



Alexandre AVRAN

EXPERIENCES

Cardiology specialty

Director of Chronic Total Occlusion (CTO) and Complete Higher Risk Indicated Percutaneous Coronary Intervention (CHIP) program
Louis Pasteur Clinic - Essey les Nancy
Since 2020

Director of CTO and CHIP program
Arnault Tzanck Institute - Saint Laurent du Var (Nice)
2016 - 2019

Director of CTO and CHIP program
Clairval Marseille Private Hospital and Marignane Clinic
2004 - 2016

Intern and assistant - Head of Clinic, Timone Hospital, cardiology division (Pr. Bory), interventional cardiology department (Pr. Bonnet)
1998 - 2004

Clinical expertise

Course director of the International Congress MultiLevel CTO course
Since 2016

Board member of the CFCI (Congrès Francophone de Cardiologie Interventionnelle)
Since 2020

Board member, Euro CTO
Since 2014

Active member, Euro CTO
Since 2011

Speaker for graduate and undergraduate students in interventional cardiology
Since 2017

Responsible for training in the field of chronic occlusion at national and international level (Algeria, Germany, Saudi Arabia, Belgium, Egypt, Israel, Lebanon, Morocco, Slovenia, Tunisia, Ukraine, etc.)
Since 2011

Invited speaker in more than 100 national and international congresses with more than 50 live cases (list attached)

Activities in the sports field

Federal boxing doctor (13 World Championships)
2002 - 2018

Doctor of the professional teams of Istres football club Ligue 2 and Ligue 1
2000 - 2004

Doctor of the professional team of the Olympique de Marseille Ligue 1 and European Cup
2005 - 2006

Doctor in charge of the Olympic swimming team at the Cercle des Nageurs in Marseille
2000 - 2016

15 lot. Les Féraud
13700 Marignane

0442883906

RPPS: 10003415089

TRAINING

Clinical Researches

President of the MultiLevel CTO Academy (development of international studies and scientific research)
Since 2020

DEA of Anthropology directed by Pr. O. Dutour. Medicine Science department of Marseille (UMR 6578)
2001

Master's degree in biological and medical sciences - Cochin Port-Royal University
1990

Post-doctoral training

Science Master of Sports Medicine
Marseille University
2002

Interventional Cardiology Certification
2001

University courses

Medical Residency Marseille University
1993

School of Medicine Paris
1987 - 1992

VOLUNTEERING

Creation and Presidency of the MultiLevel CTO Foundation
Since 2020

Pro bono interventions in different Egyptian hospitals
Since 2016

Invited speaker

2021

Egypt Webinar ICICS
Lebanon Webinar CTO
Paris High Tech
New York CTO connect

2020

Egypt Cardio step
India Webinar CTO
Brazil CTO summit
Marseille High Tech
New York CTO summit
Berlin Euro CTO
France 4 webinars CTO
Paris MLCTO
Paris CFCI
Paris DIU Interventional Cardiology
Paris GRCI

2019

Jeddah IMC ADR
Jeddah IMC nightmare in CTO
Seoul Korean CTO Euro CTO trial presentation
Marseille High Tech tips and trick in antegrade CTO
Marseille High Tech departure strategy for CTO
New York CTO summit Live commentator
San Francisco TCT epicardial complication and management
Kraków ADR in practice
Cordoba Spanish CTO
Paris CFCI
Marseille High Tech
Nice MLCTO
Nagoya CCT Japan CTO
Lublin
Istanbul Turkish CTO
Amsterdam CTO
Suisse St GAL
Vienna CTO meeting
France APPAC
Turin

2018

Jeddah IMC ADR technical
Marseille High Tech CTO and passion
Marseille High Tech accès à la branche fille
Torino CTO summit Avoid mistake in retrograde approach
Nice T How to start a CTO program
Cairo CTO summit How to read a CTO angiogram
Cairo CTO AWE
Cairo ADR technical
Paris EuroPCR The day after a CTO
France APPAC CenterCross technical
Nice MLCTO It happens to me
Toulouse Euro CTO Ostial RCA CTO
Barcelona OMG ADR How When
St Florent CTO fashion or benefit

Paris CNCF which patients for CTO
Paris DIU retrograde for which patients
Seoul KCTO summit

