

# POST CONGRESS REPORT



# Heart Failure & World Congress on Acute Heart Failure 2019

**25-28 MAY**  
**ATHENS**  
GREECE

Organised  
by the Heart Failure  
Association  
of the ESC

HEART FAILURE ●  
FROM ALPHA   
TO OMEGA 

[www.escardio.org/heartfailure](http://www.escardio.org/heartfailure)



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# 1. General Information

## 1.1. Quick facts & figures

**Heart Failure 2019 and the 6<sup>th</sup> World Congress on Acute Heart Failure** took place in Athens, Greece from 25 to 28 May 2019.



This educational programme was accredited by the European Accreditation Council for Continuing Medical Education (EACCME) for a maximum of 19 hour(s) of European external CME Credit(s) (ECMEC).

### **5 431 Total participation**

4 779 Active delegates

625 Exhibitors

30 Press

### **106 countries represented**

**296 Faculty Members** (excluding poster Presenters and Industry)

**663 Faculty Roles** (excluding Industry)

### **204 Scientific Programme sessions**

93 Scientific & educational programme sessions

30 Abstract-based sessions

81 Industry sessions

### **8 Lecture rooms**

6 Lecture Rooms

2 Agoras

3 Practical Tutorials rooms

1 poster area (divided in 2 zones)

**1721 abstracts** submitted & **1499** abstracts accepted (87%)

**273 clinical cases** submitted & **206** accepted (75%)

**40 late breaking science** submissions (100%)

22 selected for oral presentation

18 accepted as poster presentation

### **Industry sponsors**

31 companies

24 Satellite Symposia

49 Practical Tutorials sessions

8 Experts on the Spot sessions

### **Exhibition**

1214,2 m<sup>2</sup> occupied

31 exhibiting companies

### Congress Main Theme:

**“Heart Failure: from alpha to omega”**

### Other information about this congress

**HoT Walk:** organized on Monday evening by the Heart failure Specialists Of Tomorrow in collaboration with the *Hellenic Society of Cardiology*.

### NEW at this congress

- The largest Agora was built in the Atrium
- **Childcare Services:** available in a hotel few minutes' walk to the venue
- **Increase of HFA Congress Travel Grants** (200 vs 150 in **2018, 400€ travel allowance vs 300€** in 2018)
- **Delegate material sent by post:** for all delegates registered before the late fee registration deadline. The aim of the initiative was to significantly reduce the delegate queues on site and to reduce the size of the registration area as this area was needed to build exhibit stands.

## 1.2. Introduction

Organised by the Heart Failure Association of the European Society of Cardiology (HFA of the ESC), the Heart Failure Congress is a unique forum where cardiologists, interventional heart failure specialists, cardiac surgeons, internists, practicing general physicians, basic scientists, epidemiologists, cardiac nurses, industry affiliates and others have the opportunity to meet and exchange ideas and information.



The HFA congress is an international event open to healthcare professionals interested in any aspect of heart failure from epidemiology, through basic and translational science to prevention (reviewing the treatment of hypertension and post-infarction care), diagnosis (including novel imaging modalities and biomarkers), monitoring (together with remote monitoring), prognostication (risk stratification as well as use of biomarkers), medical and nursing management (including drugs, devices, tele-care and surgery).

## 1.3. History

**Heart Failure 2019  
& 6<sup>th</sup> World Congress on Acute Heart Failure**  
Athens, Greece  
Total attendance: 5 431

**Heart Failure 2018  
& 5<sup>th</sup> World Congress on Acute Heart Failure**  
Vienna, Austria  
Total attendance: 5 861

**Heart Failure 2017  
& 4<sup>th</sup> World Congress on Acute Heart Failure**  
Paris, France  
Total attendance: 5 024

**Heart Failure 2016  
& 3<sup>rd</sup> World Congress on Acute Heart Failure**  
Florence, Italy  
Total attendance: 6 148

**Heart Failure 2015  
& 2<sup>nd</sup> World Congress on Acute Heart Failure**  
Seville, Spain  
Total attendance: 4 791

**Heart Failure 2014  
& 1<sup>st</sup> World Congress on Acute Heart Failure**  
Athens, Greece  
Total attendance: 4 433



**Heart Failure 2013**

Lisbon Portugal

Total attendance: 4 470

**Heart Failure 2012**

Belgrade Serbia

Total attendance: 3 673

**Heart Failure 2011**

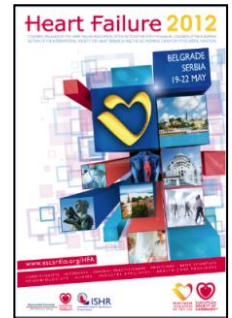
Gothenburg - Sweden

Total attendance: 2 534

**Heart Failure 2010**

Berlin - Germany

Total attendance: 3 317



## 1.4. Scientific Committees

### Heart Failure 2019 Congress Chairperson

**Gerasimos Filippatos (GR)**

#### *Presidential Trio*

- President **Petar M. Seferović (RS)**
- President Elect **Andrew Coats (UK)**
- Immediate Past-President **Frank Ruschitzka (CH)**

#### *Executive Committee*

- Chairperson of the Clinical Section **Johann Bauersachs (DE)**
- Chairperson of the Basic Science Section **Stéphane Heymans (NL)**
- Coordinator for National HF Societies and Working Groups **Yuri Lopatin (RU)**
- Secretary **Mitja Lainscak (SI)**
- Treasurer **Giuseppe Rosano (UK)**

#### *Clinical section*

- Tuvia Ben Gal (IL)
- Jelena Celutkiene (LT)
- Ovidiu Chioncel (RO)
- Ewa Jankowska (PL)
- Loreena Hill (IR)
- Tiny Jaarsma (SE)
- Lars Lund (SE)
- Davor Milicic (HR)
- Brenda Moura (PT)
- Christian Mueller (CH)
- Wilfried Mullens (BE)
- Maurizio Volterani (IT)

#### *Basic Science Section*

- Johannes Backs (DE)
- Rudolf de Boer (NL)
- Alexander Lyon (UK)

#### *Ex-officio & Sui Generis*

##### *Ex-officio*

- Editor in Chief, European Journal of Heart Failure - **Marco Metra (IT)**
- Editor in Chief, ESC Heart Failure - **Stefan Anker (DE)**
- Chair, WG on Myocardial Function - **Thomas Thum (DE)**
- Chair, Scientific Programmes Committee Heart Failure 2019 - **Gerasimos Filippatos (GR)**

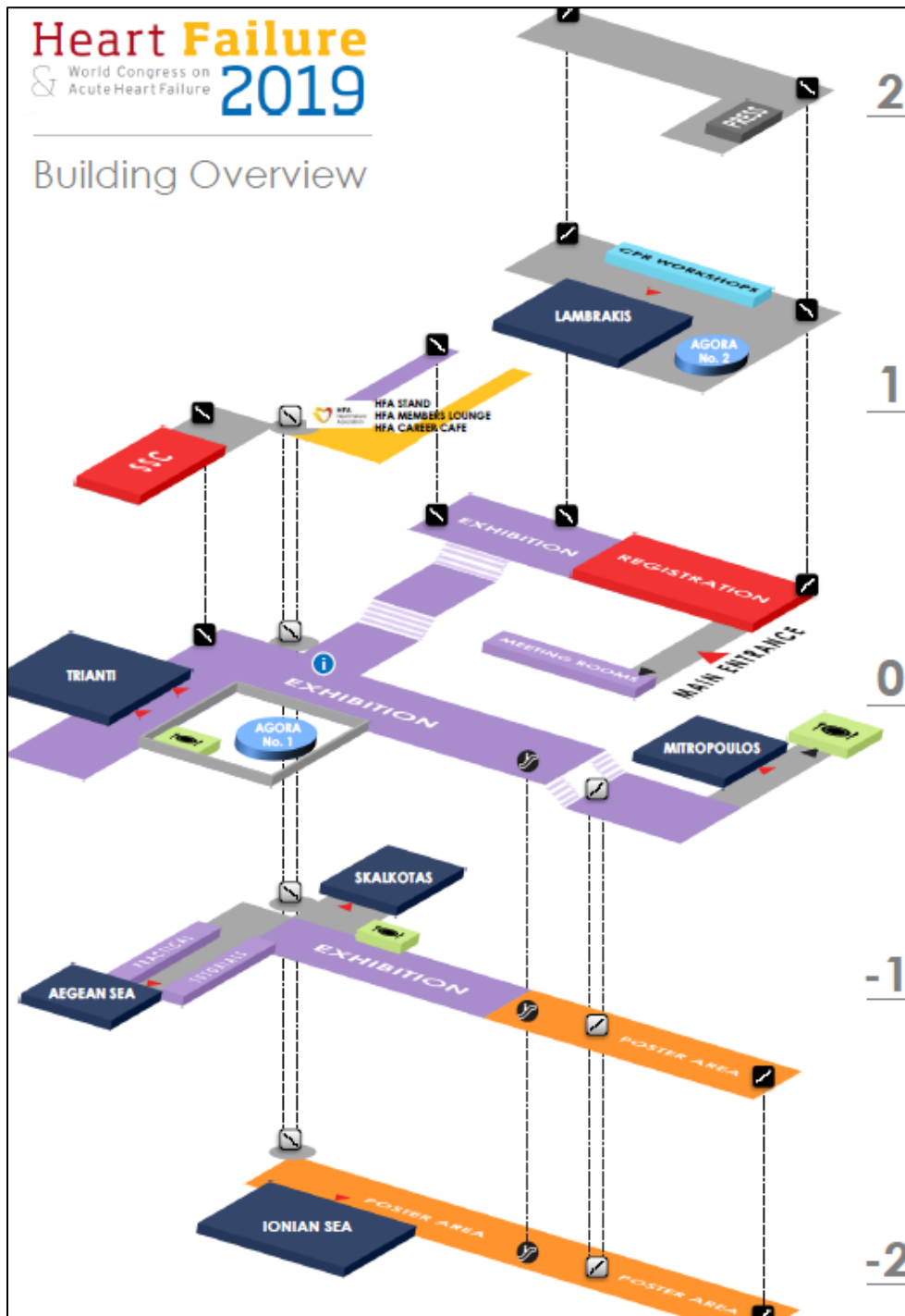
##### *Sui Generis*

- Massimo Piepoli (IT)
- Piotr Ponikowski (PL)

## 1.5. Venue

### Megaron Athens Conference Centre

Leof. Vasilissis Sofias, Athina 115 21, Greece





## 1.6. Schedule

Type	FRIDAY 24 MAY	SATURDAY 25 MAY	SUNDAY 26 MAY	MONDAY 27 MAY	TUESDAY 28 MAY
<b>Scientific sessions</b>		08.30-17.30	08.30-18.00	08.30-18.00	08.30-12.30
<b>Registration</b>	14.00-18.00	07.30-18.30	07.30-18.30	07.30-18.30	07.30-13.00
<b>Exhibition</b>		10.00-18.00	09.00-18.00	09.00-18.00	Closed
<b>Speaker Service Centre</b>	14.00-18.00	07.30-18.30	07.30-18.30	07.30-18.30	07.30-12.30

## 2. Scientific Programme

### 2.1. Overview

8 Lecture rooms, including 2 Agoras

3 Practical Tutorials rooms

1 Poster Area (*divided in 2 zones*)

**204 sessions**

#### 93 – Scientific and Educational Programme

Session type	# sessions
Clinical Cases	3
Debate Session	3
Guidelines in Daily Practice	5
How-to Session	9
Special Session	13
Symposium	56
Special Event	4
<b>Grand Total</b>	<b>93</b>

#### 30 - Abstract based Programme

Session type	# Sessions
Abstract Session	1
Clinical Case Posters	6
Clinical Cases	3
Moderated Posters	6
Poster Session	5
Rapid Fire Abstracts	7
Young Investigator Award Abstracts	2
<b>Grand Total</b>	<b>30</b>

#### 81 – Industry Programme

Session Type	# Sessions
Practical Tutorials	49
Satellite Symposium	24
Satellite Symposium - Experts on the Spot	8
<b>Grand Total</b>	<b>81</b>

## Scientific submissions

**1721** abstracts submitted

1499 abstracts accepted (87% acceptance) → including 19 HFWM 2019 abstracts – automatically accepted

**273** clinical cases submitted

206 clinical cases accepted (75% acceptance)

**40** Late-Breaking Science Submissions

22 accepted in oral sessions

18 accepted as poster presentation – 100% acceptance rate

## New this year

- Agora outdoors (due to the venue space limitations)
- New special sessions: Parade of devices: attend and learn
- YIA sessions at faculty dinner
- Back this year: Basic Science poster discussants  
(1 discussant per 10 posters on specific topic approximately)

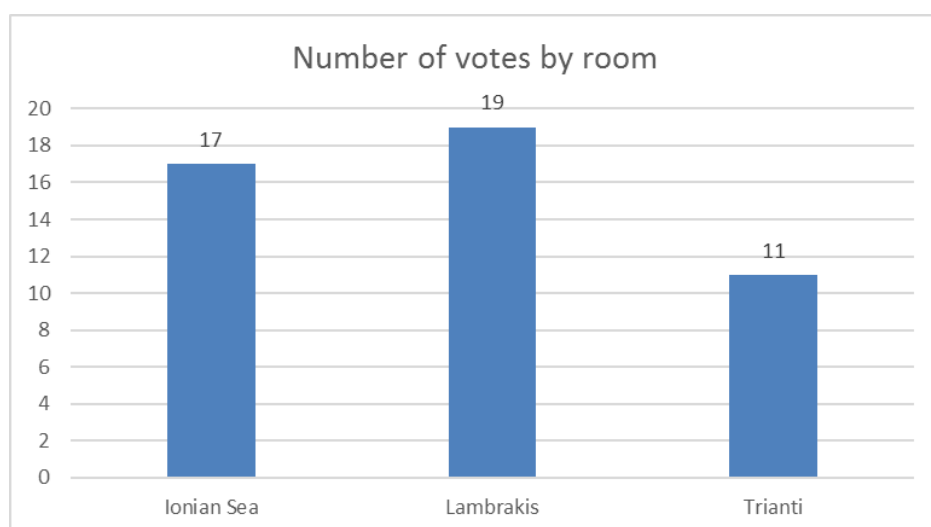
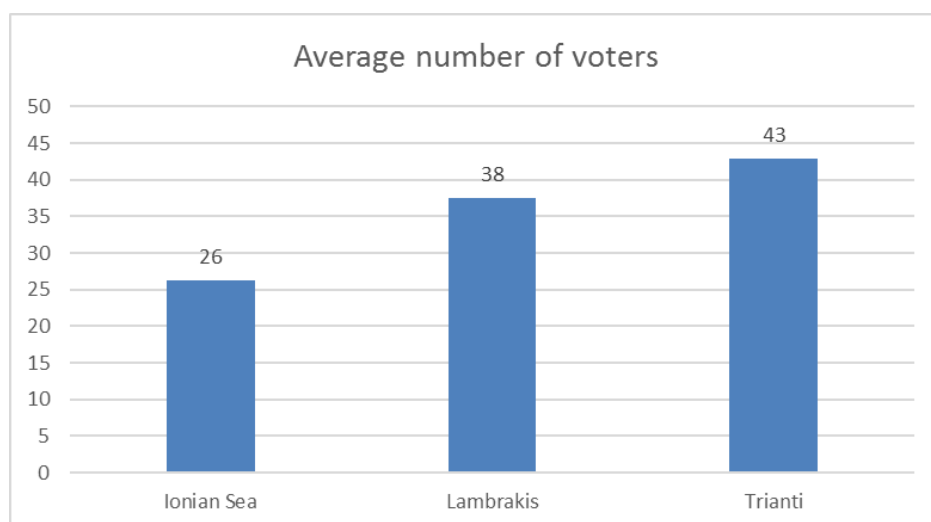
## Special initiatives again this year:

- Clinical Case Awards – Oral award session composed of the best submitted cases
- HFA Career Cafe - in a relaxed atmosphere - young heart failure enthusiasts are given the opportunity to meet internationally renowned experts in the field.
- The Virtual Case Area featuring Virtual Case Demonstrations
- “Off the Record sessions”: These sessions of 45 minutes were held in the Agora and opened the floor to informal discussions about a specific topic between a renowned expert, a panel of discussants, and the audience including the Heart failure specialists Of Tomorrow (HOT).
- HFA Grand Debate: Two special sessions on the most popular controversies in the management of heart failure, in which specialists defended a position in front of their opponent.

## Voting sessions

Voting option was available in 3 rooms: Ionian sea, Lambrakis and Trianti. Voting is available through the mobile app application for the specific sessions.

Session title	Voters per session
Acute heart failure: does clinical settings matter?	78
Advances in therapeutic interventions in acute heart failure	486
Clinical dilemmas in the treatment of comorbidities in heart failure	228
Guidelines in Daily Practice I: Potassium binders	116
Guidelines in Daily Practice II: heart failure and hypertension	42
Guidelines in Daily Practice III: Myocardial revascularisation in heart failure	61
Guidelines in Daily Practice V: pregnancy and heart failure	74
HFA Championships	75
HFA Focus	192
The Grand Debate 1: Advances in medical and interventional treatment of heart failure	107
The Grand Debate 2: Challenges in heart failure management: mitral regurgitation and atrial fibrillation	173



## 2.2. Faculty

**296 Faculty Members** (excluding poster Presenters and Industry)

**663 Faculty Roles** (excluding Industry)

- 232 Chairperson roles
- 328 Speaker roles
- 15 Judge roles
- 88 Discussants

### Faculty overview

	2013	2014	2015	2016	2017	2018	2019
<b>Total number of Faculty</b>	238	303	260	272	287	286	296
<b>Total number of Roles</b>	561	624	549	549	659	644	663

### Faculty return rate

Number of returning faculty in 2019 compared to 2018: 138 (47%)

Number of returning faculty in 2019 compared to 2016-2018: 169 (57%)

### Faculty roles

Type of roles

	2013	2014	2015	2016	2017	2018	2019	Variance 2017 - 2018
Chairperson	148	175	194	196	232	233	232	+1
Speaker	401	362	321	295	330	344	328	-16
Judges	12	10	11	18	20	20	15	-5
Discussant	N/A	77	23	44	77	47	88	+41
<b>Total</b>	561	624	549	549	659	644	663	+19

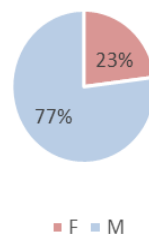
## Role distribution per faculty

Number of roles per faculty	2013	2014	2015	2016	2017	2018	2019
1 role	114	150	122	153	128	134	140
2 roles	62	76	64	51	70	71	73
3 roles	26	38	31	34	39	34	41
4 roles	19	19	20	13	20	14	13
5 roles	8	8	10	6	11	16	14
6 roles	4	3	8	6	7	7	6
7 roles	2	2	4	5	3	3	4
8 roles		4			6	3	1
9 roles	1	2		1	2	2	3
10 roles	1	1			1		1
11 Roles				2		1	1
12 roles	1			1			
14 roles							1
	<b>238</b>	<b>303</b>	<b>260</b>	<b>272</b>	<b>287</b>	<b>286</b>	<b>296</b>

## Faculty by gender

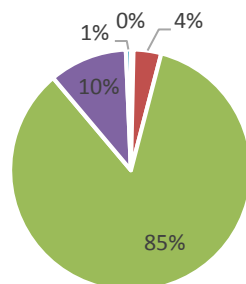
Gender	# Faculty	%
F	68	23%
M	228	77%
Grand Total	<b>296</b>	

Heart Failure 2019 - Faculty by gender



## Faculty by region

Faculty by region



■ Africa (non ESC) ■ Asia Pacific ■ ESC ■ North America ■ South & Central America

## Comparison with previous years

Region	2013	2014	2015	2016	2017	2018	2019	Variance 2018-2019
Africa (non ESC)	1	1	1	1	2	3	1	-2
Asia Pacific	8	13	15	11	18	19	11	-8
ESC	193	250	205	226	226	226	251	+25
North America	28	37	37	32	37	36	31	-5
South & Central America	8	2	2	2	4	2	2	0
<b>Total</b>	<b>238</b>	<b>303</b>	<b>260</b>	<b>272</b>	<b>287</b>	<b>286</b>	<b>296</b>	<b>+10</b>

## Top 10 countries of origin

Country	2014	2015	2016	2017	2018	2019
	Greece	Spain	Italy	France	Austria	Greece
Greece	<b>70</b>	13	15	10	8	<b>69</b>
Germany	30	26	27	28	41	33
United States of America	35	35	30	34	34	31
United Kingdom	17	21	24	27	22	25
Italy	20	13	<b>57</b>	20	13	18
Netherlands	14	15	16	13	17	14
France	13	8	7	<b>56</b>	16	14
Switzerland	11	15	16	14	19	9
Sweden	4	8	8	9	7	9
Spain	8	<b>48</b>	11	7	5	8

