee Break

10:35 – 11:15 Pectus Arcuatum Session(PAS) –(41mins) (with 3 abstracts)

Moderators- Becky Brown, Jose Ribas M Campos

10 mins – Pectus Arcuatum repair – Jose Ribas M Campos 10 mins – Pectus Arcuatum repair – Nezih Onur Ermerak 3min Q&A 3 abstracts:

PAS-1 CW250076 3 min talk and 2min Q&A

Patient-Specific 3D Surgical Guide-Assisted Wedge Osteotomy for Pectus Arcuatum: A Novel Tabula-Sparing Technique

Hasan Ersoz, Dr. Pectus Clinic, Izmir, Turkey

PAS-2 CW250111 3 min talk and 2min Q&A

Pectus Arcuatum Repair: A Novel Minimally Invasive Technique

Hyung Joo Park, Cleveland Clinic, USA

PAS-3 CW250134 5 min talk and 3min Q&A

Pectus Arcuatum: Over 15 Years of Experience at a Reference

Center

Rawan Zeineddine, Mayo Clinic Arizona, USA

11:20—11:50 Thematic Session4 – The choice of bar configuration (30 mins)

8 mins talk, 6mins discussion

Moderator - Tunc Lacin, Marcelo Martinez-Ferro

Parallel Bar David Notrica

Xi Bar John DiFiore

Xi Technique Hyung Joo Park

Lunch pickup

11:55 Lunch meeting – Manuel Lopez Cryotherapy-(25mins)

Moderators : Manuel Lopez Manuel Lopez, Slawomir Zacha

Jowita Biernawska

12:25 –13:05 Abstract Session13(AS 13)- Simulation/Basic Science – (45 mins)

3-minute talk, 2-minute Q&A 5-minute talk, 3-minute Q&A

Moderators : Mathew Thomas, Ivan Schewitz

AS13-1 CW250101 5 min talk

Taulinoplasty and MIRPE: comparison of two different approaches for pectus excavatum repair
Michele torre, Gaslini Institute, Genova, Italy

AS13-2 CW250015 3 min talk

"Sternochondroplasty with extrathoracic Pectus Up bar by intraoperative traction": Taulinoplasty combined with a "mini-Ravitch" surgery for pectus excavatum correction CALOGERO PORRELLO, Thoracic Surgery Unit, Noto Pasqualino clinic, Palermo, Italy

AS13-3 CW250028 3 min talk

Guidance in osteotomy for Ravitch procedure in chest wall deformities: optimised resection and reconstruction Hans GL Van Veer, Department of Thoracic Surgery, University Hospitals Leuven, Belgium

AS13-4 CW250033 3 min talk

The new IX-bar technique Viktor Markushin, TS clinic, Krasnodar, Russia

AS13-5 CW250140 3 min talk

Understanding Chest Wall Movement Recovery Trajectories Following Pectus Surgery Kwanyong Hyun, St. Vincents Hospital, The Catholic University of Korea

AS13-6 CW250090 3 min talk

Criterias to decide how many bars to place before pectus excavatum surgery

<u>Tunc Lacin</u>, Marmara University, Faculty of Medicine, Department of Thoracic Surgery Turkey

AS13-7 CW250098 3 min talk
Development and Pre-Validation of Simulation Models for Minimally Invasive Repair of Pectus Excavatum
Sofia Tachella, Clinica Mi Pectus, Argentina

13:05—13:20 Closing Ceremony
15mins Nuss's Reflection Donald Nuss
Closing Address – Masahiko Noguchi

13:40 -14:10 CWIG General Assembly-(30mins)

Poster Presentation

P-1 CW250010

Stabilizer Fixation versus Pericostal Suture Fixation in the Nuss Procedure <u>Juma Obayashi, Department of Pediatric Surgery, St. Marianna University School of Medicine, Kawasaki, Japan</u>

P-2 CW250017

Impact of the Nuss Procedure on Spinal Curvature Across Four Time Points Jin Yong Jeong, College of Medicine, The Catholic University of Korea

P-3 CW250046

Cryoablation Versus Epidural Analgesia:

Evaluating Clinical Benefits After the Nuss-Bar Procedure Bram Pothof, Thoraxcentrum Twente, Medisch Spectrum Twente

