



# ESC CONGRESS 2021

THE DIGITAL EXPERIENCE

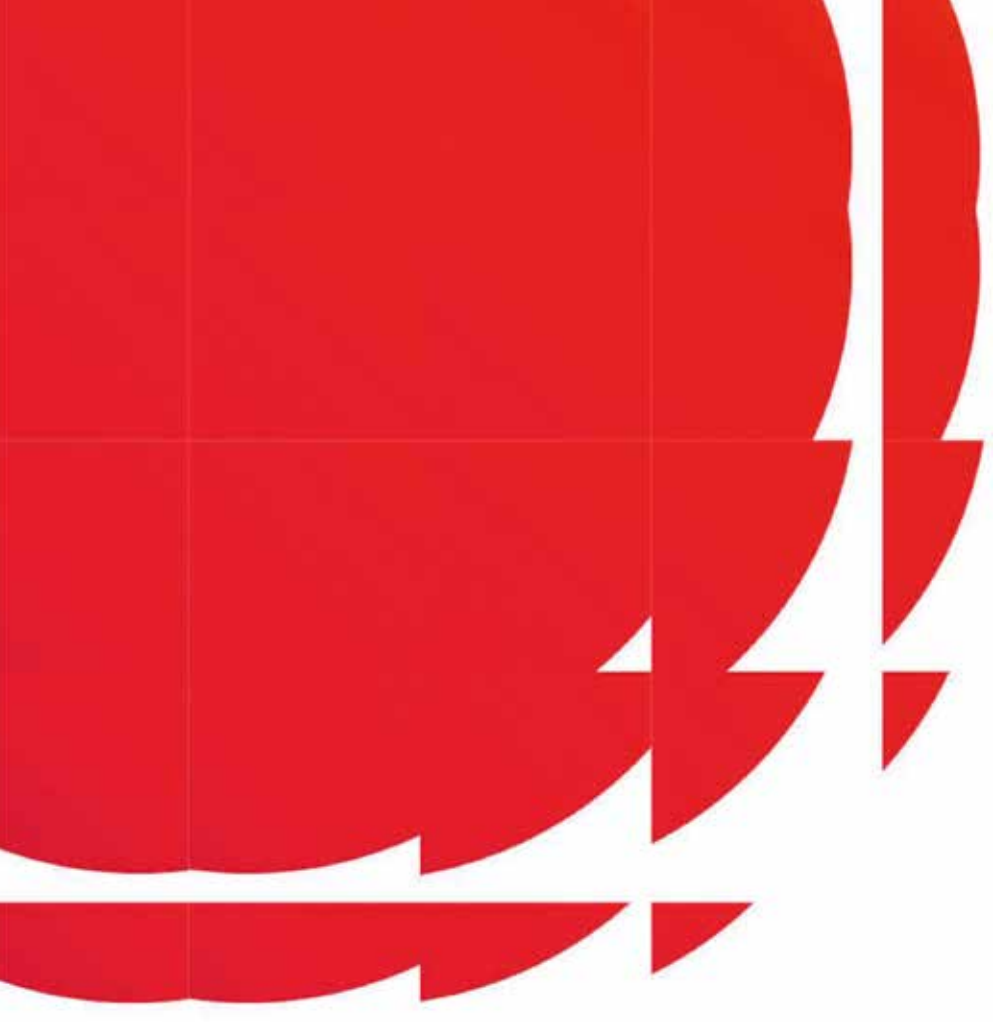
**27 - 30 AUGUST**

Post-Congress Report



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## 1. Key Figures

## 1.1. Key Figures

### 39,685 Participants Registered

- 36% of registrations from those under age 40
- From 170 countries/territories
- 6,375 (16.1%) of registrations were new contacts

### 25,295 Logged-In Users during congress dates

FROM 27- 30 AUGUST (CONGRESS DAYS)

- 25,295 delegates logged in
- 63.7% of total registered participants (2020:61.9%)
- 36% of delegates under age 40 (2020: 52.6%)
- 38% of delegates were female (2020: 43.6%)

### Analytics

- On average, 17,043 logged on to the congress platform each day
- Delegates spent 3:04 hours/day watching live content
- Delegates spent 42 min/day watching on-demand content
- 73.9% of delegates attended more than one congress date

### 452 ESC Scientific and Educational Programme Sessions

- 207 scientific and educational programmes
- 156 abstract-based sessions
- 40 Late-Breaking Science Sessions
- 48 ESC TV
- 1 special events

### 3,775 Participants in the Programme

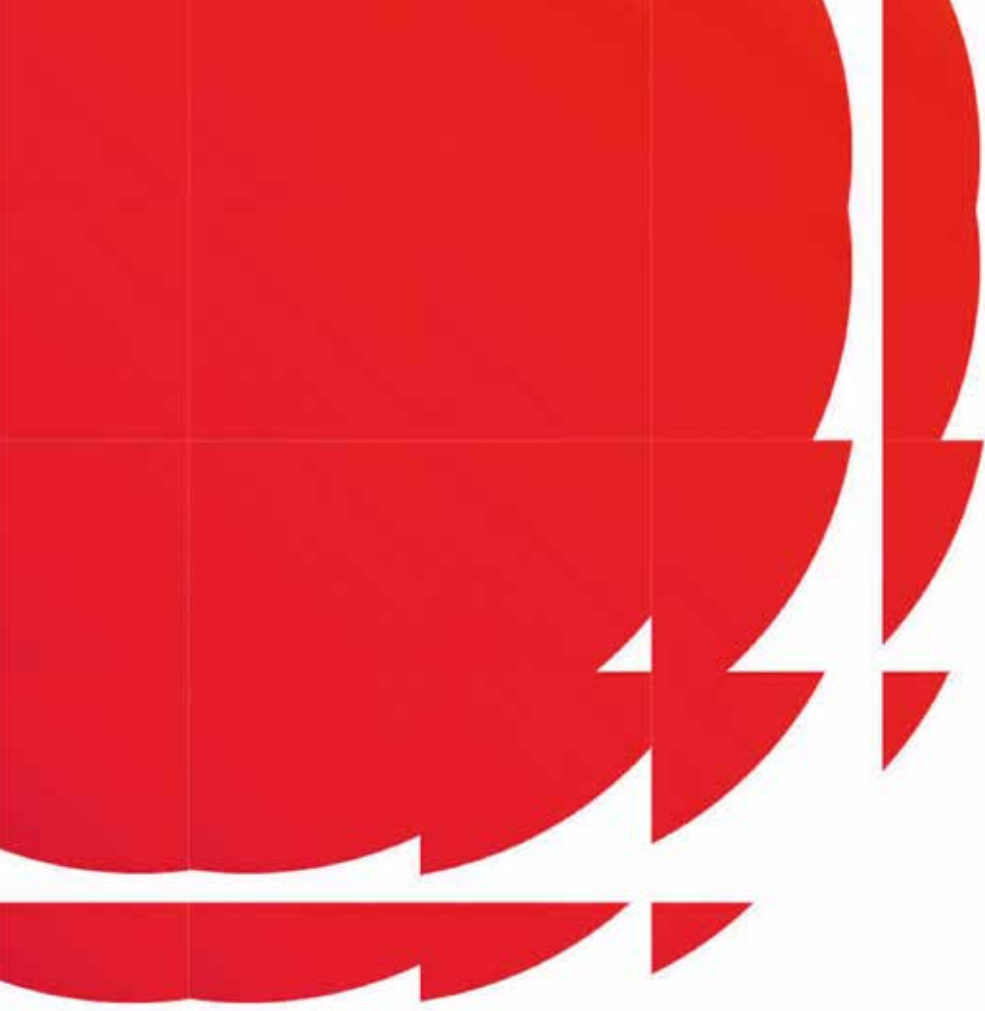
- 963 Invited faculty (chairpersons, speakers, discussants, judges) – 47 countries represented
- 2,873 presenters (abstracts, clinical cases) – 87 countries represented

### Scientific Contributions

- 5,629 abstracts submitted / 3,798 accepted
- 470 clinical case submitted / 119 accepted
- 197 Late-Breaking Science Applications / 130 accepted
- 42 interviews produced for the congress

### 79 Industry Sessions & 4 virtual Tutorials

- 63 channel Satellite Symposia
- 16 prime time Satellite Symposia
- 4 virtual Tutorials



## **2. Scientific Programmes**

## 2.1. Background Information

### NEW in 2021:

#### 1. NEW IN CHANNEL PROGRAMME

- New educational tracks:
  - Core Cardiology – Educational track, developed in collaboration with the ESC Educational Committee, designed to give the audience a general update on all topics of cardiology.
  - Cardiology Toolbox – Didactic sessions to convey practical knowledge for practicing cardiologists who want to refresh and improve their skills and for cardiologists in training.
- NEW role of Chat Moderator – Representatives of young community moderating chat forum discussions during session broadcasts.
- Live sessions on the channels at 8 a.m. & 12 p.m. – featuring live interactions with the audience.
- Live interludes from the studio during 15 minute breaks – short sessions with lively discussions featuring experts in the studio.

#### 2. NEW IN THE PRIME TIME PROGRAMME

- More time slots allocated to prime time sessions (guidelines & Hot Lines) (5 hours) in comparison with 2020 (3 hours, 15 minutes)
- 1. Guideline sessions – 70 minutes per session
  - 4. presentations – 10 minutes per chapter
    - Panel discussion – 30 minutes
  - Hot Line Sessions – 55 minutes (2 Hot Lines) & 90 minutes ( 3 Hot Lines)
    - Most presenters had 12 minutes to present their trials
    - Discussant appointed to give a review – 5 minutes
    - Panel discussions & questions from the audience – 12 minutes (larger trials were given up to 15 minutes)

Presentation and discussion times increased in comparison with 2020 and previous years (on site)

- The day in focus – wrap-up and insights on the programmes from the experts – programme available exclusively for ESC Members & FESC

## 2.2 Schedule Overview

The schedule of the digital event was as follows:

### MONDAY, 23 AUGUST

- Opening of the Research Gateway
- Abstracts & VOD presentation available online with platform interactivity features

### FRIDAY, 27 AUGUST – MONDAY, 30 AUGUST

- Live Abstract Presentations & Discussions – 7:15–8:00 – ZOOM rooms by topic
- Channel Programme – 8:00–13:45 – 15 channels running in parallel
- Prime Time Programme – 14:00–21:00 – Live Sessions from ESC studio in Amsterdam
- Live Abstract Presentations & Discussions – 20:15–21:00 (not on Monday)

All presentations broadcast in the morning programme (channels by topic) and from the live studio were available on the platform the day after the broadcast.

### 2.2.1 Scientific and Educational Programme

Table 2-1: 2019–2021 Number of Sessions Overview

	2019	2020	2021
<b>Abstract - Based Programme</b>	<b>248</b>	<b>259</b>	<b>156</b>
Abstract Sessions	30	6 (channel)	61 (live)
Advances in Science	60	67 (VOD)	11 (channel)
Best Posters / e-Posters	-	104	45*
Clinical Cases	32	26	21
Moderated Posters	70	-	
Poster Sessions	7	-	
Rapid Fire Abstracts	30	28 (VOD)	
Award Abstracts	7	8 (channel)	8 (channel)
Blockbusters - Deep Dives (new name in 2021: Highlights from the Young)	12	20 (VOD)	10 (live)
<b>ESC TV</b>	<b>51</b>	<b>34</b>	<b>42</b>
ESC TV Interviews	42	30	24
ESC TV Stage Sessions	11	-	
ESC TV Wrap-Ups	4	4	
Special Events	-	-	
New in 2021: The Day in Focus - Exclusive for ESC Members & FESC			4
New in 2021: Live Interludes			12
<b>Late-Breaking Science</b>	<b>36</b>	<b>33</b>	<b>40</b>
Hot Line Sessions	6 (24 trials)	13 (trials)	18 (trials)
Late-Breaking Science	16	20	22
Meet the Trialists on ESC TV Stage	14	-	
<b>Special Events</b>	<b>4</b>	<b>8</b>	<b>1</b>
<b>Scientific &amp; Educational Programme</b>	<b>334</b>	<b>257</b>	<b>207</b>

	2019	2020	2021
Cardiology@Breakfast / HowTo@Breakfast	18	19	9
Case-Based Sessions	15	-	
Cardiology in 4 Days (new name in 2021: Core Cardiology)	14	14	15
Guidelines in Practice	10	9	8
How Should I Treat	7	11	7
Debate Sessions	13	15	19
Focus with the Experts	23	10	
Meet the Experts	13	10	21
Guidelines - Main Sessions	6	8	4
Focus with the Experts	23		
Guidelines - Meet the Task Force	5	-	
Highlight Sessions / Congress Condensed	3	-	
Live-in-the-Box	7	4	
Pitch Sessions (digital technologies)	16	-	
Quiz Sessions	5	-	
Special Sessions (includes named lectures)	20	17	3
Symposium (includes official joint sessions)	156	140	106
New in 2021: Cardiology Toolbox			15

\* e-Poster Sessions were constructed by main topic vs. subtopics in 2020

Table 2-2: Focus on Sessions and Content Management (content capture)

Sessions	#	Capture	Programme
<b>Abstract-Based Programme</b>			
Abstract Sessions	61	Live Abstracts Presentations & Discussions - via ZOOM	Live Abstracts
Advances in Science	11	Pre-Recorded Sessions	Channel Programme
Award Sessions	8	Pre-Recorded Sessions	Channel Programme
Clinical Cases	16	Self-Recorded Presentations	Research Gateway
	5	ZOOM Rooms - Live Presentations & Discussions	Live Abstracts
Congress Committee e-Posters Choices	12	Self-Recorded Presentations	Research Gateway
e-Posters	33	Self-Recorded Presentations	Research Gateway
Highlights from the Young	10	Self-Recorded Presentations	Research Gateway
<b>ESC TV</b>			
Interludes	12	Live from Amsterdam Studio	Channel Programme
Interviews	25	Recorded Remotely or in Amsterdam Studio	ESC TV
The Day in Focus - Exclusive for ESC Members & FESC	4	Live from Amsterdam Studio	Prime Time Programme
<b>Pre-Arranged</b>			
Cardiology Toolbox	15	Pre-Recorded Session	Channel Programme
Core Cardiology	15	Self-Recorded Presentation	Channel Programme



Sessions	#	Capture	Programme
Great Debates	1	Pre-Recorded Session	Channel Programme
	18	Live Sessions	Channel Programme
Guidelines in Practice	1	Pre-Recorded Sessions	Channel Programme
	7	Live Sessions	Channel Programme
Hot Lines	18	Live IVE from Amsterdam Studio	Prime Time Programme
How Should I Treat?	4	Pre-Recorded Sessions	Channel Programme
	4	Live Sessions	Channel Programme
HowTo ...	6	Pre-Recorded Sessions	Channel Programme
	3	Live Sessions	Channel Programme
Late-Breaking Science	12	Pre-Recorded Sessions	Channel Programme
Latest Science	10	Self-Recorded Presentations	Research Gateway
Meet the Experts	5	Pre-Recorded Sessions	Channel Programme
	16	Live Sessions	Channel Programme
New ESC Guidelines	4	Live from Amsterdam Studio	Prime Time Programme
Official Joint Sessions	39	Pre-Recorded Sessions	Channel Programme
	1	Live IVE Sessions	Channel Programme
Special Events - Inaugural Sessions	1	Pre-Recorded Sessions	Prime Time Programme
Special Sessions - Named Lectures	3	Pre-Recorded Sessions	Channel Programme
Symposiums	39	Pre-Recorded Sessions	Channel Programme
	26	Live Sessions	Channel Programme

## 2.2.2 Abstract and Clinical Cases Programme

Featured in the Scientific Programme:

- 3, 441 abstract presentations
- 111 clinical case presentations
- 2, 814 abstract and clinical case presenters –from 87 countries

### 2.2.2.1 Abstract and Clinical Case Submissions and Acceptances 2021

Table 2-3: Clinical Cases

Clinical Cases	
Submitted	470
Accepted	119
Withdrawn after Notification of Acceptance	8
Presented	111

Accepted cases were split between two programmes: 29 cases\* in the Young Community Programme and 90 cases in the General Programme.

\*The four best cases from the Young Community Programme were featured in the Best Clinical Cases Award Session.

The four top-rated ones will be published free of charge in the *European Heart Journal – Case Reports* (open access journal).

Table 2-4: Abstracts

Abstracts	
Submitted	5,629
Accepted	3,798
Withdrawn after Notification of Acceptance	3,57*
Presented	3,441

\*189 can be considered as no-shows (82 abstract presentations not uploaded and 107 abstract presenters not registered)

### 2.2.2.1 Abstract and Clinical Case Submissions: Acceptance Comparisons with Previous Years

	Abstracts					
	ESC 2019		ESC 2020		ESC 2021	
	SUB	ACC	SUB	ACC	SUB	ACC
	11,318	4,509	11,066	4,357	5,629	3,798
Acceptance Rate	39.84%		39.37%		67.47%	

Variance ESC 2021 - 2020	
Submissions	-49.13%
Acceptances	-12.83%
Variance ESC 2021 - 2019	
Submissions	-50.27%
Acceptances	-15.77%

There was a higher acceptance rate in 2021, but the high quality of content was still maintained (cutoff was Grade 6 vs. 6.5 in previous years: hence the variance in accepted was lower than in submitted).

	Clinical Cases					
	ESC 2019		ESC 2020		ESC 2021	
	SUB	ACC	SUB	ACC	SUB	ACC
	637	164	682	114	470	119
Acceptance Rate	25.75%		16.72%		25.32%	

Variance ESC 2021 - 2020	
Submissions	-31.09%
Acceptances	4.39%
Variance ESC 2021 - 2019	
Submissions	-26.22%
Acceptances	-27.44%

Table 2-5: Abstract Submission and Acceptance Overview by Region and Year 2017-2021

	ESC 2017		ESC 2018		ESC 2019		ESC 2020		ESC 2021	
	SUB	ACCEPT	SUB	ACCEPT	SUB	ACCEPT	SUB	ACCEPT	SUB	ACCEPT
Africa (non-ESC)	31	5	43	9	79	12	45	11	24	8
Asia Pacific	2,781	1,08	2,909	1,111	3,124	1,112	3,002	1,107	1,013	653
ESC	7,057	3,014	7,051	2,892	6,964	2,889	6,917	2,762	3,932	2,674
North America	555	318	662	344	730	384	751	393	509	384
South & Central America	380	98	364	105	421	112	351	84	151	79
<b>Grand Total</b>	<b>10,804</b>	<b>4,515</b>	<b>11,029</b>	<b>4,461</b>	<b>11,318</b>	<b>4,509</b>	<b>11,066</b>	<b>4,357</b>	<b>5,629</b>	<b>3,798</b>

### 2.2.2.2 Abstract and Clinical Cases Programme

Table 2-6: Number of Presentations by Session and Broadcast Type

Session Type	Number of Presentations	Presentation Format on the Online Congress Platform
Abstract Sessions	277	Live Abstract Sessions
Highlights from the Young	44	Live Abstract Sessions
Clinical Cases	24	Live Clinical Case Sessions
Advances in Science	20	Channel_Pre-Recorded Sessions
Award Sessions	30	Channel_Pre-Recorded Sessions
Clinical Cases	83	Research Gateway_On Demand
Congress Committee e-Posters Choices	313	Research Gateway_On Demand
e-Posters	2,761	Research Gateway_On Demand
<b>Grand Total</b>	<b>3,552</b>	

Abstract and case content was primarily accessible on demand through the Research Gateway on the online congress platform as of Monday, 23 August.