## 2.3. Sessions

### Programme overview by type of sessions

	Type	2013	2014	2015	2016	2017	2018	2019	Variance
		Lisbon	Athens	Seville	Florence	Paris	Vienna	Athens	2018/2019
<b>Abstract-based programme</b>	Clinical Cases			9	4	3	3	3	0
	Moderated Posters	6	7	7	12	12	12	12	0
	Poster Session	8	6	5	6	5	6	5	-1
	Rapid Fire Abstract	3	6	6	5	7	7	7	0
	Young Investigators Awards Abstracts	3	3	3	3	3	3	2	-1
	Abstract Session				2	1	0	1	1
	<b>Total abstract sessions</b>	<b>20</b>	<b>22</b>	<b>30</b>	<b>32</b>	<b>31</b>	<b>31</b>	<b>30</b>	<b>-1</b>
<b>Scientific &amp; educational programme</b>	Clinical Interactive Educational Session/ HFA Focus	7	4	4	4	2	2		-2
	Debate Session		2	2	0	2	2	3	1
	How-to Session		6	4	12	8	7	9	2
	Main Session	2		11	6				0
	Read with the Experts								0
	Special Event	2	2	3	4	4	3	4	1
	Special Session	6	9	7	6	12	15	13	-2
	Symposium	43	47	43	44	59	60	56	-4
	WorkShop		3						0
	Guidelines in Daily Practice					5	5	5	0
	Clinical Cases							3	3
<b>Total pre-arranged sessions</b>	<b>60</b>	<b>73</b>	<b>74</b>	<b>76</b>	<b>92</b>	<b>91</b>	<b>93</b>	<b>2</b>	
<b>Industry programme</b>	Practical Tutorials	36	14	17	25	50	28	49	21
	Satellite Symposium	13	17	18	16	22	20	24	4
	EBAC Accredited Educational Programme				2				0
	EBAC Accredited Educational Programme - Experts on the Spot				2				0
	Satellite Symposium - Experts on the Spot			1	2	8	8	8	0
	<b>Total industry sessions</b>	<b>49</b>	<b>31</b>	<b>36</b>	<b>47</b>	<b>80</b>	<b>56</b>	<b>81</b>	<b>25</b>
	<b>Total sessions per congress</b>	<b>129</b>	<b>126</b>	<b>140</b>	<b>155</b>	<b>203</b>	<b>178</b>	<b>204</b>	<b>35</b>



## Special Sessions in 2019

- Heart Failure 2019 Highlights
- HFA Championships
- HFA Focus
- Late breaking trial I - Acute heart failure
- Late breaking trial II - Chronic heart failure
- Late breaking trial III - Innovative and device therapy
- Late breaking trial IV - Registries
- Off the record with Professor Dirk Brutsaert
- Off the record with Professor Magdi Yacoub
- Off the record with Professor Mariell Jessup
- Parade of devices 1: attend and learn
- Parade of devices 2: attend and learn
- The year's best papers on heart failure

## Sessions by Topic

Topics	# sessions
10 - Chronic Heart Failure	5
10.1 - Chronic Heart Failure – Pathophysiology and Mechanisms	1
10.1.1 - Chronic Heart Failure - Pathophysiology	2
10.1.10 - Heart Failure with Preserved Ejection Fraction	3
10.1.3 - Cardiotoxicity of Drugs and Other Therapies	2
10.1.9 - Heart Failure with Mid-range Ejection Fraction	1
10.2 - Chronic Heart Failure – Epidemiology, Prognosis, Outcome	2
10.3.1 - Chronic Heart Failure – Diagnostic Methods: Biomarkers	1
10.3.2 - Chronic Heart Failure – Diagnostic Methods: Imaging	1
10.4 - Chronic Heart Failure – Treatment	3
10.4.2 - Chronic Heart Failure: Pharmacotherapy	1
10.4.3 - Chronic Heart Failure: Rehabilitation	1
10.4.6 - Ventricular Assist Devices	2
10.4.7 - Heart Transplantation	1
10.4.8 - Devices for Autonomic Modulation	1
10.6.2 - Chronic Heart Failure: Comorbidities	4
10.99 - Chronic Heart Failure - Other	2
11 - Acute Heart Failure	3
11.1 - Acute Heart Failure – Pathophysiology and Mechanisms	6
11.3.2 - Acute Heart Failure: Imaging	1
11.6 - Acute Heart Failure - Clinical	5
15 - Valvular Heart Disease	1
17 - Myocardial Disease	1
17.6 - Myocardial Disease – Clinical	1
17.6.1 - Myocarditis	1
27 - Hypertension	1
28.7 - Diabetes and the Heart	1
30 - Cardiovascular Disease in Special Populations	2

30.6 - Cardio-Oncology	1
31.1 - Cardiovascular Pharmacotherapy	1
32 - Cardiovascular Nursing	2
36 - Basic Science	2
36.2 - Basic Science - Cardiac Biology and Physiology	2
36.2.3 - Basic Science - Cardiac Biology and Physiology: Signal Transduction, Mechano-Transduction	1
36.2.8 - Basic Science - Cardiac Biology and Physiology: Leukocytes, Inflammation, Immunity	1
36.3 - Basic Science - Cardiac Diseases	3
36.3.11 - Basic Science - Cardiac Diseases: Gene Therapy, Cell Therapy	1
36.5.8 - Basic Science - Vascular Diseases: Drugs, Drug Targets	1
5 - Atrial Fibrillation	1
9 - Device Therapy	4
9.3 - Cardiac Resynchronization Therapy	2
99 - Other	21
<b>Grand Total</b>	<b>100</b>

### Sessions by Category

	2014	2015	2016	2017	2018	2019
Basic Science - Translational	6	7	10	10	11	10
Cardiomyopathy				6		
Joint Session	7	9	5	5	6	9
Late Breaking Science				4	3	
Local language session			3	4		
Local Track	5	4	6	6	4	6
Mobile App - Ask a Question to the Chair				73	76	72
Mobile App - Voting		4	4	5	15	12
World Congress on Acute Heart Failure	14	12	15	14	13	10
Categories until 2016						
Update on valvular disease for the HF specialist	2					
Co-morbidities and heart failure	6	1	2			
Current evidence-based management	4	2	2			
ESC Clinical Practice Guidelines			6			
Heart Failure with Preserved Ejection Fraction	2		1			
Imaging and Biomarkers	4		1			
Interventions Devices and Telemonitoring	3		2			
New and emerging therapies	2		3			
Patient care	4		3			
<b>Grand Total</b>	<b>59</b>	<b>39</b>	<b>63</b>	<b>127</b>	<b>128</b>	<b>119</b>

## Joint sessions

Partners	HF2016	HF2017	HF2018	HF2019
Heart Failure Society of America	X	X	X	
Japanese Heart Failure Society	X	X	X	
Asian Pacific		X		
Heart failure Association of India and the Cardiology Society of India - Heart Failure Council	X	X	X	X
EHRA	X	X	X	X
Global Heart Failure Awareness Programme	X			
Interamerican Society of Heart failure		X	X	X
Pan African Society of Cardiology			X	
HoT	X		X	
HiT, YaC and Young EP			X	
Chinese Heart Failure Association			X	
Korean Heart Failure Society			X	X
ACNAP				X
EACVI				X
ESC Council of Cardio Oncology				X
WG on pharmacotherapy of the ESC				X

## Number of sessions per lecture room per day

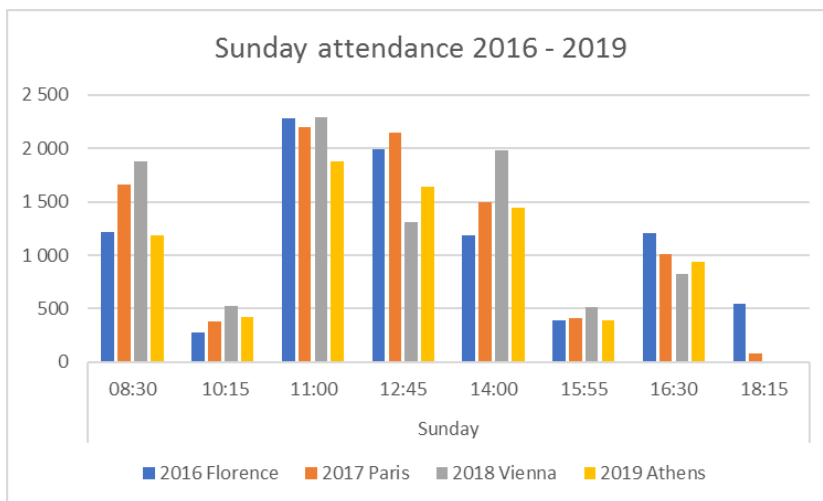
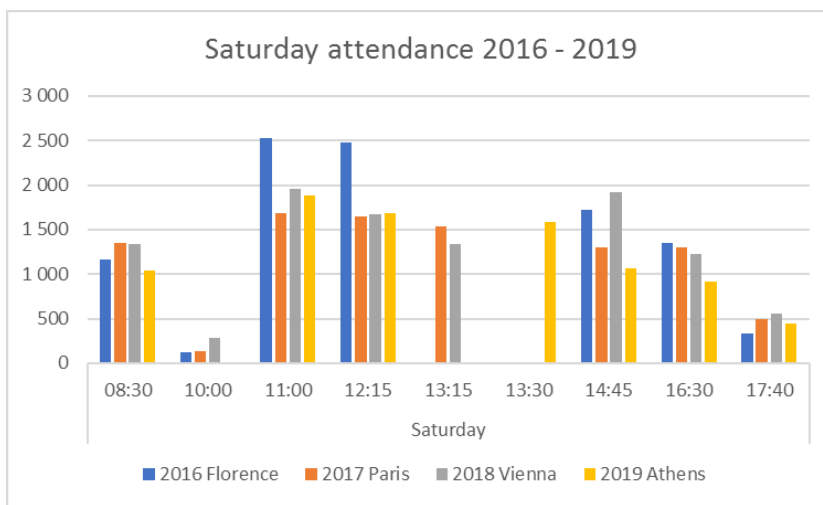
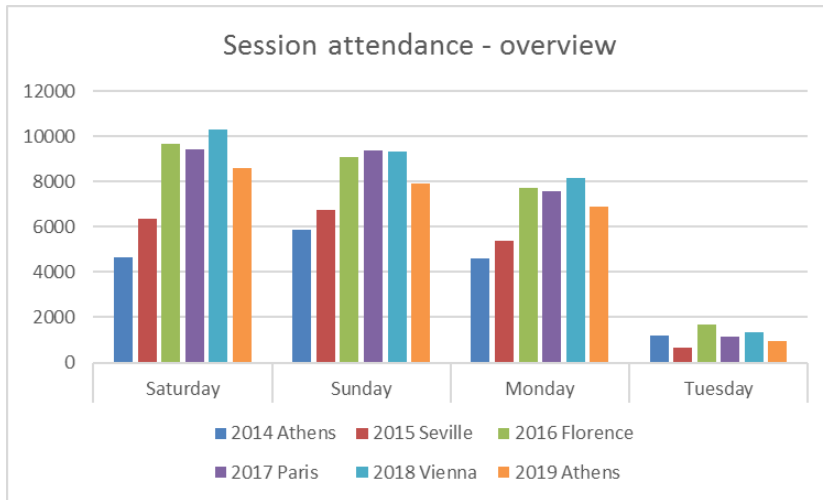
Rooms	Room Capacity	Saturday 25 May	Sunday 26 May	Monday 27 May	Tuesday 28 May	Grand Total
Trianti	850	3	4	4		11
Lambrakis	630	4	4	4	2	14
Ionian Sea	500	3	4	4	1	12
Mitropoulos	450	4	4	4		12
Skalkotas	380	5	4	4	1	14
Aegean Sea	180	3	4	5	1	13
Agora 1	110	3	3	3		9
Agora 2	88	4	4	5	1	14
Moderated Poster Area		2	4	4	2	12
Virtual Case Area		1	2	2	1	6
<b>Grand Total</b>		<b>32</b>	<b>37</b>	<b>39</b>	<b>9</b>	<b>117</b>

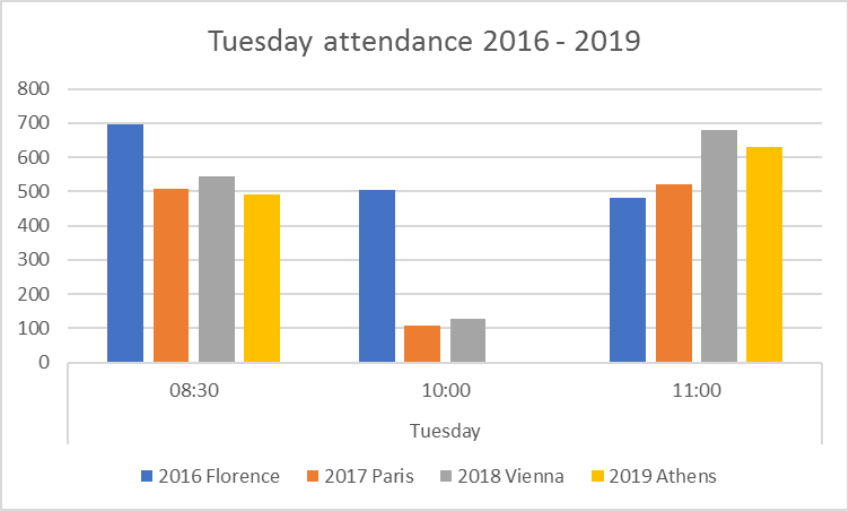
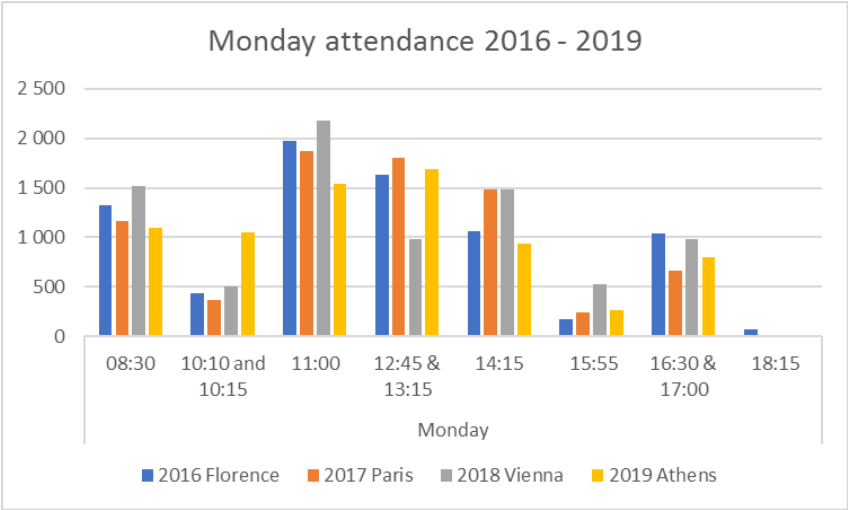
## 2.4. Occupancy of scientific sessions

### Attendance per time slot- Comparison with previous years

Date	Start Time	2014	2015	2016	2017	2018	2019	% of total attendance*
		Athens	Seville	Florence	Paris	Vienna	Athens	
Saturday	08:30	688	840	1 160	1 351	1342	1040	22%
	10:00			116	130	281		
	11:00	1 010	1 489	2 533	1 682	1957	1879	39%
	12:15	50	18	2 477	1 651	1676	1683	35%
	13:15	770	1 203		1 530	1340		22%
	13:30	50	30				1591	
	14:45	852	1 309	1 726	1 296	1926	1065	22%
	16:30	774	923	1 352	1 294	1228	916	19%
	17:40	450	570	330	492	550	450	9%
			<b>4 644</b>	<b>6 382</b>	<b>9 694</b>	<b>9 426</b>	<b>10 300</b>	<b>8 624</b>
Sunday	08:30	981	1 031	1 214	1 661	1 877	1 188	25%
	10:15	55	42	280	383	530	425	9%
	11:00	1 363	1 368	2 287	2 197	2 293	1 880	39%
	12:45	1 140	1 588	1 995	2 150	1 306	1 643	34%
	14:00	980	1 210	1 190	1 495	1 978	1 441	30%
	15:55	38	50	386	410	512	390	8%
	16:30	764	859	1 206	1 013	826	941	20%
	18:15	559	425	542	85			
		<b>5 880</b>	<b>6 728</b>	<b>9 100</b>	<b>9 394</b>	<b>9 322</b>	<b>7 908</b>	
Monday	08:30	874	831	1 319	1 160	1 519	1 097	23%
	10:10 and 10:15	108	117	429	368	504	1050	22%
	11:00	1 265	1 226	1 975	1 876	2 182	1 545	32%
	12:45 & 13:15	735	1 351	1 630	1 800	981	1694	35%
	14:15	770	899	1 066	1 481	1 482	941	20%
	15:55	185	121	175	234	527	263	6%
	16:30 & 17:00	558	615	1 040	661	982	793	17%
	18:15	110	244	72				
		<b>4 605</b>	<b>5 404</b>	<b>7 706</b>	<b>7 580</b>	<b>8 177</b>	<b>6 893</b>	
Tuesday	08:30	471	306	695	507	544	492	10%
	10:00	162	54	505	108	127		
	11:00	525	320	480	522	680	630	13%
		<b>1187</b>	<b>680</b>	<b>1680</b>	<b>1137</b>	<b>1351</b>	<b>1122</b>	
	<b>Grand Total</b>	<b>16 316</b>	<b>19 194</b>	<b>28 180</b>	<b>27 537</b>	<b>29 150</b>	<b>24 547</b>	

\* Based on total active delegates (excl. exhibitors and press) = 4779





## Detailed occupancy per session per day

Session Title	Room	Start Time	Peak attendance	Room capacity	% occupancy
<b>Saturday 25 May 2019</b>					
Late breaking trial I - Acute heart failure	Lambrakis	8:30	550	630	87%
Focus on diabetes in heart failure	Mitropoulos	8:30	290	450	64%
Management of acute heart failure in the ED: time matters	Skalkotas	8:30	140	380	37%
Rapid Fire 1 - Basic Science	Agora 2	8:30	60	88	68%
Acute heart failure and acute coronary syndrome	Lambrakis	11:00	480	630	76%
Guidelines in Daily Practice I: Potassium binders	Ionian Sea	11:00	310	500	62%
HFA Focus	Trianti	11:00	275	850	32%
Anti-fibrotic therapies in heart failure.	Aegean Sea	11:00	250	180	139%
Managing heart failure patients with COPD	Skalkotas	11:00	180	380	47%
Lifestyle interventions in chronic heart failure	Mitropoulos	11:00	130	450	29%
Rapid Fire 2 - Biomarker: present and future	Agora 2	11:00	130	88	148%
E-health and social media in heart failure	Agora 1	11:00	124	110	113%
Reshaping the future of heart failure management - Translating innovations to practice in HFpEF	Lambrakis	12:15	550	630	87%
Optimizing the heart failure patients' pathway right from the discharge	Trianti	12:15	550	850	65%
Solving the puzzle of heart failure, diabetic kidney disease and risk of stroke: let's fit the pieces together	Skalkotas	12:15	190	380	50%
How heart failure biomarkers change clinical practice in the management of acute heart failure	Aegean Sea	12:15	170	180	94%
Management of hyperkalaemia in patients with heart failure – Overcoming barriers to optimal renin-angiotensin-aldosterone system inhibitor therapy	Mitropoulos	12:15	120	450	27%
Problems and optimization of volume management in patients with acute heart failure	Agora 1	12:15	103	110	94%
Cardiac amyloidosis in the spotlight: how to treat today?	Trianti	13:30	550	850	65%
Heart Failure, diabetes & SGLT2 inhibition: time to change practice?	Lambrakis	13:30	480	630	76%
Functional mitral regurgitation in heart failure: time to treat!	Skalkotas	13:30	271	380	71%
Current challenges and innovations in the treatment of mitral and tricuspid regurgitation	Mitropoulos	13:30	150	450	33%
The hyperkalaemia challenge in heart failure: what is the role of novel agents?	Ionian Sea	13:30	140	500	28%
Advances in therapeutic interventions in acute heart failure	Lambrakis	14:45	350	630	56%
The Grand Debate 1: Advances in medical and interventional treatment of heart failure	Trianti	14:45	150	850	18%
How to integrate new technologies in the heart failure clinic	Skalkotas	14:45	134	380	35%
Multimodality imaging in heart failure	Mitropoulos	14:45	130	450	29%
Myocarditis: from bench to bedside	Agora 1	14:45	100	110	91%
Translating pathophysiology to the clinic in Takotsubo syndrome	Aegean Sea	14:45	79	180	44%
Exercise in heart failure: challenges and opportunities	Ionian Sea	14:45	72	500	14%
Clinical Case Award - Unusual heart failure presentations: teach the teachers	Agora 2	14:45	50	88	57%
HFpEF: current diagnosis and management	Mitropoulos	16:30	380	450	84%
Peripartum cardiomyopathy: new clinical insights	Lambrakis	16:30	150	630	24%
Diabetes and heart failure	Aegean Sea	16:30	103	180	57%
Off the record with Professor Mariell Jessup	Agora 1	16:30	100	110	91%
Guidelines in Daily Practice II: heart failure and hypertension	Ionian Sea	16:30	72	500	14%
Rapid Fire 3 - Acute heart failure	Agora 2	16:30	70	88	80%
How to manage psychosocial and CNS disorders in Heart Failure	Skalkotas	16:30	41	380	11%
Inaugural Session	Trianti	17:45	450	850	53%

