Topic	Registry Name	Geography coverage	Time	Research objectives	Participant criteria	Endpoint	Research type	Data collection basement	Initiator or funding	Registry working group	Ethic committee approval	Informed consent	Compulsory
ICD Registry	NCDR ICD Registry [1]	US	04.2006-	To provide important insights into clinical and procedural characteristics of patients receiving an ICD in US	N.a.	N.a.	Prospective	Multicenter	American College of Cardiology Foundation and the Heart Rhythm Society	Working group	N.a.	N.a.	No
	Multicenter Pediatric ICD Registry [2]	US	03.1992-03.2004	To examine a current-era cohort using a long-term multicenter retrospective approach to identify a large group of pediatric and CHD patients with ICDs.	Yes	N.a.	Retrospective	Multicenter	N.a.	N.a.	Local review board	N.a.	No
	The Ontario ICD Database [3]	CA	02.2007-08.2009	To examine the frequency of complications and their predictors.	N.a.	N.a.	Prospective	Multicenter	Ontario Ministry of Health and Long-term care	Local electrophysiologist and a trained research coordinator	N.a.	No	Yes
	The Medtronic ICD Registry [4]	Latin A	01.2005-08.2007	To summarize experience in patients with Chagas' disease and life-threatening ventricular arrhythmias implanted with ICDs and to classify the type of spontaneous ventricular tachyarrhythmia presented and the respective therapy provided by the device.	N.a.	Multiple shocks or adverse event	Retrospective	Multicenter	Medtronic Inc. Latin America Operations	N.a.	Local ethics committee	Yes	No
	ICD-registry Ludwigshafen [5]	DE	1992-05.2008	N.a.	N.a.	N.a.	Prospective	Single center	N.a.	N.a.	N.a.	Yes	No
	The German DEVICE registry [6]	DE	03.2007-04.2010	To gather information on overall mortality, re-hospitalization, early and late clinical and device complications, heart failure development, incidence of ICD shock delivery, change of medication and necessary device upgrading procedures.	Only data on new implants	N.a.	Prospective	Multicenter	Institut für Herzinfarktforschung	DEVICE registry office	N.a.	Yes	No
	Spanish ICD Registry [7]	ES	2005-	To determine how ICDs are currently used in Spain.	N.a.	N.a.	Prospective	N Multicenter	Spanish Society of Cardiology	Working group on ICDs	N.a.	N.a.	No
	French OPERA registry [8]	FR	05.2002-09.2008	To study the determinants of FAT and FIT therapies delivered by single-, dual-, and triple-chamber ICD	Yes	N.a.	Prospective	Single center	Guidant/Boston Scientific	N.a.	Approved by CNIL	Yes	No
	Stidefix Registry [9]	FR	03.2007-	To respond to the legal mandate of the French health authorities requiring the enrolment of all new ICD implants in a national registry by the medical centres, to create a database enabling analysis of the French practices in the area of cardiac pacing and defibrillation, and to provide a computer-based tool to the implanting centres for managing implantations.	Yes	N.a.	Prospective	Multicenter	Biotronik France, Boston Scientific France, Medtronic France, Saint Jude Medical France, and Sorin Group France	N.a.	N.a.	Yes	No
	The LEADER registry [10]	FR	N.a.	To determine the DT procedures used in everyday practice, to compare the characteristics of patients with or without DT, and to compare severe adverse events in these two populations during implantation and follow-up.	Yes	N.a.	Prospective	Multicenter	Boston Scientific Corporation, Guidant France SAS	N.a.	Approved by the French Ministry of Scientific Research and the French Privacy Authority	Yes	No
	National Registry on Cardiac Electrophysiology [11]	PRT	N.a.	To provide an overall picture of the situation in Portugal with regard to the number of participating centers and their volume of activity and the number and type of procedures performed, as well as development over time.	N.a.	N.a.	Prospective	N Multicenter	Portuguese Association of Arrhythmology, Pacing and Electrophysiology (APAPE) and the Portuguese Institute of Cardiac Rhythm (IPRC)	N.a.	N.a.	N.a.	No
	EFFORTLESS S-ICD Registry [12]	EU&NZ	06.2009-	To document clinical, system, and patient related outcome data from S-ICD patients implanted since the commercial release of the S-ICD.	Yes	N.a.	P&R	In Multicenter	Cameron Health	N.a.	N.a.	Yes	No
	The European LQTS ICD Registry [13]	Global	2002-	To assess the current indications to implant according to clinical history, response to previous therapy, and specific genotype and to evaluate the clinical course after ICD implantation.	Yes	N.a.	P&R	In Multicenter	Medtronic Bakken Research Center in the Netherlands and Boston Scientific	Working Group	Local institutional review boards	Yes	No

	The Israeli ICD Registry [14]	IL	07.2010-	N.a.	N.a.	All-cause mortality. VT/VF, HF, ATP or shock	Prospective	Multicenter	N.a.	Working Group	Ethics committee of each participating institution	Yes	Yes
	The Japanese Cardiac Device Treatment Registry [15]	JP	08.2006-	To record current clinical situation of cardiac implantable defibrillator devices.	N.a.	N.a.	Prospective	Multicenter	The Japanese Heart Rhythm Society	JHRS office	Each institution	Yes	N.a.