Most top-rated abstracts were featured in the Channel Programme and in the morning/evening Live Abstract and Case Sessions.

Table 2-7: Number of Presentations by Broadcast Type

Programme	Number of Presentations
Channel (available after the session on demand)	50
Live (were available after the session on demand)	345
On Demand	3,157
<b>Grand Total</b>	<b>3,552</b>

Table 2-8: Number of Abstract and Case Presentations by Topic

Main Topic	Number of Presentations
Arrhythmias and Device Therapy	446
Basic Science	262
CAD, ACS, ACC	509
Cardiovascular Disease in Special Populations	214
Cardiovascular Nursing and Allied Professions	27
Cardiovascular Pharmacology	86
Diseases of the Aorta, Peripheral Vascular Disease, Stroke	104
e-Cardiology, Digital Health, Public Health, Health Economics, Research Methodology	140
Heart Failure	353
Hypertension	123
Imaging	304
Interventional Cardiology and Cardiovascular Surgery	206
Preventive Cardiology	327
Valvular, Myocardial, Pericardial, Pulmonary Congenital Heart Disease	451
<b>Grand Total</b>	<b>3,552</b>

## Award Sessions

Finalists presented to a jury which selected the winner at the end of the recording.

There were four finalists in each session. All finalists received an award certificate. The results were announced on Monday, 30 August at 12:45 p.m. CEST on all the channels featured on the online congress platform.

- **Young Investigator Award Session in Population Sciences – 27/08**  
Winner – C. Topriceanu (London, UK): Childhood bradycardia associates with atrioventricular conduction defects in older age: a longitudinal birth cohort study
- **Nursing and Allied Professions Investigator Award – 27/08**  
Winner – N. Hamazaki (Sagamihara, JP): Associations between kidney function and outcomes following cardiac rehabilitation in patients with heart failure
- **Young Investigator Award Session in Thrombosis – 28/08**  
Winner – E. Tzolos (Edinburgh, UK): In vivo coronary artery thrombus imaging with 18F-GP1 PET-CT
- **Young Investigator Award Session in Clinical Cardiology – 28/08**  
Winner --M. Burrage (Oxford, UK): Impaired myocardial energetics limits cardiac functional reserve and leads to exercise-induced pulmonary congestion in heart failure with preserved ejection fraction
- **Best Clinical Cases Award Session – 28/08**  
Winner – M. Daghm (Edinburgh, UK): Takotsubo and SCAD, can they co-exist?
- **Young Investigator Award Session in Basic Science – 29/08**  
Winner – R. Blanco Dominguez (Madrid, ES): CD69 expression in regulatory T cells protects from the immune-mediated damage after myocardial infarction
- **Young Investigator Award Session in Coronary Pathophysiology and Microcirculation – 29/08**  
Winner – C. P. Kotanidis (Oxford, UK): A human arterial transcriptomic signature predicts major adverse cardiac events and identifies novel, redox-related therapeutic targets within the vascular wall
- **Young Investigator Award Session in Sudden Cardiac Death – 29/08**  
Winner – R. E. Jones (London, UK): In-depth phenotypic characterisation of myocardial fibrosis by cardiovascular magnetic resonance predicts sudden cardiac death in coronary heart disease: a long-term prospective outcome study.

### 2.2.2.3 Late-Breaking Science Programme

#### SUBMISSIONS AND ACCEPTANCE

Table 2-9: Late-Breaking Science Programme Submissions and Acceptance 2017-2021

Submission Types	2017		2018		2019		2020		2021	
	SUB	ACC	SUB	ACC	SUB	ACC	SUB	ACC	SUB	ACC
Basic & Translational Late-Breaking Science	44	10	57	12	70	15	35	8	21	12
Clinical Trial Update	53	22	38	15	50	10	31	9	39	31
Late Breaking Clinical Trial	79	41	94	35	103	48	91	35	68	54
Registry	112	23	107	30	148	37	99	16	69	33
<b>Grand Total</b>	<b>288</b>	<b>96</b>	<b>296</b>	<b>92</b>	<b>371</b>	<b>110</b>	<b>256</b>	<b>68</b>	<b>197</b>	<b>130</b>

Accepted submissions were inserted in the programme as follows:

- 18 Hot Line presentations in prime time and live from the studio in Amsterdam;
- 40 Late-Breaking Science pre-recorded sessions broadcast on the channels; and
- 65 Latest Science available on demand through Research Gateway

#### Hot Line Sessions

18 Hot Line Sessions (one trial per session). Most of the faculty was involved in those sessions (chairpersons, discussants and speakers) and were in the studio in Amsterdam. Those not able to attend in person connected remotely. Live questions were taken from the audience. All Hot Lines included a press conference.

Session timing:

- Most presenters had 12 minutes to present their trials.;
- Discussants had 5 minutes to give a review;
- Panel discussions and questions from the audience were allotted 12 minutes; and
- Larger trials were given up to 15 minutes.

Table 2-10: Hot Line Sessions

Hot Line Session	Date of Presentation
GUIDE-HF	27/08/2021
EMPEROR-Preserved / EMPEROR-Pooled	27/08/2021
SMART-MI	27/08/2021
MASTER DAPT	28/08/2021
ENVISAGE-TAVI AF	28/08/2021
FIGARO-DKD / FIDELITY Analysis	28/08/2021
APAF-CRT	28/08/2021
DECAAF II	28/08/2021
TOMAHAWK	29/08/2021
RIPCORD 2	29/08/2021
ACST-2	29/08/2021
LOOP Study	29/08/2021
SSaSS - Salt Substitute and Stroke Study	29/08/2021
IAMI	30/08/2021
PRONOUNCE	30/08/2021
STEP Study	30/08/2021
Amulet IDE	30/08/2021
STOPDAPT-2 ACS	30/08/2021

## Late-Breaking Science Sessions

The other accepted Late-Breaking Science Submissions were integrated in the programme as pre-recorded sessions with two chairpersons/moderators introducing each trial and commenting on results.

Table 2-11: Late-Breaking Science Sessions Overview

Session Title	Presentation Title
Registries on Valve	Risk of Mortality Across the Spectrum of Untreated Aortic Stenosis
	Repair or Replace? TEER versus. TMVI for Secondary MR
	Inclusion C-criteria of COAPT and MITRA-FR in EuroSMR-Registry
Late-Breaking Basic & Translational Science	Inhibition of ADAMTS13 Rescues Acquired von Willebrand syndrome in a Preclinical Left Ventricular Assist Device Animal Model
	Key pathomechanisms of TTNtv-DCM
	QGC606, a Novel Drug for Treating Heart Failure
	VASOAILLERGO - Vascular Dysfunction Caused by Allergic Inflammation.
Late-Breaking Trials in ACS	QUORUM : Quantum Genomics Fibrinolytic (QGC001) or Ramipril after Acute Myocardial Infarction for Prevention of Left Ventricular Dysfunction
	HUYGENS: Evolocumab and Changes in Plaque Composition on OCT
	Low-Dose Rivaroxaban during the Acute Phase of ACS - H-REPLACE Trial)
	ACCOST-HH: Adrecizumab in Cardiogenic Shock
Late-Breaking Science in Artificial Intelligence & Digital Health	CcardAIC-Cluster: Redefining Beta-Blocker Response in Heart Failure
	CcardAIC-ECG: ECG prediction of Heart Failure
	Upstream AF Risk Control with Digital Tool
Late-Breaking Science in Heart Failure	AVANTI: Dual VP-R-receptor Antagonism in HF
	DAPA-HF
	VANISH Trial Results
Late-Breaking Science in Arrhythmias	Two-Year Outcomes with Leadless Pacing- Micra CED Results
	LAAOS III - Surgical Atrial Fibrillation Ablation Evaluation
	Benefit of Early Rhythm Control Therapy in Patients with Asymptomatic AF - Insights from EAST-AFNET 4
Trial Updates in ACS & PCI	TWILIGHT-HBR: Ticagrelor Monotherapy in High Bleeding Risk Patients
	Antiplatelet Therapy in High Bleeding Risk Patients with and without Oral Anticoagulant Therapy after Coronary Stenting
	SYNTAX II Trial: Five Year Follow-Up
Late-Breaking Trials: - COVID-19	PREPARE-IT: Icosapent Ethyl Versus Placebo in People Exposed to COVID-19
	Colchicine in Patients Hospitalized with COVID-19
	The Michelle Trial: Medically Ill Hospitalized Patients for COVID-19 Thrombosis Extended Prophylaxis with Rivaroxaban Therapy
	Insights into the Effects of the COVID-19 Pandemic: Comprehensive Analysis from the GUIDE-HF Trial
Late-Breaking Trials in Hypertension	Quadruple Ultra-low-dose Treatment for Hypertension - QUARTET
	Efficacy of Digital Therapeutics for Essential Hypertension (HERB-DH1 pivotal study)
	DECIDE-Salt , Effects of Salt Substitute and Stepwise Reduction of Salt Supply

Session Title	Presentation Title
Late-Breaking Science in Imaging	"EURECA" Use of Imaging in CCS
	FABULOUS - 18F-Fluoride Assessment of Aortic Bioprosthesis Durability and Outcome
	The PACIFIC-II study: Diagnostic Comparison of SPECT, PET and MRI in Patients with Prior CAD
Late-Breaking Science in Prevention	Fixed Dose Combination Therapies with or without Aspirin in Primary Prevention of Cardiovascular Disease
	Explanations for Contrasting Results of REDUCE-IT vs. STRENGTH
	NATURE-PCSK9 Trial
Registries on Special Populations	WHF COVID-19 & CVD Global Study
	Event Risk Gradient by Levels of Psycho-Affective Burden after Myocardial Infarction
	Mortality in Hypertrophic Cardiomyopathy by Reason for Diagnosis and Genotype
	Eligibility for Early Rhythm Control in the General Population and Relation to Outcomes in the UK Biobank

Table 2-12: Latest Science Sessions Overview

Session Title	Presentation Title
Latest Basic & Translational Science	Prediction of Plaque Vulnerability and Clinical Outcome by a Deep Learning-Based Algorithm for Optical Coherence Tomography Imaging in Coronary Artery Disease
	Arrhythmogenic Cardiomyopathy Is Caused by Disruption of the Desmosomal Adhesive Interface
	Drug Gene Interaction in Association with Novel Transcriptomic-Based Plaque Phenotypes: A Study in Symptomatic and Asymptomatic Human Plaques
	Activation of the Apelin Receptor by LIT01-196 as a New Strategy for Prevention of Heart Failure After Myocardial Infarction
	Convolved Neural Network ECG Classification Using Fourier Domain Shows Improved Accuracy versus Real Domain ECG in Atrial Fibrillation Using PTB-XL Dataset
	S100A8/A9 Levels Are Increased in COVID-19 Patients and Induce Procoagulant Platelets in a GPIIb-Dependent Manner
	Distribution of Monocyte Subsets and Atherosclerotic Plaque Phenotyping
	A Fully Automatic Machine-Learning Algorithm Reliably Quantifies Scar on CMR in Post-Infarct Patients and Outperforms Humans in Predicting Arrhythmic Events in the International Derivate Cohort
Latest Science in Arrhythmias and Device Therapy	RACE V: Predictors of Atrial Fibrillation Progression
	ESC-EHRA EORP Atrial Fibrillation General Long-Term Registry
	ACTIVE-AF: A Randomised Controlled Trial of Exercise Training in AF Patients
	PULSe-AI: A Randomised Controlled Trial of AF Identification in Primary Care
	STROKESTOP: Cost-Effectiveness of Population Screening for Atrial Fibrillation Based on Long-Term Follow-Up Data
	The PROFID Clinical Prediction Model
	WEARIT-France Study: Nocturnal Heart Rate To Predict Cardiovascular Events
	EORP-AF LT

Session Title	Presentation Title
Latest Science in COVID-19	RESIST Trial: Role of Statin and Aspirin in SARS-CoV-2 Infection
	Intentional Weight Loss and COVID-19
	The HEP-COVID Trial
	Hospitalized Patients with Hypertension and Moderate COVID-19 Benefit from Continuing ACEIs and ARBs: Insights from the BRACE CORONA Trial
	Cardiovascular Risk Factors and COVID19 Risk
	Acute and Chronic Myocardial Injury in Patients with COVID-19
Latest Science in ACS	Incidence, Associated Outcomes and Predictors of Upper Gastrointestinal Bleeding Following Acute Myocardial Infarction - A SWEDEHEART-Based Nationwide Cohort Study
	Colchicine in Acute Myocardial Infarction
	One-Month DAPT in Stable Coronary Artery Disease
	REDUCE-IT PRIOR MI: Reduction in Ischemic Events, Including Cardiovascular Mortality, with Icosapent Ethyl in Patients with Prior Myocardial Infarction
	BIC-8 Revisited - Copeptin Together with High Sensitivity Troponin for Management of Suspected NSTEMI-ACS
	Refining Dual Antithrombotic Treatment in Patients with Chronic Coronary Syndrome
	UKGRIS: The GRACE Risk Score Trial for NSTEMI-ACS
	Ticagrelor Implementation in PCI-Treated ACS Patients
	Cost-Effective Analysis of HOST-EXAM
	An Observational Study on Ticagrelor 60 mg Treatment Patterns and Event Rates in Clinical Practice in the US and Europe
	Effects of Sacubitril/Valsartan Compared with Ramipril on Coronary Events after Myocardial Infarction - Results from the PARADISE-MI Trial
Latest Science in Heart Failure	Postimplant Phosphodiesterase Type 5 Inhibitor Use in Contemporary Centrifugal Flow Left Ventricular Assist Devices
	MIMO: Midazolam vs. Morphine in Acute Cardiogenic Pulmonary Edema
	E-INH Study: Efficacy and Sustainability of Remote Patient Management after AHF
	The HUNT for HF Risk Score
	Gestational Hypertensive Disorders in PPCM.
	High-Sensitivity Cardiac Troponin in DAPA-HF
	DYNAMIC - Riociguat in Patients with Pulmonary Hypertension and Heart Failure with Preserved Ejection Fraction
	EmDia - Empagliflozin and Left Ventricular Diastolic Function
	Efficacy of ARNI in Real World
Latest Science in Hypertension	SingHypertension: Managing Hypertension in Primary Care Clinics
	Intensive BP Control in AF Patients
	Age-Specific Effects of Blood Pressure-Lowering Pharmacotherapy for Prevention of Cardiovascular Disease
	OFF MED Pivotal: Heart Rate Analysis
Latest Science in interventional Cardiology and Cardiovascular Surgery	FLOWER MI Trial: Outcomes in Patients with PCI vs. Deferred PCI in FFR-Group
	TWILIGHT-Stent: Ticagrelor Monotherapy According to Stent Type



Session Title	Presentation Title
Latest Science in CV Prevention	Opiates and its Effects on Cardiovascular Outcomes
	Benefits of SGLT2-1/2 Inhibition on Heart Failure, Ischemic, and Kidney Endpoints
	Metabolic Surgery and Risk of MACE in NASH
	E3 Trial: The 52-Week Results
	CRISP-CT: Incorporating FAI-Score In Clinical Decision-Making
	Nationwide Trends in Stroke and Atrial Fibrillation in Patients with Incident Type 2 Diabetes
	Long-term Effects of the Randomized Evaluation of Secondary Prevention by Outpatient Nurse Specialists-2 Trial (RESPONSE-2)
Latest Science in Valvular Heart Disease	GALILEO Sex Differences Substudy
	Transcatheter Treatment for Degenerative Mitral Regurgitation
	ESC-EORP European Endocarditis Registry
	Medications and Their Association with Mortality after SAVR for Aortic Stenosis
	AVADEC: Menaquinone-7 in Patients with Aortic Valve Calcification
Latest Science in Special Populations	Sex-Based Outcomes in VOYAGER PAD
	VOYAGER PAD - Rivaroxaban in Symptomatic PAD with and without Comorbid Diabetes
	VOYAGER PAD - Rivaroxaban in Fragile Patients with Symptomatic PAD
	Cardiovascular Subanalysis of the TRITON Study
	M-PAC Registry- Pregnancy Outcomes in Women with Cardiovascular Disease

#### 45 Simultaneous Publications

General Medical Journals	
NEJM	7
The Lancet	8
Plos One	1
Cardiology General	
Circulation	8
EHJ	13 (includes 4 ESC Guidelines)
EHJ-CVP	1
EHJ-QCCO	2
EJHF	1
ESC Heart Failure	1
JACC: CV Interventions	2
JACC: Heart Failure	1
<b>Grand Total</b>	<b>45</b>

## 2.3 Faculty Overview

### Contributors to the Programme – Overview of Invited Faculty and Presenters

There were 3,775 active programme contributors from 88 countries, representing 5,132 roles.

[The number of programme contributors (invited faculty and presenters combined) does not equal the total of invited faculty and presenters. This is explained by the fact that several persons fulfilled both faculty and presenter roles and were, therefore, included in both groups. These contributors were, however, counted only once in the overview below.]

Table 2-13: Gender and Region Overview of Contributors

Gender	# Persons	% Persons	# Roles	% Roles
Female	1,432	38%	1,887	37%
Male	2,343	62%	3,245	63%
<b>Grand Total</b>	<b>3,775</b>		<b>5,132</b>	

Region	# Persons	% Persons	# Roles	% Roles
Africa (non-ESC)	12	0,3%	15	0.3%
Asia Pacific	544	14%	664	13%
ESC	2,691	71%	3,786	74%
North America	449	12%	573	11%
South & Central America	79	2%	94	2%
<b>Grand Total</b>	<b>3,775</b>		<b>5,132</b>	

Table 2-13-1: Comparison 2019–2021

Gender	2019		2020		2021	
Female	1,657	32%	1,376	35%	1,432	38%
Male	3,457	68%	2,565	65%	2,343	62%
<b>Grand Total</b>	<b>5,114</b>		<b>3,941</b>		<b>3,775</b>	

Region	2019		2020		2021	
Africa (non-ESC)	30	1%	14	0.4%	12	0.3%
Asia Pacific	982	19%	838	21%	544	14%
ESC	3,528	69%	2,634	67%	2,691	71%
North America	471	9%	380	10%	449	12%
South & Central America	103	2%	75	2%	79	2%
<b>Grand Total</b>	<b>5,114</b>		<b>3,941</b>		<b>3,775</b>	

#### NEW ROLE – CHAT MODERATORS

(not included in category of all contributors because it has no direct impact on content)

This year we invited representatives of the young community to contribute to the digital event by moderating sessions in their areas of expertise. Their role was to connect to the pre-recorded sessions during the broadcast and to initiate, encourage, and moderate discussions between connected faculty and the audience in chat sessions. A total of 77 chat moderators contributed to the Channel Programme during the event.