P-4 CW250068

A study on clinical characteristics and risk factors for the development of Surgical Site Infection after the Nuss procedure

<u>Ikumi Kimura, Department of Thoracic Surgery, Keio University School of Medicine, Tokyo, Japan</u>

P-5 CW250132

Thoracoscopic Repair of Harrison's Groove Using a Metal Implant Sunghoon Kim, University of California San Francisco

P-6 CW250038

OUTCOMES OF PROLONGED RETAINING PECTUS BARS AND PATIENTS' PERSPECTIVES BEHIND

Mustafa Yuksel, Demiroglu Bilim University, Department of Thoracic Surgery

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Bridging the Gap in Pectus Excavatum Care: A QI Project on Pre- and Postoperative Physical Therapy Integration
Rebecca L Brown, Cincinnati Childrens Hospital Medical Center

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The impact of surgery for pectus excavatum on pulmonary function <u>Kyohei Masai,</u> Department of Surgery ,Division of Thoracic Surgery, Keio University School of Medicine, Tokyo, Japan

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Is Multiple-Bar Repair Safe in Pediatric Pectus Excavatum? A Comparative Study with the Adult Population

Gongmin Rim, CHA Bundang Medical Center, CHA University, Seongnam, South Korea

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Severe Pectus Excavatum and cardiac surgery: Sequential repair to ensure Safety

Ana Lain Fernandez, Hospital Universitari Vall de Hebron

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Minimally invasive treatment of pectus carinatum without anterior chest wall incision

Hiroshi Taniguchi, Ise Municipal General Hospital

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ALTERNATIVE TREATMENT OF PECTUS EXCAVATUM

Rustem Yakubovich Hayaliev, Multidisciplinary International Clinic Surgemed, Urgench, Uzbekistan, Republican Center of Sport Medicine, Tashkent, Uzbekistan

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Clinical application of vacuum bell therapy for pectus excavatum; finding suitable candidates.

<u>Ji Eon Kim, Department of Thoracic and Cardiovascular Surgery, Korea University Anam Hospital</u>

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External Chest Wall Stabilizers in Rib Fractures: Impact on Clinical Outcomes Cenk BALTA, Antalya City Hospital, Antalya, Turkey.

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Pericardial Effusion due to rib fracture David M Notrica, Phoenix Childrens Hospital

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CRYO-ANALGESIA FOR MULTIPLE FRACTURED RIBS.

<u>Ivan Schewitz</u>, University of Cape Town , Waterfall City Hospital

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Brace Treatment in the Sternal Fracture Esra Yamansavci Sirzai <u>Suat Seren</u>, Chest Diseases and Surgery Training and Research Hospital, Thoracic Surgery Department

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Resection and reconstruction of tumors in the chest wall: experience in a national concentration center

Miguel Martinez, ABC MEDICAL CENTRE, ISSEMYM MEDICAL CENTRE

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Application of bridge technique for pectus bar fixation during Nuss procedure Dong Yan, Thoracic surgery Beijing children hospital

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Surgical methods for removal of the pectus bar fixed with steel wire Qian Zhang, Department of Thoracic Surgery, Beijing Children s Hospital

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NBA XI: A Cheat Code to Multiple Bar Pectus Repair Hyung Joo Park, Cleveland Clinic

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Use of Elevation-Compression Devices in Correction of Chest Deformities Vladimir Kuzmichev, MONIKI

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Nuss procedure with cross-bar can correct isolated costal flaring Vladimir Kuzmichev, MONIKI

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Short Bars, Big Impact: The Innovative Short-Bar and Sandwich Techniques Redefining Pediatric Chest Wall Surgery

<u>Anja Christina</u>, WeinhandlUniversitiy Clinic of Pediatric and Adolescent Surgery, Medical University of Vienna

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Correction of PE in women Rustem

<u>Yakubovich Hayaliev</u>, International Clinic Surgemed, Urgench, Uzbekistan, Republican Scientific Practical Center of Sport Medicine, Tashkent, Uzbekistan

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SEVERE FORMS OF PECTUS EXCAVATUM

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P-27 CW250043 Over 1000 cases of Nuss procedure

<u>Yasushi Kasagi,</u> Department of Thracic Surgery, Matsuyama Cardiovascular Medical Center