	The Gulf ICD Registry [16]	AGR	10.2011-07.2016	To describe the characteristics and the outcomes of patients receiving ICDs in the Arab Gulf region.	A new ICD implant	All-cause mortality, adverse event	Prospective	Multicenter	Conducted under the auspices of the Gulf Heart Association, Gulf Heart Rhythm Society, and Saudi Heart Rhythm Society. Funded by Medtronic Inc. and Boston Scientific, Inc	N.a.	Per local ethics regulations	Yes	N.a.
	ICD registry in Taiwan [17]	TWN	1998-2009	To investigate the long-term prognosis and the predictors of mortalities among ICD recipients in Taiwan.	N.a.	The occurrence of all-cause mortality	Retrospective	Multicenter	N.a.	N.a.	Approved by the institutional review board	N.a.	No
	A Multicenter French Registry [18]	FR	2002-2012	To determine the proportion of female ICD recipients, and differences in terms of characteristics at implant and outcomes in women compared to men.	At least 18 years old at the time of ICD implantation, first implantation	Appropriate therapies, early complications, inappropriate shocks, overall and specific mortalities.	Retrospective	Multicenter	Public sources	Steering Committee:	By the French data protection committee	Yes	No
Pacemaker Registry	German Pacemaker Registry [19]	DE	1982-	N.a.	N.a.	N.a.	Prospective	Multicenter	N.a.	N.a.	N.a.	N.a.	No
	Danish Pacemaker Register[20]	DK	01.1982-	To record all implantations and removals of PPM and PM-leads.	N.a.	N.a.	Prospective	N Multicenter	N.a.	N.a.	N.a.	N.a.	Yes
	Spanish Pacemaker Registry [21]	ES	1997-	To report most relevant characteristic in Spain.	N.a.	N.a.	Prospective	N Multicenter	Spanish Society of Cardiology	Working group	N.a.	N.a.	No
	Single Academic Pacemaker Center [22]	GR	01.1989-06.2006	To evaluate changes in indications for pacing and pacing modes.	N.a.	N.a.	Retrospective	Single center	N.a.	N.a.	N.a.	N.a.	No
	Nigeria Pacemaker Registry [23]	NGA	01.2008-	N.a.	N.a.	N.a.	Prospective	Single center	N.a.	N.a.	Ethics committee	Yes	No
CRT Registry	The CRT RENEWAL [24]	US	N.a.	To predict all-cause mortality as a means to help better manage this group of patients.	Specific device	N.a.	Prospective	Multicenter	Boston Scientific CRM	N.a.	Local institutional review boards	Yes	No
	Single center registry on prognosis in CRT [25]	NLD	N.a.	To better understand survival benefit in patients treated with CRT.	Yes	N.a.	Prospective	Single center	N.a.	N.a.	N.a.	N.a.	No
	The InSync/InSync ICD Italian Registry [26]	IT	1999-	To evaluate the effectiveness of CRT alone or in combination with an ICD (CRT-D).	Yes	All-cause mortality	Prospective	Multicenter	N.a.	N.a.	By ethics committees of each participating center	Yes	No
	Single center CRT registry [27]	SWE	1998-2008	N.a.	Yes	N.a.	Retrospective	Single center	The Stockholm County Council	N.a.	Approved by the local ethics committee	N.a.	No
	J-CRT [28]	JP	04.2006-03.2009	To identify both ability of echocardiographic parameters to detect CRT volume responders and relation of these parameters with clinical outcomes.	Yes	Death; adverse event	Prospective	Multicenter	N.a.	J-CRT committee, 2-day workshop training	each institution	Yes	No
	The Contak Italian Registry [29]	IT	2004-2007	To compare the long-term prognosis of patients who received CRT-D or CRT-P according to class IA	Yes	Death	Prospective	Multicenter	N.a.	N.a.	Approved by the Local Ethics	Yes	No

				recommendations of the European Society of Cardiology (ESC).							Committees		
	A prospective CRT registry [30]	NL	2005-2009	To assess the independent predictive value of apical rocking on long-term clinical outcomes in a large study population.	CRT-D	MACE	Prospective	Single center	N.a.	N.a.	the institutional review board	N.a.	No
CIED Registry	The REPLACE Registry [31]	US	07.2007-06.2009	Risk related to generator replacements with lead generator.	Yes	6 months	Prospective	Multicenter	Funded by BIOTRONIK	The REPLACE Registry Steering Committee, Clinical Events committee, Novella Clinical	Each institution	Yes	No
	The HomeGuide Registry [32]	IT	N.a.	To provide an organizational model for implementing remote monitoring of CIEDs in daily clinical practices.	N.a.	N.a.	Prospective	Multicenter	Biotronik Italia	Steering committee	An institutional review board	Yes	No
	Registry of Emilia Romagna on Arrhythmia Interventions [33]	IT	07.2005-	To collect clinical and implant data for all cardiac devices implanted in the Emilia-Romagna region.	N.a.	N.a.	Prospective	Multicenter	The regional health care and social agency of Emilia-Romagna	N.a.	Each institution	Yes	No