Table 2-13-2: Chat Moderators by Gender and Country

Gender	# Chat Moderators	
Female	23	30%
Male	54	70%
<b>Grand Total</b>	<b>77</b>	

Country	# Chat Moderators
Germany	17
Austria	7
United Kingdom of Great Britain & Northern Ireland	6
France	4
Italy	4
Poland	4
Spain	4
Belgium	3
Netherlands (The)	3
Portugal	3
Switzerland	3
Australia	2
Denmark	2
Egypt	2
Israel	2
Turkey	2
Czechia	1
Finland	1
India	1
Kazakhstan	1
Norway	1
Russian Federation	1
Serbia	1
Slovakia	1
United States of America	1

### 2.3.1 Invited Faculty

The focus of this section of the report is on invited faculty (role speaker, chairperson, discussant) in the Scientific & Educational Programme; chairperson and judge in the Abstract-Based Programme.

There was a total of 963 invited faculty representing 47 countries and 1,515 roles.

Table 2-14: Invited Faculty by Gender

Gender	# Persons	% Persons	# Roles	% Roles
Female	286	30%	470	31%
Male	677	70%	1,045	69%
<b>Grand Total</b>	<b>963</b>		<b>1,515</b>	

Table 2-14-1: Comparison 2019–2021

(2021 represented the highest percentage of female faculty)

Gender	2019		2020		2021	
Female	404	26%	194	28%	286	30%
Male	1,134	74%	506	72%	677	70%
<b>Grand Total</b>	<b>1,538</b>		<b>700</b>		<b>963</b>	

Table 2-14-2: Invited Faculty by Region

Region	# Persons	% Persons	# Roles	% Roles
Africa (non-ESC)	5	1%	7	0%
Asia Pacific	61	6%	79	5%
ESC	733	76%	1,212	80%
North America	153	16%	204	13%
South & Central America	11	1%	13	1%
<b>Grand Total</b>	<b>963</b>		<b>1,515</b>	

Table 2-14-3: Comparison 2019–2021

Region	2019		2020		2021	
Africa (non-ESC)	14	1%	2	0.3%	5	1%
Asia Pacific	109	7%	41	6%	61	6%
ESC	1,202	78%	528	75%	733	76%
North America	199	13%	124	18%	153	16%
South & Central America	14	1%	5	1%	11	1%
<b>Grand Total</b>	<b>1,538</b>		<b>700</b>		<b>963</b>	

Table 2-14-4: Invited Faculty by Country by Most to Least Represented

Country	# Persons	% Persons	# Roles	% Roles
United Kingdom of Great Britain & Northern Ireland	137	14%	230	15%
United States of America	123	13%	170	11%
Germany	122	13%	200	13%
Italy	83	9%	120	8%
Netherlands (The)	66	7%	124	8%
France	44	5%	78	5%
Switzerland	43	4%	99	7%
Spain	33	3%	47	3%
Sweden	29	3%	47	3%
Belgium	28	3%	45	3%
Canada	27	3%	31	2%
Austria	23	2%	33	2%
Denmark	22	2%	35	2%
Japan	20	2%	21	1%
Australia	13	1%	16	1%
Norway	13	1%	16	1%
Portugal	13	1%	16	1%
Greece	11	1%	15	1%
China	10	1%	10	1%
Israel	9	1%	15	1%
Poland	9	1%	13	1%
Romania	6	1%	10	1%
Finland	5	1%	8	1%
Czechia	5	1%	7	0%
South Africa	5	1%	7	0%

Country	# Persons	% Persons	# Roles	% Roles
Argentina	5	1%	6	0%
Brazil	5	1%	5	0%
Ireland	4	0.4%	12	0.8%
Saudi Arabia	4	0.4%	8	0.5%
Serbia	4	0.4%	7	0.5%
Turkey	4	0.4%	6	0.4%
Russian Federation	4	0.4%	5	0.3%
Croatia	4	0.4%	4	0.3%
India	4	0.4%	4	0.3%
Singapore	3	0.3%	13	0.9%
Egypt	3	0.3%	6	0.4%
Korea (Republic of)	3	0.3%	3	0.2%
Mexico	3	0.3%	3	0.2%
Slovenia	2	0.2%	4	0.3%
Slovakia	2	0.2%	3	0.2%
Cyprus	1	0.1%	2	0.1%
Guatemala	1	0.1%	2	0.1%
Lithuania	1	0.1%	2	0.1%
Hong Kong	1	0.1%	1	0.1%
Hungary	1	0.1%	1	0.1%
Lebanon	1	0.1%	1	0.1%
Libya	1	0.1%	1	0.1%
Malaysia	1	0.1%	1	0.1%
New Zealand	1	0.1%	1	0.1%
Taiwan	1	0.1%	1	0.1%

Table 2-14-5: Comparison 2017–2021

	2017	2018	2019	2020	2021
Countries Represented	72	75	70	47	50
Total Invited Faculty	1,515	1,650	1,538	700	963

### 2.3.1 Abstract and Clinical Cases with Latest Science Presenters

The information provided in this part of the report relates to the presenters for abstracts, clinical cases and latest science. A total of 2,873 persons presented in the dedicated programme.

Table 2-15: Overview by Gender and Region

Gender	# Persons	% Persons	# Presentations	% Presentations
Female	1,161	40%	1,417	39%
Male	1,712	60%	2,200	61%
<b>Grand Total</b>	<b>2,873</b>		<b>3,617</b>	

Region	# Persons	% Persons	# Presentations	% Presentations
Africa (non-ESC)	7	0.2%	8	0.2%
Asia Pacific	486	17%	585	16.2%
ESC	2,011	70%	2,574	71.2%
North America	301	10%	369	10.2%
South & Central America	68	2%	81	2.2%
<b>Grand Total</b>	<b>2,873</b>		<b>3,617</b>	

Table 2-16: 2021 Country Representation – 87 Countries (top 10 highlighted)

Row Labels	# Persons	% Persons	# Presentations	% Presentations
United States of America	241	8%	302	8%
Germany	233	8%	269	7%
United Kingdom of Great Britain & Northern Ireland	219	8%	254	7%
Italy	200	7%	269	7%
Spain	187	6%	261	7%
Japan	187	6%	215	6%
Russian Federation	155	5%	198	5%
Netherlands (The)	113	4%	125	3%
Portugal	112	4%	199	5%
Greece	85	3%	142	4%
China	84	3%	108	3%
France	76	3%	103	3%
Poland	70	2%	89	2%
Denmark	60	2%	64	2%
Switzerland	58	2%	69	2%
Sweden	58	2%	60	2%
Israel	57	2%	77	2%
Australia	47	2%	60	2%
Norway	47	2%	51	1%

Row Labels	# Persons	% Persons	# Presentations	% Presentations
Austria	44	2%	59	2%
Brazil	43	1%	48	1%
Belgium	41	1%	50	1%
Canada	35	1%	39	1%
Turkey	25	1%	32	1%
Mexico	25	1%	28	1%
Korea (Republic of)	24	1%	35	1%
Hungary	24	1%	30	1%
Ukraine	22	1%	30	1%
India	22	1%	26	1%
Philippines	22	1%	22	1%
Ireland	17	1%	20	1%
Romania	16	1%	16	0%
Singapore	15	1%	16	0%
Hong Kong	14	0.5%	21	0.6%
Czechia	14	0.5%	14	0.4%
Egypt	13	0.5%	16	0.4%
Taiwan	11	0.4%	15	0.4%
Thailand	10	0.3%	11	0.3%
Argentina	9	0.3%	11	0.3%
Finland	8	0.3%	8	0.2%
Iran (Islamic Republic of)	7	0.2%	10	0.3%
Colombia	7	0.2%	8	0.2%
Viet Nam	7	0.2%	8	0.2%
Belarus	7	0.2%	7	0.2%
Indonesia	7	0.2%	7	0.2%
Slovenia	6	0.2%	7	0.2%
Malaysia	6	0.2%	6	0.2%
New Zealand	6	0.2%	6	0.2%
Bulgaria	5	0.2%	5	0.1%
Serbia	5	0.2%	5	0.1%
Algeria	4	0.1%	5	0.1%
Lithuania	4	0.1%	5	0.1%
Cyprus	4	0.1%	4	0.1%
Jordan	4	0.1%	4	0.1%
South Africa	3	0.1%	4	0.1%
Qatar	3	0.1%	3	0.1%
Kosovo Republic of	2	0.1%	5	0.1%
Peru	2	0.1%	5	0.1%

Row Labels	# Persons	% Persons	# Presentations	% Presentations
Armenia	2	0.1%	4	0.1%
Bangladesh	2	0.1%	3	0.1%
Lebanon	2	0.1%	3	0.1%
Slovakia	2	0.1%	3	0.1%
Azerbaijan	2	0.1%	2	0.1%
Ecuador	2	0.1%	2	0.1%
Malta	2	0.1%	2	0.1%
Morocco	2	0.1%	2	0.1%
North Macedonia	2	0,1%	2	0.1%
Pakistan	2	0.1%	2	0.1%
Saudi Arabia	2	0.1%	2	0.1%
Tunisia	2	0.1%	2	0.1%
Chile	1	0.0%	3	0.1%
Croatia	1	0.0%	3	0,1%
United Arab Emirates	1	0.0%	2	0.1%
Benin	1	0.0%	1	0.0%
Bolivia (Plurinational State of)	1	0.0%	1	0.0%
Congo (Democratic Republic of the)	1	0.0%	1	0.0%
Estonia	1	0.0%	1	0.0%
Guatemala	1	0.0%	1	0.0%
Kyrgyzstan	1	0.0%	1	0.0%
Moldova (Republic of)	1	0.0%	1	0.0%
Nigeria	1	0.0%	1	0.0%
Oman	1	0.0%	1	0.0%
Syrian Arab Republic	1	0.0%	1	0.0%
Uganda	1	0.0%	1	0.0%
Uruguay	1	0.0%	1	0.0%
Uzbekistan	1	0.0%	1	0.0%
Venezuela (Bolivarian Republic of)	1	0.0%	1	0.0%

Table 2-17: Comparison 2017–2021

The drop in number of presenters was related to a drop in abstract submissions – despite an increased acceptance rate in 2021.

	ESC 2017	ESC 2018	ESC 2019	ESC 2020	ESC 2021
Abstracts / Case / LBS Presented	4,341	4,201	4,426	3,962	3,441
Number of Presenters	3,460	3,313	3,576	3,299	2,873
Countries Represented	77	75	86	81	87



## 2.4. Online Programme Attendance

- Scientific and Educational Programme Attendance (Channel Programme & Prime Time Programme)

Table 2-18: Channel Programme – Top 10 Attended Sessions

Broadcast Date	Content Capture	Session Type	Channel	Session Title	Attendees	Avg View Time
28 August	Pre-Recorded	Symposium	Channel 6 - Heart Failure	How-To Manage HFpEF: State of the Art in 2021	1,856	29:07
27 August	Pre-Recorded	Official Joint Session	Channel 1 - COVID-19	Influenza, COVID-19, Vaccinations, and Cardiovascular Risk	1,717	20:47
28 August	Pre-Recorded	Advances in Science	Channel 1 - Advances in Science	Diastolic Blood Pressure: Should We Care?	1696	22:49
27 August	Pre-Recorded	Late-Breaking Science	Channel 2 - Latest Science	Late-Breaking Trials in ACS	1589	22:10
29 August	Pre-Recorded	Symposium	Channel 1 - COVID-19	Preventing and Managing COVID-19: Where Are We?	1586	21:04
27 August	Live	Symposium	Channel 1 - COVID-19	Long COVID: Does It Matter?	1542	24:39
28 August	Pre-Recorded	HowTo ...	Channel 6 - Heart Failure	Optimising Heart Failure Management	1498	26:25
27 August	Pre-Recorded	Late-Breaking Science	Channel 6 - Heart Failure	Late-Breaking Science in Heart Failure	1439	24:44
29 August	Pre-Recorded	Official Joint Session	Channel 1 - COVID-19	Enthusiasm vs. Evidence for COVID-19 Pharmacotherapies: What Do We Know and What Have We Learnt?	1249	28:49
27 August	Pre-Recorded	How Should I Treat?	Channel 6 - Heart Failure	How Should I Treat My Patient with Acute Heart Failure?	1121	23:05

Table 2-19: Channel Programme – Top 10 Attended Live Sessions

Broadcast Date	Session Type	Channel	Session Title	Attendees	Avg View Time
27 August	Symposium	Channel 1 - COVID-19	Long COVID: Does It Matter?	1,542	24:39
29 August	Symposium	Channel 1 - COVID-19	COVID-19: Who Is at Risk?	1,083	25:54
29 August	Official Joint Session	Channel 2 - Late-Breaking Science	Highlights from NEJM	1,047	26:43
28 August	Great Debates	Channel 2 - Cardiovascular Pharmacology	Great Debate: Anticoagulation for Stroke Prevention in Atrial Fibrillation - the Grey Zone	1,039	23:48
27 August	Great Debates	Channel 3 - Arrhythmias and Device Therapy	Great Debate: ICD Indications for Primary Prevention in Patients with Dilated Cardiomyopathy - Time for a Change?	990	25:07
28 August	Great Debates	Channel 6 - Heart Failure	Great Debate: Vasodilators No Longer Have a Role in the Treatment of Acute Heart Failure	899	26:48
28 August	Meet the Experts	Channel 2 - Cardiovascular Pharmacology	Meet the Experts: New Cardiorenal Pharmacotherapy for Diabetes	896	25:39
30 August	Great Debates	Channel 1 - Digital Health, Public Health, Health Economics	Great Debate: Artificial Intelligence in Cardiology - A Marriage Made in Heaven or Hell?	851	28:48
27 August	Symposium	Channel 7 - Cardiovascular Imaging	Echocardiography: Doing It Right in 2021 and Beyond	842	23:02
30 August	Meet the Experts	Channel 2 - Hypertension	Meet the Experts: How To Approach the Combination of Hypertension and Atrial Fibrillation	827	27:24

Table 2-19-1: Channel Programme - Top 10 Attended Pre-Recorded Sessions

Broadcast Date	Session Type	Channel	Session Title	Attendees	Avg View Time
28 August	Symposium	Channel 6 - Heart Failure	How-To Manage HFpEF: State of the Art in 2021	1,856	29:07
27 August	Official Joint Session	Channel 1 - COVID-19	Influenza, COVID-19, Vaccinations, and Cardiovascular Risk	1,717	20:47
28 August	Advances in Science	Channel 1 - Advances in Science	Diastolic Blood Pressure: Should We Care?	1,696	22:49
27 August	Late-Breaking Science	Channel 2 - Latest Science	Late-Breaking Trials in ACS	1,589	22:10
29 August	Symposium	Channel 1 - COVID-19	Preventing and Managing COVID-19: Where Are We?	1,586	21:04
28 August	HowTo ...	Channel 6 - Heart Failure	Optimising Heart Failure Management	1,498	26:25
27 August	Late-Breaking Science	Channel 6 - Heart Failure	Late-Breaking Science in Heart Failure	1,439	24:44
29 August	Official Joint Session	Channel 1 - COVID-19	Enthusiasm vs. Evidence for COVID-19 Pharmacotherapies: What Do We Know and What Have We Learnt?	1,249	28:49
27 August	How Should I Treat?	Channel 6 - Heart Failure	How Should I Treat My Patient with Acute Heart Failure?	1,121	23:05
30 August	How Should I Treat?	Channel 3 - Arrhythmias and Device Therapy	Managing Recurring ICD Shocks for Ventricular Tachyarrhythmias	1005	19:50

Table 2-19-2: Channel Programme – 10 Least-Attended Sessions

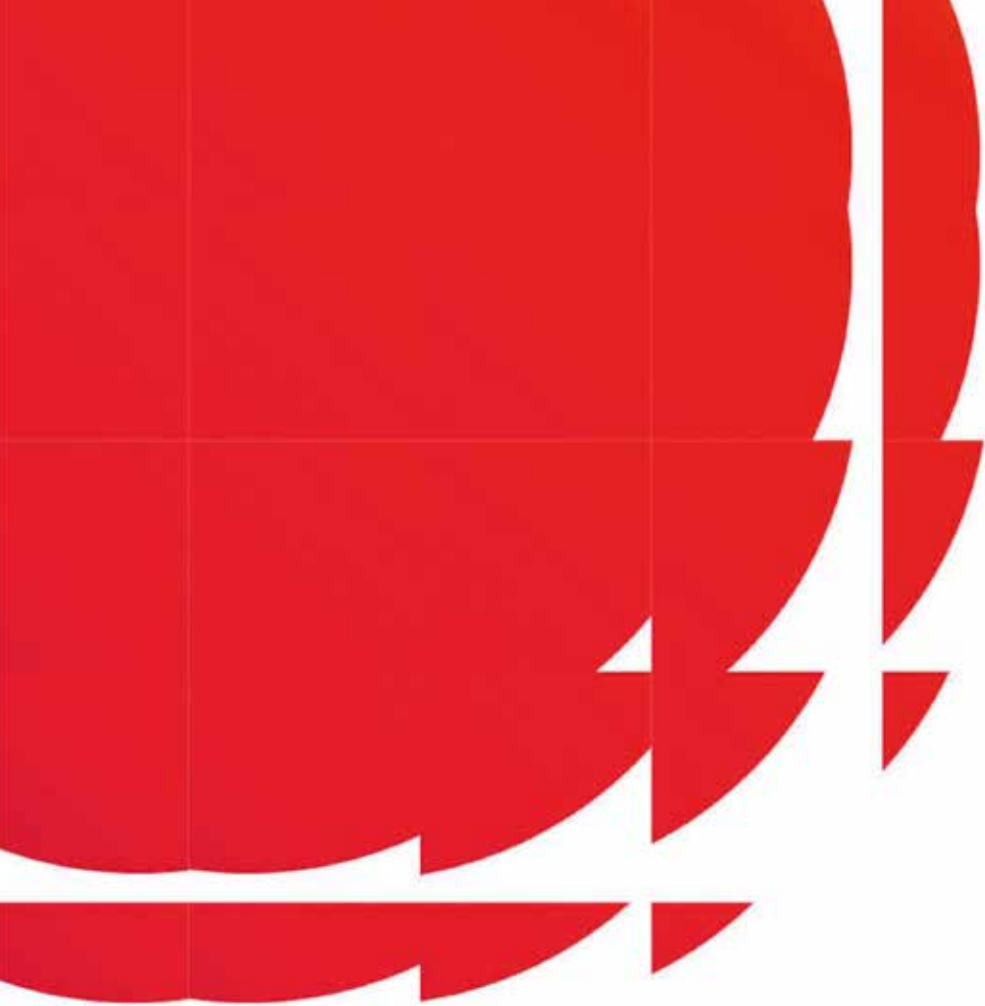
Broadcast Date	Session Type	Content Capture	Channel	Session Title	Attendees	Avg View Time
29 August	Award Sessions	Pre-Recorded	Channel 12 - Awards and Named Lectures	Young Investigator Awards Session in Basic Science	61	14:09
30 August	Official Joint Session	Pre-Recorded	Channel 15 - International Joint Sessions	Sudden Cardiac Death in Asia	54	18:26
28 August	Meet the Experts	Pre-Recorded	Channel 11 - Nursing and Allied Professionals	Person-Centred Care for People with Implantable Cardioverter Defibrillators	52	16:17
29 August	Official Joint Session	Pre-Recorded	Channel 15 - International Joint Sessions	Therapeutic Interventions and Risk of Sudden Cardiac Death in Structural Heart Disease	51	16:46
30 August	Official Joint Session	Pre-Recorded	Channel 15 - International Joint Sessions	Epidemiology and Investigation of Sudden Cardiac Death in the Young	49	21:16
27 August	Award Sessions	Pre-Recorded	Channel 12 - Awards and Named Lectures	Young Investigator Awards Session in Population Sciences	44	13:49
27 August	Special Session	Pre-Recorded	Channel 12 - Awards and Named Lectures	ESC Geoffrey Rose Lecture in Population Sciences and Florence Nightingale Lecture in Nurse-Led Research	34	19:36
29 August	Award Sessions	Pre-Recorded	Channel 12 - Awards and Named Lectures	Young Investigator Awards Session in Sudden Cardiac Death	32	13:39
29 August	Award Sessions	Pre-Recorded	Channel 12 - Awards and Named Lectures	Young Investigator Awards Session in Coronary Pathophysiology and Microcirculation	29	16:46
27 August	Award Sessions	Pre-Recorded	Channel 12 - Awards and Named Lectures	Nursing and Allied Professions Investigator Awards	24	14:48