Session Title	Room	Start Time	Peak attendance	Room capacity	% occupancy
<b>Sunday 26 May 2019</b>					
Late breaking trial II - Chronic heart failure	Trianti	8:30	460	850	54%
Emerging treatment options in HFpEF	Lambrakis	8:30	320	630	51%
Clinical dilemmas in the treatment of comorbidities in heart failure	Ionian Sea	8:30	134	500	27%
Valve disease in Heart Failure patients	Skalkotas	8:30	85	380	22%
Functional mitral regurgitation: the road ahead.	Mitropoulos	8:30	70	450	16%
Myocarditis: a multi-facet disease	Aegean Sea	8:30	69	180	38%
Young Investigator Award - Clinical	Agora 2	8:30	50	88	57%
Management of hyperkalaemia in patients with heart failure – A multidisciplinary approach	Agora 2	10:15	250	88	284%
Optimize heart failure care program: key learnings from countries	Agora 1	10:15	175	110	159%
The Grand Debate 2: Challenges in heart failure management: mitral regurgitation and atrial fibrillation	Trianti	11:00	500	850	59%
The year's best papers on heart failure	Lambrakis	11:00	500	630	79%
Imaging in heart failure: all you need to know	Mitropoulos	11:00	250	450	56%
Dilated cardiomyopathies: what are the mechanisms?	Aegean Sea	11:00	216	180	120%
Cardiac resynchronisation therapy: optimising device use	Ionian Sea	11:00	164	500	33%
Inflammation in heart failure	Skalkotas	11:00	110	380	29%
Nursing Investigator Award	Agora 2	11:00	90	88	102%
Patient and family engagement: compelling need for improvement	Agora 1	11:00	50	110	45%
Treatment choices to optimise benefits for heart failure patients	Trianti	12:45	450	850	53%
Management of iron deficiency in heart failure: implementing best practices to improve patient outcomes	Mitropoulos	12:45	320	450	71%
Sodium–glucose co-transporter 2 inhibition and the heart: lessons from cardiovascular outcomes trials in Type 2 diabetes (EBAC Accredited)	Ionian Sea	12:45	290	500	58%
An update on device technologies in heart failure	Lambrakis	12:45	200	630	32%
Advances in heart failure management: what if you can do more for more patients?	Skalkotas	12:45	160	380	42%
An un-nerve-ing disease: diagnosing hATTR amyloidosis beyond the heart	Agora 1	12:45	155	110	141%
Who should receive the wearable cardioverter defibrillator? Evidence and risk stratification for prevention of sudden cardiac death	Aegean Sea	12:45	68	180	38%
Global position paper on endomyocardial biopsy in cardiovascular medicine	Aegean Sea	14:00	187	180	104%
Assessment and treatment of congestion	Lambrakis	14:15	320	630	51%
Cardiogenic shock: recent advances and future perspectives	Trianti	14:15	300	850	35%
HFmEF: clinical and therapeutic dilemmas	Skalkotas	14:15	188	380	49%
Atrial fibrillation and heart failure	Mitropoulos	14:15	160	450	36%
The future of big data strategies in heart failure	Agora 1	14:15	120	110	109%
Guidelines in Daily Practice III: Myocardial revascularisation in heart failure	Ionian Sea	14:15	86	500	17%
Young Investigator Award - Basic Science and Translational Science	Agora 2	14:15	80	88	91%
When should a cardiologist consider referring a patient for LVAD therapy?	Agora 2	15:55	250	88	284%
Making critical choices for patients at the right time – Join the discussion	Agora 1	15:55	140	110	127%
Chronic heart failure: optimising patient management	Trianti	16:30	250	850	29%
Cardiorenal axis in heart failure	Skalkotas	16:30	172	380	45%
Parade of devices 1: attend and learn	Ionian Sea	16:30	151	500	30%
Acute heart failure: does clinical settings matter?	Lambrakis	16:30	100	630	16%
Pulmonary congestion: new approaches	Mitropoulos	16:30	85	450	19%
Hypertrophic cardiomyopathies: from gene to disease	Aegean Sea	16:30	83	180	46%
Off the record with Professor Magdi Yacoub	Agora 1	16:30	55	110	50%
Oral Clinical Case - Advanced interventions from Alpha to Omega	Agora 2	16:30	45	88	51%



Session Title	Room	Start Time	Peak attendance	Room capacity	% occupancy
<b>Monday 27 May 2019</b>					
Cardio-Oncology in 2019 - The new frontier	Lambrakis	8:30	250	630	40%
Late breaking trial III - Innovative and device therapy	Trianti	8:30	230	850	27%
Rapid Fire 4 - Chronic heart failure - Pharmacology	Agora 2	8:30	180	88	205%
A crosstalk between diabetes and heart failure	Mitropoulos	8:30	150	450	33%
What is heart failure with preserved ejection fraction?	Aegean Sea	8:30	135	180	75%
Iron disorders: practical guidance for the clinician	Skalkotas	8:30	70	380	18%
The omega phase of the heart failure journey: palliative and end-life care	Agora 1	8:30	42	110	38%
Hot clinical topics in CRT!	Ionian Sea	8:30	40	500	8%
HFA General Assembly	Aegean Sea	10:10	70	180	39%
New therapeutic options in the treatment of mitral regurgitation: practical considerations	Agora 2	10:15	250	88	284%
Screening, diagnosis and treatment of iron deficiency in chronic heart failure – Practical recommendations	Agora 1	10:15	240	110	218%
Special issues in cardio-oncology	Ionian Sea	11:00	390	500	78%
Advanced heart failure: Update 2019	Lambrakis	11:00	320	630	51%
Guidelines in Daily Practice IV: patient with acute heart failure and pulmonary embolism.	Trianti	11:00	280	850	33%
Heart failure innovation - Drugs, devices, artificial intelligence	Mitropoulos	11:00	170	450	38%
Heart failure epidemiology and registries	Agora 1	11:00	120	110	109%
Cardiac repair therapies	Aegean Sea	11:00	110	180	61%
Contemporary management of heart failure	Skalkotas	11:00	95	380	25%
Oral Clinical Case 2	Agora 2	11:00	60	88	68%
Meet the experts on getting to grips with HFpEF	Trianti	12:45	830	850	98%
Cracking the code to a differential diagnosis of cardiac amyloidosis	Lambrakis	12:45	250	630	40%
Know it by heart – New opportunities for cardiologists in the Sodium-Glucose-Co-Transporter 2 (SGLT2) inhibitor era	Ionian Sea	12:45	232	500	46%
Fighting advanced heart failure with innovative medical device technology	Skalkotas	12:45	165	380	43%
Innovative devices to better treat heart failure patients	Mitropoulos	12:45	110	450	24%
Does multi-sensor prediction of heart failure facilitate CRT optimisation?	Aegean Sea	12:45	82	180	46%
Off the record with Professor Dirk Brutsaert	Agora 2	13:15	25	88	28%
Practical use of biomarkers: tips and tricks	Mitropoulos	14:15	250	450	56%
Short term mechanical circulatory support	Ionian Sea	14:15	174	500	35%
Identifying and treating sleep apnea in heart failure	Trianti	14:15	130	850	15%
HFA Championships	Lambrakis	14:15	130	630	21%
Cancer and heart failure: enemies in treatment?	Aegean Sea	14:15	93	180	52%
Frailty and fatigue in heart failure: emerging problem in the heart failure clinic.	Skalkotas	14:15	90	380	24%
Rapid Fire 5 - Non-pharmacological treatments: beyond conventional	Agora 2	14:15	74	88	84%
Challenges faced in diagnosing and managing HFpEF	Agora 1	15:55	170	110	155%
The evolving role of cardiologists: can we help decrease the cardiovascular event burden in patients with type 2 diabetes?	Agora 2	15:55	93	88	106%
Emerging therapies in heart failure	Trianti	16:30	200	850	24%
Late breaking trial IV - Registries	Ionian Sea	16:30	106	500	21%
Guidelines in Daily Practice V: pregnancy and heart failure	Lambrakis	16:30	80	630	13%
Takotsubo syndrome: from pathophysiology to the clinic	Skalkotas	16:30	75	380	20%
Female heart failure: what is different?	Mitropoulos	16:30	60	450	13%
Rapid Fire 6 - Risk stratification and prognosis	Agora 2	16:30	60	88	68%
Upcoming and novel drugs in heart failure	Aegean Sea	16:30	42	180	23%
Lemons against heart failure / Social Media Activities	Agora 1	17:00	170	110	155%

Session Title	Room	Start Time	Peak attendance	Room capacity	% occupancy
<b>Tuesday 28 May 2019</b>					
Heart failure in cardiomyopathies: differences in diagnosis and management	Ionian Sea	8:30	226	500	45%
Heart transplantation: everything you need to know	Skalkotas	8:30	100	380	26%
Parade of devices 2: attend and learn	Lambrakis	8:30	60	630	10%
Rapid Fire 7 - Improving our insights: biomarkers, imaging, scores	Agora 2	8:30	60	88	68%
Clinical approach to cardio-oncological patient	Aegean Sea	8:30	46	180	26%
Heart Failure 2019 Highlights	Lambrakis	11:00	630	630	100%

## Best attended sessions

*Excluding industry sponsored sessions*

Session Title	Room	Date	StartTime	Peak attendance
Heart Failure 2019 Highlights	Lambrakis	28/05/2019	11:00	630
Late breaking trial I - Acute heart failure	Lambrakis	25/05/2019	8:30	550
The Grand Debate 2: Challenges in heart failure management: mitral regurgitation and atrial fibrillation	Trianti	26/05/2019	11:00	500
The year's best papers on heart failure	Lambrakis	26/05/2019	11:00	500
Acute heart failure and acute coronary syndrome	Lambrakis	25/05/2019	11:00	480
Late breaking trial II - Chronic heart failure	Trianti	26/05/2019	8:30	460
Inaugural Session	Trianti	25/05/2019	17:45	450
Special issues in cardio-oncology	Ionian Sea	27/05/2019	11:00	390
HFpEF: current diagnosis and management	Mitropoulos	25/05/2019	16:30	380
Advances in therapeutic interventions in acute heart failure	Lambrakis	25/05/2019	14:45	350

## 2.5. Abstracts

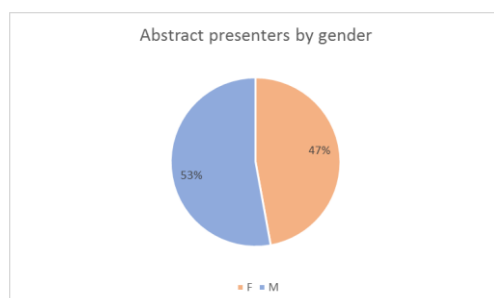
### Overview of submissions by type

	Status	2012	2013	2014	2015	2016	2017	2018	2019
<b>Abstracts</b>	Submitted	1 143	1 515	1 444	1 588	1 793	1 945	1 844	1 721
	Accepted	1 078	1 436	1 309	1 461	1 639	1 704	1 602	<b>1 499</b>
	Accepted withdrawn	48	44	43	36	68	52	68	<b>71</b>
	% acceptance	94%	95%	91%	92%	91%	87%	87%	87%
<b>Clinical Cases</b>	Submitted				224	217	253	294	<b>273</b>
	Accepted				76	74	71	226	<b>206</b>
	Accepted withdrawn				10	1	1	9	<b>6</b>
	% acceptance				34%	34%	28%	77%	<b>75%</b>
<b>TOTAL</b>	Expected onsite	1030	1 392	1 266	1 506	1 706	1 752	1789	1 495
	No shows	168 (16%)	237 (17%)	245 (19%)	350 -23%	283 -17%	300 -17%	144 8%	<b>148</b> <b>10%</b>
	Presented	862	1 155	1 039	1 175	1 420	1 453	1 540	<b>1 347</b>
<b>Late Breaking Trial submissions</b>	Accepted for oral presentation					49	22	24	<b>22</b>
	Accepted for poster presentation (Clinical Forum)			18	15	16	9	16	<b>18</b>
	Accepted - withdrawn					3	1	2	<b>2</b>

### Abstract submissions: top ten countries of origin

Country	2014	2015	2016	2017	2018	2019
Russian Federation	180	136	147	211	222	<b>189</b>
Spain	89	<b>221</b>	118	163	158	116
Portugal	98	117	115	151	138	94
Italy	91	95	<b>280</b>	126	138	92
Germany	66	81	85	68	102	77
United Kingdom of Great Britain & Northern Ireland	82	69	75	83	82	64
Greece	<b>104</b>	35	33	29	35	64
Korea (Republic of)					57	62
United States of America	38	35	47	61	58	55
Netherlands (The) <b>New in top 10</b>						50

### Abstract presenter by gender

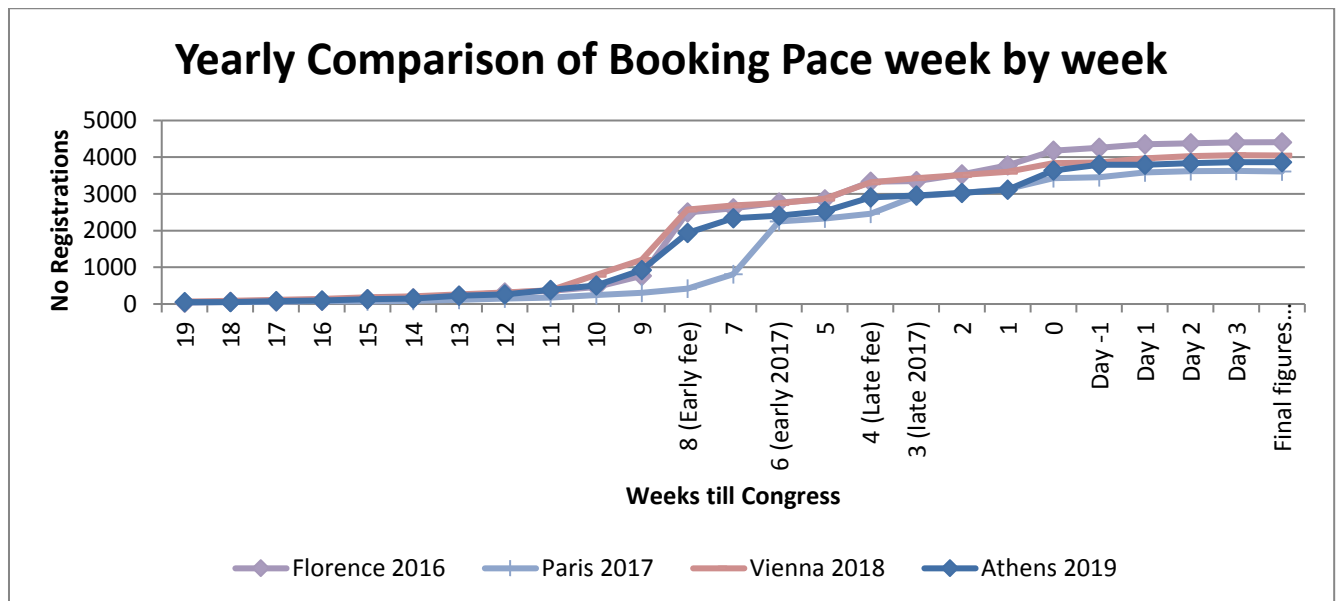


## 3.Registration and Attendance

### 3.1. Registration Overview

	Athens 2014	Seville 2015	Florence 2016	Paris 2017	Vienna 2018	Athens 2019	Difference 2018 vs2019
Active delegates	4 034	4 347	5 627	4 447	5 268	<b>4 779</b>	<b>-489</b>
Press	19	32	56	65	45	<b>30</b>	<b>-15</b>
Exhibitors	380	412	465	512	548	<b>625</b>	<b>77</b>
<b>Total</b>	<b>4 433</b>	<b>4 791</b>	<b>6 148</b>	<b>5 024</b>	<b>5 861</b>	<b>5 434</b>	<b>-427</b>

### 3.2. Registration by fee period



### 3.3. Delegate breakdown by activity

ACTIVITY	% of Event	ACTIVITY	% of Event
Physician Cardiologist - Clinical Cardiologist	46,92%	Other - Press	0,27%
Information not available	26,32%	Physician Cardiologist - Acute Cardiac Care	0,21%
Allied Professional - Scientist/ Biomedical Scientist	4,41%	Physician Cardiologist - Electrophysiologist	0,21%
Other - Other	4,37%	Allied Professional - Medical Technologist / Medical Technician / Technician	0,19%
Nurse - Nurse	2,85%	Allied Professional - Administrator	0,15%
Physician (non-cardiologist) - Internal Medicine	2,64%	Nurse - Nurse Practitioner	0,15%
Physician Cardiologist - Interventional	2,33%	Allied Professional - Paramedic	0,12%
Other - Other Healthcare Profession	2,14%	Physician (non-cardiologist) - Endocrinologist	0,12%
Physician Cardiologist - Heart Failure	1,12%	Physician (non-cardiologist) - Nephrologist	0,12%
Physician (non-cardiologist) - Other Specialty	0,94%	Physician Cardiologist - Imaging	0,12%
Other - Industry Representative	0,92%	Physician Cardiologist - Scientist Researcher	0,12%
Physician (non-cardiologist) - General Practitioner / Family Medicine	0,75%	Allied Professional - Pharmacist	0,10%
Physician (non-cardiologist) - Cardio-Thoracic Surgery	0,60%	Nurse - Advanced Nurse Practitioner	0,10%
Physician (non-cardiologist) - Intensive Care Medicine	0,40%	Physician (non-cardiologist) - Neurologist	0,10%
Allied Professional - Clinical Bioengineer	0,35%	Physician (non-cardiologist) - Radiologist	0,06%
Physician (non-cardiologist) - Emergency Medicine	0,33%	Physician Cardiologist - Adult Congenital Heart Disease	0,06%

### 3.4. Registration by origin

#### Registration TOP 15

Rank 2019	Country	Athens 2014	Seville 2015	Florence 2016	Paris 2017	Vienna 2018	Athens 2019	+/-vs 2018
1	Greece*	1411	170	153	121	117	593	476
2	Spain	124	1063	257	225	200	276	76
3	United States of America	133	154	191	229	250	266	16
4	Netherlands (The)	124	153	201	175	233	261	28
5	Italy	222	299	1323	224	290	260	-30
6	Germany	227	209	408	231	304	224	-80
7	United Kingdom of Great Britain & Northern Ireland	147	148	212	193	192	185	-7
8	Russian Federation	124	121	118	156	151	183	32
9	Romania	44	84	123	96	126	141	15
10	Portugal	61	116	102	113	126	132	6
11	France	134	159	207	726	104	127	23
12	Switzerland	81	115	152	151	144	123	-21
13	Belgium	66	98	171	138	94	114	20
14	Serbia	68	100	114	99	95	95	0
15	Lithuania	18	36	26	37	51	94	43

#### Registrations by country

Country	Athens	Seville	Florence	Vienna	Athens
Greece	1411	170	153	117	593
Spain	124	1063	257	200	276
United States of America	133	154	191	250	266
Netherlands (The)	124	153	201	233	261
Italy	222	299	1323	290	260
Germany	227	209	408	304	224
United Kingdom of Great Britain & Northern Ireland	147	148	212	192	185
Russian Federation	124	121	118	151	183
Romania	44	84	123	126	141
Portugal	61	116	102	126	132
France	134	159	207	104	127
Switzerland	81	115	152	144	123
Belgium	66	98	171	94	114
Serbia	68	100	114	95	95
Lithuania	18	36	26	51	94
Sweden	46	57	75	86	90
Poland	40	63	85	83	89
Japan	50	44	60	93	76
Korea (Republic of)	14	40	57	66	69
Bulgaria	21	79	107	101	63
Ukraine	43	31	29	38	60
Czechia	25	32	52	83	59