2017

Jeddah IMC Ambiguous proximal cap
Jeddah IMC CTO and Angiography
Marseille High Tech Indication des cathéters double lumière dans les CTO
Paris GACI the 3 CTO rules not the be broken
Biarritz APPAC Nouveauté et futur de la CTO
Biarritz APPAC how to approach a CTO lesion
Nice MLCTO Ostial RCA CTO
Zurich Retrograde summit Can we standardize the method
Riga Retrograde CTO a step-by-step approach
Reunion Cardiorun Ping pong technique

2018

Paris How teaching CTO GRCI
Toulouse review of CTO devices JIF CTO
Nice CTO and strategies. National Congress of French Cardiologists
Kraków Poland Angiogram and CTO Euro CTO summit
Nice, France Retrograde approach aster by step method Multi Level CTO course,
Nice, France Ping pong skill in CTO. Multi-Level CTO course
Biarritz France How to be a good CTO proctor APPAC
Cairo Egypt CTO technique
Alexandria Egypt Cardio Alex Antegrade dissection re-entry: step-by-step
Sousse Tunisia Antegrade revascularization new wires and approaches
Cairo Egypt ACIC Tips and Tricks in CTO
Turin, Italia Italian CTO summit. My most teaching case in the Hybrid algorithm
New York CTO summit That's how I do it Antegrade dissection reentry with a 6 French system
Cairo Egypt CTO complications and how to avoid
Marseille France CTO High Tech
Marseille France CTO for the expert High Tech
Jeddah Arabia CTO update from the new guidelines IMC live
Jeddah Arabia Hybrid approach new concept to treat the CTO, patient selection IMC live
Marseille France Que faire en cas de lésion résistante High Tech
Marseille France How to analyse CTO lesions High Tech
Biarritz France CTO techniques through APPAC clinical cases
Paris Les occlusions chroniques DIU cardiologie interventionnelle
Marseille CTO traitement et actualités Amical
Paris All operators can do antegrade GRCI CTO
Marseille France When and how to use more aggressive High Tech techniques
Zurich Retrograde step by step Retrograde summit

Live operator CTO International congresses

CTO Live Aid Nancy
MLCTO Paris
CFCI Lille

2020

2019

Istanbul Turkish CTO
France JIF CTO
Amsterdam CTO meeting
Suisse Swiss CTO summit
Paris CFCI
Euro CTO Berlin
Pologne Lublin
Jeddah IMC
France MLCTO
Turin CTO summit

New York CTO summit
Jeddah IMC
Turin CTO summit
France MLCTO
Cairo CTO cardio step
Euro CTO Toulouse
Barcelone OMG
Nancy JIF CTO
Paris CFCI
Madrid CTO fundamental

2018

2017

New York CTO summit
Jeddah IMC
Turin CTO summit
France MLCTO
Zurich Retrograde CTO summit
Riga CTO meeting
Lublin Polish CTO summit

Toulouse JIF CTO
Turin CTO summit
Nice MLCTO
Jeddah IMC
Zurich Retrograde CTO summit

2016

Publications

[Guiding Principles for Chronic Total Occlusion Percutaneous Coronary Intervention.](#)

Brilakis ES, Mashayekhi K, Tsuchikane E, Abi Rafeh N, Alaswad K, Araya M, **Avran A**, Azzalini L, Babunashvili AM, Bayani B, Bhindi R, Boudou N, Boukhris M, Božinović NŽ, Bryniarski L, Bufe A, Buller CE, Burke MN, Büttner HJ, Cardoso P, Carlino M, Christiansen EH, Colombo A, Croce K, Damas de Los Santos F, De Martini T, Dens J, Di Mario C, Dou K, Egred M, ElGuindy AM, Escaned J, Furkalo S, Gagnor A, Galassi AR, Garbo R, Ge J, Goel PK, Goktekin O, Grancini L, Grantham JA, Hanratty C, Harb S, Harding SA, Henriques JPS, Hill JM, Jaffer FA, Jang Y, Jussila R, Kalnins A, Kalyanasundaram A, Kandzari DE, Kao HL, Karpaliotis D, Kassem HH, Knaapen P, Kornowski R, Krestyaninov O, Kumar AVG, Laanmets P, Lamelas P, Lee SW, Lefevre T, Li Y, Lim ST, Lo S, Lombardi W, McEntegart M, Munawar M, Navarro Lecaro JA, Ngo HM, Nicholson W, Olivecrona GK, Padilla L, Postu M, Quadros A, Quesada FH, Prakasa Rao VS, Reifart N, Saghatelian M, Santiago R, Sianos G, Smith E, C Spratt J, Stone GW, Strange JW, Tammam K, Ungi I, Vo M, Vu VH, Walsh S, Werner GS, Wollmuth JR, Wu EB, Wyman RM, Xu B, Yamane M, Ybarra LF, Yeh RW, Zhang Q, Rinfret S. *Circulation*. 2019 Jul 30;140(5):420-433. doi: 10.1161/CIRCULATIONAHA.119.039797. Epub 2019 Jul 29. PMID: 31356129