Table 2-19-3: Prime Time Programme Sessions by Most to Least Attended

The most attended session of the Prime Time Programme (and of the congress) was 2021 ESC Guidelines for the Diagnosis and Treatment of Acute and Chronic Heart Failure

Broadcast Date	Session Type	Channel	Session Title	Attendees	Avg View Time
27 August	New ESC Guidelines	Prime Time	2021 ESC Guidelines for the Diagnosis and Treatment of Acute and Chronic Heart Failure	8,446	45:12
27 August	Hot Line	Prime Time	Hot Line - EMPEROR-Preserved / EMPEROR-Pooled	7,139	43:05
28 August	New ESC Guidelines	Prime Time	2021 ESC/EACTS Guidelines for the Management of Valvular Heart Disease	6,762	48:32
29 August	New ESC Guidelines	Prime Time	2021 ESC Guidelines on Cardiac Pacing and Cardiac Resynchronisation Therapy	5,677	50:15
27 August	Hot Line	Prime Time	Hot Line - GUIDE-HF	5,462	19:50
28 August	Hot Line	Prime Time	Hot Line - ENVISAGE-TAVI AF	5,066	22:24
27 August	Hot Line	Prime Time	Hot Line - SMART-MI	4,840	20:17
30 August	New ESC Guidelines	Prime Time	2021 ESC Guidelines on Cardiovascular Disease Prevention in Clinical Practice	4,829	47:49
28 August	Hot Line	Prime Time	Hot Line - FIGARO-DKD / FIDELITY Analysis	4,589	23:24
28 August	Hot Line	Prime Time	Hot Line - APAF-CRT	4,485	22:09
29 August	Hot Line	Prime Time	Hot Line - ACST-2	3,972	22:45
28 August	Hot Line	Prime Time	Hot Line - DECAAF II	3,907	23:07

Broadcast Date	Session Type	Channel	Session Title	Attendees	Avg View Time
27 August	Special Event	Prime Time	Inaugural Session	3,892	15:55
28 August	Hot Line	Prime Time	Hot Line - MASTER DAPT	3,885	16:50
29 August	Hot Line	Prime Time	Hot Line - LOOP Study	3,840	23:58
29 August	Hot Line	Prime Time	Hot Line - RIPCORDER 2	3,738	21:06
29 August	Hot Line	Prime Time	Hot Line - SSaSS	3,526	24:02
29 August	Hot Line	Prime Time	Hot Line - TOMAHAWK	3,359	19:04
30 August	Hot Line	Prime Time	Hot Line - STEP Study	3,215	21:40
30 August	Hot Line	Prime Time	Hot Line - PRONOUNCE	3,030	19:19
30 August	Hot Line	Prime Time	Hot Line - Amulet IDE	3,029	21:14
30 August	Hot Line	Prime Time	Hot Line - STOPDAPT-2 ACS	2,974	23:47
30 August	Hot Line	Prime Time	Hot Line - IAMI	2,574	18:03
30 August	Special Session	Prime Time	The Day in Focus - Monday, 30 August -	2,010	20:52
27 August	Special Session	Prime Time	The Day in Focus -- Friday, 27 August -	1,546	29:57
28 August	Special Session	Prime Time	The Day in Focus -- Saturday, 28 August -	1,476	31:40
29 August	Special Session	Prime Time	The Day in Focus -- Sunday, 29 August -	1,400	31:20



### **3. Attendance & Participation Statistics**

### 3.1. Registration Headlines

Congress registration started in January 2021 and closed on the last day of the congress, 30 August. Last year ESC Congress 2020 – The Digital Experience was free of charge: this year it was a paying event.

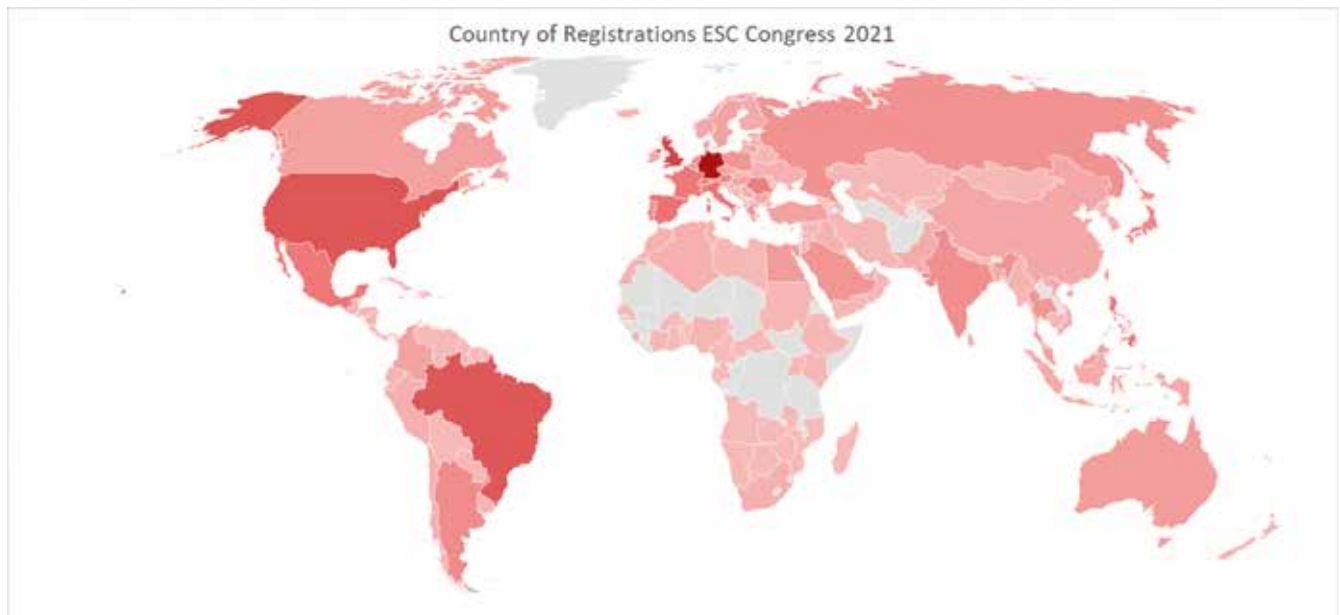
It was compulsory to register through a My ESC account to attend the ‘live’ events and to access content on demand throughout the congress and until Monday, 13 September.

On 23 August, we opened restricted free access to enter the Congress Research Gateway and Our Global Community. This was not required for fully registered delegates.

Figure 3-1: Cumulative Registrations



Figure 3-2: Registration by Country



### 3.1.1. Registered Delegates Demographics

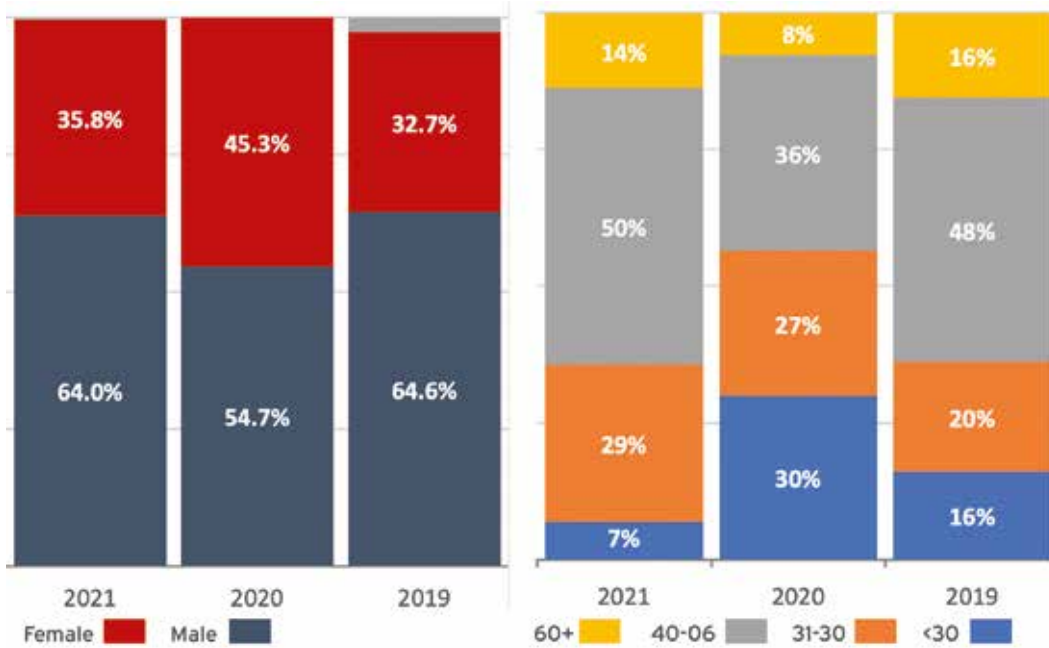
Unlike 2020 when there was an increase in delegate registrations from countries in South/Central America, the registration pattern for the paid ESC Congress of 2021 was more like pre-pandemic registration statistics in 2019 for the top 10 countries.

Table 3-1: Top 10 Countries by Registration Showing Percentage of Total Delegates

2021		2020		2019	
Germany	7,6%	Mexico	6,4%	Germany	7,8%
United Kingdom	4,8%	Brazil	6,1%	France	6,0%
United States of America	4,2%	United States of America	4,8%	Italy	5,2%
Brazil	4,1%	Germany	4,4%	United States of America	5,1%
Spain	3,1%	United Kingdom	4,4%	Japan	3,9%
Italy	3,0%	Italy	3,9%	Brazil	3,4%
Philippines	2,9%	Ecuador	3,5%	Spain	2,9%
France	2,8%	Argentina	3,4%	Netherlands (The)	2,8%
Mexico	2,8%	Colombia	2,9%	China	2,8%
Switzerland	2,6%	India	2,6%	United Kingdom	2,6%
<b>170 countries in total</b>		<b>213 countries in total</b>		<b>159 countries in total</b>	

Similar demographics to a physical event: 35.7% of registrations came from under-40s, which is similar to our last physical event in 2019.

Figure 3-3: Age and Gender Split at ESC Congress 2021 – The Digital Experience vs. ESC Congress 2020 and 2019



### 3.1.2. Profession and Stage in Career

For 2021, practicing clinical cardiologist was the most common profession, accounting for 31.8% of all registered delegates, compared with only 20.6% in 2020 and 42.6% in 2019

Table 3-2: Top 20 Professions and Stage in Career of Registered Delegates at ESC Congress 2021 – The Digital Experience

Profession	Student	In Training	Practicing	Retired	Unknown	Grand Total	% of Total
Physician Cardiologist	192	2,929	15,067	157	9	18,354	60.8%
Unknown	60	26	14	1	6,021	6,122	2.0,3%
Physician (non-cardiologist)	77	558	1,624	49	3	2,311	7.7%
Other	236	264	1,738	36		2,274	7.5%
Allied Professional	68	92	696	18	2	876	2.9%
Nurse	5	4	215	7		231	0.8%
<b>Grand Total</b>	<b>638</b>	<b>3,873</b>	<b>19,354</b>	<b>268</b>	<b>6 035</b>	<b>30,168</b>	
	<b>2.1%</b>	<b>12.8%</b>	<b>64.2%</b>	<b>0.9%</b>	<b>20.0%</b>		

### 3.1.3 Primary Interest

Table 3-2-1: Primary Specialties Selected by Registered Delegates

Primary Specialty	< 40	40-49	50-59	60-69	70+	Grand Total	
Interventional Cardiology and Cardiovascular Surgery - Interventional Cardiology	901	1053	791	373	74	3,192	10.6%
Heart Failure - Chronic Heart Failure	888	713	619	283	50	2,553	8.5%
Imaging - Echocardiography	614	533	418	220	22	1,807	6.0%
Coronary Artery Disease - Acute Coronary Syndromes - Acute Cardiac Care - Acute Coronary Syndromes	468	361	259	205	53	1,346	4.5%
Arrhythmias and Device Therapy - Arrhythmias-General	412	423	302	163	26	1,326	4.4%
Basic Science - Basic Science	538	302	168	70	6	1,084	3.6%
Preventive Cardiology - Risk Factors and Prevention	189	282	291	223	74	1,059	3.5%
Hypertension - Hypertension	196	272	264	196	44	972	3.2%
Heart Failure - Acute Heart Failure	342	261	192	107	17	919	3.0%
Coronary Artery Disease - Acute Coronary Syndromes - Acute Cardiac Care - Acute Cardiac Care	380	194	140	77	4	795	2.6%



### 3.1.4 New Contacts

There were 6,375 new contacts from 129 countries.

Table 3-3: New Contact Countries

Country	New Contacts	%
Philippines	529	8.3%
United States of America	440	6.9%
Germany	316	5.0%
Brazil	291	4.6%
Saudi Arabia	277	4.3%
Mexico	256	4.0%
India	247	3.9%
United Kingdom	186	2.9%
Thailand	144	2.3%
Argentina	139	2.2%

Figure 3-4: New Contacts by Age

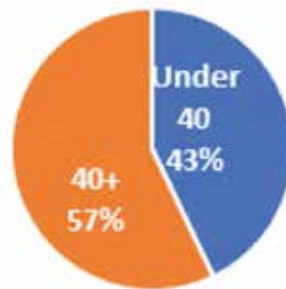
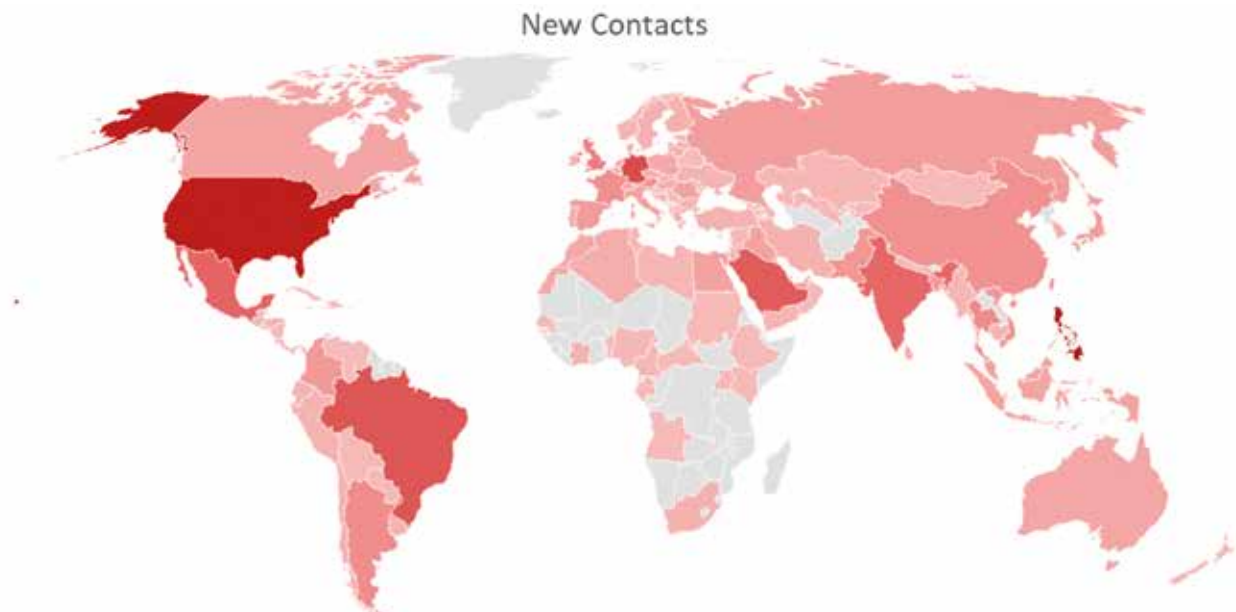


Figure 3-1-4: New Contacts by Country



### 3.1.5 The Research Gateway

2,391 Research Gateway registrations from 112 countries, of whom 635 (26.5%) purchased a full registration.

