

**Identity:**

Title: Dr

Family Name(s): Lyon

First Name(s): Alexander

Age: 49

**Photo:****Application for the following position in the HFA Board or Nominating Committee:**

Nominating Committee member

**Place of work**

*If you work in multiple places, please provide the one where you spend the most time or that you consider to be your main place of practice.*

Institute/organisation:	Royal Brompton Hospital
Department:	Cardiology
Address:	Sydney Street, London
Post code / Zip:	SW3 6NY
Country:	UK

**General Curriculum Vitae (500 words max)**

*Please also include your H index and top 5 to 10 publications in the last 5 years*

Dr. Alexander Lyon is a Consultant Cardiologist at the Royal Brompton Hospital. Alex trained at Oxford University where he was awarded a first class degree and a clinical scholarship. Alex studied for his PhD in gene therapy for heart failure at Imperial College. His clinical interests are in the field of cardio-oncology (cardiovascular disease in cancer patients), heart failure, complex hypertension, Takotsubo syndrome and the effects of major stresses of the heart, and gene therapy for chronic heart failure.

Alex has been the clinical lead for the Cardio-Oncology service at the Royal Brompton Hospital since 2011, specialising in surveillance and cardioprotection from modern cancer drugs, risk stratification and treatment of all cardiac complications of cancer treatment. The service was recently awarded a Gold Cardio-Oncology Centre of Excellence award from the International Cardio-Oncology Society in 2022, and he is the Director of the new Cardio-Oncology Centre of Excellence at the Royal Brompton hospital.

Alex is a co-chair of the first ESC Cardio-Oncology Guideline which was presented and published in August 2022 which includes 272 new recommendations for the management of cardiovascular disease in cancer patients and survivors. The guideline has over 300,000 webpage views and 100,000+ downloads in the first 12 months since publication. He is also a co-author of the 2021 BSE-BCOS guideline on echocardiography in cancer patients and the 2022 ESMO guideline on the diagnosis and management of immunotherapy-related toxicities.

Alex is the chair of the European Society of Cardiology (ESC) Council of Cardio-Oncology (2022-2024), the past president of the British Cardio-Oncology Society, a board member of International Cardio-Oncology Society (ICOS), and he is the cardiology advisor to the charity Macmillan Cancer. Alex is a co-investigator of the first Leducq Cardio-Oncology Transatlantic Research Network funded from 2020-2025 (\$6M).

Alex has published over 230 scientific papers in peer-reviewed journals and Alex is a deputy editor of the European Heart Journal. His H-index is 69 and in 2023 he was identified as one of the top 50 most highly cited academic doctors in the UK in the last 10 years by the Web of Science.

European Society of Cardiology Core Curriculum for cardio-oncology.

López-Fernández T, Farmakis D, Ameri P, Asteggiano R, de Azambuja E, Aznar M, Barac A, Bayes-Genis A, Bax JJ, Bergler-Klein J, Boriani G, Celutkienė J, Coats A, Cohen-Solal A, Córdoba R, Cosyns B, Filippatos G, Fox K, Gulati G, Inciardi RM, Lee G, Mamas MA, Novo G, Plummer C, Psyrris A, Rakisheva A, Suter T, Tini G, Tocchetti CG, Toutouzas K, Wilhelm M, Metra M, **Lyon AR**, Rosano GMC. **Eur J Heart Fail.** 2023 Dec 7.

2022 ESC Guidelines on cardio-oncology developed in collaboration with the European Hematology Association (EHA), the European Society for Therapeutic Radiology and Oncology (ESTRO) and the International Cardio-Oncology Society (IC-OS). **Lyon AR et al** **EJH** 2022 Nov 1;43(41):4229-4361.

Pathophysiology of Takotsubo syndrome - a joint scientific statement from the Heart Failure Association Takotsubo Syndrome Study Group and Myocardial Function Working Group of the European Society of Cardiology - Part 1: overview and the central role for catecholamines and sympathetic nervous system. Omerovic E, Citro R, Bossone E, Redfors B, Backs J, Bruns B, Ciccarelli M, Couch LS, Dawson D, Grassi G, Iacoviello M, Parodi G, Schneider B, Templin C, Ghadri JR, Thum T, Chioncel O, Tocchetti CG, van der Velden J, Heymans S, **Lyon AR.** **Eur J Heart Fail.** 2022 Feb;24(2):257-273. doi: 10.1002/ejhf.2400. Epub 2022 Feb 16. PMID: 34907620

Pathophysiology of Takotsubo syndrome - a joint scientific statement from the Heart Failure Association Takotsubo Syndrome Study Group and Myocardial Function Working Group of the European Society of Cardiology - Part 2: vascular pathophysiology, gender and sex hormones, genetics, chronic cardiovascular problems and clinical implications. Omerovic E, Citro R, Bossone E, Redfors B, Backs J, Bruns B, Ciccarelli M, Couch LS, Dawson D, Grassi G, Iacoviello M, Parodi G, Schneider B, Templin C, Ghadri JR, Thum T, Chioncel O, Tocchetti CG, van der Velden J, Heymans S, **Lyon AR.** **Eur J Heart Fail.** 2022 Feb;24(2):274-286. doi: 10.1002/ejhf.2368.

Defining cardiovascular toxicities of cancer therapies: an International Cardio-Oncology Society (IC-OS) consensus statement.