Austria	34	63	71	808	55
Turkey	22	17	22	56	54
Ireland	29	27	47	59	53
Israel	24	37	38	52	52
Canada	26	25	39	46	51
China	19	23	47	30	50
Brazil	33	37	34	37	47
Denmark	29	39	70	50	45
Slovakia	15	33	83	107	44
Cyprus	22	9	12	13	43
Australia	37	34	59	57	42
Finland	27	36	51	37	42
Hungary	19	20	24	104	39
Norway	17	15	51	50	36
Argentina	31	40	32	44	34
India	75	78	77	83	32
Bosnia and Herzegovina	24	8	13	7	27
Estonia	6	13	10	18	26
Slovenia	6	16	59	84	26
Colombia	12	31	20	26	25
Taiwan, Province of China	11	3	8	17	23
Thailand	7	5	7	27	23
Kazakhstan	13	7	7	17	20
Croatia	7	42	46	43	19
Mexico	25	17	12	20	19
Philippines	8	2	10	24	14
Armenia	12	6	8	23	13
Lebanon	15	10	8	14	13
Azerbaijan	2	4	4	6	12
Iraq	0	2	3	12	12
Singapore	3	11	15	21	12
Hong Kong	4	0	1	3	11
Georgia	6	3	24	25	10
Indonesia	8	13	10	17	10
Kenya	3	5	10	13	10
Latvia	13	14	14	13	10
Viet Nam	0	0	0	6	10
Uzbekistan	2	2	0	5	9
Albania	8	13	26	24	8
Malta	0	0	2	4	8
South Africa	5	3	6	12	8
Kosovo Republic of	7	0	5	7	7
Peru	6	13	10	5	7
Jordan	1	0	2	4	6
Montenegro	1	2	3	6	6
New Zealand	4	5	7	10	6
United Arab Emirates	5	21	17	13	6
Belarus	9	3	9	7	5

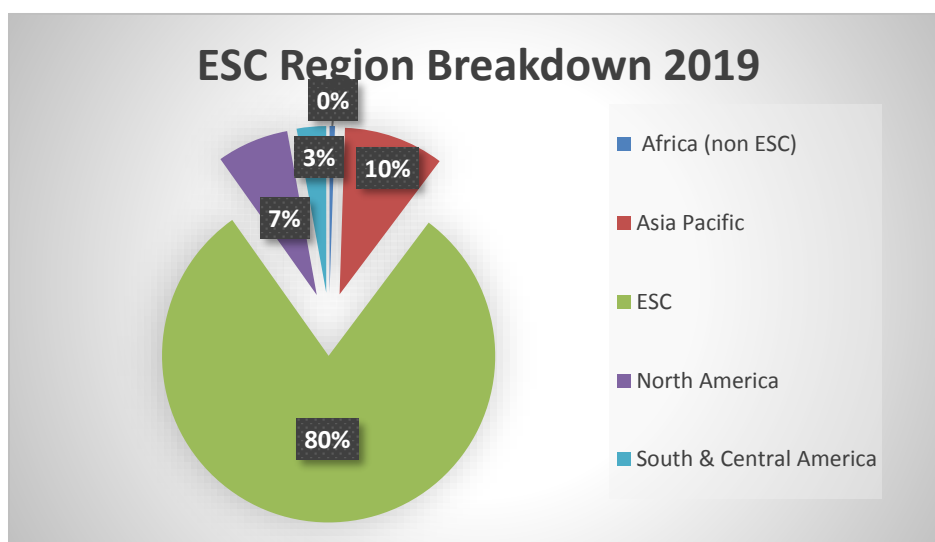
Chile	7	18	10	11	5
Egypt	38	34	43	10	5
Kuwait	0	0	5	7	5
Malaysia	4	8	5	7	5
Myanmar	0	13	0	5	5
Moldova (Republic of)	1	2	3	3	4
Panama	1	2	2	2	4
Qatar	2	4	2	0	4
Costa Rica	0	0	2	1	3
Ecuador	1	11	4	2	3
Iran (Islamic Republic of)	2	1	6	12	3
Pakistan	1	0	0	2	3
Tunisia	18	5	9	2	3
Uruguay	1	1	1	6	3
Bangladesh	0	0	3	0	2
Guatemala	4	4	4	4	2
Korea Democratic People's Republic Of	0	1	0	0	2
Luxembourg	4	5	11	6	2
Macao	0	0	0	0	2
Mongolia	0	0	2	0	2
Morocco	3	3	3	3	2
Nigeria	2	4	5	5	2
Palestine, State of	1	0	0	0	2
Paraguay	0	2	0	1	2
Bahrain	3	4	4	1	1
Congo (Democratic Republic of the)	0	1	1	1	1
El Salvador	0	0	0	0	1
Ethiopia	0	0	0	1	1
Iceland	2	1	2	2	1
Kyrgyzstan	0	0	0	0	1
Liechtenstein	0	0	0	0	1
Nepal	0	0	0	1	1
Oman	3	2	1	1	1
Saudi Arabia	16	15	26	3	1
Sudan	1	0	0	2	1
Tanzania, United Republic of	0	1	0	1	1
Trinidad and Tobago	0	0	0	0	1
Venezuela (Bolivarian Republic of)	11	8	7	0	1
Afghanistan	0	0	0	1	0
Algeria	2	22	6	2	0
Aruba	0	1	0	1	0
Burkina Faso	0	1	0	0	0
Cambodia	0	0	0	2	0
Cameroon	0	1	0	1	0
Cote d'Ivoire	0	0	0	1	0
Faroe Islands	1	0	0	0	0
Gabon	1	0	0	0	0
Gambia	0	0	0	1	0



Guadeloupe	0	0	1	0	0
Honduras	0	1	1	0	0
Jamaica	0	0	1	0	0
Macedonia The Former Yugoslav Republic of	4	3	15	8	0
Martinique	1	0	0	0	0
Monaco	0	1	0	0	0
Namibia	0	0	1	0	0
Netherlands Antilles	0	0	1	0	0
New Caledonia	0	1	1	0	0
Reunion	0	0	1	0	0
Rwanda	0	1	0	0	0
Senegal	0	0	1	0	0
Sri Lanka	1	0	2	0	0
Swaziland	0	0	0	1	0
Uganda	0	0	1	0	0
Yemen	4	0	0	0	0
Zimbabwe	0	0	1	0	0

### Registrations by region

Region	Vienna 2019	Athens 2019
Africa (non ESC)	39	25
Asia Pacific	547	468
ESC	<b>4271</b>	<b>3842</b>
North America	316	335
South & Central America	140	137

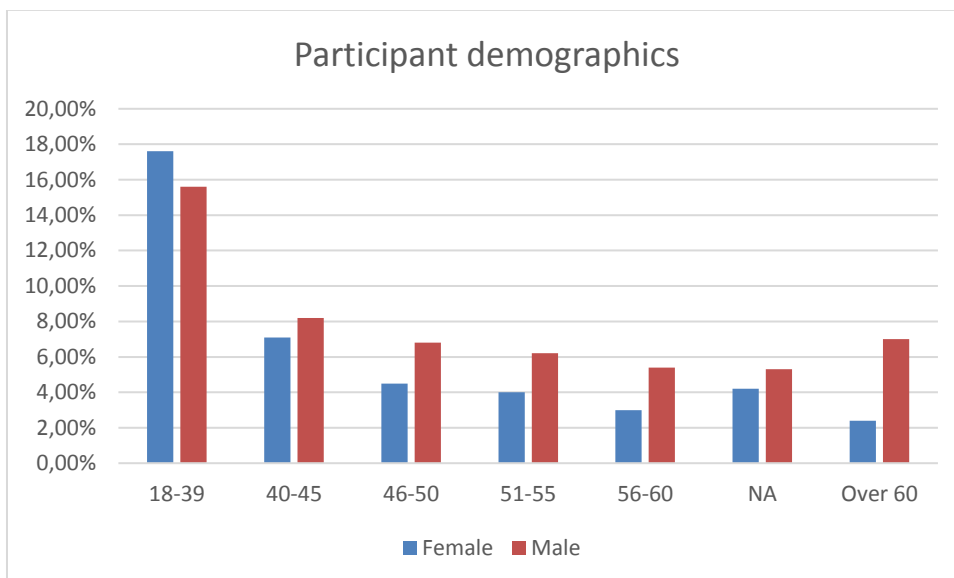


### 3.5. Returning delegates

N° part	Percentage	HF 2017	HF 2018	HF 2019	Comment
1470	31%	NO	YES	YES	31 % of HF 2019 active delegates attended also HF 2018
1037	22%	YES	NO	YES	22 % of HF 2019 active delegates attended 2017 but not HF 2018
730	15%	YES	YES	YES	15 % of HF 2019 attended both HF 2017 and HF 2018

#### Participants demographics

Age bands	Total	Female	Male
18-39	33,2%	17,6%	15,6%
40-45	15,3%	7,1%	8,2%
46-50	11,4%	4,5%	6,8%
51-55	10,3%	4,0%	6,2%
56-60	8,4%	3,0%	5,4%
NA	11,7%	4,2%	5,3%
Over 60	9,4%	2,4%	7,0%



### 3.6. Exhibitors attendance

Exhibitor badges	Number of badges
Total	625

Exhibitor badges compared to previous years	Seville 2015	Florence 2016	Paris 2017	Vienna 2018	Athens 2019
Exhibitors Total	412	465	512	548	625

## 4. YIA & Grants

### 4.1. HFA Travel Grants

200 HFA Travel Grants of 400€ were available this year.

#### Criteria

Mandatory criteria were:

- Being an HFA HoT member
- Having submitted at least one abstract for HF2019

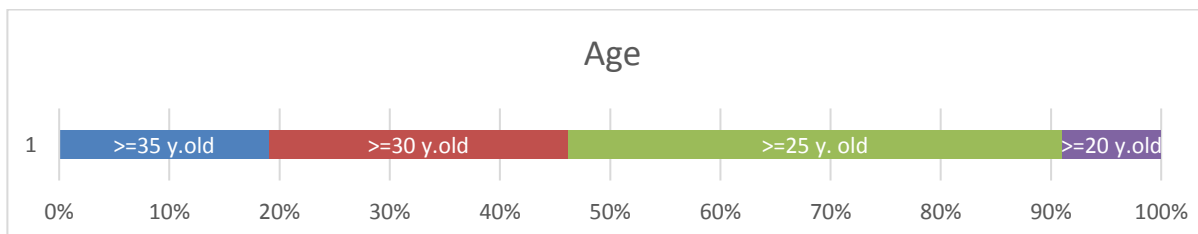
Selection criteria were as follows:

1. Age:
  - Under 30y. old: 2 points
  - Between 30-40y. old: 1 point
  - Over 40y. old: 0 point
2. Profession:
  - Physician: 0 point
  - Others healthcare prof: 1 point
3. Country
  - Low Income Country: 2 points
  - Middle Income Country: 1 point
  - High Income Country: 0 point
4. Abstract score
  - <6.00: 0 point
  - <6.60: 1 point
  - <7.50: 2 points
  - >7.50: 3 points

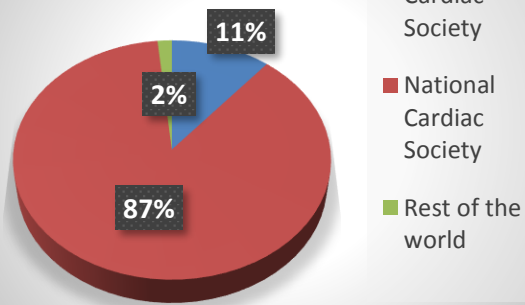
The application form was available directly on "MY ESC ACCOUNT".

Only HFA HoT members could have access to the e-form.

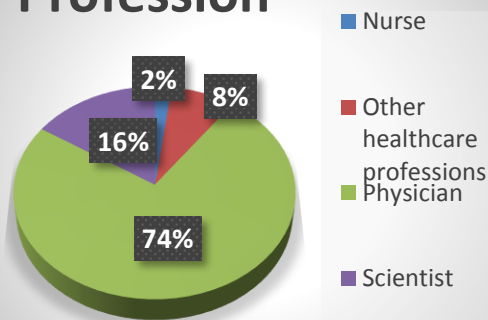
#### Stats



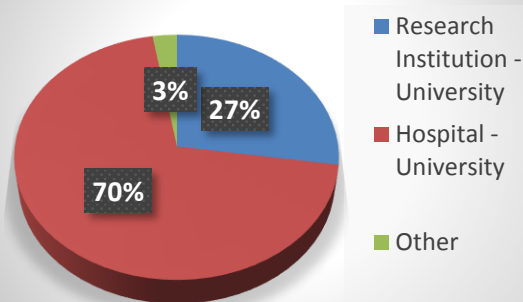
## ESC Region



## Profession



## Place of Work



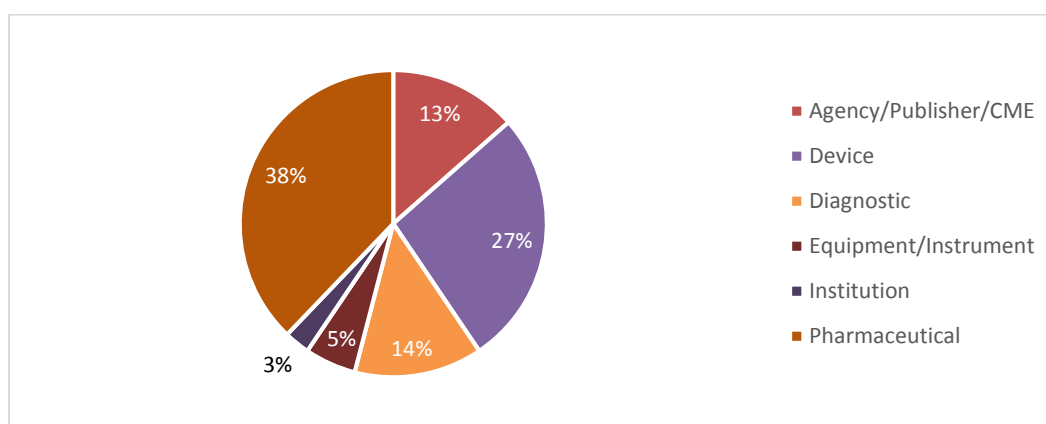
## 4.2. Investigator Award sessions finalists

2 Young Investigator Award sessions: 1 Basic & Translational and 1 Clinical science and 1 Nursing Investigator award session were held at HF2019

- All finalists of the Award sessions received a 400€ travel grant to help them come to Heart Failure 2019
- First prize winners received a 1000€ prize
- Runner-up positions (2nd & 3rd) received a 250€ prize

## 5. Industry

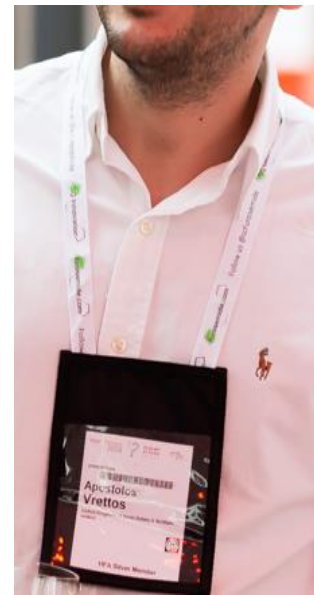
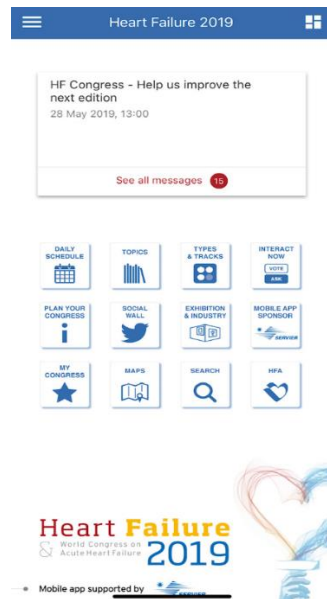
### 5.1. Breakdown by industry Sector



### 5.2. Sponsorship & advertisement

Product available	2015 Seville	2016 Florence	2017 Paris	2018 Vienna	2019 Athens
Badge Leads Management System		Novartis (1)	Novartis (1)	Novartis (1) Bayer (1)	<b>Novartis (1)</b> <b>Pfizer (1)</b> <b>Akcea (1)</b>
Delegate badge laces	Cardioentis (1)	Cardioentis (1)	ScPharma (1)	n/a	<b>SQ Innovation (1)</b>
Delegate congress bag		Cardioentis (1)	n/a	n/a	n/a
e-Blasts #2	Novartis (1)	Novartis (1)	Abiomed (1) Alnylam (1) AstraZenca (2) Novartis (2) PACE (1) Vifor (2)	Novartis (2) AstraZeneca (2) PACE (1) Alnylam (1)	<b>Abbott (1)</b> <b>Alnylam (1)</b> <b>AstraZeneca (1)</b> <b>Vifor (2)</b> <b>Novartis (1)</b>
Final Programme back cover	Pfizer (1)	Novartis (1)	Novartis (1)	Novartis (1)	<b>Novartis (1)</b>
Final Programme bookmark	Pfizer (1)	Novartis (1)	n/a	n/a	n/a
Final Programme inside front cover			Alnylam (1)	Alnylam (1)	n/a
Final Programme inside back cover			n/a	n/a	n/a
Congress News Printed		Bayer (1)	n/a	n/a	n/a
Industry Programme	Novartis (1)	Novartis (1)	Novartis (1)	Novartis (1)	n/a
Industry Programme advert			Included for all Satellite Symposia and Practical Tutorials + 1 additional paying advert for AstraZeneca	Included for all Satellite Symposia and Practical Tutorials + 1 additional paying advert for Novartis	<b>Included for all Satellite Symposia and Practical Tutorials</b>
Industry Sponsored Session info screen			Included for all Satellite Symposia and Practical Tutorials	Included for all Satellite Symposia and Practical Tutorials	<b>Included for all Satellite Symposia and Practical Tutorials</b>
Live Broadcasting			Novartis (1)	Novartis (2)	n/a
Mobile Application	SERVIER (1)	SERVIER (1)	SERVIER (1)	Novartis (1)	<b>SERVIER (1)</b>
Mobile app Splash Advert & Push Notification				AstraZeneca (1) Novartis (1)	<b>AstraZeneca (1)</b>
Online Congress News	n/a	Novartis (1)	Novartis (1)	Novartis (1)	<b>Novartis (1)</b>
Screencast		Charite (1) scPharma (1)	Included for all Satellite Symposia	n/a	<b>Medscape (1)</b>

		Vifor (2)			
Webcast	ResMed (1) Medtronic (1)	Novartis (2)	AstraZeneca (2) Novartis (1 + video highlights + recording of EotS) PACE (1) Roche (1) St Jude Medical (1) Vifor (1)	AstraZeneca (1) Boston (1) Novartis (4) Roche (1) Vifor (1)	<b>Medtronic (1)</b> <b>Novartis (2)</b> <b>Vifor (2)</b> <b>Zoll (1)</b>
Weblink			Included for all Satellite Symposia and Practical Tutorials	Included for all Satellite Symposia and Practical Tutorials	<b>Included for all Satellite Symposia and Practical Tutorials</b>
On-site advertising	Novartis (1)	Novartis (1) Servier (1)	Alnylam (1) Novartis (6) St Jude (2)	Alnylam (1) Servier (1) Novartis (5)	<b>AstraZeneca (3)</b> <b>Novartis (4)</b>
<b>Total sponsorship &amp; advertising</b>	<b>16</b>	<b>24</b>	<b>38</b>	<b>33</b>	<b>28</b>



## 5.3. Exhibition



### Stand space – evolution since 2015

	Heart Failure 2015	Heart Failure 2016	Heart Failure 2017	Heart Failure 2018	Heart Failure 2019
Total in m <sup>2</sup>	723.5	763	941.5	1047.5	1214.2
Nber of companies	24	25	28	28	31

## 5.4. Sponsored sessions

### Satellite Symposia

24 Satellite Symposia were organised by 17 different companies.

The following items are included in the price of a Satellite Symposium:

- Room rental
- 1 advert
- 1 weblink
- 1 information screen



Account Name	Slot	Attendance	Room Size/Capacity
Abbott Vascular International BVBA	Saturday 13:30-14:30 - 60mins	90%	380
ABBOTT	Sunday 12:45-14:00 - 75mins	100%	380
ABBOTT	Monday 12:45-14:00 - 75mins	90%	380
AKCEA THERAPEUTICS	Sunday 12:45-13:45 - 60mins	141%	110
AstraZeneca UK Ltd	Saturday 13:30-14:30 - 60mins	34%	500
AstraZeneca UK Ltd	Sunday 12:45-13:45 - 60mins	90%	500
Bayer AG	Saturday 12:15-13:15 - 60mins	90%	380
Boehringer Ingelheim International GmbH	Monday 12:45-13:45 - 60mins	90%	500



Boston Scientific International SA	Monday 12:45-13:45 - 60mins	60%	180
Charite - Campus Virchow-Klinikum (CVK)	Saturday 13:30-14:30 - 60mins	60%	457
Charite - Campus Virchow-Klinikum (CVK)	Monday 12:45-14:00 - 75mins	30%	457
Medscape Cardiology	Saturday 13:30-14:30 - 60mins	70%	850
Medtronic International Trading SARL	Sunday 12:45-14:00 - 75mins	32%	630
Novartis Pharma AG	Sunday 12:45-14:00 - 75mins	90%	850
Novartis Pharma AG	Monday 12:45-14:00 - 75mins	98%	850
Pfizer Inc	Monday 12:45-14:00 - 75mins	50%	630
Physicians Academy for Cardiovascular Education	Saturday 12:15-13:15 - 60mins	120%	630
Physicians Academy for Cardiovascular Education	Saturday 13:30-14:30 - 60mins	90%	630
Reprive Cardiovascular, Inc	Saturday 12:15-13:15 - 60mins	110%	110
Roche Diagnostics International Ltd	Saturday 12:15-13:15 - 60mins	100%	180
Servier Affaires Médicales	Saturday 12:15-13:15 - 60mins	65%	850
Vifor (International) AG	Saturday 12:15-13:15 - 60mins	80%	457
Vifor (International) AG	Sunday 12:45-13:45 - 60mins	80%	457
Zoll CMS GmbH	Sunday 12:45-13:45 - 60mins	60%	180

### Satellite Symposia over the years

	Heart Failure 2015	Heart Failure 2016	Heart Failure 2017	Heart Failure 2018	Heart Failure 2019
Number of Satellite symposia	18	18	22	20	24

### Practical Tutorials

3 companies ran Practical Tutorials. No attendance figures are available as the ESC was not involved in the organisation of these sessions.