Table 3-4: The Research Gateway Country Top 10

Country	Registered	% of Total
Argentina	199	8.3%
Russian Federation	176	7.4%
United States of America	136	5.7%
United Kingdom	104	4.3%
Malaysia	87	3.6%
Poland	84	3.5%
Germany	75	3.1%
Italy	75	3.1%
Lithuania	74	3.1%
Viet Nam	74	3.1%

Figure 3-5: Research Gateway by Country

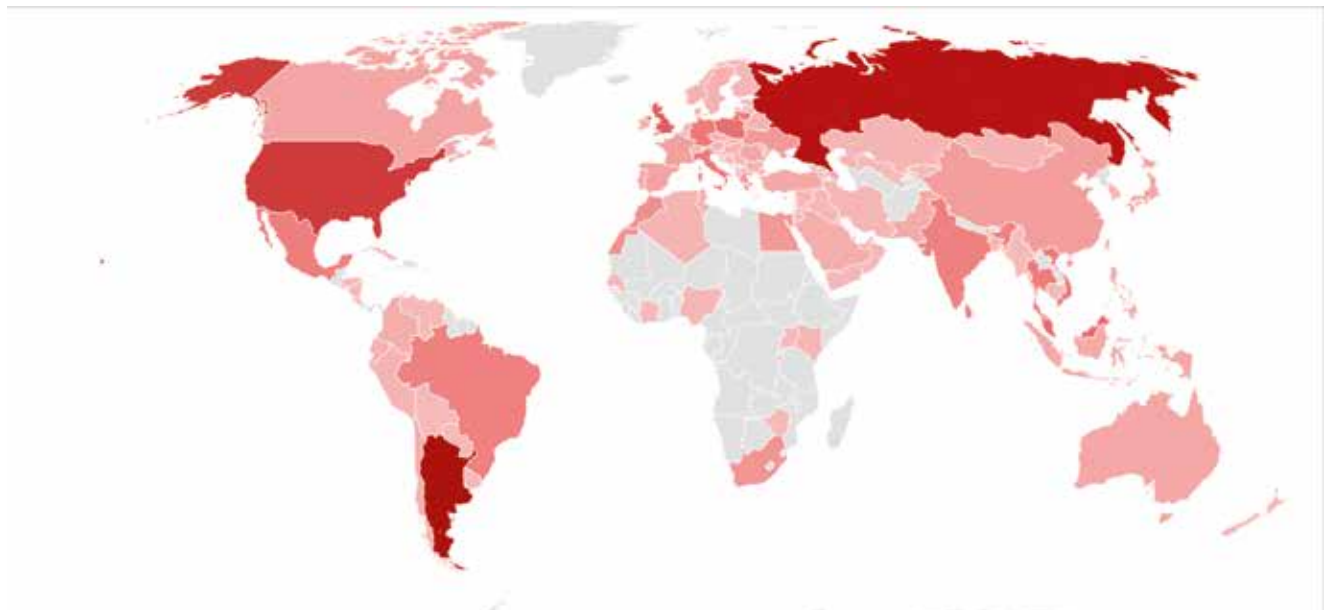
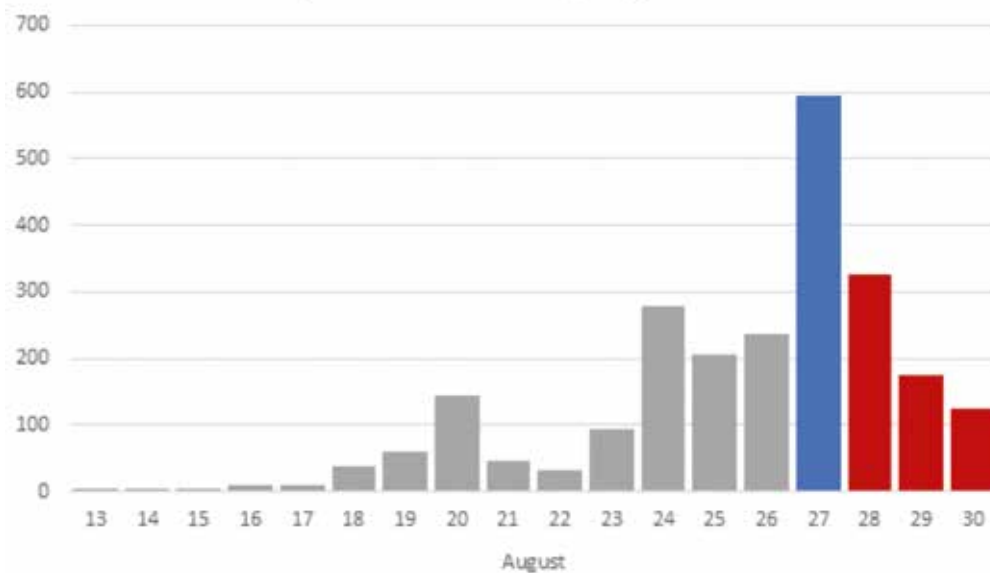


Table 3-5: Research Country by Profession

Profession	Student	In Training	Practicing	Retired	Unknown	Grand Total	% of Total
Physician Cardiologist	32	263	1,036	2	20	<b>1,353</b>	56.6%
(blank)	13	1		493	2	<b>509</b>	21.3%
Physician (non-cardiologist)	13	48	145	1	3	<b>210</b>	8.8%
Other	40	21	113		9	<b>183</b>	7.7%
Allied Professional	5	15	86		3	<b>109</b>	4.6%
Nurse		2	24		1	<b>27</b>	1.1%
<b>Grand Total</b>	<b>103</b>	<b>350</b>	<b>1,404</b>	<b>496</b>	<b>38</b>	<b>2,391</b>	
	<b>4.3%</b>	<b>14.6%</b>	<b>58.7%</b>	<b>20.7%</b>	<b>1.6%</b>		

Figure 3-5-1: Daily

## Daily Research Gateway Registrations



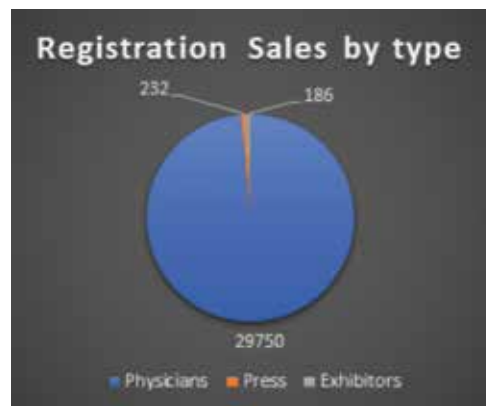
## 3.2 Registration

### 3.2.1. Registration by Type

Table 3-6 : Registration by Type

Registration by Category	2021
	Online Event
Physicians	29,750
Press	232
Total Active Participants	29,982
Exhibitors	186
<b>Total Participants</b>	<b>30,168</b>

Figure 3-6: Registration by Type



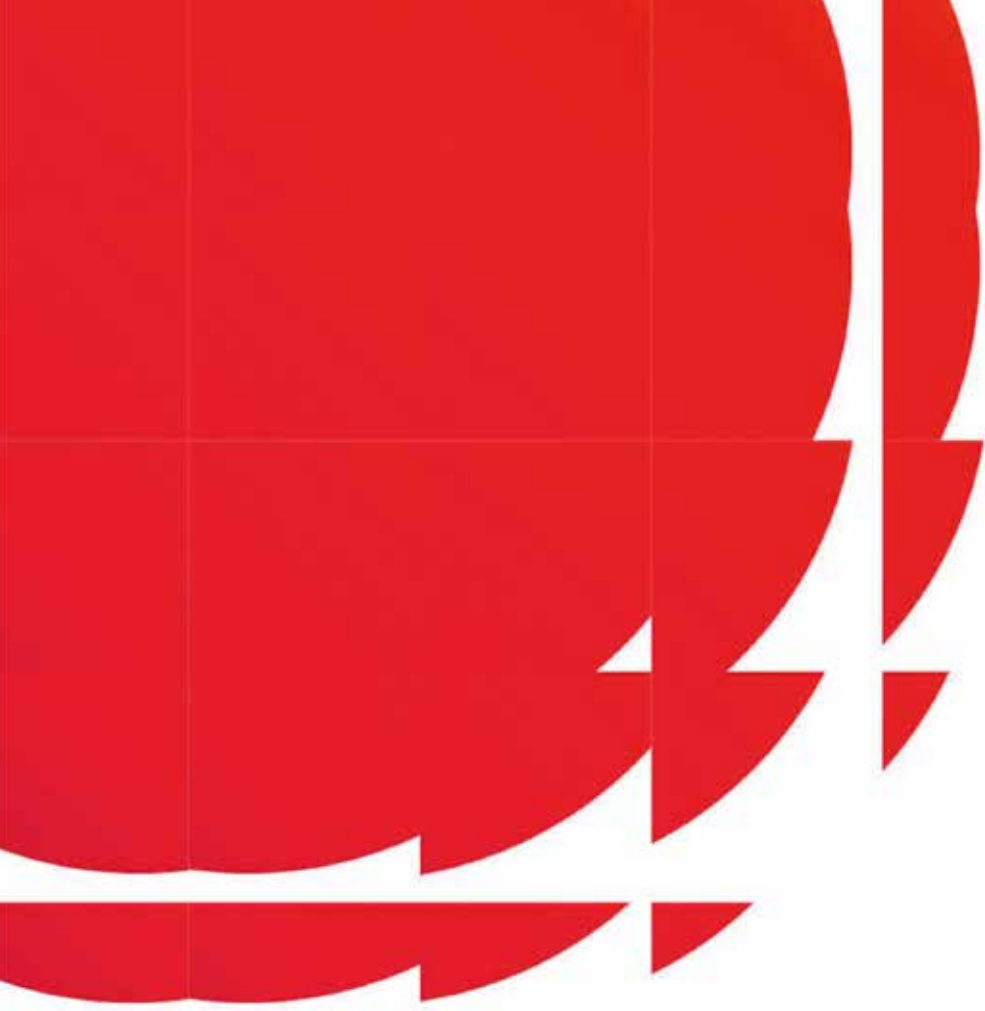
### 3.2.2 Participants by Fee Type

Table 3-7: Participants by Fee Type

By Fee type	Participants
Member Fees	5,151
Non-Member Fees	8,400
Group registration	12,516
Exhibitor Registration	186
Free Registration	3,915
<b>Total Registrations</b>	<b>30,168</b>

Figure 3-7: Participants by Fee Type





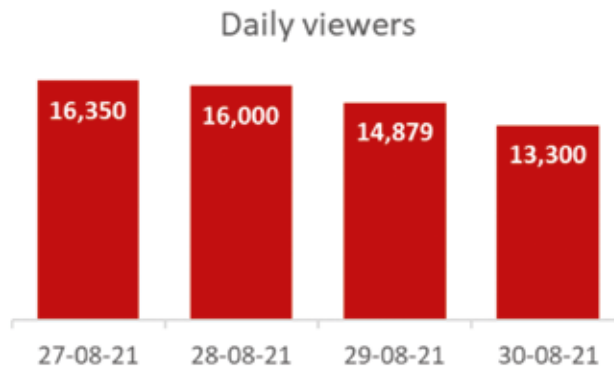
## **4. Analytics**

## 4.1. Congress Delegates

- 25,295 delegates logged on to the congress platform during the four congress dates
- 23,659 delegates logged on to the congress platform during the four congress dates and watched live or on-demand scientific content

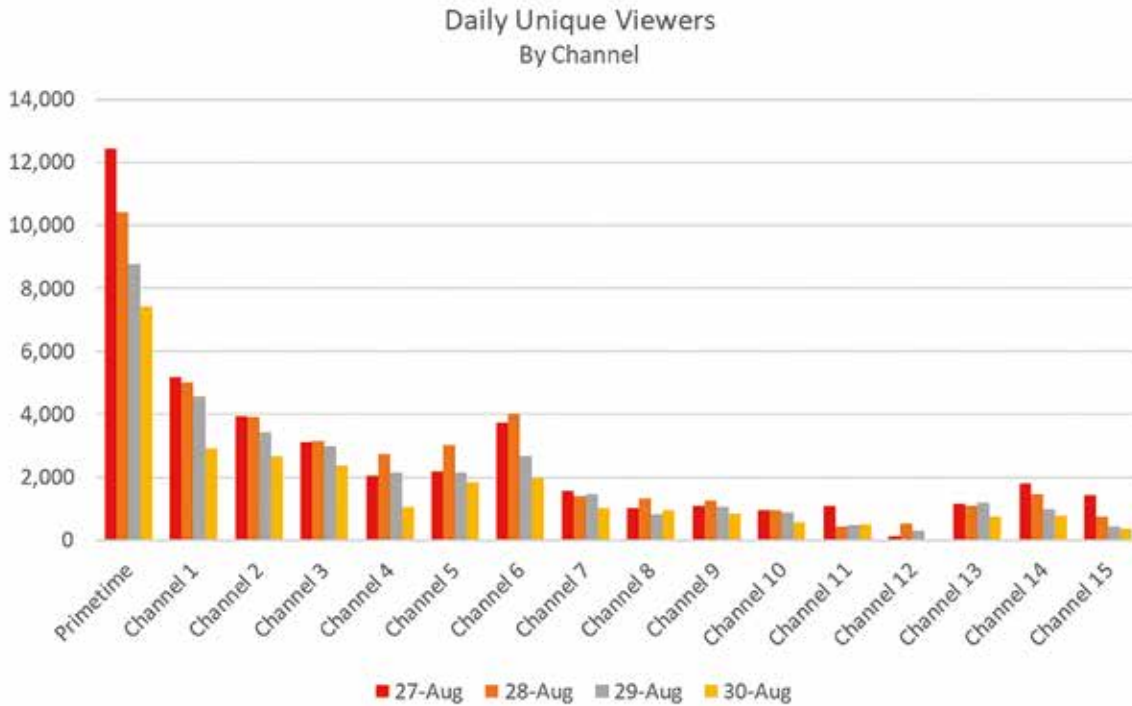
Figure 4-1: Daily Platform Viewers

	27 Aug	28 Aug	29 Aug	30 Aug
Total on Platform	18,794	17,854	16,753	14,771
Daily Viewers	16,350	16,000	14,879	13,300



- The Prime Time Channel was the most popular each day with an average 9,761 daily unique viewers.

Figure 4-2: Unique Daily Viewers by Channel



Channel	27 Aug	28 Aug	29 Aug	30 Aug	Daily Average
Primetime	12,423	10,415	8,771	7,434	9,761
Channel 1	5,193	5,024	4,581	2,911	4,427
Channel 2	3,956	3,914	3,435	2,683	3,497
Channel 3	3,117	3,139	2,987	2,364	2,902
Channel 4	2,051	2,750	2,157	1,052	2,003
Channel 5	2,195	3,005	2,170	1,849	2,305
Channel 6	3,731	3,997	2,679	1,981	3,097
Channel 7	1,556	1,404	1,466	1,029	1,364
Channel 8	1,006	1,319	827	957	1,027
Channel 9	1,075	1,276	1,069	856	1,069
Channel 10	938	939	893	585	839
Channel 11	1,086	428	480	515	627
Channel 12	126	546	291	42	251
Channel 13	1,146	1,077	1,186	757	1,042
Channel 14	1,806	1,454	975	792	1,257
Channel 15	1,419	755	443	365	746

3 hr, 4 min – The average time delegates spent watching live content  
 42 min, 22 sec – the average length of time delegates spent watching on-demand content

Figure 4-3: Average Viewing Time Live or OD Content

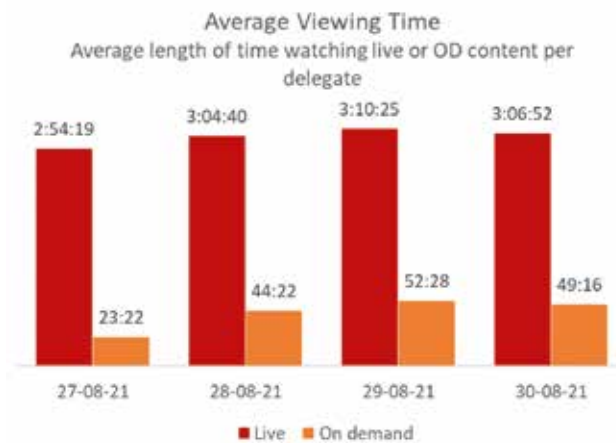
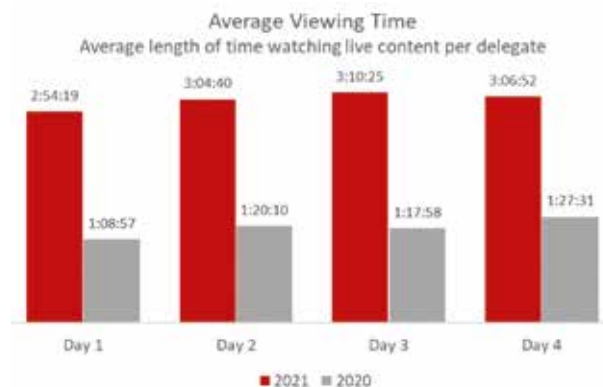


Figure 4-4: Average Viewing Time Live Content





## 4.2 Congress Attendee Profiles

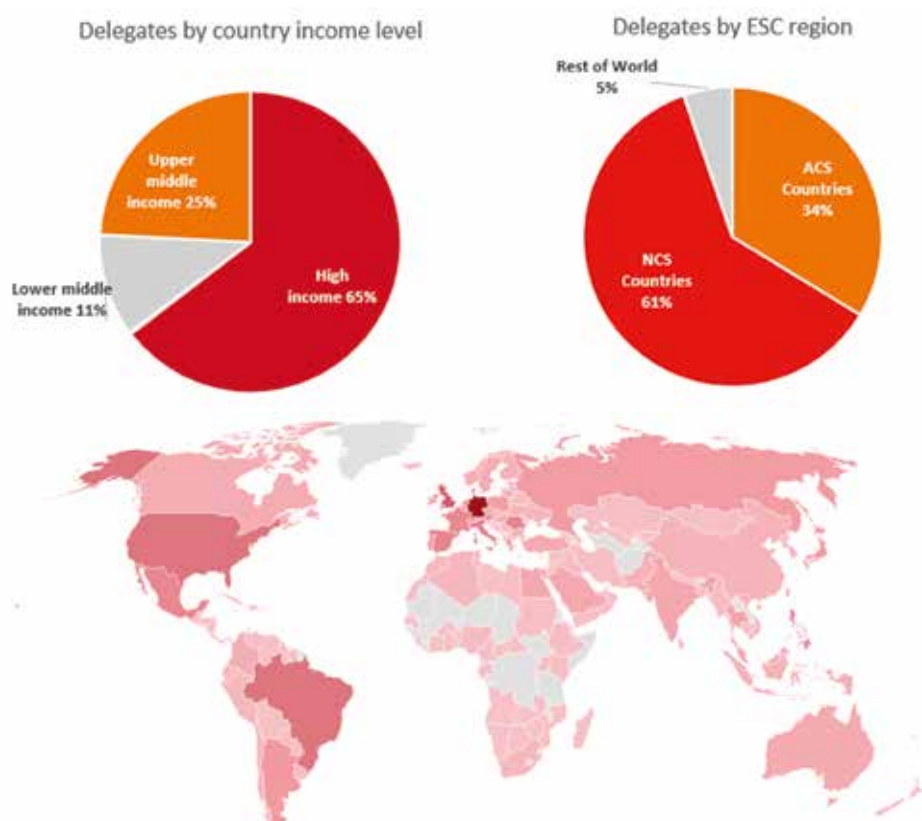
- 23,659 delegates from 167 countries/territories logged on to the congress platform during the congress to watch live and/or on-demand sessions
- 61% were from National Cardiac Society countries
- 34% of delegates came from Affiliated Cardiac Society countries
- 5% hailed from the rest of world