	Italy PM and ICD Registry [34]	IT	2001-	To evaluate the effects in clinical practice of the major guidelines.	N.a.	N.a.	Prospective	Multicenter	Italian Society of Arrhythmology and Cardic Pacing (AIAIC)	N.a.	N.a.	N.a.	No
	Swedish PM and ICD Registry [35]	SWE	PM: 1989- ICD: 2004-	To provide a real time picture of the use of CIED in clinical practice.	N.a.	N.a.	Prospective	N Multicenter	Swedish Heart Lung-Foundation & Stockholm County council	Registry Administers	Each institution	N.a.	Yes
	The Kaiser Permanente-Cardiac Device Registry [36]	US	01.2007-12.2013	To describe key elements, clinical outcomes, and potential uses of the Kaiser Permanente-Cardiac Device Registry	N.a.	N.a.	Prospective	Multicenter	N.a.	N.a.	N.a.	Yes	Yes
Stent Registry	Guthrie Health Off-label Stent (GHOST) Registry [37]	US	07.2001-12.2007	To compare long-term safety and effectiveness of DES versus BMS in patients undergoing PCI for NSTEMI.	Yes	MACE	Prospective	Single center	The Guthrie Health Foundation	N.a.	N.a.	N.a.	No
	The prairie "real world" stent registry [38]	US	05.2003-07.2007	To compare long-term mortality for DES versus BMS in patients with SVG disease from our large “real world” cohort of stent patients	Yes	All-cause mortality, MACE	Retrospective	Single center	N.a.	N.a.	N.a.	N.a.	No
	HMORN-Stent Registry [39]	US	2004-2007	All patients who underwent PCI with a DES	N.a.	N.a.	Prospective	Multicenter	N.a.	N.a.	N.a.	N.a.	No
	POLAR Registry [40]	Latin A	11.2008-07.2010	To clinically evaluate the Promus stent in patients in clinical practice.	No	N.a.	Prospective	Multicenter	Boston Scientific	The Cardiovascular Research Centre	Ethics Committees approval	Yes	No
	AUTAX (Austrian Multivessel TAXUS-Stent) registry [41]	AUT	06.2004-	To evaluate patients with multivessel CAD with/without previous PCI or concomitant cardiac surgery with possible complete revascularization by PCI, and treated solely with multiple TAXUS Express stent implantation in a “real world” setting, and to report the short, medium, and long term angiographic and clinical outcomes	No	N.a.	Prospective	Multicenter	N.a.	N.a.	Austrian Society of Cardiology and the institutional review committees approval	Yes	No
	the Leipzig SUPERA Popliteal Artery Stent Registry [42]	DE	01.2008-04.2010	To evaluate the efficacy and integrity of this new nitional stent system in complex popliteal artery obstructions, implementing a clinically established systematic follow-up regime with stent fracture screening and evaluation for restenosis.	No	N.a.	Retrospective	Single center	N.a.	N.a.	N.a.	Yes	No
	German Cypher Stent Registry [43]	DE	04.2002-	To determine the safety, effectiveness and 6-month and long term follow-up data of the SES in clinical practice and factors associated with clinical events as well as the need for TVR during follow-up.	No	N.a.	Prospective	Multicenter	DGK;DNK;ALKK, Cordis Corporation, J&J	Steering committee	N.a.	Yes	No
	German DES.DE Registry [44]	DE	10.2005-10-2006	To compare the effects of PES, SES and BMSs in a “real-world” setting	Yes	N.a.	Prospective	Multicenter	DGK;DNK;ALKK	Steering committee	N.a.	Yes	No
	WAR-STENT registry [45]	IT	11.2008-06.2010	To investigate the contemporary management of patients on warfarin undergoing PCI-S, and to	No	N.a.	Prospective	Multicenter	N.a.	N.a.	Ethic committee	Yes	No

				determine the incidence of adverse events in a real-world setting.									
	The Tacrolimus-Eluting STent (TEST) registry [46]	IT	02.2005-08.2005	To investigate the safety and efficacy of this particular TES in an unselected population of patients, without the restrictive clinical or angiographic criteria applicable to previous trials.	Yes	MACE	Prospective	Single center	N.a.	N.a.	N.a.	N.a.	No
	Artery Angioplasty-Stent Registry III [47]	UK	2005-2008	To set standards of practice of interventional radiologists carrying out iliac interventional procedures.	No	N.a.	Prospective	Multicenter	BSIR	Working group	N.a.	N.a.	No
	The Frontier stent registry [48]	EU	05.2002-10.2002	To investigate the safety and performance of this device for the treatment of de novo or restenotic bifurcation lesions.	Yes	MACE	Prospective	Multicenter	Guidant Corp	The data and safety monitoring board and clinical events committee	N.a.	N.a.	No
	The China CYPHER Select registry [49]	CN	07.2004-08.2005	To evaluate the safety and efficacy or the CYPHER Select SES	No	MACE, cardiac death, nonfatal MI, TLR	Prospective	Multicenter	Chinese Society of Cardiology	Data coordinating center and core laboratory	N.a.	Yes	No