Account Name	Quantity	Room Size/Capacity
ABBOTT	1	50
Alnylam Pharmaceuticals	1	58
Orion Corporation	1	62

### Practical Tutorials over the years

	Heart Failure 2015	Heart Failure 2016	Heart Failure 2017	Heart Failure 2018	Heart Failure 2019
Number of Practical tutorials	3	3	3	3	3

### Experts on the spot

Short style sessions arranged in the AGORA located in the vicinity of the exhibition and designed to ensure experts interact with delegates.

Account Name	Attendance	Capacity
ABBOTT	284%	88
Boehringer Ingelheim International GmbH	106%	88
Charite - Campus Virchow-Klinikum (CVK)	284%	88

Novartis Pharma AG	127%	110
Novartis Pharma AG	218%	110
Servier Affaires Medicales	159%	110
Vifor (International) AG	284%	88
Vifor (International) AG	218%	110

### Experts on the spot over the years

	Heart Failure 2015	Heart Failure 2016	Heart Failure 2017	Heart Failure 2018	Heart Failure 2019
Number of Experts on the spot	1	4	8	8	8



## 5.5. Industry feedback

HFA is in a healthy position now. Education activities and research promotion are very successful. It was announced during the Industry Debrief that there is a wish to implement an HF Forum in 2020 to enhance interactivity with Industry partners and HFA.

[For more detailed topic-related feedback, please consult the full minutes from our Industry Debrief](#)

An Industry site visit for Heart Failure 2020 is scheduled on 17 September 2019 in Barcelona.

## 6. Publications

### 6.1. Flyer (formerly called first announcement)

6000 flyers printed

### 6.2. Advance programme

The advance programme was replaced by a marketing page, regularly updated according to the congress dates (congress programme, registration, attendance guide). The link was shared in emails and bulletins.

[www.escardio.org/Marketing/Heart-Failure-2019](http://www.escardio.org/Marketing/Heart-Failure-2019)

### 6.3. Final Programme

Launched: April 2019

Shared on [www.escardio.org/Congresses-&-Events/Heart-Failure](http://www.escardio.org/Congresses-&-Events/Heart-Failure)

### 6.4. Congress News

#### Printed Facts & Figures -

<b>Name</b>	<b>Congress News -</b>
<b>Lifespan</b>	Congress & reference document
<b>Key info</b>	Interviews and scientific highlights from the congress 4 daily editions of 4 pages, 28 articles
<b>Format</b>	250 x 350mm folded (500 x 350mm unfolded)
<b>Print quantity</b>	7 000 copies total: (2000 Day 1, 2000 Day 2, 2000 Day 3, 1000 Day 4).
<b>Electronic format</b>	<i>Electronic congress news were sent to all HFA Members and congress participants every day.</i>
<b>Sponsor</b>	None
<b>Distribution rate*</b>	All copies distributed each morning of the congress

#### E-congress news: sent to

- All onsite delegates
- Non-attending HFA members

D1 - 3095

D1 - 3570

D2 - 3095

D2 - 3567

D3 - 3146

D3 - 3546

D4 - 3146

D4 - 3579

## 6.5. Ads for print

### **Adverts for the congress were created for the European Journal of Heart Failure:**

November 2018 – February 2019: abstract submission

March 2019 – April 2019: key deadlines

May 2019 – July 2019: congress resources

### **Ads also appeared in:**

Arrhythmia & Electrophysiology Review (AER)

Cardiac Failure Review (CFR) - former Heart Failure Review (HFR)

Cardiology

Journal of Vascular Research

Cardiac Rhythm News

## 7. Electronic Communications

### 7.1. Promotional e-campaigns

- European Journal of Heart Failure
- Cardiac Failure Review
- Arrhythmia & Electrophysiology Review
- Cardiology
- Cardiac Rhythm News

#### Dedicated e-campaigns

Send Date	Campaign	Open Rate	Click Rate
05.07.2018	Call for sessions	49.76%	9.25%
07.01.2019	Call for Abstract – 1 week to go	25%	2.92%
14.01.2019	Call for abstract: extension	24.27%	2.47%
15.03.2019	1 week to early fee	28.61%	2.22%
12.04.2019	1 week to go Late Reg	21.27%	1.66%
20.05.2019	Attendance Guide	58.64%	18.04%
15/05/2019	Access to the latest science (HFA Members)	57.39%	4.81%
20/05/2019	Attendance guide	58.64%	18.04%
25/05/2019	e-Congress News - Day 1 - Delegates	50.42%	8.38%
25/05/2019	e-Congress News - Day 1 - Non attending members	39.66%	6.08%
26/05/2019	e-Congress News - Day 2 - Delegates	46.18%	10.55%
26/05/2019	e-Congress News - Day 2 - Members not attending	37.20%	10.89%
27/05/2019	e-Congress News - Day 3 - Members not attending	40.59%	6.69%
27/05/2019	e-Congress News - Day 3 - Delegates	33.87%	8.37%
27/05/2019	Post congress survey 2019	45.02%	24.24%
28/05/2019	e-Congress News - Day 4 - Delegates	43.28%	7.70%
28/05/2019	e-Congress News - Day 4 - Members not attending	40.26%	7.44%

#### Promotion in bulletins and newsletters

Send Date	Campaign	Open Rate	Click Rate
28/09/2018	Bulletin	21.89%	3.16%
12/10/2018	Bulletin	24.2%	4.49%
23/10/2018	Member newsletter	20.49%	6.01%
26/10/2018	Bulletin	23.27%	4.04%
09/11/2018	Bulletin	24.55%	3.10%
26/11/2018	Bulletin	23.83%	3.39%
21/12/2018	Bulletin	19.51%	2.78%
11/01/2019	Bulletin 1	16.97%	1.63%
25/01/2019	Newsletter		
08/02/2019	Bulletin 2		
22/02/2019	Bulletin no 3		
08/03/2019	Bulletin		
22/03/2019	Bulletin		
05/04/2019	Bulletin		
19/04/2019	Bulletin		
03/05/2019	Bulletin	17.75%	3.87%
17/05/2019	Bulletin	19.65%	2.78%

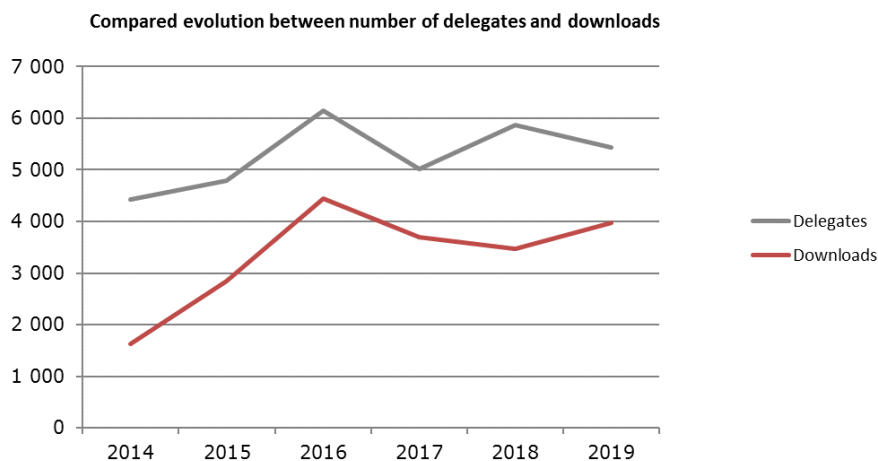
## 7.2. Transactional e-mailings

Type	Send date	Audience	Open Rate	ClickRate
Call for science	04/07/2019		49%	5.1%
Call for science - reminder	25/07/2019		41%	4.1%
Members pre-congress	15/05/2019	HFA members	57%	4.8%
Attendance Guide	20/05/2019	All delegates	58%	18%
eDaily news - Day 1	25/05/2019	Delegates	50%	8.4%
eDaily news - Day 1	25/05/2019	Non attending members	39%	6.0%
eDaily news - Day 2	26/05/2019	Delegates	46%	10%
eDaily news - Day 2	26/05/2019	Non attending members	37%	10%
eDaily news - Day 3	27/05/2019	Delegates	33%	8.0%
eDaily news - Day 3	27/05/2019	Non attending members	40%	6.7%
eDaily news - Day 4	28/05/2019	Delegates	43%	7.7%
eDaily news - Day 4	28/05/2019	Non attending members	40%	7.4%
Post congress survey	27/05/2019			

## 7.3. ESC Congress Mobile App

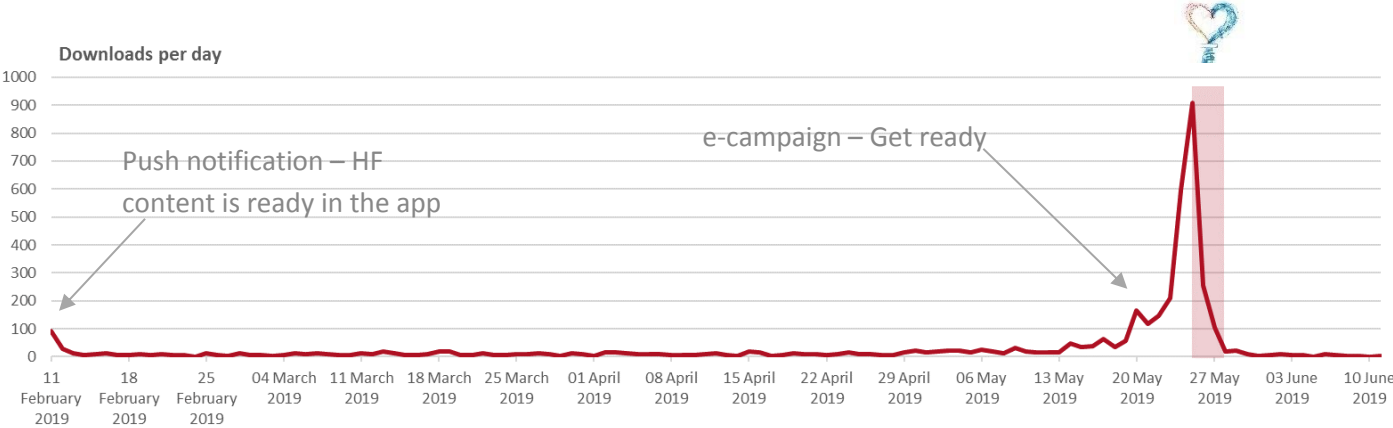
### Facts and figures

- 3,982 downloads (+15% compared to 2018) – 5,431 participants (-7% compared to 2018)
- Mobile app promoted in 6 newsletters/e-campaigns for a total of 188,225 recipients
- Most popular functionalities:
  - Access to the Daily Schedule (89%)
  - Access to the Latest Messages section (73%)
  - Access to My Congress section (51%)
- NEW in 2019: Access to the resources via the app for sub-specialty congresses



# Downloads & Users

The app was launched on 11 February. It was promoted on the main ESC Congresses app webpage.





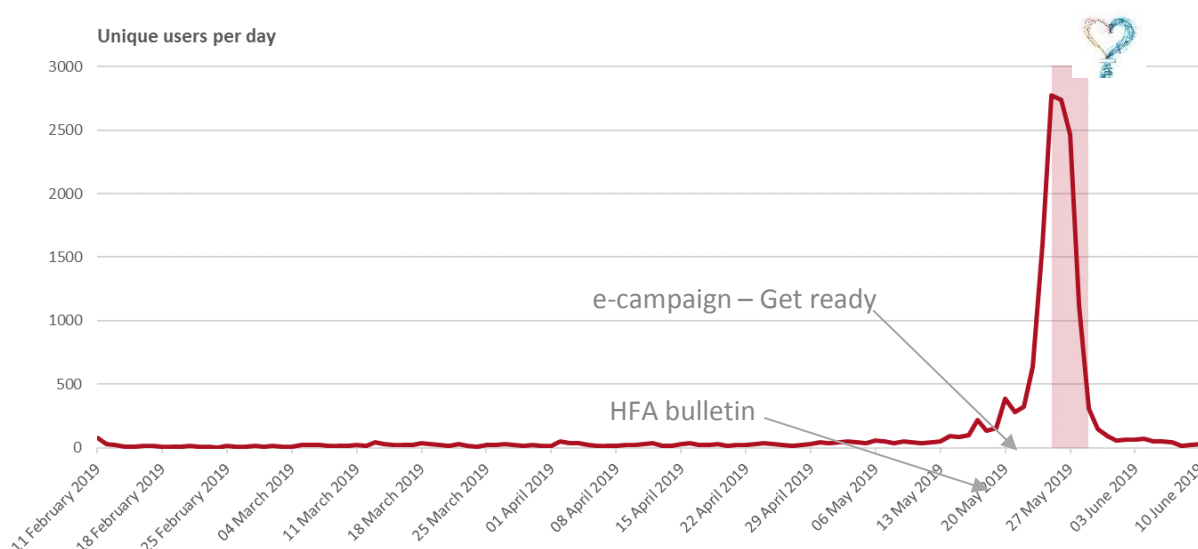
## Downloads per period

Period	2019		2018	
	No. of downloads	Distribution	No. of downloads	Distribution
Pre-Congress	2,609	66%	2,258	65%
Congress Day 1	908	23%	834	24%
Congress Day 2	256	6%	232	7%
Congress Day 3	104	3%	85	2%
Congress Day 4	20	1%	11	0%
Post-Congress	85	2%	44	1%
<b>TOTAL</b>	<b>3,982</b>	<b>100</b>	<b>3,464</b>	<b>100</b>

The repartition of downloads is the same as last year. 66% of downloads were completed before the congress has started. As in 2017 and 2018, most of the downloads were done within the pre-congress week.

## Users per day

This graph shows the number of active devices connected to Heart Failure 2019 mobile app. One user = one device: if you use the app on your iPad and your iPhone on the same day, you will be counted twice. A user is only counted if he/she undertakes an action within the app (app launch, click of a button, access a map...)



On the most intensive day – Congress day 1 – the app was used on **2,775 devices**, representing 70% of downloads (76% in 2018 and 60% in 2017).

## Splash screens

This feature enabled industries to buy splash screens (advert) that were displayed for 4 seconds every time the app was launched during a specific period. This year, on Saturday, a bug in the app prevented it to display the Saturday scheduled splash screens, leading to the below low numbers.

Splash screens	Views	Average time viewed (in sec)	No. devices	No. views per device
PACE – Saturday early morning	2	3.63	2	1.0
AstraZeneca - Saturday late morning	9	2.91	4	2.3
AstraZeneca – Sunday morning	5,005	2.96	1,740	2.9

*Views:* number of views per device

*Average time viewed:* average time in seconds a splash screen is viewed

*No. devices:* number of devices on which a splash screen has been displayed

*No. views per device:* number of times a splash screen has been displayed on one device

*No. closed by user on a device:* number of times a splash screen has been closed before the end of the display period (4s)

A push notification was also linked to these splash screens and sent 30min before the session starts (See **Error! Reference source not found.** for more details on other sent notifications):

Message title	Date & Time	Views	No. of users	Views per user	% of users
Don't miss the PACE Satellite Symposium on Saturday 25 May at 13:30 in room Lambrakis	25 May 09:50	628	545	1.2	14
Please join us for this Satellite Symposium chaired by Professor Andrew Coats, sponsored by AstraZeneca	25 May 10:10	624	547	1.1	14
Please join us for this EBAC accredited Satellite Symposium chaired by Professor Alexandre Mebazaa	26 May 09:15	498	439	1.1	11

## User behaviour

### Overall functionalities

The three most popular functionalities are

- Access to the Daily Schedule (89%)
- Access to the Latest Messages section (73%)
- Access to My Congress section (51%)

## Mobile App interactive sessions

Heart Failure 2019 hosted 60 “Mobile App – Ask a question” and 12 “Mobile App – Vote and Ask a question” sessions.

- 1,643 votes were cast
- Maximum number of votes received for one question: 81 answers
- Average number of voters per session: 27
- 195 questions were sent in 38 sessions out of 72
- Maximum number of questions submitted in a single session: 45 (“Late breaking trial II - Chronic heart failure”)

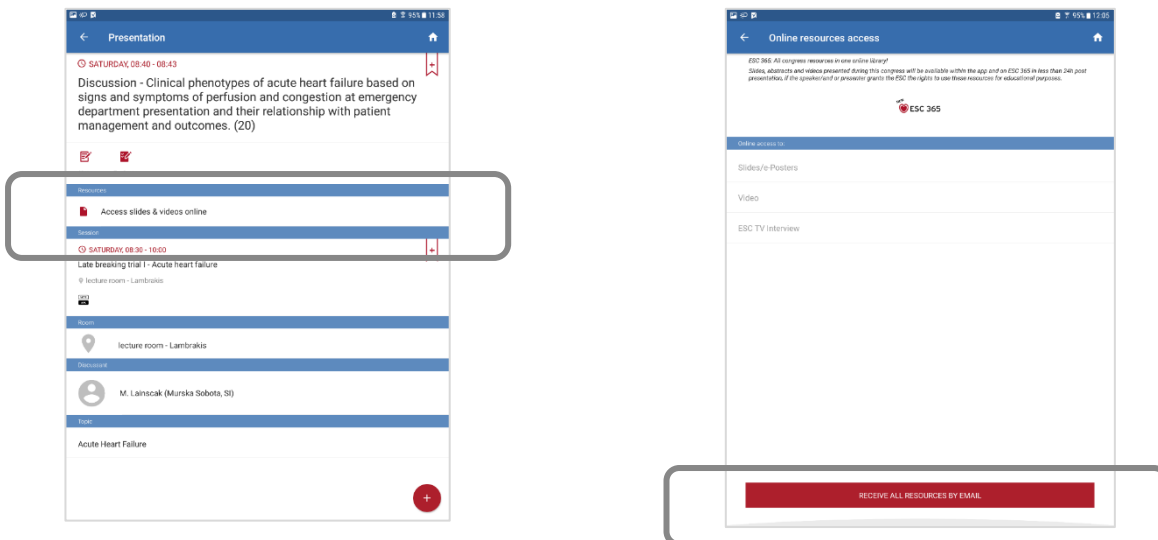
## Evaluate functionality

This year, users had the possibility to evaluate sessions and presentations.