Table 4-1: Top 10 Attendance by Country

Top 10 Countries

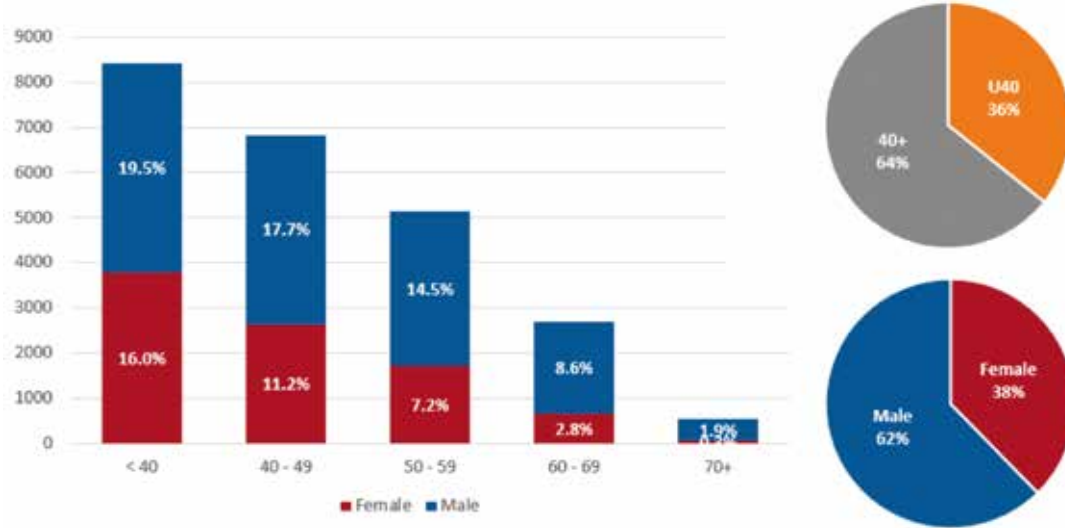
Top 10 Countries	Delegates	% of Total Delegates
Germany	2,003	8.47%
United Kingdom	1,131	4.78%
Brazil	873	3.69%
United States of America	871	3.68%
Italy	714	3.02%
Romania	714	3.02%
Spain	696	2.94%
Mexico	673	2.84%
Switzerland	669	2.83%
France	647	2.73%

Figure 4-5: Delegates by Income and Region



- 36% of delegates were under 40
- The average age of delegates was 45
- 38% of delegates were female

Figure 4-6: Age and Gender of Delegates



- 62% of delegates were practising cardiology physicians
- 14.8% of delegates were students or in training

Table 4-2: Profession and Stage of Delegates Careers

	Student	In Training	Practicing	Retired	Unknown	Grand Total	
Physician Cardiologist	152	2,313	12,087	130	3	<b>14,685</b>	62%
Other	218	223	1,462	30	4,372	<b>6,305</b>	27%
Physician (non-cardiologist)	51	408	1,271	33	3	<b>1,766</b>	7%
Allied Professional	56	72	579	14	1	<b>722</b>	3%
Nurse	4	4	168	5		<b>181</b>	1%
<b>Total</b>	<b>481</b>	<b>3,020</b>	<b>15,567</b>	<b>212</b>	<b>4,379</b>	<b>23,659</b>	
	<b>2%</b>	<b>13%</b>	<b>66%</b>	<b>1%</b>	<b>19%</b>		

- 53.8% of delegates work in a hospital setting (note that a single delegate can work in more than one setting)

Table 4-3: Delegates Place of Work

Place of Work	Count	Percentage
Healthcare - Hospital	12,733	54%
Research Institution - University	4,877	21%
Healthcare - Private Practice	4,464	19%
Industry	2,199	9%
Research Institution - Non-University	1,004	4%
Administration and Government	658	3%
Insurance	66	0.3%

- 10,424 delegates (44% of total) held 18,252 ESC Memberships

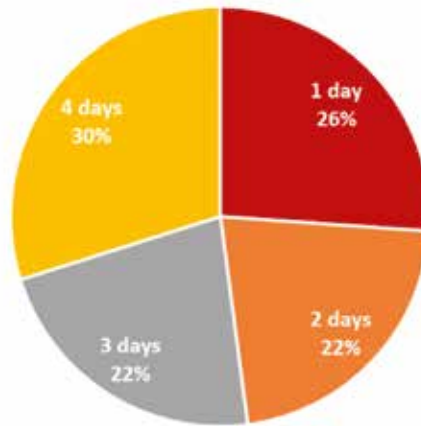
Table 4-4: Number of Days Attended by Delegates

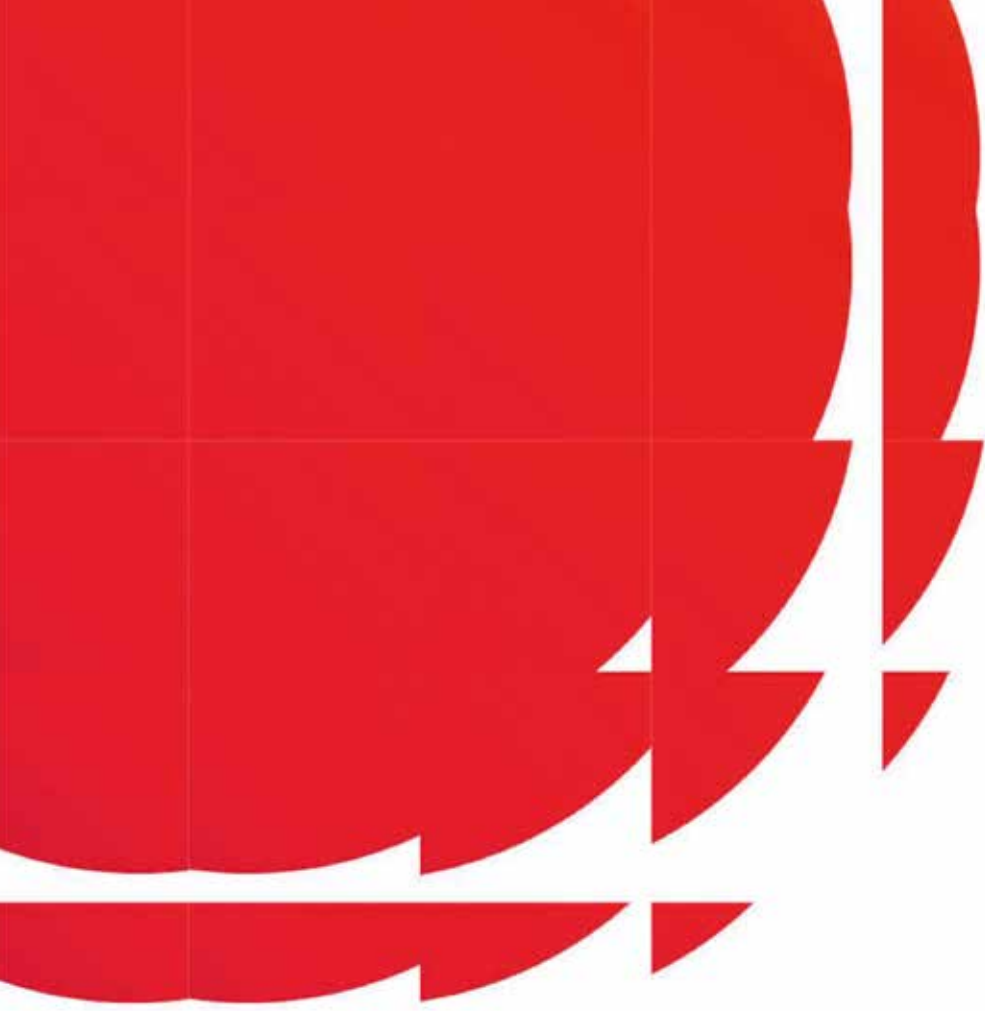
- 73.9% of delegates attended more than one day of the live event
- 29.9% of delegates attended all four days of the live event

No. of Days Attended	Delegates	% of Total
1 Day	6,605	26.1%
2 Days	5,512	21.8%
3 Days	5,624	22.2%
4 Days	7,552	29.9%

Table 4-4-1: Number of Repeat Attendance Days

Repeat attendace by delegates





## **5. Platform & Functionalities**

## 5.1. Platform & Functionalities

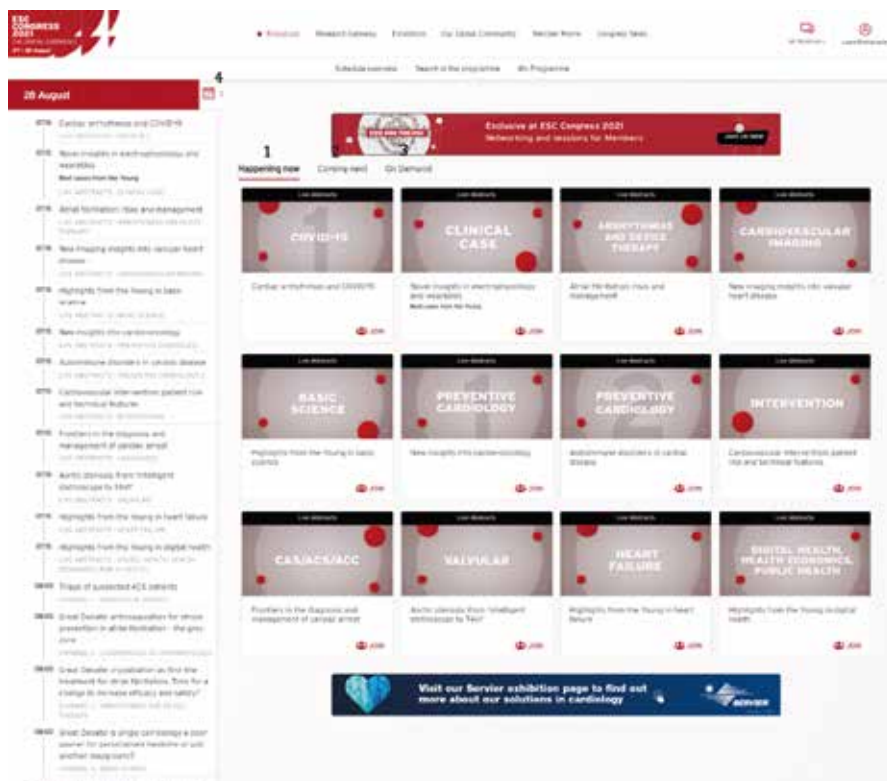
This year, the ESC Congress was held on the newly developed ESC Digital Event platform. The aim was to make the platform as simple as possible for attendees to access the scientific content. The live sessions were available from the home page, with clear directions allowing attendees to easily navigate through the event.

The platform was divided into eight sections:

1. Live Programming/Broadcast from the home page
2. Dynamic Programme and search
3. Research Gateway available a few days before (Monday)
4. Exhibition to interact with ESC industry partners
5. Global Community to showcase partners (NCS/ACS/sister societies/global partners)
6. Member Home to engage the ESC community
7. Congress News to engage at large (open/public access)
8. Networking feature to allow discussion with peers

## 5.2. Broadcast

Figure 5-1: Screen Shots of Congress Home Page

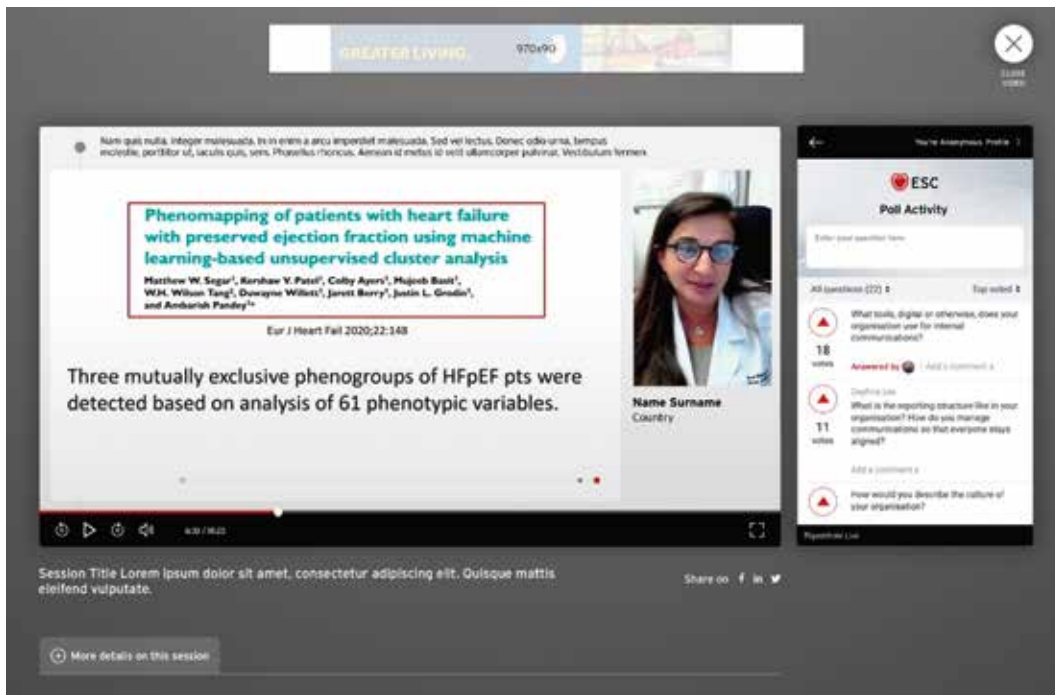


The home page of the site allowed attendees to immediately see what was taking place at that moment (1), what was coming next (2), and to access the on-demand (3). A small calendar view on the left allowed them to see the programme at a glance thanks to an expand button which allowed a calendar view of the programme (4).

Figure 5-2: View of Schedule

The screenshot displays the ESC Congress 2021 website interface. At the top, the navigation bar includes 'Home', 'Research & Delivery', 'Exhibition', 'Our Global Community', 'Member Home', and 'Congress Area'. Below this, a 'Schedule overview' section provides search and filter options. The main content area is a grid showing the schedule for August 28th, organized by time slots and channels. The channels are: Channel 1 (Advanced in Science), Channel 2 (Cardiovascular Pharmacology), Channel 3 (Arrhythmias and Device Therapy), and Channel 4 (Basic Science). The grid lists various sessions with titles, times, and speakers. A 'PRIME TIME' section is highlighted on the left. At the bottom, there is a footer with ESC logo, contact information, and a data privacy notice.

During the live sessions, attendees were able to interact through the chat functionality located to the right of the player. This allowed for Q&A, comments and even polling/voting. Speakers of pre-recorded content were encouraged to connect during their sessions to answer questions/comments and to take part in discussions.



### 5.3 Programme

The programme was accessible from the left column of the home page or from the programme search which allowed visitors to browse for sessions, bookmark them, and access the VOD or 'live' events from the search page.

Recommendations on the right side of the programme guided attendees towards sessions or presentations they may have had a particular interest in.

For more details, they could visit the various programme sections.

Figure 5-3: Programme Search

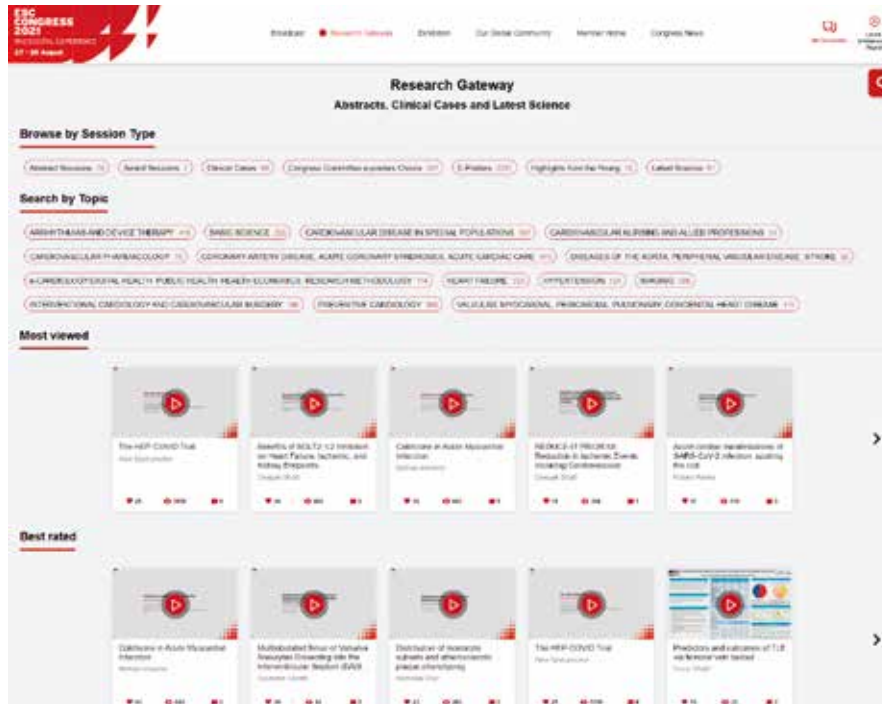
The screenshot displays the ESC Congress 2021 website's search interface. At the top, the navigation bar includes the event title 'ESC CONGRESS 2021 THE DIGITAL EXPERIENCE 27-30 AUGUST' and various menu items like 'Research Gateway', 'Exhibitors', and 'My Registration'. A search bar is located below the navigation, with the text 'ESC - Taking you further' and 'Congresses'. Below the search bar, there are filters for 'Sessions (407)', 'Industry Sessions (76)', 'Faculty & Presenters (200)', and 'Abstracts (626)'. A grid of session cards is shown, each with a title, date, and a 'SEE DETAILS' button. On the right side, there are sections for 'Recommended for you' and 'Supported for you', each listing relevant sessions. At the bottom, there is a 'Join the cardiology event of the year' button.