	A novel computer based stent registry [50]	IDN	01.2002-12.2011	To evaluate the feasibility of a computer based stent registry with patient directed automated information system to prevent retained double J stents.	No	N.a.	Retrospective	Single center	N.a.	N.a.	N.a.	N.a.	No
	The j-Cypher Registry [51]	JP	08.2004-11.2006	To investigate the safety of DES	N.a.	Death	Prospective	Multicenter	Cordis Cardiology Japan and J&J	Data management center	N.a.	Yes	No
	the DATE registry [52]	KR	12.2006-03.2008	To determine the feasibility of 3-month dual antiplatelet therapy after ZES implantation in relatively low risk patients with coronary artery disease.	Yes	Death	Prospective	Multicenter	IN-SUNG Foundation	Steering committee	Institutional review board	Yes	No
	FOCUS registry [53]	Asia	03.2009-02.2010	To evaluate the safety and efficacy of a second-generation cobalt-chromium sirolimus-eluting stent in routine treatment of patients with coronary artery disease.	Yes	MACE	Prospective	Multicenter	MicroPort Medical	An independent clinical research organization	ethics committees	Yes	No
	The 'all comer' Coroflex Please drug-eluting stent registry in Europe and Asia [54]	EU&ASIA	09.2006-02.2008	To further document the safety and efficacy of the Coroflex Please paclitaxel-eluting stent.	Yes	MACE	Prospective	Multicenter	N.a.	Data management group	N.a.	N.a.	No
	DESERT (international Drug-Eluting Stent Event Registry of Thrombosis) [55]	Global	04.2003-	To identify clinical, procedural, and angiographic correlates of late/very late DES thrombosis as well as to determine the clinical outcomes of these events.	Yes	N.a.	Retrospective	Multicenter	N.a.	N.a.	N.a.	N.a.	No
	The TIMI 38 Coronary Stent Registry (CSR) [56]	Global	07.2007-07.2009	To investigate the DAPT after ACS.	Yes	MACE	Prospective	Multicenter	Daiichi Sankyo Co, Ltd, and Eli Lilly and Co.	N.a.	N.a.	N.a.	No
	E-Five Registry [57]	Global	10.2005-	To documentation of the safety and clinical performance of the Endeavor ZES in real-world and to assess the event rate	Yes	MACE	Prospective	Multicenter	Medtronic Vascular	N.a.	Local ethics committees	Yes	No
	The Korean Multicenter Drug-Eluting Stent Registry [58]	Korea	N.a.	For second-generation biocompatible or biodegradablepolymer coated DES	Stent	Stent-oriented outcomes (target lesion failure [TLF]) and patient-oriented composite outcomes (POCO)	Prospective	Multicenter	N.a.	N.a.	The ethics committee at each participating center	Yes	No
TAVI Registry	The STS/ACC TVT Registry [59]	US	05.2012-	to measure and improve quality of care and patient outcomes in clinical practice and to have a pivotal role in the scientific evidence and surveillance for medical devices	N.a.	N.a.	Prospective	N Multicenter	The Society of Thoracic Surgeons and the American College of Cardiology	The steering committee	N.a.	N.a.	No
	Brazilian TAVI Registry [60]	BR	01.2008-12.2012	To identify the clinical and procedural variables related to PPM implantation after TAVI.	N.a.	N.a.	Prospective	Multicenter	Brazilian society of interventional cardiology	N.a.	N.a.	Yes	No
	The Austrian TAVI	AUT	01.2011-	To monitor TAVI procedures	N.a.	from VARC	Prospective	Multicenter	Austrian Society of	N.a.	The	Yes	No

	Registry [61]								Cardiology, Committee on Interventional Cardiology		institutional Review Board of the Medical University Graz		
	The Belgian TAVI Registry [62]	BE	N.a.	To include and follow-up all consecutive Belgian TAVI procedures.	TAVI was considered by the heart team	N.a.	Prospective	Multicenter	N.a.	No core laboratory	Approved by the institutional Ethics Committee	N.a.	Yes
	The Swiss TAVI registry [63]	CHE	2011-	To assess the safety and efficacy of unselected and consecutive TAVI procedures in Switzerland.	N.a.	from VARC	Prospective	Multicenter	Swiss Heart Foundation, manufactures, the Swiss Working Group of Interventional Cardiology and Acute Coronary Syndromes	Under the lead of Swiss Cardiovascular Center Bern	N.a.	Yes	Yes
	The Bern TAVI Registry [64]	CHE	08.2007-04.2012	N.a.	N.a.	from VARC	Prospective	Single center	N.a.	N.a.	The local ethics committee	Yes	No
	The Aachen TAVI registry [65]	DE	01.2008-	To evaluate the clinical pre-interventional predictors, including aortic valve calcification severity, of 3-year outcome and mortality in a real-world population treated with TAVI.	Yes	N.a.	Prospective	Single center	N.a.	N.a.	N.a.	N.a.	No
	The German TAVI Registry [66]	DE	01.2009-	N.a.	N.a.	N.a.	Prospective	Multicenter	N.a.	N.a.	Yes	No	N.a.