- 78 sessions and 70 presentations were evaluated
- The overall average rating is 4.6, the median is at 5
- Number of rates received: 80 for presentations, 108 for sessions
- Number of comments received: 10 for presentations and 12 for sessions

## Receive the resources post congress button

This functionality was implemented in 2015 for ESC Congress and was made available for sub-specialty congresses following ESC Congress 2018: when clicking on a presentation, the user has the possibility, by clicking on a dedicated button, to receive an email after the congress which includes the resources (direct link to ESC 365) of the selected presentation.



In total, there were:

- **7,851** resource requests received from 16 March until 26 June
- **2,090** resource requests on Sunday 26 May (congress day 2)
- **984** unique resources requested
- **439** unique My ESC Account holders hit the “Receive Resources” button and did so for an average of **18** different presentations – median is at 6.

*Note: Resources were made available within 24h of a presentation being given subject to speaker/presenter authorisation.*

## The top 10 of most requested presentations is as follows

	Presentation title	Related session	No. times requested
1	Chronic heart failure.	Heart Failure 2019 Highlights	65
2	Diuretic resistance.	Assessment and treatment of congestion	63
3	Medical treatment.	The year's best papers on heart failure	53
4	Definition and diagnosis.The new HFA algorithm.	HFpEF: current diagnosis and management	51
5	Understanding and managing obesity-related HFpEF.	Reshaping the future of heart failure management - Translating innovations to practice in HFpEF	49
6	Devices and interventions.	Heart Failure 2019 Highlights	49
7	Sacubitril/Valsartan.	Emerging treatment options in HFpEF	48
8	SGLT-2 inhibitors.	Emerging treatment options in HFpEF	44
9	Imaging.	The year's best papers on heart failure	43
10	Biomarkers and imaging.	Heart Failure 2019 Highlights	43

## User behaviour regarding sessions

### The top 20 most popular sessions

Rank	Session title	No. Views
1	Late breaking trial I - Acute heart failure	3,117
2	Advanced heart failure: Update 2019	2,699
3	Late breaking trial II - Chronic heart failure	2,678
4	Emerging treatment options in HFpEF	2,593
5	The Grand Debate 2: Challenges in heart failure management: mitral regurgitation and atrial fibrillation	2,447
6	Advances in therapeutic interventions in acute heart failure	2,389
7	HFpEF: current diagnosis and management	2,375
8	The year's best papers on heart failure	2,232
9	Focus on diabetes in heart failure	2,180
10	Clinical dilemmas in the treatment of comorbidities in heart failure	2,034
11	Meet the experts on getting to grips with HFpEF - <i>Organised by Medscape Education, supported with an educational grant from Novartis</i>	2,031
12	Treatment choices to optimise benefits for heart failure patients - <i>Sponsored by Novartis</i>	1,961
13	Assessment and treatment of congestion	1,905
14	Heart Failure 2019 Highlights	1,824
15	Emerging therapies in heart failure	1,775
16	HFA Focus	1,729
17	Dilated cardiomyopathies: what are the mechanisms?	1,724
18	Reshaping the future of heart failure management - Translating innovations to practice in HFpEF - <i>Organised by PACE-CME, supported with educational grants provided by Novartis, Novo Nordisk and Pfizer</i>	1,709
19	Imaging in heart failure: all you need to know	1,694
20	Heart failure innovation - Drugs, devices, artificial intelligence	1,666

## User behaviour regarding exhibitors

### Top ten - ranking of popular exhibitors

Rank	Exhibitor name	No. of views
1	Heart Failure Association (HFA) - European Society of Cardiology (ESC)	1,652
2	SERVIER	868
3	Novartis Pharma AG	163
4	AstraZeneca	137
5	Abbott	126
6	Bayer AG	91
7	Boehringer Ingelheim & Eli Lilly Alliance	85
8	Alnylam Pharmaceuticals	76
9ex	AKCEA THERAPEUTICS	71
9ex	Pfizer Inc	71

## User behaviour regarding home menu buttons

### Overview

Rank	Name	Views	No. of users	Views per user	% of users
1	Daily Schedule	44,936	3,491	12.9	89
2	My Programme	22,449	1,800	12.5	46
3	My Congress	19,953	2,002	10.0	51
4	Latest Messages	13,272	2,883	4.6	73
5	Results – Persons	8,181	1,383	5.9	35
6	Results - Presentations	7,587	1,467	5.2	37
7	By Types & Tracks	5,368	1,934	2.8	49
8	Building overview	6,379	1,797	3.6	46
9	By Topics	5,189	1,898	2.7	48
10	Interact Now	4,611	865	5.3	22
11	Exhibition & Industry	1,424	848	1.7	22
12	Social wall - FP only	1,007	560	1.8	14

## What users searched for

### Top 10 searched items in the mobile app were

Rank	Searched word	No. of times searched
1	mullens	136
2	novartis	97
3ex	sacubitril	94
3ex	lam	94
5	cleland	77
6	omecamtiv	66
7	mcmurray	65
8ex	voors	62
8ex	anker	62
10	lund	54

## Top ten most viewed topics/types & tracks

Rank	Topic/Types & Tracks	No. of Views	No. of Times as Favourite
1	Special Session	278	0
2	Guidelines in Daily Practice	271	8
3	Poster Session	270	0
4	Symposium	240	4
5	How-to Session	222	2
6	Heart Failure with Preserved Ejection Fraction	213	9
7	Acute Heart Failure	211	9
8	Special Event	206	1
9	Mobile App - Vote and Ask a Question	205	13
10	Clinical Cases	195	2

## Top ten most viewed speakers/presenters

Rank	Name	No. of Views	No. of Times as Favourite
1	CS. Lam (Singapore, SG)	137	3
2	P. Seferovic (Belgrade, RS)	104	1
3	G. Filippatos (Athens, GR)	94	6
4	W. Mullens (Genk, BE)	93	2
5	F. Ruschitzka (Zurich, CH)	80	0
6	R. De Boer (Groningen, NL)	75	2
7	A. Coats (Coventry, GB)	68	0
8	A. Voors (Groningen, NL)	57	1
9	M. Metra (Brescia, IT)	55	0
10	C. Lam (Singapore, SG)	52	3

## Top ten most read messages

Rank	Message	Date sent	Views	No. of users	Views per user	% of users
1	Welcome to your congress app	11 Feb 2019 08:00	1,311	1,065	1.2	27
2	Heart Failure 2019 - Abstracts are now available in the app!	17 May 2019 15:00	1,057	867	1.2	22
3	HF Congress - In tomorrow's programme	24 May 2019 16:00	1,022	804	1.3	20
4	HF Congress - Are you ready?	20 May 2019 11:00	919	782	1.2	20
5	Discover HFA Atlas on the HFA-ESC Stand	25 May 2019 13:00	789	648	1.2	16
6	HF Congress - Registration opens tomorrow	23 May 2019 12:00	779	671	1.2	17
7	All eyes on #HeartFailure2019	24 May 2019 12:00	709	632	1.1	16
8	HF Congress - In tomorrow's programme	25 May 2019 16:00	701	599	1.2	15
9	HFA is calling you	26 May 2019 06:45	679	555	1.2	14
10	90 seconds to win the new ESC textbook	26 May 2019 13:00	649	549	1.2	14

## HFA section

Rank	Section	Views	No. of users	Views per user	% of users
1	HFA-ESC stand	712	-	-	-
2	HFA: Providing services and products for you!	193	140	1,4	4
3	HFA Activities on-site	170	116	1,5	3
4	What is the Heart Failure Association of the ESC?	116	99	1,2	3

## Promotion of the App

### On the ESC website

A dedicated webpage promoting the congress mobile app is available all year long; this web page gave users the links to the app stores to drive downloads.

This [web page](#) promoted the mobile app functionalities.

### E-campaigns

The mobile app was also promoted in Heart Failure Association bulletins and Heart Failure congress e-campaigns.

E-campaigns	Sent on	# of recipients	Open rate	No. of downloads on that day
HFA bulletin	22 Feb	41,508	24%	+6
HFA Congress – Early fee deadline	15 Mar	57,472	29%	+6
HFA bulletin	3 May	42,516	18%	+21
HFA bulletin	17 May	40,612	20%	+65
HFA Congress – Get ready	20 May	3,022	59%	+166
HFA Congress – Day	25 May	3,095	50%	+908

### On printed/online elements

- In the Final Programme, a printed version was distributed to the delegate and it was also available online
- Congress News
- Dedicated webpage

## 7.4. Banners

Banners were placed on the Wiley website of the European Journal of Heart Failure, advertising abstract submission and registration (from November 2018 to May 2019)

Banners were also placed in the following journals: Cardiology, Journal of Vascular Research and Radcliffe Cardiology – CFR.

## 7.5. ESC TV

### Project presentation

The interviews were recorded on 3 days during Heart Failure 2019 in Athens, Greece. Interview format was speech to camera and take-home messages.

Overall, a total of 13 videos were recorded and released between 25 and 27 of May. Interviews were published on YouTube (ESC TV @ Heart Failure 2019 Playlist), Escardio.org and 365.

A 15-minute slot was booked for each faculty for the “speech to camera” format: briefing and preparation, set up and recording of the interview (preferably in one take).

A 30-minute slot was booked for the “take home messages”: briefing and preparation, editorial discussion between faculty, set up and recording (in one take). A short audio recording for podcast was also performed after the interview.

### Late-Breaking trials & Symposium

Interviews were speech to camera of +/- 3 minutes.

Most of the interviewees were discussants during the session – a minority were speakers.

### My Take Home Messages

My Take home messages format is a +/- 10-minute discussion on an overview of the interviewee’s take home messages on the content presented during the whole congress.

On Saturday 25 May: *My Take Home Messages on Acute Heart Failure and Fibrosis* with Gerasimos Filippatos, Greece and Alexander Lyon, UK.

On Sunday 26 May: *My Take Home Messages on novel treatments in heart failure* with Rudolf De Boer, Netherlands and Carolyn Lam, Singapore.

On Monday 27 May: *My Take Home Messages on diuretics and congestion* with Wilfried Mullens, Belgium and Theresa McDonagh, UK.

### Videos dissemination

The videos were posted on the [ESC TV @HF2019 playlist](#) on YouTube, on the dedicated page on ESC website and on [365](#)



## ESC TV analytics

Analysed period: 25 May (first videos will be published on that day) until 11 June included.

*N.B The links used on ESC TV dedicated webpage were YouTube links during the congress and the analysed period. YouTube links are used on Twitter.*

Video Title	Interviewee	Video length	Published on	YouTube channel			Facebook	Twitter	LinkedIn	ESC website	ESC 365
				Average time watched	Average percentage watched	No. of views				No. of views	No. of views
Acute heart failure congestion and perfusion status; impact of the clinical classification on in hospital and <a href="#">long term</a> outcomes: insights from the ESC EORP HFA Heart Failure Long Term Registry	Mandeep Mehra	03:08	25 May 2019	02:00	63%	143	Total Reach: 9,344 Total Impressions: 14,198 Engaged Users: 322 Views: 1.5K	-	-	1	4
Lung Ultrasound Guided Treatment in Ambulatory Patients with Heart Failure: <a href="#">a</a> Randomized Controlled Clinical Trial (LUS-HF study)	Peter Pang	03:05	25 May 2019	01:36	52%	191		-	Views: 2,783 Impressions: 11,786 Reactions: 91 Engagement rate: 2.34%	3	6
My Take Home Messages on Acute Heart Failure and Fibrosis	Gerasimos Filippatos and Alexander Lyon	07:01	25 May 2019	03:24	48%	242		Engagement: 34 Engagement rate 1.5%	-	20	3
Cardiac contractility modulation in patients with heart failure with reduced ejection fraction. IMPULSE-HF a randomized controlled trial	Gerd Hasenfuss	01:54	26 May 2019	01:18	66%	87	-	Engagement: 103 Engagement rate 2.3%	-	3	4
Trajectories of LVEF: is it okay to switch lanes?	Lars Lund	03:31	26 May 2019	02:12	61%	96	-	Engagement: 30 Engagement rate 1.1%	-	4	4

Video Title	Interviewee	Video length	Published on	YouTube channel			Facebook	Twitter	LinkedIn	ESC website	ESC 365
				Average time watched	Average percentage watched	No. of views				No. of views	No. of views
Patient involvement in studies: the time is now	Anna Stromberg	02:10	26 May 2019	01:06	51%	54	Total Reach: 9,451 Total Impressions: 14,004 Engaged Users: 247 Views: 1.3K	-	-	3	11
Effective and safe decongestion using the Reprive-System in patients with acute heart failure: the results of the TARGET-1 and TARGET-2 studies	Andrew Coats	02:34	26 May 2019	01:36	63%	149	Total Reach: 9,065 Total Impressions: 13,423 Engaged Users: 244 Views: 1.4K	-	-	13	1
<b>My Take Home Messages on novel treatments in heart failure on ESC-HF</b>	<b>Rudolf De Boer and Carolyn Lam</b>	07:53	26 May 2019	04:06	52%	<b>238</b>	Total Reach: 10,120 Total Impressions: 14,846 <b>Engaged Users: 317</b> <b>Views: 1.6K</b>	Engagement: 90 Engagement rate 1.8%	Views: 2,655 Impressions: 10,988 Reactions: 99 Engagement rate: 2.25%	15	18
<b>My Take Home Messages on diuretics and congestion</b>	<b>Wilfried Mullens and Theresa McDonagh</b>	08:08	27 May 2019	04:24	54%	<b>200</b>	-	-	-	3	1
A first in human multi-center, open label, prospective study to evaluate the safety, usability and performance of the V-LAP system	Finn Gustafsson	03:11	27 May 2019	01:48	57%	114	Total Reach: 8,417 Total Impressions: 13,011 Engaged Users: 250 Views: 1.3K	-	Views: 2,745 Impressions: 11,249 Reactions: 72 Engagement rate: 2.16%	2	5

Video Title	Interviewee	Video length	Published on	YouTube channel			Facebook	Twitter	LinkedIn	ESC website	ESC 365
				Average time watched	Average percentage watched	No. of views				No. of views	No. of views
First in human experience with direct sodium removal using a zero sodium peritoneal solution: a new candidate therapy for volume overload	Patrick Rossignol	02:10	27 May 2019	01:18	59%	129	-	Engagement: 47 Engagement rate 1.3%	-	25	2
Clinical presentation, management and 6-month outcome of women diagnosed with PPCM from Europe, Africa, Asia Pacific and Middle East	Karen Sliwa-Hahnle	05:02	27 May 2019	01:48	36%	102	-	Engagement: 29 Engagement rate 1%	-	2	6
<b>Outcomes after hospitalization for acute heart failure across regions at different economic levels: results from the REPORT-HF registry</b>	<b>John Parissis</b>	02:21	27 May 2019	01:12	50%	207	Total Reach: 8,480 Total Impressions: 12,566 Engaged Users: 220 Views: 1.2K	-	Views: 2,144 Impressions: 9,597 Reactions: 66 Engagement rate: 2.32%	<b>199*</b>	3

*\*John Parissis video was the last video published and the first one displayed on the YouTube playlist*

## Metrics definition

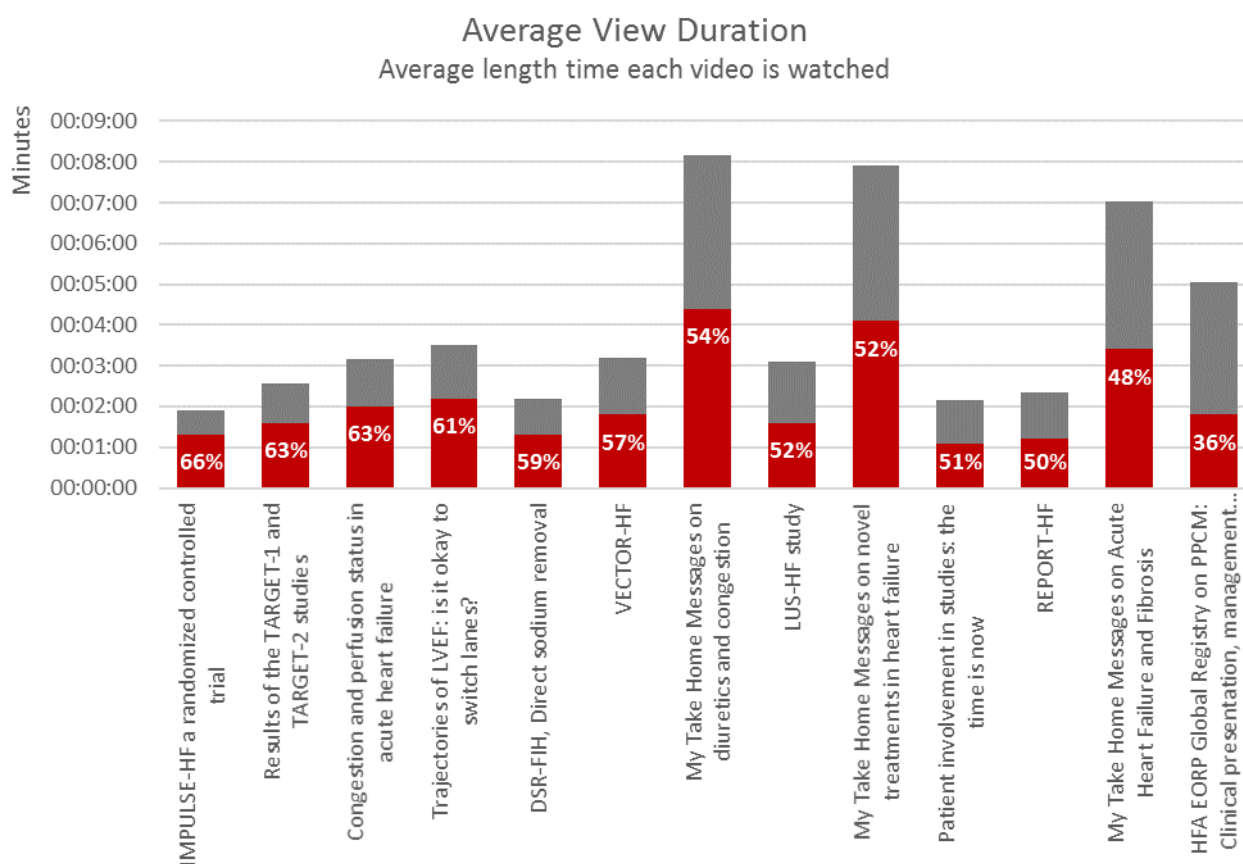
### Twitter

- Impressions: Total times a post was served to newsfeeds
- Engagements: Total number of times a user has interacted with a Tweet; this includes all clicks anywhere on the Tweet (including hashtags, links, avatar, username, and Tweet expansion), retweets, replies, follows, and likes.
- Engagement rate: The number of engagements (clicks, retweets, replies, follows and likes) divided by the total number of actual impressions

### Facebook, LinkedIn, Instagram

- Total Reach: The number of people who were served our post in their newsfeed.
- Total Impressions: The number of times a post was seen. This includes multiple users.
- Engaged Users: Unique users interacting with the post (sharing, commenting etc).