Herrmann J, Lenihan D, Armenian S, Barac A, Blaes A, Cardinale D, Carver J, Dent S, Ky B, **Lyon AR**, López-Fernández T, Fradley MG, Ganatra S, Curigliano G, Mitchell JD, Minotti G, Lang NN, Liu JE, Neilan TG, Nohria A, O'Quinn R, Pusic I, Porter C, Reynolds KL, Ruddy KJ, Thavendiranathan P, Valent P. **Eur Heart J.** 2022 Jan 31;43(4):280-299. doi: 10.1093/eurheartj/ehab674. PMID: 34904661

Baseline cardiovascular risk assessment in cancer patients scheduled to receive cardiotoxic cancer therapies: a position statement and new risk assessment tools from the Cardio-Oncology Study Group of the Heart Failure Association of the European Society of Cardiology in collaboration with the International Cardio-Oncology Society.

**Lyon AR**, Dent S, Stanway S, Earl H, Brezden-Masley C, Cohen-Solal A, Tocchetti CG, Moslehi JJ, Groarke JD, Bergler-Klein J, Khoo V, Tan LL, Anker MS, von Haehling S, Maack C, Pudil R, Barac A, Thavendiranathan P, Ky B, Neilan TG, Belenkov Y, Rosen SD, Iakobishvili Z, Sverdlov AL, Hajjar LA, Macedo AVS, Manisty C, Ciardiello F, Farmakis D, de Boer RA, Skouri H, Suter TM, Cardinale D, Witteles RM, Fradley MG, Herrmann J, Cornell RF, Wechelaker A, Mauro MJ, Milojkovic D, de Lavallade H, Ruschitzka F, Coats AJS, Seferovic PM, Chioncel O, Thum T, Bauersachs J, Andres MS, Wright DJ, López-Fernández T, Plummer C, Lenihan D. **Eur J Heart Fail.** 2020 Nov;22(11):1945-1960. doi: 10.1002/ejhf.1920. Epub 2020 Aug 6. PMID: 32463967

Role of serum biomarkers in cancer patients receiving cardiotoxic cancer therapies: a position statement from the Cardio-Oncology Study Group of the Heart Failure Association and the Cardio-Oncology Council of the European Society of Cardiology.

Pudil R, Mueller C, Čelutkienė J, Henriksen PA, Lenihan D, Dent S, Barac A, Stanway S, Moslehi J, Suter TM, Ky B, Štěrba M, Cardinale D, Cohen-Solal A, Tocchetti CG, Farmakis D, Bergler-Klein J, Anker MS, Von Haehling S, Belenkov Y, Iakobishvili Z, Maack C, Ciardiello F, Ruschitzka F, Coats AJS, Seferovic P, Lainscak M, Piepoli MF, Chioncel O, Bax J, Hulot JS, Skouri H, Hägler-Laube ES, Asteggiano R, Fernandez TL, de Boer RA, **Lyon AR.** **Eur J Heart Fail.** 2020 Nov;22(11):1966-1983. doi: 10.1002/ejhf.2017. Epub 2020 Oct 20. PMID: 33006257

Role of cardiovascular imaging in cancer patients receiving cardiotoxic therapies: a position statement on behalf of the Heart Failure Association (HFA), the European Association of Cardiovascular Imaging (EACVI) and the Cardio-Oncology Council of the European Society of Cardiology (ESC).

Čelutkienė J, Pudil R, López-Fernández T, Grapsa J, Nihoyannopoulos P, Bergler-Klein J, Cohen-Solal A, Farmakis D, Tocchetti CG, von Haehling S, Barberis V, Flachskampf FA, Čeponienė I, Haegler-Laube E, Suter T, Lapinskas T, Prasad S, de Boer RA, Wechalekar K, Anker MS, Iakobishvili Z, Bucciarelli-Ducci C, Schulz-Menger J, Cosyns B, Gaemperli O, Belenkov Y, Hulot JS, Galderisi M, Lancellotti P, Bax J, Marwick TH, Chioncel O, Jaarsma T, Mullens W, Piepoli M, Thum T, Heymans S, Mueller C, Moura B, Ruschitzka F, Zamorano JL, Rosano G, Coats AJS, Asteggiano R, Seferovic P, Edvardsen T, **Lyon AR**. *Eur J Heart Fail*. 2020 Sep;22(9):1504-1524. doi: 10.1002/ejhf.1957. Epub 2020 Aug 21. PMID: 32621569

2021 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure.

McDonagh TA, Metra M, Adamo M, Gardner RS, Baumach A, Böhm M, Burri H, Butler J, Čelutkienė J, Chioncel O, Cleland JGF, Coats AJS, Crespo-Leiro MG, Farmakis D, Gilard M, Heymans S, Hoes AW, Jaarsma T, Jankowska EA, Lainscak M, Lam CSP, **Lyon AR**, McMurray JJV, Mebazaa A, Mindham R, Muneretto C, Francesco Piepoli M, Price S, Rosano GMC, Ruschitzka F, Kathrine Skibelund A; ESC Scientific Document Group. *Eur Heart J*. 2021 Sep 21;42(36):3599-3726. doi: 10.1093/eurheartj/ehab368. PMID: 34447992

### **Describe previous experience within the HFA, ESC and/or your National Cardiac/ HF Society**

*150 words maximum*

I am a Fellow of the Heart Failure Association.

I was an active member of the HFA Board from 2016-2020. I contributed to the growth and development with the creation of two new study groups which I chaired during that period leading to the production of several HFA position statements in the fields of Takotsubo syndrome and Cardio-Oncology.

I was also a taskforce member of the ESC 2021 heart failure guidelines.

I am currently Chair of the ESC Council of Cardio-Oncology and will finish this term in August 2024.

### **Why are you motivated to join the HFA Board or Nominating Committee?**

*150 words maximum*

I am familiar with the governance processes of the HFA and I wish to contribute to help the future of the HFA by overseeing the appropriate transparent elections.

### **How will you combine your HFA position with your daily clinical/research workload?**

*80 words maximum*

I can commit to attend the HFA Nominations Committee meetings