	FRANCE 2 Registry [67]	FR	2010-	To analyze patient characteristics and clinical outcome of performing TAVI.	By a dedicated heart team	Incidence of AKI (acute kidney injury)	Prospective	Multicenter	N.a.	Scientific committee	N.a.	N.a.	No
	The ATHENS TAVR Registry [68]	GR	10.2009-09.2011	To evaluate the procedural, echocardiographic and 30-day clinical outcomes of patients undergoing transfemoral implantation of the newer generation valves in the "real world"; 2) to compare the procedural, echocardiographic and 30 day clinical outcomes of the nonrandomized use of the two available valve types.	Under a systematic workup protocol	from VARC	Prospective	Multicenter	N.a.	N.a.	Each participating centre	Yes	No
	The POL-TAVI registry [69]	POL	2013-	To assess the incidence of moderate-to-severe PVL after TAVI.	Yes	N.a.	Prospective	N Multicenter	N.a.	N.a.	N.a.	N.a.	Yes
	OBSERVANT TAVI Registry [70]	IT	12.2010-	To evaluate and compare short-, medium-, and long-term outcomes in patients undergoing SAVR or TAVI, in terms of both survival and major adverse cardiac and cerebrovascular events, to build a new pre-procedure risk score, specific for the elderly population, and to define specific "indication criteria" to guarantee appropriate patient selection for SAVR or TAVI	Yes	All-cause mortality, MACCE	Prospective	Multicenter	N.a.	Steering group	N.a.	N.a.	No
	The UK TAVI registry [71]	UK	2008-	To create a comprehensive record of all TAVI procedures in UK	N.a.	N.a.	Prospective	Multicenter	NICOR	DMG; The clinical Research Group and the Dataset Group	N.a.	N.a.	No
	The Ibero-American TAVI registry [72]	The Ibero-A	12.2007-05.2012	To find out the indications, early results and survival of TAVI patients	Yes	N.a.	Prospective	Multicenter	Medtronic	The CoreValve Registry committee from ES and PRT	N.a.	Yes	No
	The multi-centre European PARTNER TAVI study [73]	EU	N.a.	To prospectively establish the role of both TF and TA in the high-risk population	Yes	Death, haemodynamic	Prospective	Multicenter	N.a.	N.a.	Ethics committee approval at each center	Yes	No
	Rabin Medical Center TAVR registry [74]	IL	11.2009-08.2013	To report our initial long-term clinical experience with TAVI for "all comer" patients with severe symptomatic AS using currently approved devices.	N.a.	N.a.	Prospective	Single center	N.a.	N.a.	N.a.	N.a.	No
	The Optimized CathEter vAlvular iNtervention	JP	10.2013-12.2014	To evaluate all patients received a Sapien XT bioprosthesis (Edwards Lifesciences, Irvine, CA, USA) via either transfemoral (TF) or transapical	N.a.	VARC-2	Prospective	Multicenter	N.a.	N.a.	N.a.	Yes	No

	(OCEAN-TAVI) registry [75]			approach (TA).								
	A large multicenter TAVI registry [76]	Israel	2008-2014	To evaluate TAVI temporal trends in a large multicenter Israeli registry	STS-PROM	VARC-2	Retrospective	Multicenter	N.a.	3 centers	N.a.	N.a.	No
	the Italian CoreValve registry [77]	IT	2007-	Describing and improving the use of implantable devices in Italian clinical practice which has already been described elsewhere	N.a.	VARC	Prospective	Multicenter	Medtronic Italy	N.a.	N.a.	N.a.	No
	A Multicenter Spanish Registry [78]	ES	2014-	To assess, in patients with severe AS, the determinants of management and prognosis	Not previous AS intervention	N.a.	Prospective	Multicenter	N.a.	N.a.	By the Ethics Committee	Yes	No
	A Poland single-center registry [79]	PL	2008-2014	To evaluate early- and mid-term clinical outcomes after TAVI in a single-center setting	N.a.	VARC	Prospective	Single center	Fund	A multidisciplinary heart team	By the institutional Ethical Board	N.a.	No
	The Transcatheter Valve Treatment Sentinel Pilot Registry [80]	EU	01.2011-05.2012	To assess and identify predictors of in-hospital outcome and complications of contemporary TAVI practice	No	VARC	Prospective	Multicenter	European Society of Cardiology	The relevant Working Groups and Associations	By the TCVT Registry Executive Committee	Yes	No
	The ROUTE registry [81]	PL	05.2013-06.2014	To determine the feasibility of using Tao access for TAVI procedures employing the Edwards SAPIEN transcatheter heart valve.	TAo	VARC-2	Prospective	Multicenter	N.a.	A cardiac surgeon, an interventional cardiologist, and a cardiologist	N.a.	N.a.	No
	SAPIEN XT Aortic Bioprosthesis Multi-Region Outcome Registry [82]	International	07.2010-11.2011	To evaluate the epidemiology, predictors, and prognostic implications of AF, either pre-existing or new onset, in TAVR patients	SAPIEN XT valve only	VARC	Prospective	Multicenter	Edwards Lifesciences	The local heart team	The local regulatory authorities	Yes	No

Topic	Registry Name	Data collection	Data entry	Data validation	Statistical analysis	Data information	Device type	Procedure type	Follow-up	Website	Patients tracked	Sample size	Limitation
ICD Registry	NCDR ICD Registry [1]	Data collection version	NCDR Web site and personnel	He rigorous Data Quality Reporting (DQR) process ensure data accuracy, monthly site manager meetings, online dashboard	Yes	130 data elements	Single-or dual-chamber ICDs, CRT-D	Implantations and replacement	N.a.	Yes, annual report	N.a.	Most centers	N.a.