[Percutaneous recanalisation of chronic total occlusions: 2019 consensus document from the EuroCTO Club.](#)

Galassi AR, Werner GS, Boukhris M, Azzalini L, Mashayekhi K, Carlino M, **Avran A**, Konstantinidis NV, Grancini L, Bryniarski L, Garbo R, Bozinovic N, Gershlick AH, Rathore S, Di Mario C, Louvard Y, Reifart N, Sianos G. *EuroIntervention*. 2019 Jun 20;15(2):198-208. doi: 10.4244/EIJ-D-18-00826. PMID: 30636678

[Latest developments in chronic total occlusion percutaneous coronary intervention.](#)

Nikolakopoulos I, Vemou E, Karacsonyi J, Xenogiannis I, Werner GS, Gershlick AH, Rinfret S, Yamane M, **Avran A**, Egred M, Garcia S, Burke MN, Brilakis ES. *Expert Rev Cardiovasc Ther*. 2020 Jul;18(7):415-426. doi: 10.1080/14779072.2020.1787153. Epub 2020 Jul 13. PMID: 32594784

[EuroCTO Club 2018 meeting: "Experts Live" in Toulouse.](#)

Boudou N, **Avran A**, Garbo R, Lefèvre T, Hildick-Smith D, Reifart N, Galassi AR, Mattesini A, Dini CS, Brilakis ES, Yamane M, Sianos G, Mashayekhi K, Karpaliotis D, DeMartini T, Werner GS, Di Mario C. *EuroIntervention*. 2019 Apr 5;14(18):e1814-e1817. doi: 10.4244/EIJV14I18A319. PMID: 30956181

[The Experts "Live" Workshop of the EuroCTO Club 2017, Berlin.](#)

Bufe A, Di Mario C, Landmesser U, Gessner MM, Sianos G, Garbo R, Dini CS, Lauer B, Boudou N, Grancini L, **Avran A**, Lauten A, Mashayekhi K, Hildick-Smith D, Escaned J, Buettner HJ, Reifart N, Lapp H, Galassi AR, Werner GS. *EuroIntervention*. 2018 Apr 20;13(17):1987-1990. doi: 10.4244/EIJV13I17A324. PMID: 29674299

[\[Acute pericarditis and stent infection\].](#)

Hammami R, **Avran A**, Abid L, Kammoun S. *Med Mal Infect*. 2016 Oct;46(7):398-399. doi: 10.1016/j.medmal.2016.05.004. Epub 2016 Jun 28. PMID: 27368420

[Solving Challenging Situations and Complications in Everyday Percutaneous Coronary Intervention Using Chronic Total Occlusion Techniques.](#)

Azzalini L, Tzanis G, Mashayekhi K, Uretsky BF, Ojeda S, Pan M, Rinfret S, **Avran A**, Alaswad K, Yamane M, Karpaliotis D, Brilakis ES, Carlino M, Ybarra LF. *J Invasive Cardiol*. 2020 Mar;32(3):E63-E72. PMID: 32123144

[Temporal Trends in Chronic Total Occlusion Interventions in Europe.](#)

Konstantinidis NV, Werner GS, Deftereos S, Di Mario C, Galassi AR, Buettner JH, **Avran A**, Reifart N, Goktekin O, Garbo R, Bufe A, Mashayekhi K, Boudou N, Meyer-Geßner M, Lauer B, Elhadad S, Christiansen EH, Escaned J, Hildick-Smith D, Carlino M, Louvard Y, Lefèvre T, Angelis L, Giannopoulos G, Sianos G; Euro CTO Club. *Circ Cardiovasc Interv*. 2018 Oct;11(10):e006229. doi: 10.1161/CIRCINTERVENTIONS.117.006229. PMID: 30354635