## 5.4 Research Gateway

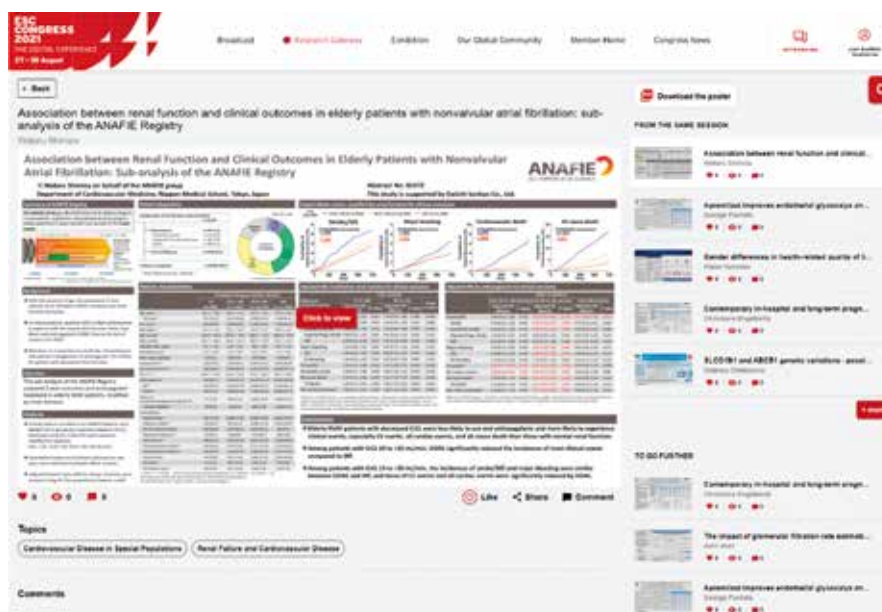
The Research Gateway allowed attendees to view all abstracts, clinical cases, and the latest science content. Attendees were able to browse by session type or topic or simply search for the content they wished to see.

Figure 5-4: Research Gateway



The resources allowed for interaction through 'likes' and commenting functionalities. Presenters were encouraged to regularly visit their content to reply to comments.

Figure 5-5: e-Poster



**Special this year:** a 'light' version of the resources were made available to presenters to allow them to publicly promote their research. This version of the page only featured the content with no interaction or navigation possibility.

## 5.5 Exhibition

This year, the ESC Congress features an exhibition section where industry partners were able to showcase their content and interact with delegates through a chat functionality.

For more details, see the exhibition section.

Figure 5-6: Exhibition

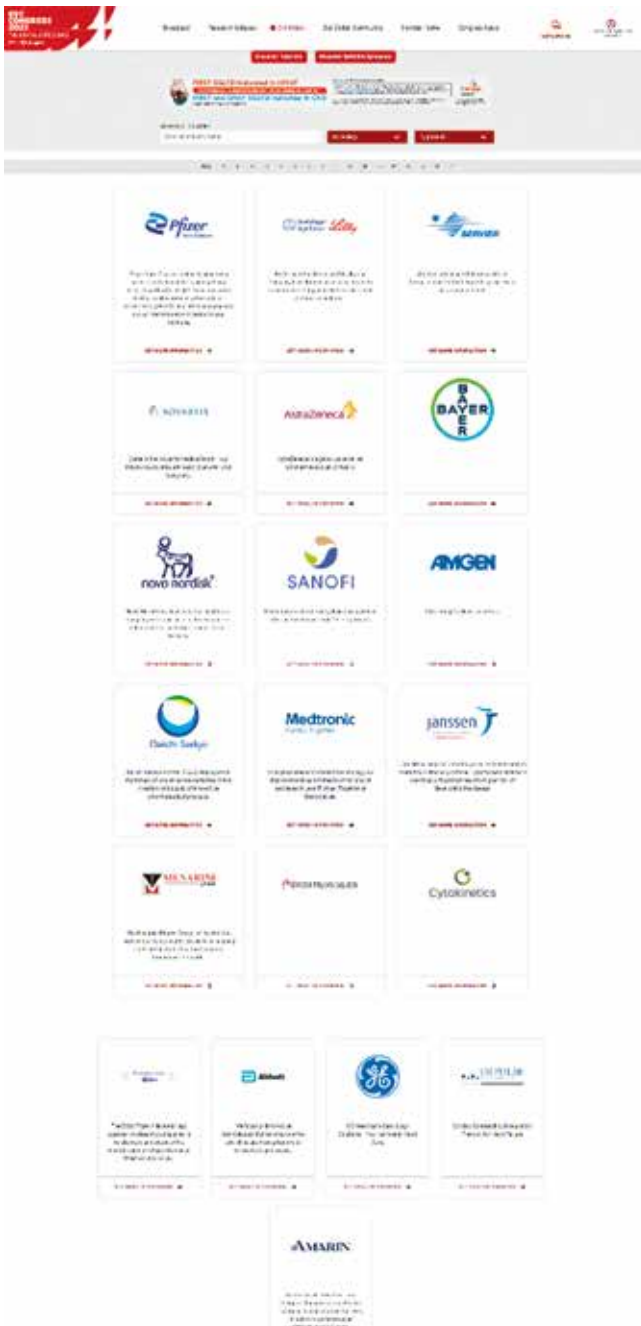


Figure 5-7: Example of a Stand



## 5.6 Global Community

A page was set up to highlight our partner societies (NCS, ACS, ESC Sister Societies and Global Partners). This allowed them, if they wished, to present themselves and engage with delegates through chat. This section aimed to drive traffic to attendees cardiac societies, thanks to personalisation of the country highlighted at the top of the page. An interactive map, as well as a listing, allowed attendees to navigate through all the societies if they wished.

For more details, see the 'Global Communities' section.

Figure 5-8: Our Global Community



## 5.7 Member Home

A special page was created for the ESC community to engage with each other and to encourage membership. This featured special activities for paying members and allowed attendees to speak to an ESC staff member if they wished to obtain more information on the ESC and its membership.

For more details, see the 'Membership' section.

Figure 5-9: Member Home

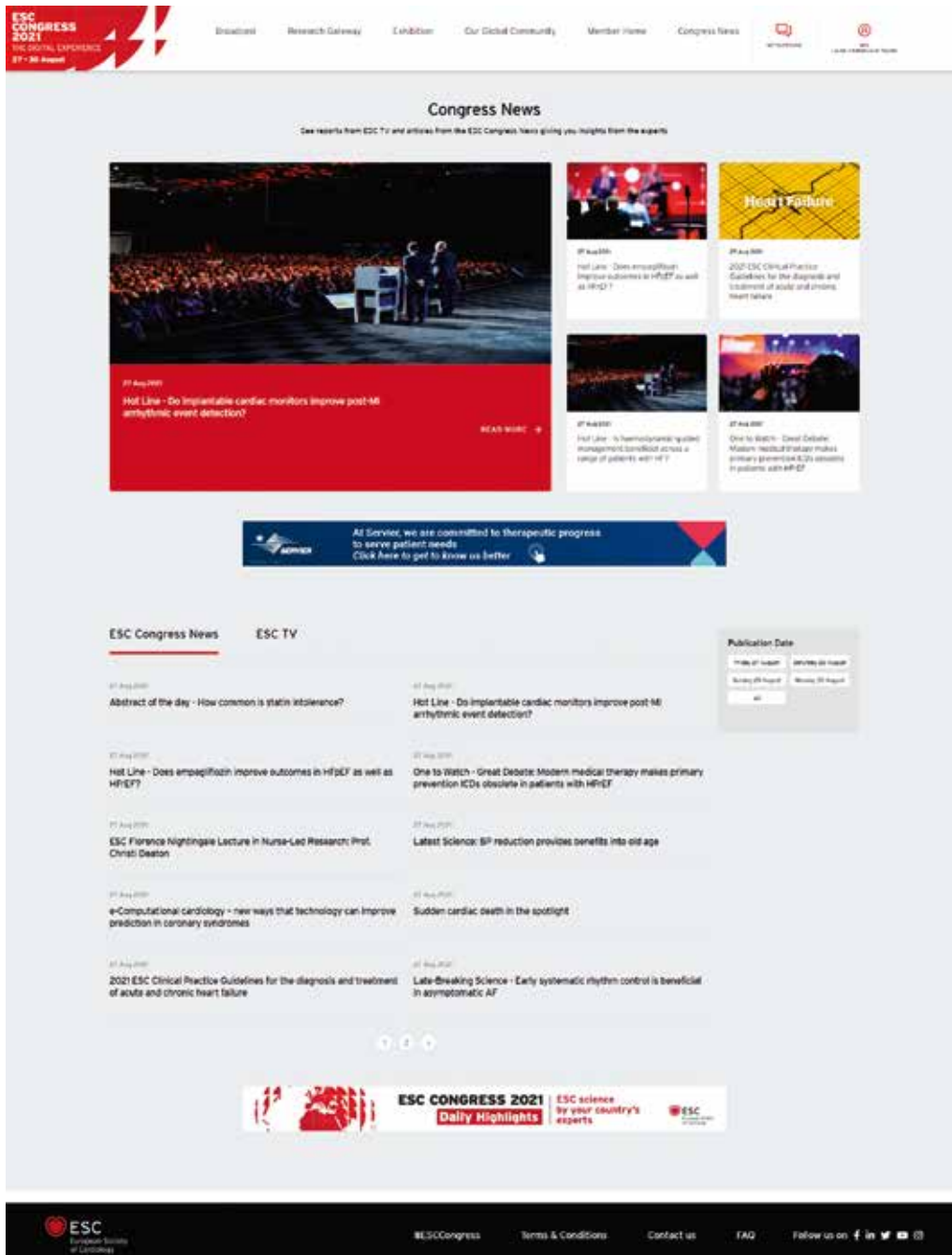


## 5.8 Congress News

The Congress News section was open to all and allowed the ESC to drive traffic to events, thanks to the daily newsletters. It allowed a 'window' into the congress and encouraged visitors who were not yet registered to register to access the full content.

Here, visitors could find news articles, as well as ESC TV interviews covering key sessions presented at ESC Congress 2021

Figure 5-10: Congress News



## 5.9 Networking

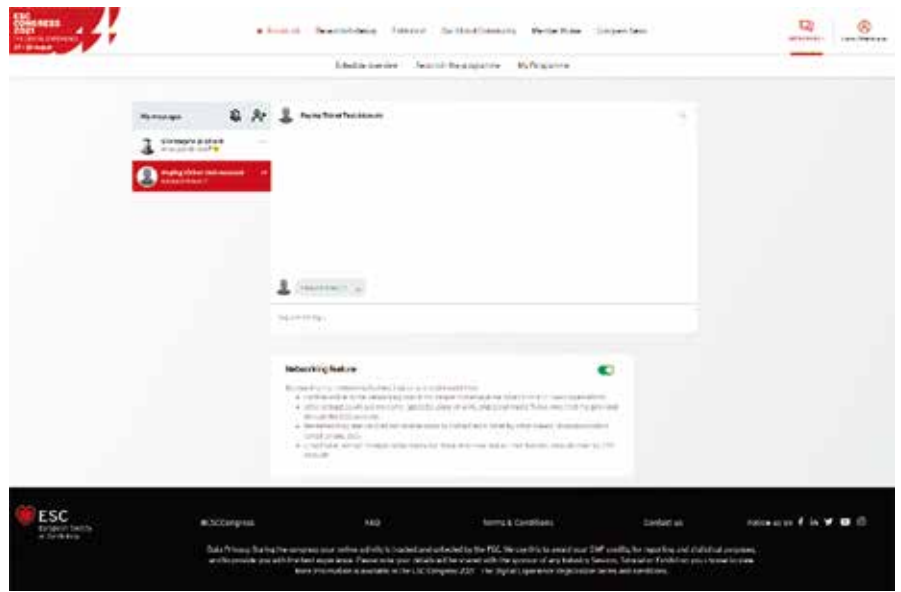
For the first time at an ESC Congress, a networking feature was piloted. This allowed attendees (if they accepted to participate) to contact their peers in one-to-one chat conversations.

A search feature allowed attendees to search for their peers and start a discussion with them.

Figure 5-11: Networking Search



Figure 5-12: Networking Discussion



## 5.10 Session Interactivity

Interactivity during the live sessions was possible through a chat functionality located to the right of the player. Detailed activity per channel per day available below.

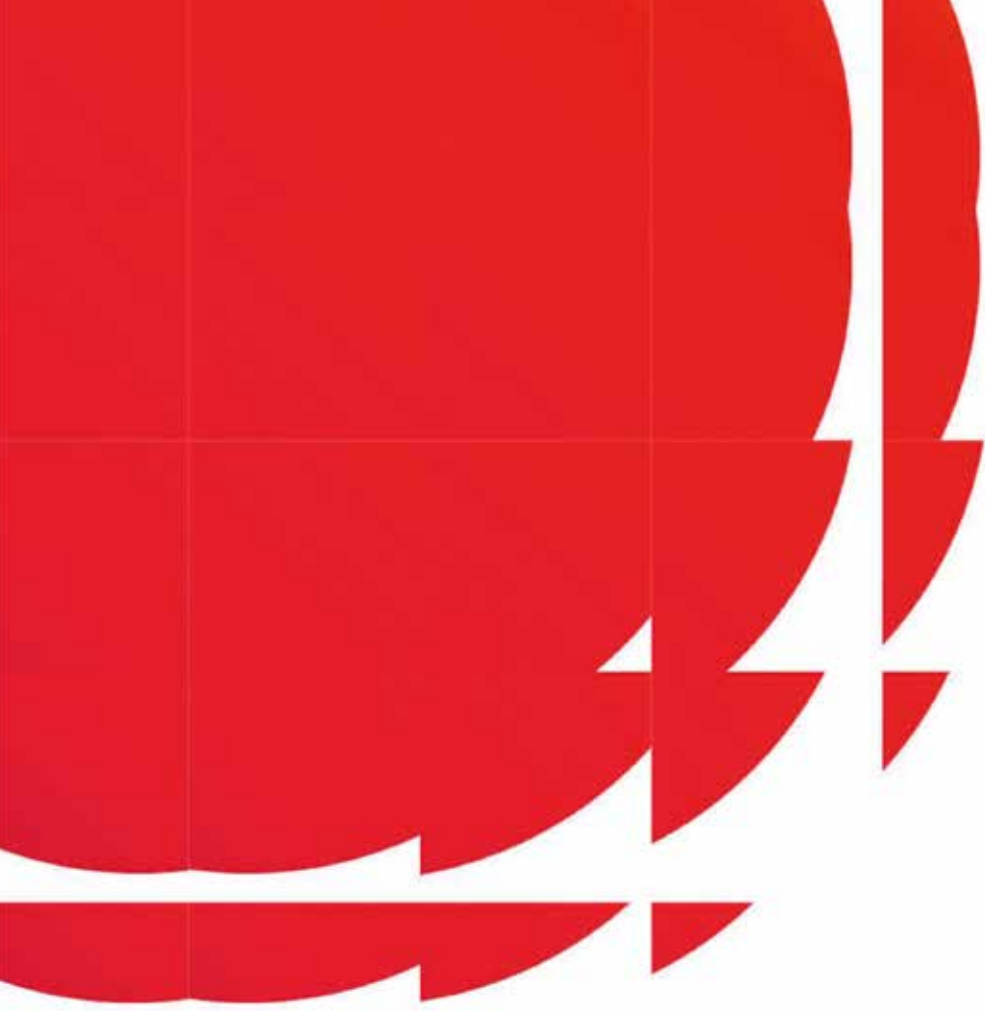
Table 5-1: Daily Channel Activities

	Q&A Interactions*	Poll Votes	Completed surveys	Chat Interactions*	Total
Friday 27/08 - COVID-19 (CHANNEL 1)	398	0	291	407	1,096
Friday 27/08 - Latest Science (CHANNEL 2)	24	0	91	293	408
Friday 27/08 - Arrhythmias and Device Therapy (CHANNEL 3)	249	0	104	91	444
Friday 27/08 - Basic Science (CHANNEL 4)	110	0	79	97	286
Friday 27/08 - Coronary Artery Disease - Acute Cardiac Care (CHANNEL 5)	170	0	67	57	294
Friday 27/08 - Heart Failure (CHANNEL 6)	143	0	120	242	505
Friday 27/08 - Cardiovascular Imaging (CHANNEL 7)	76	0	95	157	328
Friday 27/08 - Interventional Cardiology & CV Surgery, Stroke, PAD, Aortic Disease (CHANNEL 8)	54	0	37	76	167
Friday 27/08 - Preventive Cardiology, Special Populations (CHANNEL 9)	128	0	27	144	299
Friday 27/08 - Valvular, Myocardial, Pericardial, Pulmonary, Congenital Heart Disease (CHANNEL 10)	20	0	30	118	168
Friday 27/08 - General Cardiology (CHANNEL 11)	0	0	38	273	311
Friday 27/08 - Awards and Named Lectures (CHANNEL 12)	0	0	3	61	64
Friday 27/08 - Core Cardiology (CHANNEL 13)	0	0	41	72	113
Friday 27/08 - Cardiology Toolbox (CHANNEL 14)	0	0	97	271	368
Friday 27/08 - International Joint Sessions (CHANNEL 15)	25	0	35	129	189
Friday 27/08 - Prime Time Programme	4524	0	1058	589	6,171
Saturday 28/08 - Advances in Science (CHANNEL 1)	93	0	186	256	535
Saturday 28/08 - Cardiovascular Pharmacology (CHANNEL 2)	366	0	93	107	566
Saturday 28/08 - Arrhythmias and Device Therapy (CHANNEL 3)	72	0	57	98	227
Saturday 28/08 - Basic Science (CHANNEL 4)	72	0	119	26	217
Saturday 28/08 - Coronary Artery Disease - Acute Cardiac Care (CHANNEL 5)	120	0	81	99	300
Saturday 28/08 - Heart Failure (CHANNEL 6)	130	49	156	214	549
Saturday 28/08 - Cardiovascular Imaging (CHANNEL 7)	97	0	72	126	295

	Q&A Interactions*	Poll Votes	Completed surveys	Chat Interactions*	Total
Saturday 28/08 - Interventional Cardiology & CV Surgery, Stroke, PAD, Aortic Disease (CHANNEL 8)	42	0	49	53	144
Saturday 28/08 - Preventive Cardiology, Special Populations (CHANNEL 9)	51	0	38	174	263
Saturday 28/08 - Valvular, Myocardial, Pericardial, Pulmonary, Congenital Heart Disease (CHANNEL 10)	39	0	35	63	137
Saturday 28/08 - General Cardiology (CHANNEL 11)	0	0	17	193	210
Saturday 28/08 - Awards and Named Lectures (CHANNEL 12)	0	0	15	63	78
Saturday 28/08 - Core Cardiology (CHANNEL 13)	0	0	36	35	71
Saturday 28/08 - Cardiology Toolbox (CHANNEL 14)	0	0	46	203	249
Saturday 28/08 - International Joint Sessions (CHANNEL 15)	0	0	16	109	125
Saturday 28/08 - Prime Time Programme	4,588	0	1,005	0	5,593
Sunday 29/08 - COVID-19 (CHANNEL 1)	145	0	300	256	701
Sunday 29/08 - Late-Breaking Science (CHANNEL 2)	110	0	118	205	433
Sunday 29/08 - Arrhythmias and Device Therapy (CHANNEL 3)	116	0	185	147	448
Sunday 29/08 - Basic Science (CHANNEL 4)	61	0	52	36	149
Sunday 29/08 - Coronary Artery Disease - Acute Cardiac Care (CHANNEL 5)	86	0	103	177	366
Sunday 29/08 - Heart Failure (CHANNEL 6)	137	0	103	104	344
Sunday 29/08 - Cardiovascular Imaging (CHANNEL 7)	38	0	84	119	241
Sunday 29/08 - Interventional Cardiology & CV Surgery, Stroke, PAD, Aortic Disease (CHANNEL 8)	45	0	34	84	163
Sunday 29/08 - Preventive Cardiology, Special Populations (CHANNEL 9)	35	0	55	99	189
Sunday 29/08 - Valvular, Myocardial, Pericardial, Pulmonary, Congenital Heart Disease (CHANNEL 10)	35	0	39	76	150
Sunday 29/08 - General Cardiology (CHANNEL 11)	0	0	22	150	172
Sunday 29/08 - Awards and Named Lectures (CHANNEL 12)	0	0	10	35	45
Sunday 29/08 - Core Cardiology (CHANNEL 13)	0	0	63	30	93
Sunday 29/08 - Cardiology Toolbox (CHANNEL 14)	0	0	55	181	236
Sunday 29/08 - International Joint Sessions (CHANNEL 15)	0	0	16	81	97
Sunday 29/08 - Prime Time Programme	2,113	0	1,087	0	3,200