### Graphic representation of the video views on YouTube

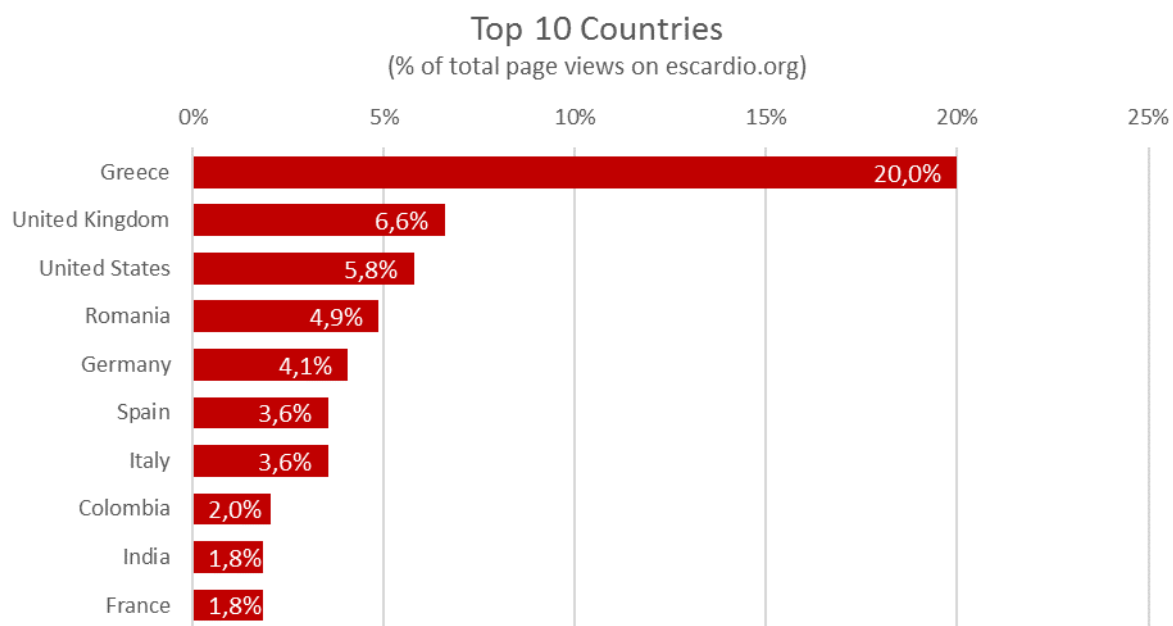


### Total views over time on YouTube channel



### Top 10 Countries watching ESC TV on YouTube

*N.B. This graphic represents only a percentage of the actual viewers as YouTube does not have access to the location for all users.*



## ESC TV @ Heart Failure 2019 promotion

### E-campaigns

	Link to	Sending date	Number of recipients	Open rate	Overall click rate
HFA Congress – Day 2	ESC TV homepage	26 May 2019	3,095 Delegates	46%	10.6%
HFA Congress – Day 2	ESC TV homepage	26 May 2019	3,567 Members not attending	37%	10.9%
HFA Congress – Day 3	ESC TV homepage	27 May 2019	3,146 Delegates	34%	8.4%
HFA Congress – Day 3	ESC TV homepage	27 May 2019	3,546 Members not attending	41%	6.7%
HFA Congress – Day 4	ESC TV homepage	28 May 2019	3,146 Delegates	43%	7.7%
HFA Congress – Day 4	ESC TV homepage	28 May 2019	3,579 Members not attending	40%	7.4%
My ESC News	ESC TV at HF 2019 webpage	5 June 2019	58,814	17%	3.0%

### Web traffic on dedicated webpage

Total number of views: 985

Source / Medium	Page views
google / organic	216
facebook.com / referral	183
HFA / Email	162
ESC / Email	157
(direct) / (none)	74
UmbrellaApp / mobileapp	47
Twitter / referral	42
linkedin.com / referral	29
EHRA / Email	28
google / cpc	18

## Comparison with ESC TV at Heart Failure 2018

	Heart Failure 2019 Athens - Greece	Heart Failure 2018 Vienna - Austria
<b>Number of ESC TV videos covering this event</b>	13	19
<b>Total number of video views</b> (within 3 weeks for 2018 and 2 weeks for 2019, from the first day on the Congress)	<p><b>1,952 views</b> on YouTube</p> <p><b>8.3K+</b> views on Facebook (6 videos published)</p> <p><b>10.3K+</b> views on LinkedIn (4 videos published)</p> <p>Average engagement rate on Twitter: <b>1.5%</b></p> <p><b>32</b> views on ESC 365</p> <p><b>293</b> views on ESC website</p>	<p><b>31,300 views</b></p> <p>(1,387 on escardio + 29,913 on YouTube)</p> <p><b>+ 11K views on Facebook</b> (6 videos published)</p> <p><b>+ 10K views on LinkedIn</b> (3 videos published)</p>
<b>Highest engagement rate for a single video</b> (average % of a video that viewers watched)	66%	66%
<b>Top countries</b> (in terms of number of views)	Greece, UK, U.S., Romania, Germany	Germany, Austria, UK, USA, Italy

## 7.6. Social Media Activity

### Facebook

**European Society of Cardiology**  
Published by Camille Dulbecco [?] · May 28 ·

Reporting from #HeartFailure2019  
Outcomes after hospitalization for acute heart failure across regions at different economic levels: results from the REPORT-HF registry Presented by John Parissis, Greece  
All ESC TV videos from #HeartFailure2019 will be available here <https://tinyurl.com/y4mvm7lu>



ESC TV  
John Parissis  
Greece  
02:21

Get More Likes, Comments and Shares  
Boost this post for €27 to reach up to 7,200 people.

8,514 People Reached    300 Engagements    [Boost Post](#)

Stratos Apostolou, Chih Yuan Chen and 40 others    13 Shares


Total Reach: 8.514

Total Engagements: 337

Total views: 1.352

**European Society of Cardiology**  
May 26 ·

Reporting from #HeartFailure2019  
Patient involvement in studies: the time is now!  
All ESC TV videos from #HeartFailure2019 will be available here <https://tinyurl.com/y4mvm7lu>  
#HFA\_ESC #ACNAP



ESC TV

9,464 People Reached    337 Engagements    [Boost Post](#)

41    1 Comment 12 Shares


Total Reach: 9.464

Total Engagements: 300

Total Views: 1,289

**European Society of Cardiology**  
May 27 ·

Reporting from #HeartFailure2019  
A first in human multi-center, open label, prospective study to evaluate the safety, usability and performance of the V-LAP system Presented by Finn Gustafsson, Denmark  
All ESC TV videos from #HeartFailure2019 will be available here <https://tinyurl.com/y4mvm7lu>



ESC TV  
at  
Heart Failure 2019  
Athens

8,446 People Reached    345 Engagements    [Boost Post](#)

34    8 Shares

Total Reach: 8.446

Total Engagements: 336

Total views : 1,348

**European Society of Cardiology**  
May 26 ·

Happening now at #HeartFailure2019  
Results of the TARGET-1 and TARGET-2 studies by Andrew Coats, #HFA\_ESC president-elect  
All ESC TV videos from #HeartFailure2019 will be available here <https://tinyurl.com/y4mvm7lu>



ESC TV

9,087 People Reached    336 Engagements    [Boost Post](#)

36    9 Shares

Total Reach: 9.087

Total Engagements: 345

Total views : 1,429



**European Society of Cardiology**  May 25 · 

Reporting from #HeartFailure2019




Acute HF congestion and perfusion status; impact of the clinical classification on in hospital and long-term outcomes Presented by Mandeep Mehra, U.S.

All ESC TV videos from #HeartFailure2019 will be available here <https://tinyurl.com/y4mvm7lu>



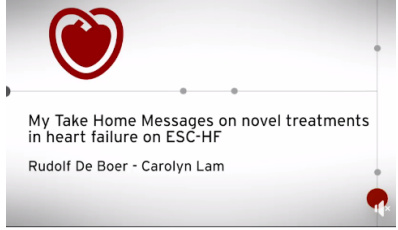
9,368 People Reached      476 Engagements      [Boost Post](#)

  68      12 Shares

**European Society of Cardiology**  Published by Camille Dubecco  · May 27 · 

Watch: My Take Home Messages on novel treatments in heart failure on ESC-HF presented by Rudolf De Boer, Netherlands - Carolyn Lam, Singapore

All ESC TV videos from #HeartFailure2019 will be available here <https://tinyurl.com/y4mvm7lu>  
#HFA\_ESC



 Watch this video with your friends.      [Start](#)

10,189 People Reached      480 Engagements      [Boost Post](#)

  32      13 Shares

Total Reach: 8,446

Total Engagements: 345

Total views: 1,348

Total Reach: 10,189

Total Engagements: 480

Total views: 1,619

**European Society of Cardiology**  added 27 new photos to the album #HeartFailure2019 — with Giuseppe Galati in Athens, Greece. 

Published by Lavinia Baciu  · May 27 · 

The most exciting event in heart failure of the year. Don't forget to tag yourselves 😊











17,346 People Reached      3,195 Engagements      [Boost Post](#)

   314      7 Comments 12 Shares

Total Reach: 17,346

Total Engagements: 3,195

## ESC Main twitter – Top tweets

	<p><b>European Society of Cardiology</b> @escardio · May 29</p> <p>Massive THANK YOU to our dear friends @rudolf_deboer @DrJaarsma @EkateriniL @ShelleyZieroth @MihaiTrofenciu @GiuseppeGalati_ @AspriaAlexia @nossikoff @mmamas1973 @GiuseppeVerg @HillLoreena @TheresaMcDonag3 @Angie_Durante89 for the great #HeartFailure2019 coverage 🙏</p> <p>True stars ♥ <a href="https://pic.twitter.com/hu3p0Ao2No">pic.twitter.com/hu3p0Ao2No</a></p>	15,370	332	2.2%	<a href="#">Promote</a>
<a href="#">View Tweet activity</a>					
	<p><b>European Society of Cardiology</b> @escardio · May 25</p> <p>J McMurray gives the cardiologist perspective on GLP-1 receptor agonist &amp; DPP-4 inhibitors.</p> <p>#HeartFailure2019 prelim data on HF hosp reduction from HARMONY. <a href="https://pic.twitter.com/FfJrftBNPS">pic.twitter.com/FfJrftBNPS</a></p>	12,846	869	6.8%	<a href="#">Promote</a>
<a href="#">View Tweet activity</a>					
	<p><b>European Society of Cardiology</b> @escardio · May 27</p> <p>D. Farmakis shows complex relationship between cancer &amp; HF. Cardiotoxicity of anthracyclines: key aspects &amp; mgmt from a HF point of view ~ the effect of coexistence of risk factors &amp; CV disease</p> <p>#heartfailure2019 <a href="https://pic.twitter.com/nzNJx5DPH">pic.twitter.com/nzNJx5DPH</a></p>	7,795	209	2.7%	<a href="#">Promote</a>
<a href="#">View Tweet activity</a>					
	<p><b>European Society of Cardiology</b> @escardio · May 26</p> <p>P Rossignol presents the AMBER trial results: patiromer helps maintaining spironolactone in patients with hypertension and CKD</p> <p>#heartfailure2019 <a href="https://pic.twitter.com/ohQZZPnR3S">pic.twitter.com/ohQZZPnR3S</a></p>	7,696	249	3.2%	<a href="#">Promote</a>
<a href="#">View Tweet activity</a>					
	<p><b>European Society of Cardiology</b> @escardio · May 28</p> <p>'We need to embrace devices and interventions, not just drugs' ~ F Ruschitzka presents the #heartfailure2019 highlights in devices &amp; interventions.</p> <p>@Filippatos @rudolf_deboer @MihaiTrofenciu @GiuseppeGalati_ <a href="https://pic.twitter.com/6BkhtJLNHv">pic.twitter.com/6BkhtJLNHv</a></p>	7,418	331	4.5%	<a href="#">Promote</a>
<a href="#">View Tweet activity</a>					
	<p><b>European Society of Cardiology</b> @escardio · May 26</p> <p>Machine learning can lead to improved &amp; targetted actionable therapy in HF treatment. Big data analysis remains a challenge, incorporating into EHR risk scores more so ~ @mmamas1973</p> <p>#HeartFailure2019 @rudolf_deboer <a href="https://pic.twitter.com/CgB5gGJ3Xp">pic.twitter.com/CgB5gGJ3Xp</a></p>	6,982	280	4.0%	<a href="#">Promote</a>
<a href="#">View Tweet activity</a>					
	<p><b>European Society of Cardiology</b> @escardio · May 25</p> <p>Diagnostic &amp; treatment of myocarditis- the old &amp; the new in clinical practice by Prof. A. Ristic.</p> <p>#HeartFailure2019 <a href="https://pic.twitter.com/0ag8bquY3p">pic.twitter.com/0ag8bquY3p</a></p>	6,664	359	5.4%	<a href="#">Promote</a>
<a href="#">View Tweet activity</a>					
	<p><b>European Society of Cardiology</b> @escardio · May 25</p> <p>#HeartFailure - 2 words: curable; disease ~ M. H Yacoub presents the #HFA_ESC Eugene Braunwald lecture.</p> <p>#heartfailure2019 @Filippatos @rudolf_deboer <a href="https://pic.twitter.com/I1UKKZTrtC">pic.twitter.com/I1UKKZTrtC</a></p>	6,421	347	5.4%	<a href="#">Promote</a>
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Image 1 - Total reactions: 67  
Total views: 2.207

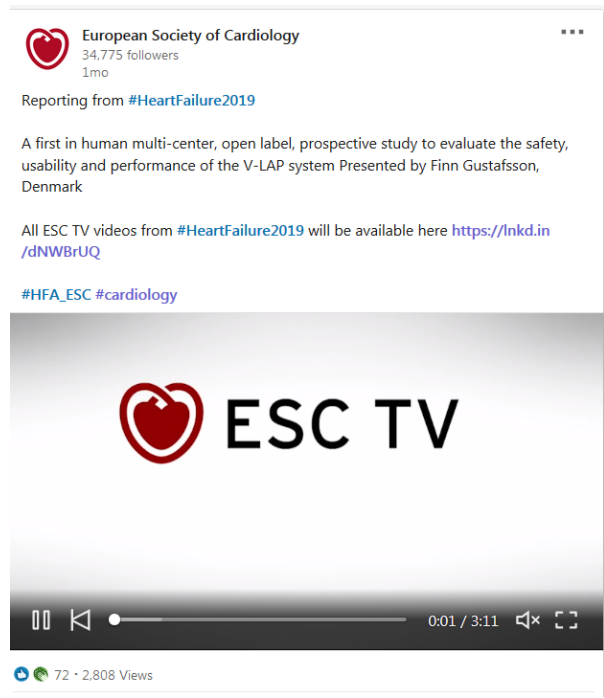


Image 2 - Total reactions: 72  
Total views: 2.808



Image 1 - Total reactions: 93  
Total views: 2.838

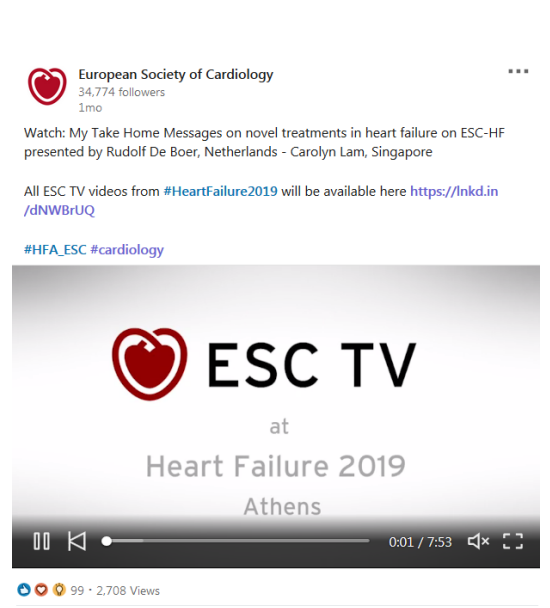



Image 2 - Total reactions: 99  
Total views: 2.708

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We congratulate the Young... more  
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262 0 2 1

101 Profile visits 7,682 Reach

## ESC Journals Twitter

	Impressions	Engagements	Engagement rate
 <p><b>European Society of Cardiology Journals</b> @ESC_Journals - May 26 Acetazolamide to increase natriuresis in congestive heart failure at high risk for diuretic resistance <a href="https://bit.ly/2JU4gjk">bit.ly/2JU4gjk</a></p> <p>@escardio @MarcoMetra #HFA_ESC #HeartFailure2019 #EJHF #ESCCoT #freeaccess <a href="https://pic.twitter.com/ag0zMErJCN">pic.twitter.com/ag0zMErJCN</a></p> <p><a href="#">View Tweet activity</a></p>	21,479	1,358	6.3%
 <p><b>European Society of Cardiology Journals</b> @ESC_Journals - May 29 Diabetic cardiomyopathy: acute and reversible left ventricular systolic dysfunction due to cardiotoxicity of hyperglycaemic hyperosmolar state <a href="https://bit.ly/2HweKnk">bit.ly/2HweKnk</a></p> <p>@escardio @Johncamm #EHJCaseReports #ESCCoT #ESCcardioEd #CardioTwitter #openaccess <a href="https://pic.twitter.com/sEvqI7vCzL">pic.twitter.com/sEvqI7vCzL</a></p> <p><a href="#">View Tweet activity</a></p>	18,690	891	4.8%
 <p><b>European Society of Cardiology Journals</b> @ESC_Journals - May 28 Differences between intravenous iron products: focus on treatment of iron deficiency in chronic heart failure patients <a href="https://bit.ly/2JWd6E">bit.ly/2JWd6E</a></p> <p>@escardio #ESCHeartFailure #ESCCoT #HeartFailure2019 #HFA_ESC #openaccess <a href="https://pic.twitter.com/GgMCSSNN9B">pic.twitter.com/GgMCSSNN9B</a></p> <p><a href="#">View Tweet activity</a></p>	16,821	779	4.6%

	Impressions	Engagements	Engagement rate
 <p><b>European Society of Cardiology Journals</b> @ESC_Journals · May 25 Heart Failure 2019 is starting today in Athens - official hashtag #heartfailure2019 - stay with us for recently published science on heart failure!</p> <p>@escardio #ESCCoT #HFA_ESC</p> <p><a href="#">View Tweet activity</a></p> <p>Promote</p>	14,552	219	1.5%
 <p><b>European Society of Cardiology Journals</b> @ESC_Journals · May 25 Machine learning-based prediction of heart failure readmission or death: implications of choosing the right model and the right metrics <a href="https://bit.ly/2Yyib2u">bit.ly/2Yyib2u</a></p> <p>@escardio #HeartFailure2019 #ESCHeartFailure #ESCCoT #openaccess #HFA_ESC <a href="https://pic.twitter.com/09pCRJKimy">pic.twitter.com/09pCRJKimy</a></p> <p><a href="#">View Tweet activity</a></p> <p>Promote</p>	10,914	267	2.4%
 <p><b>European Society of Cardiology Journals</b> @ESC_Journals · May 27 Sacubitril/valsartan eligibility and outcomes in the ESC HFA EORP Heart Failure Long-Term Registry: bridging between EMA/FDA label, the PARADIGM-HF trial, ESC Guidelines and real-world <a href="https://tinyurl.com/yxxstjsw">tinyurl.com/yxxstjsw</a></p> <p>#HeartFailure2019 #HFA_ESC @MarcoMetra <a href="https://pic.twitter.com/EN4CfmAy2m">pic.twitter.com/EN4CfmAy2m</a></p> <p><a href="#">View Tweet activity</a></p> <p>Promote</p>	10,748	445	4.1%

## Metrics definition

### Twitter

**Actual Impressions:** Total times a post was served to newsfeeds

Potential Reach: Number of combined Twitter users who could have been reached

**Engagements:** Total number of times a user has interacted with a Tweet; this includes all clicks anywhere on the Tweet (including hashtags, links, avatar, username, and Tweet expansion), retweets, replies, follows, and likes.

**Engagement rate:** The number of engagements (clicks, retweets, replies, follows and likes) divided by the total number of actual impressions

### Facebook

**Total Reach:** The number of people who had your Page's post enter their screen. Posts include statuses, photos, links, videos and more.

**Total Impressions:** The number of times your Page's post entered a person's screen. Posts include statuses, photos, links, videos and more.

**Engaged Users:** The number of unique people who engaged in certain ways with your Page post, for example by commenting on, liking, sharing, or clicking upon particular elements of the post.

**Video views:** The number of times your video was watched for at least 3 seconds, or for nearly its total length, whichever happened first within the selected date ranges.

## 8. Press

### 8.1. Key numbers

Press coverage	Date	Articles	Top Coverage
Heart Failure 2019	25-28 May 2019	270	<a href="#">E-santé</a> <a href="#">WebMD</a> <a href="#">U.S. News</a> <a href="#">Fox News</a> <a href="#">TCTMD</a> <a href="#">Medscape</a> <a href="#">Il Messaggero</a>
<a href="#">In vitro fertilisation linked to deadly heart disease in pregnancy</a>	25 May 2019	67	
<a href="#">Biomarkers help tailor diuretic use in acute heart failure patients</a>	25 May 2019	19	
<a href="#">Lonely patients with heart failure least likely to follow treatment recommendations</a>	26 May 2019	58	
<a href="#">Diuretic withdrawal is safe for stable heart failure patients</a>	26 May 2019	43	
<a href="#">Weekly pharmacy visits boost drug adherence and quality of life in heart failure patients</a>	26 May 2019	31	
<a href="#">A gut check for heart failure patients</a>	26 May 2019	48	





## 8.3. Clippings

Outlet: Il Messaggero, Italy

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Il Messaggero.it

### SALUTE

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## Chi soffre di cuore è indisciplinato: meno del 10% dei pazienti segue i consigli del medico

SALUTE > MEDICINA

Lunedì 27 Maggio 2019



Meno del 10% delle persone con insufficienza cardiaca segue le indicazioni del medico sul ridurre il consumo di sale e liquidi, pesarsi tutti i giorni, e fare attività fisica. Quelli che vivono da soli sono i pazienti più indisciplinati da questo punto di vista, come ha verificato uno studio dell'università di Wroclaw, presentato al congresso della



Società europea di cardiologia.