[Utility of Intravascular Ultrasound in Percutaneous Revascularization of Chronic Total Occlusions: An Overview.](#)

Galassi AR, Sumitsuji S, Boukhris M, Brilakis ES, Di Mario C, Garbo R, Spratt JC, Christiansen EH, Gagnor A, **Avran A**, Sianos G, Werner GS. *JACC Cardiovasc Interv*. 2016 Oct 10;9(19):1979-1991. doi: 10.1016/j.jcin.2016.06.057. PMID: 27712732

[Post-stenting assessment of Re-endothelialization with optical Frequency domain imaging after Chronic Total Occlusion procedure: The PERFE-CTO Study Design and Rationale.](#)

Levesque S, Gamet A, Lattuca B, Lemoine J, Bressollette E, **Avran A**, Motreff P, Boudou N, Faurie B, Christiaens L. *Cardiovasc Revasc Med.* 2020 Jun;21(6):760-764. doi: 10.1016/j.carrev.2019.10.019. Epub 2019 Oct 25. PMID: 31679911

[Derivation and Validation of a Chronic Total Coronary Occlusion Intervention Procedural Success Score From the 20,000-Patient EuroCTO Registry: The EuroCTO \(CASTLE\) Score.](#)

Szjgyarto Z, Rampat R, Werner GS, Ho C, Reifart N, Lefevre T, Louvard Y, **Avran A**, Kambis M, Buettner HJ, Di Mario C, Gershlick A, Escaned J, Sianos G, Galassi A, Garbo R, Goktekin O, Meyer-Gessner M, Lauer B, Elhadad S, Bufe A, Boudou N, Sievert H, Martin-Yuste V, Thuesen L, Erglis A, Christiansen E, Spratt J, Bryniarski L, Clayton T, Hildick-Smith D. *JACC Cardiovasc Interv.* 2019 Feb 25;12(4):335-342. doi: 10.1016/j.jcin.2018.11.020. Epub 2019 Jan 30. PMID: 30711551

[Impact of prior coronary artery bypass grafting in patients undergoing chronic total occlusion-percutaneous coronary intervention: Procedural and clinical outcomes from the REgistry of Crossboss and Hybrid procedures in France, the Netherlands, Belgium, and United Kingdom \(RECHARGE\).](#)

Budassi S, Zivelonghi C, Dens J, Bagnall AJ, Knaapen P, **Avran A**, Spratt JC, Walsh S, Faurie B, Agostoni P; of all the RECHARGE investigators. *Catheter Cardiovasc Interv.* 2021 Jan 1;97(1):E51-E60. doi: 10.1002/ccd.28954. Epub 2020 May 5. PMID: 32369681

[An algorithmic approach for the management of ostial right coronary artery chronic total occlusions.](#)

Avran A, Boukhris M, Drogoul L, Brilakis ES. *Catheter Cardiovasc Interv.* 2018 Sep 1;92(3):515-521. doi: 10.1002/ccd.27603. Epub 2018 Mar 30. PMID: 29602259

[Clinical implications of periprocedural myocardial injury in patients undergoing percutaneous coronary intervention for chronic total occlusion: role of antegrade and retrograde crossing techniques.](#)

Toma A, Stähli BE, Gebhard C, Gick M, Minners J, Mashayekhi K, **Avran A**, Ferenc M, Buettner HJ, Neumann FJ. *EuroIntervention.* 2018 Apr 20;13(17):2051-2059. doi: 10.4244/EIJ-D-17-00338. PMID: 28943496

[The Hybrid Algorithm for Treating Chronic Total Occlusions in Europe: The RECHARGE Registry.](#)

Maeremans J, Walsh S, Knaapen P, Spratt JC, **Avran A**, Hanratty CG, Faurie B, Agostoni P, Bressollette E, Kayaert P, Bagnall AJ, Egred M, Smith D, Chase A, McEntegart MB, Smith WH, Harcombe A, Kelly P, Irving J, Smith EJ, Strange JW, Dens J. *J Am Coll Cardiol.* 2016 Nov 1;68(18):1958-1970. doi: 10.1016/j.jacc.2016.08.034. PMID: 27788851

[One-Year Clinical Outcomes of the Hybrid CTO Revascularization Strategy After Hospital Discharge: A Subanalysis of the Multicenter RECHARGE Registry.](#)