	Multicenter Pediatric ICD Registry [2]	Medical records	N.a.	N.a.	Yes	Demographic information, implant electrical parameters, appropriate and inappropriate shock data, and complications	N.a.	N.a.	N.a.	No	No	4 centers, 443 patients	Practice variation between centers; variation between operators in implantation techniques, variances in case mix, ages, and complexity of CHD, follow-up data insufficient
	The Ontario ICD Database [3]	Local electrophysiologist and a trained research coordinator	Into a web-sited registry	Continually assessed by regular review and correspondence with study sties, automated range checks, notification of uncoded data elements, and ongoing random site audits.	Yes	Patient characteristics, indication for the defibrillator, LVEF and implant-related data	ICD, CRT-D, lead	Implantations and generator replacements	Follow-up data is availabe	N.a.	Yes, unique encrypted card number	N.a.	The role of trainee, the location of the procedure, and the number of years in practice of the operator is not available in the registry.
	The Medtronic ICD Registry [4]	Medical records	N.a.	N.a.	Yes	Demographic data, ECG, two-dimensional echocardiogram, and concomitant treatment were reported in all patients	Single-or dual-chamber ICDs, CRT-D	Implantations and replacement	Mean follow-up was 12 months	No	No	507 patients	Possible bias in patient selection, only focused on Medtronic ICDs, the mean follow-up was short.
	ICD-registry Ludwigshafen [5]	N.a.	N.a.	N.a.	Yes	Patient characteristics and ICD shock therapy	ICD	Implantations and generator replacements	Every 3 month, median 3 year	No	No	1411 patients	N.a.
	The German DEVICE registry [6]	Telephone interview, a standard questionnaire	N.a.	N.a.	Yes	Age, gender, underlying heart disease, LVEF, NYHA class, co-morbidities, and medication, type of device and implantation procedure	ICD, CRT-D	Implantations and generator replacements	One-year follow up data	No	No	44 centers, 2812 patients	Long-term development of LV function is missing; no standardized questionnaires were used to analyze the potential change of the quality of life of enrolled patients within 1 year after device implantation.
	Spanish ICD Registry [7]	Data collection form was filled out by each implant team and sent to SEC	Members of the SEC entered data into registry	Data were cleaned by a SEC computer specialist and a member of the WG-ICD.	Yes	Indications, clinical characteristics of the patients, implant parameters, types of device, device programming, and complications	Single-or dual-chamber ICDs, CRT-D	Implantations and replacement	N.a.	Yes, annual report	N.a.	About 85%	N.a.
	French OPERA registry [8]	By the sponsor and an external org	N.a.	N.a.	Yes	The time between device programming and-	ICD, CRT-D	Implantations and generator replacements	3, 6, 12, 18, 24 months after enrolled	N.a.	N.a.	636 patients	Insufficient sample size
	Stidefix Registry [9]	Enrolled online	N.a.	N.a.	Yes	Medical information, indications for ICD implantation, and type of device implanted, and distinguishes first implants from device replacements	Single-dual chamber ICD, and CRT-D	Implantations and generator replacements	N.a.	No	No	66 ceners	N.a.
	The LEADER registry [10]	Data collection at the time of hospital discharge	N.a.	N.a.	Yes	Procedural characteristics, device implantation-related adverse events and device programming	ICD, lead, CRT-D	Implantations and replacement	Followed up at 3-6 months and at 12 months after the implantation	No	No	42 centers	Not consecutive, data were collected on paper and some missing data could not be obtained despite extensive repeated requests to the invetigators.
	National Registry on Cardiac Electrophysiology [11]	Personal contact with the heads of the pacing and electrophysiology laboratories and forms were sent via Email	N.a.	N.a.	Yes	The number and type of diagnostic electrophysiologic studies (EPS) and ablation procedures performed, types of arrhythmia treated by ablation and number and type of ICDs implanted or replaced, including biventricular cardiac	ICD & BiV ICD	Implantations and replacement	N.a.	Yes, annual report	N.a.	18 centers	Lack of an online platform that would facilitate data collection and analysis.

						resynchronization device (BiV ICDs)							
	EFFORTLESS S-ICD Registry [12]	Patients reported outcome	N.a.	N.a.	Yes	Adverse events, spontaneous arrhythmia episodes, and programming changes	N.a.	N.a.	60 months follow-up, first year record	N.a.	N.a.	472	N.a.
	The European LQTS ICD Registry [13]	Prespecified questionnaire	N.a.	N.a.	Yes	Demographics, genotype, personal and family clinical history, ECG measurements, treatment, response to therapy both before and after the ICD implantation, technical and functional characteristics of the devices, delivered therapies, revisions, and device-related complications.	ICDs	Implantations and replacement	Mean observation time for 4.6+3.2 years	No	No	233 patients	Potential time-dependent differences relative to the patients' baseline characteristics or the technical features of devices due to long term, possibly skewed the results due to multicenter nature of the study
	The Israeli ICD Registry [14]	Data were collected at the time of any initial device implantation and upgrade	Entered into a secure, web-based electronic case report form	Assessed by regular review and correspondence, completeness of implantation data was assessed by comparing the registry data with the number of devices provided by the manufacturers	Yes	Demographic and clinical characteristics, indication for defibrillator implantation, comorbidities, laboratory and echocardiographic data, previous medical treatments, device manufacturer, device and lead model, pacing and sensing parameters	ICDs, CRT-D	Implantations and replacement	Annual basis	No	No	07.2010-06.2012: 2811 patients	N.a.