	<b>Q&amp;A Interactions*</b>	<b>Poll Votes</b>	<b>Completed surveys</b>	<b>Chat Interactions*</b>	<b>Total</b>
Monday 30/08 - Digital Health, Public Health, Health Economics (CHANNEL 1)	76	0	190	91	357
Monday 30/08 - Hypertension (CHANNEL 2)	95	0	130	108	333
Monday 30/08 - Arrhythmias and Device Therapy (CHANNEL 3)	75	0	111	127	313
Monday 30/08 - Basic Science (CHANNEL 4)	28	0	27	69	124
Monday 30/08 - Coronary Artery Disease - Acute Cardiac Care (CHANNEL 5)	57	0	92	97	246
Monday 30/08 - Heart Failure (CHANNEL 6)	115	0	77	54	246
Monday 30/08 - Cardiovascular Imaging (CHANNEL 7)	90	0	58	85	233
Monday 30/08 - Interventional Cardiology & CV Surgery, Stroke, PAD, Aortic Disease (CHANNEL 8)	36	0	44	41	121
Monday 30/08 - Preventive Cardiology, Special Populations (CHANNEL 9)	50	0	44	45	139
Monday 30/08 - Valvular, Myocardial, Pericardial, Pulmonary, Congenital Heart Disease (CHANNEL 10)	19	0	35	94	148
Monday 30/08 - Journals Joint Sessions (CHANNEL 11)	0	0	14	60	74
Monday 30/08 - Core Cardiology (CHANNEL 13)	0	0	42	30	72
Monday 30/08 - Cardiology Toolbox (CHANNEL 14)	0	0	31	177	208
Monday 30/08 - International Joint Sessions (CHANNEL 15)	0	0	10	131	141
Monday 30/08 - Prime Time Programme	2623	0	965	0	3,588
<b>Total</b>	<b>17,776</b>	<b>49</b>	<b>8,430</b>	<b>7,885</b>	<b>34,140</b>





## 6. Industry

## 6.1. Industry Participation

The ESC gratefully acknowledges 37 companies and organisations that contributed to the success of ESC Congress 2021 – The Digital Experience. In 2020, 35 companies and organisations contributed to ESC Congress.

## 6.2 Key Statistics

The following section outlines industry activities at ESC Congress 2021 – The Digital Experience, along with key figures which highlight their contributions to the event.

### 6.2.1 Industry Sponsored Sessions

Industry partners were invited to contribute to our scientific programme by disseminating their latest developments in cardiovascular care via two Satellite Symposia formats:

1. Exclusive industry satellite symposia sessions taking place during prime-time slots (Afternoon Programme).
2. Non-Exclusive Satellite Symposia organized in 6 simultaneous channels (Morning Programme).

## 79 Industry Sessions & 4 virtual Tutorials

- 63 channel Satellite Symposia
- 16 prime time Satellite Symposia
- 4 virtual Tutorials

### 6.2.2 Industry Sessions during ESC Congress 2021 – The Digital Experience

Table 6-1: Key metrics (average values)

Row Labels	Average Attendance	Average watching time (mm:ss)	Median watching time (mm:ss)
<b>Friday</b>	<b>1949</b>	<b>20:13</b>	<b>19:21</b>
<b>Channel Session</b>	<b>1051</b>	<b>19:26</b>	<b>17:38</b>
09:00 - 09:30	2392	16:56	19:04
11:30 - 12:00	864	17:15	17:14
13:00 - 13:45	1015	22:01	17:48
<b>Prime Time</b>	<b>4867</b>	<b>22:46</b>	<b>24:56</b>
15:00 - 15:30	6314	19:34	30:34
16:50 - 17:20	5939	21:11	21:18
19:00 - 19:30	3809	20:13	19:46
19:30 - 20:15	3405	30:06	28:04
<b>Saturday</b>	<b>1528</b>	<b>20:18</b>	<b>23:52</b>
<b>Channel Session</b>	<b>907</b>	<b>19:39</b>	<b>23:10</b>
09:00 - 09:30	814	16:31	16:52
11:30 - 12:00	876	18:25	23:15
13:00 - 13:45	1032	24:02	29:23
<b>Prime Time</b>	<b>4324</b>	<b>23:13</b>	<b>26:58</b>
15:00 - 15:30	5407	19:03	28:34
16:50 - 17:20	4843	21:44	29:38
19:00 - 19:30	3635	21:54	23:11
19:30 - 20:15	3409	30:12	26:28
<b>Sunday</b>	<b>1349</b>	<b>22:24</b>	<b>24:03</b>
<b>Channel Session</b>	<b>833</b>	<b>21:56</b>	<b>23:08</b>
09:00 - 09:30	749	22:37	20:27
11:30 - 12:00	827	17:43	23:19
13:00 - 13:45	909	25:34	25:11
<b>Prime Time</b>	<b>3541</b>	<b>24:26</b>	<b>27:57</b>
15:00 - 15:30	3972	19:25	44:26
16:50 - 17:20	3908	22:18	23:35
19:00 - 19:30	3169	23:28	15:45
19:30 - 20:15	3116	32:33	28:01

Row Labels	Average Attendance	Average watching time (mm:ss)	Median watching time (mm:ss)
<b>Monday</b>	<b>1134</b>	<b>22:07</b>	<b>23:16</b>
<b>Channel Session</b>	<b>653</b>	<b>21:25</b>	<b>21:59</b>
09:00 - 09:30	863	15:54	19:05
11:30 - 12:00	551	19:01	22:43
13:00 - 13:45	649	26:35	22:43
<b>Prime Time</b>	<b>2939</b>	<b>24:45</b>	<b>28:04</b>
15:00 - 15:30	3455	21:28	23:23
16:50 - 17:20	3114	22:30	21:34
19:00 - 19:30	2678	22:31	36:13
19:30 - 20:15	2508	32:29	31:05
<b>Grand Total</b>	<b>1476</b>	<b>21:17</b>	<b>22:48</b>

### 6.2.3 Industry Sessions: Video On Demand

Industry presentations were made available to registered delegates as video on demand on the platform from 31 August to 13 September.

Table 6-2: Industry Sessions: Video On Demand Metrics as of 13 September 2021

Viewers	
Average unique viewers all sessions	124
Highest average unique viewers	62
Lowest average unique viewers	2
Median unique viewers all sessions	92

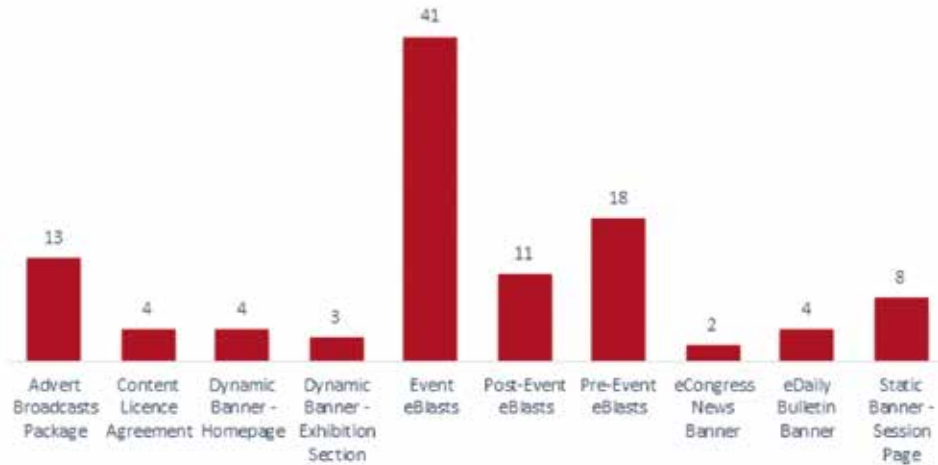


### 6.2.4 Sponsorship

ESC Congress 2021 – The Digital Experience provided partners with an unprecedented opportunity to convey their key messages to a global audience.

Sponsorship opportunities on our platform delivered increased brand awareness and generated traffic to industry partners content via various promotional formats.

Figure 6-1: Overview on Quantity of Products Sponsored per Category



### 6.2.5 e-Blasts

Sponsors were able to reach out to the audience before, during and after the event via an electronic invitation to promote activities.

Available slots		
Pre-Event e-Blasts	Event e-Blasts	Post-Event e-Blasts
02 August 2021	27 August 2021	03 September 2021
09 August 2021	28 August 2021	10 September 2021
16 August 2021	29 August 2021	17 September 2021
23 August 2021	30 August 2021	24 September 2021

Table 6-3: Average Performance for Disseminated e-Blasts. (based on statistical reports)

Key Figures - Average Performance for Pre-Event e-Blast Items		
Audience	Open Rate	Click Rate
294,505	19.1 %	1.3 %

Key Figures - Average Performance for Event e-Blast items		
Audience	Open Rate	Click Rate
21,293	36.2 %	6.7 %

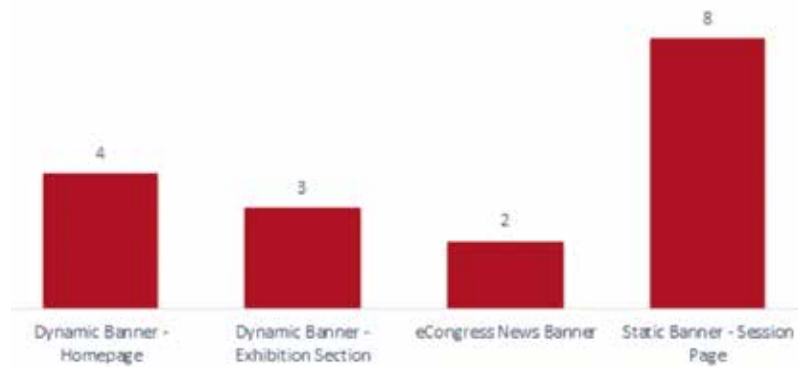
  

Key Figures - Average performance for Post-Event e-Blast items		
Audience	Open Rate	Click Rate
44,022	28.2 %	2.3 %

## 6.2.6 Banner Advertising

Industry partners had the opportunity to promote their activities, thanks to our range of banner advertisements across the congress platform.

Figure 6-2: Industry Banner Advertising on the Platform



Sponsors could promote their session programmes or exhibitor profiles on the following pages:

Figure 6-3: Home Page Dynamic Banners – Clicks per Day  
(sliding banner rotating every seven seconds including up to four sponsors)

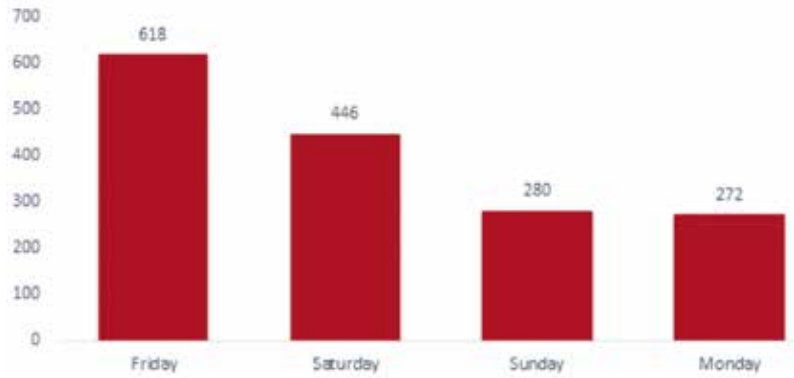


Figure 6-4: Session Page Static Banners – Clicks per Day  
(one static banner per session)

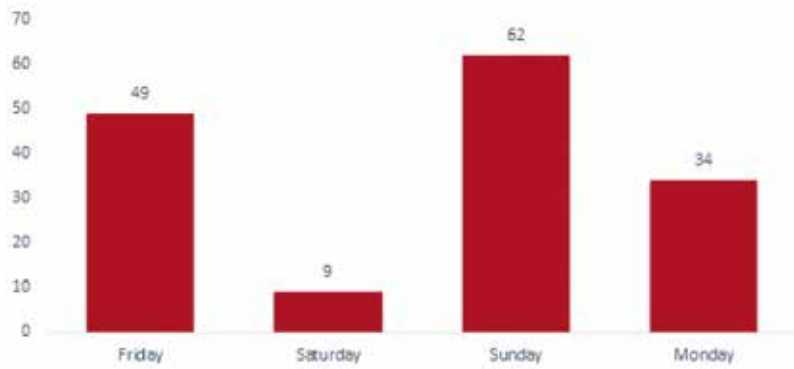
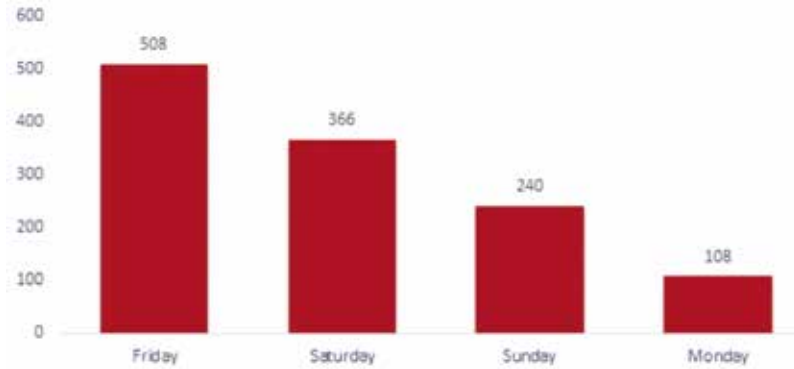


Figure 6-5: Exhibition Section Dynamic Banners  
(sliding banner rotating every seven seconds including up to four sponsors)



### 6.2.7 Adverts in ESC Broadcast Channels

Adverts in ESC broadcast channels allowed partners to promote their activities with four 30-second spots per day between sessions as follows:

- Two in the Channel Programme topic of choice between 08:00 and 12:45
- Two in the Studio Programme section between 14:00 and 19:00 on the single live channel

**Some 27 unique industry adverts were broadcast** in 52 ESC channel spots between sessions over the four days, attracting **75,043 unique viewers** (2,779 viewers per advert on average).

### 6.2.8 e-Daily Bulletin Banners

Our dedicated congress newsletter highlighting the most up-to-date scientific information from ESC Congress 2021 – The Digital Experience was the ideal opportunity to extend industry partner visibility via an e-Daily Bulletin banner advertisements promoting their digital sessions and exhibitor profiles. Industry adverts were placed at the end of the e-Daily Bulletin message.

Figure 6-6: Extracts from e-Daily Bulletins Sent during Congress



Table 6-4: Metrics for e-Daily Bulletin Banners

Metrics for e-Daily Bulletin BulletinBanners - Average over 4 Days				
Target	Audience	Open Rate	Click Rate	Advert Clicks
All Participants	298,033	23.48%	8.92%	92
Registered*	26,720	33.76%	1.176%	27
Non-Registered	271,313	10.64%	14.65%	65



## 6.3 Exhibition

Industry partners had the opportunity to showcase their online exhibition page at ESC Congress 2021 – The Digital Experience. Partners were acknowledged through an exhibitor profile on a dedicated exhibition page. Users could access the exhibition home page by clicking on the exhibition tab of the congress platform. Industry logos were displayed on the home page in order to lead delegates to their respective exhibition pages.

Some 33 industry partners exhibited at ESC Congress 2021 – The Digital Experience, which represented a total of 36 dedicated exhibition pages (one sponsor could have more than one page). A selection of three exhibition packages was available to partners for their various needs.

Table 6-5: Various Exhibition Packages

Package Type	Quantity
Starter	15
Booster	6
Expert	15
<b>Total</b>	<b>36</b>

In addition, seven exhibitors ordered the virtual booth insert allowing them to promote their external virtual booth (microsite) on the congress platform.

The exhibition opened on 26 August, one day before the congress started, and it closed on the last day of the VOD period on 14 September. During this period, there was a total of 8,161 unique viewers on the exhibition home page who generated 4,245 unique clicks (on at least one exhibitor logo).

Figure 6-8: Overview of Exhibition Home Page

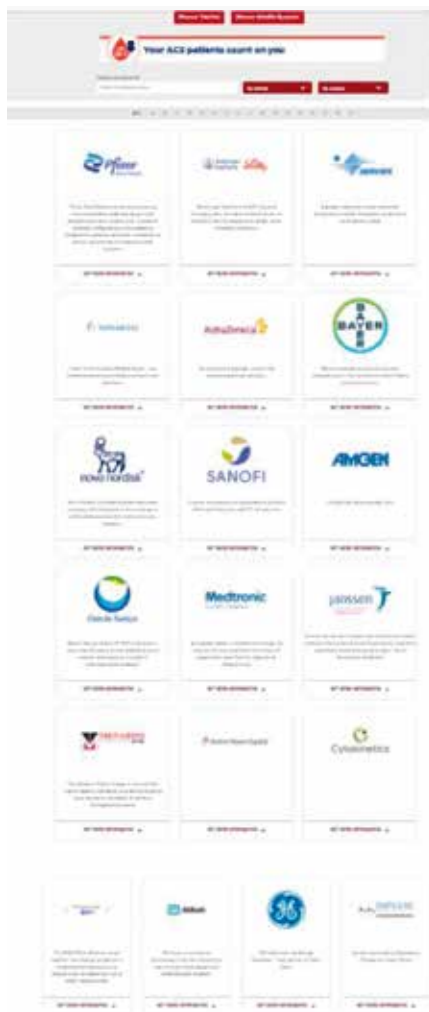


Figure 6-9: Example 1 of Dedicated Exhibition Page



Figure 6-10: Example 2 of Dedicated Exhibition Page



## 6.4 ESC Congress 2021 - The Digital Experience - Industry Feedback

- 1 online industry survey
- 9 focus interviews – 45 minutes each

Figure 6-20: Summary of Industry Feedback on ESC Congress 2021



Figure 6-21: Industry Feedback Looking Ahead to ESC Congress 2022