Maeremans J, **Avran A**, Walsh S, Knaapen P, Hanratty CG, Faurie B, Agostoni P, Bressollette E, Kayaert P, Smith D, Chase A, McEntegart MB, Smith WHT, Harcombe A, Irving J, Ladwiniec A, Spratt JC, Dens J; RECHARGE Investigators. *J Invasive Cardiol.* 2018 Feb;30(2):62-70. Epub 2017 Nov 15. PMID: 29138365

[Towards a contemporary, comprehensive scoring system for determining technical outcomes of hybrid percutaneous chronic total occlusion treatment: The RECHARGE score.](#)

Maeremans J, Spratt JC, Knaapen P, Walsh S, Agostoni P, Wilson W, **Avran A**, Faurie B, Bressollette E, Kayaert P, Bagnall AJ, Smith D, McEntegart MB, Smith WHT, Kelly P, Irving J, Smith EJ, Strange JW, Dens J. *Catheter Cardiovasc Interv.* 2018 Feb 1;91(2):192-202. doi: 10.1002/ccd.27092. Epub 2017 May 4. PMID: 28471074

[Fully Transradial Versus Transfemoral Approach for Percutaneous Intervention of Coronary Chronic Total Occlusions Applying the Hybrid Algorithm: Insights From RECHARGE Registry.](#)

Bakker EJ, Maeremans J, Zivelonghi C, Faurie B, **Avran A**, Walsh S, Spratt JC, Knaapen P, Hanratty CG, Bressollette E, Kayaert P, Bagnall AJ, Egred M, Smith D, McEntegart MB, Smith WHT, Kelly P, Irving J, Smith EJ, Strange JW, Dens J, Agostoni P. *Circ Cardiovasc Interv.* 2017 Sep;10(9):e005255. doi: 10.1161/CIRCINTERVENTIONS.117.005255. PMID: 28851720

[Antegrade Dissection and Reentry as Part of the Hybrid Chronic Total Occlusion Revascularization Strategy: A Subanalysis of the RECHARGE Registry \(Registry of CrossBoss and Hybrid Procedures in France, the Netherlands, Belgium and United Kingdom\).](#)

Maeremans J, Dens J, Spratt JC, Bagnall AJ, Stuijzand W, Nap A, Agostoni P, Wilson W, Hanratty CG, Wilson S, Faurie B, **Avran A**, Bressollette E, Egred M, Knaapen P, Walsh S; RECHARGE Investigators. *Circ Cardiovasc Interv.* 2017 Jun;10(6):e004791. doi: 10.1161/CIRCINTERVENTIONS.116.004791.PMID: 28625964

[Radiation Exposure for Percutaneous Interventions of Chronic Total Coronary Occlusions in a Multicenter Registry: The Influence of Operator Variability and Technical Set-up.](#)

Werner GS, **Avran A**, Mashayekhi K, Reifart J, Galassi AR, Boudou N, Meyer-Gessner M, Garbo R, Buettner JH, Bufe A, Spratt JC, Bryniarski L, Kalnins A, Lismanis A, Christiansen EH, Martin-Yuste V, Isaz K, Sianos G, Gagnor A, di Mario C, Hildick-Smith D, Serra A, Grancini L, Reifart N. *J Invasive Cardiol.* 2021 Feb 11:JIC20210211-1. Online ahead of print. PMID: 33570501

[Relevance of the study of convergence method in assessing paraprothhetic mitral regurgitation by transthoracic echocardiography.](#)

Alexandre Avran MD, Stéphane Arquès, MD, Pierre Dieuzaide, MD, Ange Ferracci, MD, Marc Lambert, MD, Gilbert Habib, MD, Pierre Ambrosi, MD, and Roger Luccioni, MD, FACC. Department of Cardiology, La TIMONE Hospital, Marseille, France.

[L'étude de la zone de convergence est-elle applicable à la quantification des insuffisances mitrales paraprothétiques \(abstract\).](#)

S. Arques, A. Avran, P. Dieuzaide, A. Ferracci, J.L. Bonnet, G. Habib, R. Luccioni
Arch Mal Cœur dec 99

[Complications aiguës de l'angioplastie coronaire : prévention et prise en charge.](#)

Avran, J. Quilici, L. Fourcade J.L Bonnet, et M. Bory
Arch Mal Cœur 1999 ; 92 : 1571-7