	The Japanese Cardiac Device Treatment Registry [15]	Medical staff record a hard copy data sheet	JHRS office assess to JID-CAD website, and input patient data	N.a.	Yes	Implantation information, patient characteristics and pharmacologic treatment at the time of the implantation	ICD, CRT-D, CRT-P	First and replacements	Every 6 month within 2 years	N.a.	N.a.	60 centers, target populatio n is 800	N.a.
	The Gulf ICD Registry [16]	Data collected on paper Case-report form (CRF)	Enter online using a web-based, custom designed, and password-protected electronic data capture portal.	N.a.	Yes	Baseline demographics, admission characteristics, medical history and risk factors, diagnostic procedures, ICD implant procedure characteristics, ICD programing, adverse events, discharge characteristics, discharge medications.	ICD	First implant	Follow-up schedule will be at the discretion of the implanting physician, which is typically every 3 or 4 months	N.a.	N.a.	1500	Risk to lost follow-up
	ICD registry in Taiwan [17]	N.a.	N.a.	N.a.	Yes	Patient data, including baseline characteristics, clinical comorbidities, primary cardiac diagnosis, the use of anti-arrhythmia drugs and LVEF were registered and collected from 3 sites	ICD	generator replacements	Every 3 months to evaluate	No	No	3 centers, 238 patients	Retrospective study character, Insufficient sample size
	A Multicenter French Registry [18]	Medical record	Co-investigators in charge of the data collection and analysis at each medical center	Data storage, quality control, and statistical analyses by three institutes.	Yes	Comorbidities, the type of ICDs	ICD	First	4-6 months	No	No	5539 patients	Retrospective nature of the registry led to information bias; no central adjudication for classification of appropriate and inappropriate therapies was used.
Pacemaker Registry	German Pacemaker Registry [19]	N.a.	N.a.	N.a.	N.a.	N.a.	Pacemaker	First and replacements	N.a.	Yes	N.a.	N.a.	N.a.
	Danish Pacemaker Register[20]	N.a.	N.a.	N.a.	N.a.	N.a.	Pacemaker	Implantations and generator replacements	N.a.	Yes	N.a.	All 14 centers	N.a.
	Spanish Pacemaker Registry [21]	European Pacemaker Patient Identification Card (EPPIC), information from PM	Using specific software by 2 nurses trained in the monitoring of pacing devices	Refine the data which transferred from the EPPIC	Yes	Age, sex, codes for symptoms, causes, indications, pacing modes, implantations and extractions of leads and generators	Pacemaker, CRT-P	Implantations and generator replacements	In 2013, some included in home	Yes, Annual report, data sent to	Yes	About 35%	N.a.

		suppliers							monitoring/follow-up groups	EUCOMED			
	Single Academic Pacemaker Center [22]	Clinic's archive	Transfer to electronic database	N.a.	Yes	all implants, first or replacements of permanent pacemakers	Pacemaker	First and replacements	N.a.	No	No	2180 patients	No follow-up data are available
	Nigeria Pacemaker Registry [23]	Data storage covers the fields recommended by the European pacemaker patient identification codes	A Microsoft access database	N.a.	Yes	Patients data, implant data and complications	Pacemaker	First and replacements	Median 26 months	No	No	2008-2012 51 patients	N.a.
CRT Registry	The CRT RENEWAL [24]	Data collected at each visit; Minnesota Living with Heart Failure quality of life questionnaire	N.a.	N.a.	Yes	Minnesota Living with Heart Failure QOL Questionnaire, Heart rate variability measures and activity log data	CRT	N.a.	2 weeks, 3, 6, 12 months post-implant visits	No	No	1206 patients from 107 centers	Patients dropped out of the study, lost to follow-up
	Single center registry on prognosis in CRT [25]	Data collected by chart review, device interrogation and telephone contact	N.a.	N.a.	Yes	N.a.	CRT	N.a.	Median 25+19 months	No	No	716 patients	N.a.
	The InSync/InSync ICD Italian Registry [26]	N.a.	N.a.	All examinations of a subject were always made by the same physician, who had a specific competence in assessing the effects of CRT	Yes	Demographic, history, and clinical variables as baseline, complications	CRT, CRT-D	First and replacements	1, 3, 6 months and every 6 months thereafter	No	No	117 Italian center	Potential bias in patient selection as well as lack of control group and patient blinding.
	Single center CRT registry [27]	Medical records	Entered into a database	N.a.	Yes	Medical records	CRT	N.a.	N.a.	No	No	627 patients	Retrospective study character and lack of a suitable control group
	J-CRT [28]	Doppler 1w, 6m, 12m after CRT	N.a.	N.a.	Yes	N.a.	CRT	Initially implantation	At least 6 months	N.a.	N.a.	225 patients from 18 centers	Data variability among the institutions
	The Contak Italian Registry [29]	N.a.	N.a.	N.a.	Yes	Baseline evaluation,	CRT	N.a.	Regular clinical visits	N.a.	N.a.	658 patients	Small population, not randomized
	A prospective CRT registry [30]	Patients with CRT-D	N.a.	N.a.	Yes	Baseline characteristics, ECG, procedural data	CRT-D	N.a.	A median of 5.2 years	N.a.	N.a.	295 patients	Technical limitations
CIED Registry	The REPLACE Registry [31]	A secure electronic data management system	Novella Clinical	Review medical record, reported events adjusted by Clinical Events Committee	Yes	Clinical data, complications, patient medical complaints	ICD and pacemaker generator replacement, including CRT-P and CRT-D	For generator replacement	A wound examination, a 3-month clinic or tele query, a final 6-month clinic visit	No	N.a.	Fixed sample size, 1750 patients, 72 institutions	Low precision because of not representative, no data beyond 6 months, not capture infrequent events
	The HomeGuide Registry [32]	Remote monitoring was accomplished with the Biotronik HM system based on ultra-low power daily or event-triggered transmissions in the MICS	From the implanted device to a mobile patient unit, forwarding data via GSM with GPRS protocol to a Service center with encrypted access	N.a.	Yes	N.a.	CIED	For generator replacement	At post-implanted discharge, at 1 month and then once in year	No	No	75 sites, 1650 patients	N.a.