P-28 CW250058

A Twelve-year-old Child with a Sunken Sternum and Progressive Muscle Weakness

Siman Chen, Department of Thoracic Surgery, Beijing Children's Hospital

P-29 CW250123

Nuss procedure after sternal cleft repair: challenging but feasible Ana Lain Fernandez, Hospital Universitari Vall de Hebron

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Simultaneous Pericardial Cyst Excision and Nuss Procedure in a Patient with Pectus Excavatum

<u>Hayrunisa Kahraman Esen</u>, Nisantasi University, Faculty of Medicine, Department of Pediatric Surgery, Istanbul, Turkey

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Minimally invasive repair of Pectus excavatum in Montenegro

<u>Branko Campar, Departhment of Thoracic surgery, University of Montenegro, Clinical center of Montenegro, Podgorica, Montenegro</u>

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Impact of Surgery on Quality of Life, Psychological States, and Personality Traits in Patients with Pectus Excavatum

<u>Kohei Matsuda</u>, Division of Thoracic Surgery, Department of Surgery, Keio University School of Medicine, Department of General Thoracic Surgery, Saitama City Hospital

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Study on the introduction of thoracic stretching for children with pectus excavatum during follow up Report at 6 months
Kiyoka Inoue, Kawasaki University of Medical Welfare

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Freeze or Heat for Pain Control After the Nuss Procedure Sadashige Uemura, Nishinomiya Watanabe Cardiovascular Center

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Enhancing Technical Mastery of Intercostal Cryoanalgesia in MIRPE:
Development and Validation of Two Procedural Simulation Models

<u>Sofia Tachella</u>, Clinica Mi Pectus , Fundacion Hospitalaria Mother and Child Medical Center

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Clinical analysis of the Nuss procedure for pectus excavatum in patients under 10 years of age.

<u>Tamaki Iwade</u>, Department of Pediatric Surgery, Ishikawa Prefectural Central Hospital

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Prevention of lung damage during the correction of Pectus excavatum (PE) deformity by using a cross bars

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Optimal age for Nuss surgery. Our version.

<u>Viktor Markushin, TS clinic, Krasnodar, Russia</u>, Multidisciplinary international hospital Surgemed, Urgench, Uzbekistan

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Evaluation of Costal Morphology in Pectus Excavatum Using Geometric Morphometrics: A Comparison with the Normal Thorax <u>Hisako Kuyama,</u> Kawasaki Medical School, Department of Pediatric Surgery

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The contribution of 3D-printing in the minimally invasive corrective surgery of Pectus Excavatum.

<u>Maha Tachaouine,</u> Department of Thoracic Surgery, HASSAN II University Hospital, Fes

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Implant Failure after Minimally Invasive Repair of Pectus Excavatum; a Case-Series

Elise J. van Polen, Zuyderland Medical Center, Heerlen

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The influence of thoracic morphology on recurrence of primary pneumothorax <u>Kazuma Nakayama</u>, Department of Thoracic Surgery, Keio University School of Medicine, Tokyo, Japan

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Diagnostic and Therapeutic Challenges of Pleural Effusion After the Nuss Procedure: A Case Series

<u>Hendrik van Braak, Department of Pediatric Surgery, Emma Kinderziekenhuis,</u> Amsterdam University Medical Center, Meibergdreef 9, 1105AZ Amsterdam, The Netherlands , Department of Surgery, Leiden University Medical Center, Albinusdreef 2, 2333ZA Leiden, The Netherlands

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Thermodermography as useful tool to assess effects/side effects of thoracal cryoablation after surgical repair of chest wall deformities

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Bilateral Hemothorax Following Chest Wall Reconstruction in a Noonan Syndrome Patient with Chest Wall Deformity: A Case Report Yujia Wu, Department of Thoracic Surgery, National Center for Childrens Health, China, Beijing Childrens Hospital, Capital Medical University

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Concurrent Pericardial Cysts and Pectus Excavatum: Insights from Two Adolescent Cases

<u>Shelby Leigh Aughtman</u>, Macon & Joan Brock Virginia Health Sciences at Old Dominion University

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Complications of pectus excavatum surgery using the Nuss procedure. Reiko Asato, University of the Ryukyus Hospital Department of Plastic and

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Pectus Hardware Salvage Following Infection At A Single Institution

Joe Rodriguez, Eastern Virgina Medical School at Old Dominion University ,USA

Reconstructive Surgery.