«La solitudine è il più importante fattore che permette di prevedere se il paziente seguirà i consigli o meno - commenta Beata Jankowska-Polaska, coordinatrice dello studio - Chi è da solo si comporta peggio in tutte le aree. I familiari hanno un ruolo centrale nell'aiutare i malati, soprattutto quelli più anziani, a seguire le raccomandazioni mediche, dando loro supporto emotivo, assistenza pratica e consigli».

Il non seguire le raccomandazioni sullo stile di vita o il prendere regolarmente le medicine contribuisce al peggioramento dei sintomi cardiaci e aumenta il rischio di ricovero in ospedale. Nello studio sono stati seguiti 475 pazienti, con insufficienza cardiaca cronica, nel seguire le indicazioni sul ridurre sale e liquidi (bibite e diversi cibi che li contengono come yogurt, minestre, salse), pesatura e attività fisica. Si è così visto che solo il 7% di loro le seguiva, mentre il risultato era migliore per i controlli medici (58%). Quasi il 48% non faceva attività fisica, e il 19% molto raramente. Per quanto riguarda il consumo di liquidi, il 25% non lo aveva mai ridotto e il 17% molto raramente, mentre per il sale il 13% non l'aveva mai diminuito e il 22% solo qualche volta. Oltre la metà (54%) dei pazienti si era pesato meno di una volta a settimana, e il 17% una volta a settimana. «E' preoccupante - conclude - che meno di un paziente su 10 segua i consigli sullo stile di vita. Le donne e i più anziani hanno i risultati peggiori».

© RIPRODUZIONE RISERVATA

You are in: Health and wellness » Less than 10% of those who have problems with ... »

## Less than 10% of those with heart problems follow the doctor's advice

27 May 2019 A- A+ [share icons]



Less than 10% of people with heart failure follow the doctor's instructions on reducing salt and fluid consumption, weighing themselves every day, and exercising. Those who live alone are the most unruly patients from this point of view, as verified by a study of the University of Wrocław, presented at the congress of the European Society of Cardiology. "Loneliness is the most important factor that allows us to predict whether the patient will follow the advice or not - says Beata Jankowska-Polaska, study coordinator - Those who are alone behave worse in all areas. Family members play a central role in "to help the sick, especially the elderly, to follow medical recommendations, giving them emotional support, practical assistance and advice". Failure to follow lifestyle recommendations or taking medication regularly contributes to the worsening of cardiac symptoms and increases the risk of hospitalization. In the study 475 patients were followed, with chronic heart failure, following the indications on reducing salt and liquids (soft drinks and various foods that contain them such as yogurt, soups, sauces), weighing and physical activity. Thus it was seen that only 7% of them followed them, while the result was better for medical checks (58%). Almost 48% did not do physical activity, and 19% very rarely. As for the consumption of liquids, 25% had never reduced it and 17% very rarely, while for salt 13% had never decreased it and 22% only sometimes. Over half (54%) of patients had weighed less than once a week, and 17% once a week. "It is worrying - he concludes - that less than one in 10 patients follow lifestyle advice. Women and the elderly have the worst results." (HANDLE).

### Photo

#### TOP VIDEO

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Three astronauts returned from the International Space Station ...

from Taboola

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#### A 'cuff' reduces pacemaker infections

HEALTH AND WELLNESS

#### Day of the Sick, Child Jesus

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#### Nutrition: the intestine "Sixth sense for happiness"

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#### Doctors and nurses dance for the little patients of the Meyer Hospital in Florence

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ACTUALITÉS SANTÉ PRATIQUE MALADIES MÉDICAMENTS BIEN-ÊTRE DIÉTÉTIQUE

Accueil » Maladies » Maladies cardiovasculaires » Insuffisance cardiaque

### Les fécondations in vitro augmentent les risques de cardiomyopathie du péripartum

Publié le 31 Mai 2019 par [Mathilde Rolive](#), [journaliste santé](#)

A +A

D'après une étude présentée au congrès scientifique de la société européenne de cardiologie, les femmes qui suivent un traitement de fertilité auraient des risques augmentés de développer des cardiomyopathies du péripartum, mettant la vie en danger de la mère et du bébé.



Selon une étude présentée le 25 mai 2019 au congrès scientifique de la Société européenne de cardiologie (ESC), les femmes qui suivent un traitement de fertilité devraient consulter d'urgence leur médecin si elles présentent des symptômes d'insuffisance cardiaque. Effectivement, elles auraient plus de chance de développer une cardiomyopathie du péripartum (PPCM), révèle [EurekAlert!](#).

**A lire aussi :** [Enceinte, 7 comportements à risque qui mettent en danger votre fœtus](#)

#### La cardiomyopathie péripartum, c'est quoi ?

La cardiomyopathie péripartum (PPCM) est une insuffisance cardiaque associée à la grossesse, qui touche environ une femme enceinte sur 1000 dans le monde. Le cœur s'agrandit et s'affaiblit généralement en fin de grossesse ou les mois suivant l'accouchement. Le PPCM met la vie du bébé et de la mère en danger.

Les signes avant-coureurs d'une insuffisance cardiaque liée au PPCM peuvent être :

- l'essouffement
- l'enflure des jambes

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- se réveiller la nuit pour uriner

**"Il est très difficile de distinguer l'inconfort normal de la grossesse des symptômes de l'insuffisance cardiaque"**

La recherche a été menée par des scientifiques allemands de l'Université de Hanovre. Ils se sont

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## Science News

from research organizations

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### A gut check for heart failure patients

Date: May 26, 2019

Source: European Society of Cardiology

Summary: Heart failure patients who consume more dietary fiber tend to have healthier gut bacteria, which is associated with reduced risk of death or need of a heart transplant.

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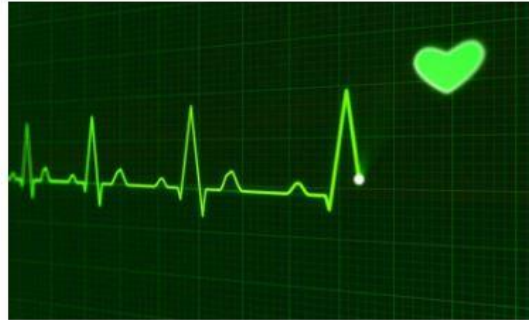
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MAY 26, 2019

## A gut check for heart failure patients

by European Society of Cardiology



Credit: CC0 Public Domain

Heart failure patients who consume more dietary fibre tend to have healthier gut bacteria, which is associated with reduced risk of death or need of a heart transplant. The fibre study was presented today at Heart Failure 2019, a scientific congress of the European Society of Cardiology (ESC).

"Our gut microbiota is composed of trillions of microorganisms that have the potential to affect our health," said study author Dr. Cristiane Mayerhofer, of Oslo University Hospital, Norway. "Previous research has reported reduced biodiversity of microbes in the gut of patients with heart failure patients. Today we show for the first time that this is related to low fibre intake."

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"We show an important pathway that connects diet, microbial activity, and cardiovascular disease," said Dr. Mayerhofer. "It would be prudent for patients with heart failure to limit their meat intake to two to three times a week."

To conduct the study, the investigators recruited 84 well-treated patients with chronic heart failure and 266 healthy people. The composition of gut microbes was assessed by sequencing the bacterial 16S rRNA gene in stool samples and compared between the two groups.

Heart failure patients had lower biodiversity of intestinal microbes than healthy controls, with differences in the two main phyla of bacteria present in the human gut. Patients with heart failure had a lower ratio of Firmicutes/Bacteroidetes (F/B) compared to controls, and this difference was even more pronounced when the cause of heart failure was non-ischaemic

Dietary and outcome analyses were performed in heart failure patients. Patients who had a heart transplant or died had lower biodiversity and a lower F/B ratio than

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## ¿Por qué la fibra puede ayudar a los pacientes con insuficiencia cardiaca?

Publicado 27/05/2019 8:01:25 [cgt](#)



GETTY-ARCHIVO

MADRID, 27 May. (EUROPA PRESS) -

Los pacientes con insuficiencia cardiaca que consumen más fibra dietética tienden a poseer bacterias intestinales más saludables, lo que se vincula con menor riesgo de muerte o la necesidad de un trasplante de corazón. El estudio sobre la fibra se presenta este domingo en 'Heart Failure 2019', un congreso científico de la Sociedad Europea de Cardiología.

"Nuestra microbiota intestinal está compuesta por billones de microorganismos que tienen el potencial de afectar nuestra salud", afirma la autora del estudio, la doctora Cristiane Mayerhofer, del Hospital Universitario de Oslo, Noruega. "Investigaciones anteriores han reportado una reducción en la biodiversidad de microbios en el intestino de pacientes con insuficiencia cardiaca. Hoy mostramos por primera vez que esto está relacionado con un bajo consumo de fibra", agrega.

El trabajo también relacionó la ingesta de carne con niveles más altos de trimetilamina-N-óxido (TMAO) en pacientes con insuficiencia cardiaca. Investigaciones anteriores han demostrado que el incremento de los niveles de TMAO se asocia con un mayor riesgo de eventos cardiovasculares, y que los microbios intestinales desempeñan un papel en su formación.

"Mostramos una vía importante que conecta la dieta, la actividad microbiana y las enfermedades cardiovasculares –dice el doctor Mayerhofer-. Sería prudente que los pacientes con insuficiencia cardiaca limiten su consumo de carne de dos a tres veces por semana".

Para llevar a cabo el estudio, los científicos reclutaron a 84 pacientes bien tratados con insuficiencia cardiaca crónica y 266 personas sanas. Se evaluó la composición de los microbios intestinales mediante la secuenciación del gen 16S rRNA bacteriano en muestras de heces y se comparó entre los dos grupos.

Los pacientes con insuficiencia cardiaca tenían una biodiversidad de microbios intestinales más baja que los controles sanos, con diferencias en los dos filos principales de bacterias presentes en el intestino humano. Los pacientes con insuficiencia cardiaca registraron una proporción más baja de Firmicutes/Bacteroidetes (F/B) en comparación con los controles, y esta diferencia fue incluso más pronunciada cuando la causa de la insuficiencia cardiaca no fue isquémica.

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- 3 La OMS, sobre la posible paralización de Madrid Central: "Todo lo que proteja la salud no se puede tocar"
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# Fertility Treatment, Pregnancy Heart Issue Linked?

By Robert Preidt  
*HealthDay Reporter*

TUESDAY, May 28, 2019 (HealthDay News) -- The risk of a pregnancy-related type of heart failure is five times higher for women who undergo fertility treatment than those who conceive naturally, a new study says.

The condition is called peripartum cardiomyopathy (PPCM). It affects about 1 in 1,000 pregnant women worldwide and is life-threatening to the mother and baby.

This study included 111 women with PPCM and was presented Saturday at a meeting of the European Society of Cardiology, in Athens.

"It is very difficult to distinguish normal pregnancy discomfort from heart failure symptoms," study co-author Dr. Tobias Pfeffer said in a society news release. He's a cardiologist at Hannover Medical School in Germany.

"Our study shows that the risk of PPCM is five times higher in women who have fertility treatment, so they should be aware that this discomfort may not be benign. PPCM is often diagnosed much too late, with direct consequences on prognosis," Pfeffer said.

Shortness of breath, swollen legs and waking up in the night to urinate could be warning signs of PPCM. Women undergoing fertility treatment should immediately see their doctor if they have such symptoms, researchers advised.

"In all women who have conceived artificially, gynecologists and fertility doctors should advise cardiac checks including echocardiography after delivery, or shortly before, to rule out PPCM," said study senior author Dr. Denise Hilfiker-Kleiner. She's the medical school's dean of research in molecular cardiology.

She noted women may undergo multiple rounds of fertility treatment if they don't get pregnant or lose a pregnancy.

"Lost pregnancies can also induce PPCM," Hilfiker-Kleiner said. "Women who have developed signs of cardiac stress or impaired function should

HOME / CIVIC / HEALTH NEWS

# For People With Heart Failure, Loneliness Can Mean Worse Care

May 28, 2019 at 2:00 p.m.



BY ROBERT FREIDT, HealthDay Reporter

TUESDAY (May 28, 2019 (HealthDay News)) — Fewer than 1 in 10 heart failure patients follow lifestyle treatment recommendations, and a new study suggests that loneliness is a major reason why.

Polish researchers assessed 475 heart failure patients' compliance with a regimen of restricting salt and fluid intake, being physically active, and weighing themselves each day.



HEALTHDAY

Only 7 of the patients followed all four lifestyle recommendations. Nearly 45% got no exercise, and 19% rarely exercised. About 25% never and 17% rarely adhered to fluid restrictions, while 13% never and 22% rarely restricted salt intake. About 54% of patients weighed themselves less than once a week, and 17% did it once a week.

Salt and fluid restrictions help keep fluid retention under control, daily weighing alerts to worsening fluid retention, and exercise improves energy levels and quality of life, explained the authors of the study.

Failure to follow lifestyle recommendations or regularly take medications contributes to worsening heart failure symptoms and an increased risk of hospitalization.

"Loneliness is the most important predictor of whether patients adopt the advice or not," study senior author Beata Jankowska-Polaska, from Wroclaw Medical University, said in a news release from the European Society of Cardiology.

"Patients who are alone do worse in all areas. Family members have a central role in helping patients comply, particularly older patients, by providing emotional support, practical assistance, and advice," she noted.

"We also found that women were less compliant than men, and patients over 65 had poorer scores than younger patients," she added.

Loneliness, a higher number of other health problems, and heart failure that caused more physical limitations were independent predictors of not following the recommendations, the researchers said.

Doctors and nurses need to encourage better self-care in their patients with heart failure, according to Jankowska-Polaska.

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INFERTILITY - Published May 29

# Infertility linked to dangerous heart condition in pregnancy

LiveScience



Fox News Flash top headlines for May 29

Fox News Flash top headlines for May 29 are here. Check out what's clicking on Foxnews.com

Women undergoing fertility treatments may be at an increased risk of a dangerous pregnancy condition called peripartum cardiomyopathy.

But the heightened risk is not likely to be related to the treatments themselves. Rather, researchers say, factors that contribute to infertility may also make this type of heart failure more common.

## SARAH PALIN'S DAUGHTER WILLOW REVEALS PREGNANCY ON INSTAGRAM

In new research presented Saturday (May 25) at the Heart Failure 2019 conference in Athens, Greece, German researchers reported that women undergoing fertility treatments had a risk of peripartum cardiomyopathy five times that of women who got pregnant without fertility treatment. However, infertility did not seem to affect the patients' recovery from peripartum cardiomyopathy, according to their research, which has yet to be published in a peer-reviewed scientific journal. [18 Ways Pregnancy Changes Your Body Forever]

## Infertility and cardiomyopathy

Peripartum cardiomyopathy is a kind of heart failure that occurs during pregnancy or within a few months of birth. The condition affects about 1 in every 1,000 to 4,000 pregnancies resulting in live births, according to a 2016 article in the journal *Circulation*. Most women recover, but peripartum cardiomyopathy can be fatal. A 2015 study published in the journal *Obstetrics & Gynecology* found that the condition was responsible for 23 percent of maternal deaths in California between 2002 and 2005.

"We still argue about knowing what the cause of peripartum cardiomyopathy is," said Dr. Ileana Piña, a cardiologist at the Albert Einstein College of Medicine, who was not involved in the research. There are certain risk factors, Piña told Live Science, including being of African American descent and having more than one pregnancy.

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## Weaning Off Diuretics in Stable Heart Failure? ReBIC-1 Hints at Possibilities

A small, double-blind, randomized trial from Brazil could serve as a jumping off point for larger studies, one expert says.

By Shelley Wood May 28, 2019



**A**THENS, Greece—A small, randomized clinical trial is offering a tantalizing hint that outpatients with heart failure and reduced ejection fraction who are stable and have no clinical signs of congestion may be taken off their diuretics without experiencing significant worsening of dyspnea or increased reuse of additional diuretics.

“Diuretic discontinuation seems to be well-tolerated in most of these patients and might deserve consideration in the appropriate clinical setting,” according to Andreia Biolo, MD (Hospital de Clínicas de Porto Alegre, Brazil), who presented the ReBIC-1 trial during a late-breaking clinical trial session Sunday at the European Society of Cardiology 2019 Heart Failure Congress.

Diuretics have been used for decades to relieve symptoms of congestion in heart failure patients, based on studies dating back to the ‘80s and ‘90s, Biolo reminded her audience. More recently, however, observational data have shown that the drugs are potentially harmful when misdosed, particularly when higher-than-needed dosages are used in the outpatient setting.

The double-blind, randomized ReBIC-1 trial was designed to test the safety and tolerability of withdrawing furosemide in stable, euvolemic patients with chronic heart failure.

“**Since many patients with heart failure take many drugs, safely withdrawing unnecessary drugs might facilitate the optimal use of other lifesaving therapies.**”

ANDREIA BILOLO

The study was conducted at 11 centers across Brazil and enrolled 188 outpatients with stable NYHA class I or II heart failure taking 40–80 mg of daily furosemide. All patients had to have remained out of hospital with no admissions or decompensation for the previous 6 months, with no changes in their diuretic dose over the same period.

At 90 days there was no difference in the primary endpoint, comprised of dyspnea self-assessment that involved asking patients to grade their symptoms over the past week, or in the proportion of patients free from the need for additional furosemide during follow-up (74.3% vs 83.8%, OR 1.69; 95% CI 0.82–3.49). Dyspnea across the entire trial population was mild and remained stable for both groups, Biolo said. There were no significant differences in heart-failure hospitalizations, deaths, or those two endpoints combined. NT-proBNP levels increased by 125 pg/dL in the withdrawal group and by 60 pg/dL in the maintenance group, with no significant differences between the two.

News > Medscape Medical News > Conference News > ESC-HF 2019

## Less Is More: Loop Diuretic Withdrawal May Be Safe in Selected Heart Failure Outpatients

Steve Sklar  
May 28, 2019

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Selected patients with heart failure who are doing well on optimal guideline-directed medical therapy, including furosemide, may be safely taken off loop diuretics without raising their risk for dyspnea, decompensation, or other ill effects, suggests a randomized study.

Importantly, the study entered patients with a history of hospitalization for acute HF who were consistently stable on good medical therapy. In fact, about 60% of the 188 patients were in NYHA functional class 1 when they were randomly assigned to either go off or continue their maintenance doses of furosemide.

"This was a very low-risk group. They had no recent admissions and were optimized on drugs, and they tended to be younger than we see in some trials of decompensated heart failure," said Andréia Biolo, MD, ScD, Hospital de Clinicas de Porto Alegre, Brazil. The mean age for patients in both groups was 59 years.

That means their prognosis was "fairly favorable" and their prospects for living many more years were quite good. Such patients would likely welcome the opportunity to take one fewer medication among the many generally prescribed in heart failure, she told *theheart.org | Medscape Cardiology* after presenting the first Brazilian Research Network in Heart Failure (ReBIC-1) study here at European Society of Cardiology Heart Failure 2019.

There are also good clinical reasons why furosemide withdrawal, when safely possible, may be a prudent idea, Biolo observed. Intensive loop diuretic therapy can cause neurohormonal activation and compromise renal function, among other potential adverse effects, and possible long-term risks of lower maintenance doses aren't well understood.

The current study asked whether it is safe to withdraw loop diuretics in low-risk stable patients with heart failure, "and we know safety trials, to be definitive, actually require a very large sample size," noted G. Michael Felker, MD, MHS, Duke University, Durham, North Carolina, as invited discussant after the ReBIC-1 presentation.

"I think smaller trials can give a clue and a suggestion that a treatment or process of care might be safe, but I don't think they're able to provide definitive evidence of safety."

However, for lower-risk stable, medically well-managed patients like those in the study, "I think these data definitely support the concept of a trial of furosemide withdrawal as part of an overall strategy of optimizing care," he said.

"Most of what we do in heart failure care is to focus on increasing intensity of treatment," Felker noted. "But when we think about optimization, it doesn't always mean increasing doses. It means having people on the right regimen. For drugs like diuretics that are focused on symptomatic management of congestion, maybe the correct dose is a lower dose."

It may be relatively few patients with a history of HF decompensation that the current findings apply to, cautioned Martin Schulz, PhD, professor of pharmacy, Freie Universität Berlin, who wasn't involved in ReBIC-1.

The trial's inclusion and exclusion criteria produced a population that was well treated, with literally everyone on beta blockers and 90% on ACE inhibitors or angiotensin receptor blockers, and with strikingly high usage of other