	Registry of Emilia Romagna on Arrhythmia Interventions [33]	Data collected in each institution	N.a.	N.a.	Yes	Clinical characteristics, characteristics of implanted devices	CIED	First and replacements	N.a.	N.a.	N.a.	24 centers	N.a.
	Italy PM and ICD Registry [34]	EURID/Eucomed implant form, retrieved from mail	N.a.	Data checked on the day entry, and annual report review	Yes	EURID/Eucomed items	CIED	First and replacements	N.a.	Yes	Yes	N.a.	N.a.
	Swedish PM and ICD Registry [35]	EURID implant forms	Participating centers using direct data entry on the website	Regularly checked for internal consistencies by the Registry administer, and online	Yes	Patients demographics, clinical indications, aetiology, complications, fluoroscopy time,	PM, ICD, CRT, CRT-P, CRT-D	First and replacements	1 year to see complications	Yes, annual report	Yes	44 centers, covering	NYHA class, left ventricular ejection fraction, and phrenic nerve stimulation

				statistics are updated on a daily basis.		surgical time, technical information on generators and leads, survival data						almost 100%, 121744 PM and 10503 ICD	are not available, CRT could therefore not be assessed.
	The Kaiser Permanente-Cardiac Device Registry [36]	Data source: device manufacturers, Paceart, and Apollo Data Repository.	All data were recorded and transferred to a centralized data repository for data management, validation, and reporting.	Automated, ongoing quality control procedures were carried out to flag patient and device data anomalies that were adjudicated using the EMR by clinical content experts.	Yes	Device characteristics, patient demographics, clinical indications for implant, procedural details, and postoperative outcomes	CIED	First and replacements	4 months follow-up	Yes	Yes	385 medical facilities	The KP-CDR does not track certain data on time variant and CIED-specific variables, is limited on the number of variables and detail of procedures captured in order to minimize data collection burden and ensure high quality.
Stent Registry	Guthrie Health Off-label Stent (GHOST) Registry [37]	A nurse performed data collection, medical records, telephone	Entered into an Excel spreadsheet and utilized for outcomes analysis	Exclusion patients make selection bias	Yes	Baseline clinical and angiographic characteristics, laboratory values, and in-hospital outcomes.	N.a.	N.a.	At least 5 years or occurrence of MACE	No	No	07.2001-12.2007: 896 PAT	Exclusion crieteria
	The prairie "real world" stent registry [38]	Procedure and in-hospital outcome data were obtained from NCDR Registry	Telephone	N.a.	Yes	Patient characteristics, MACE	DES, BMS	N.a.	6 M, 1 year, annually thereafter	No	No	379 PAT	Retrospective and not randomized control
	HMORN-Stent Registry [39]	N.a.	N.a.	N.a.	Yes	Clinical characteristics	N.a.	N.a.	N.a.	No	No	3 sites, 7689 PAT	N.a.
	POLAR Registry [40]	Latin A	11.2008-07.2010	To clinically evaluate the Promus stent in patients in clinical practice.	No	N.a.	Prospective	Multicenter	Boston Scientific	The Cardiovascular Research Centre	Ethics Committees approval	Yes	
	AUTAX (Austrian Multivessel TAXUS-Stent) registry [41]	N.a.	N.a.	N.a.	Yes	Patient characteristics, angiographic findings, procedural characteristics	TAXUS	N.a.	2 years	No	No	9 Centers	N.a.
	the Leipzig SUPERA Popliteal Artery Stent Registry [42]	Medical records	N.a.	N.a.	Yes	Patient characteristics, angiographic findings, procedural characteristics	SUPERA	N.a.	6, 12 M	No	No	101 patients	Further evidence needed to confirm these first encouraging results.
	German Cypher Stent Registry [43]	Case report forms were collected via the internet	N.a.	A query management was established for missing or implausible data	Yes	Patient characteristics, angiographic findings, interventional characteristics, clinical events	N.a.	N.a.	Up to 5 years	No	No	04.2002-09.2005: 5946 PAT	No reliable data during follow-up, no external outcome data validation
	German DES.DE Registry [44]	Internet platform	N.a.	N.a.	Yes	Baseline clinical and angiographic characteristics and certain procedural and clinical in-hospital events	Taxus and Cypher	N.a.	3, 6, 9, 12 M	No	No	From 10.2005-10.2006, 6384 patients at 98 sites	Low rates of enrollment and under-reporting of event
	WAR-STENT registry [45]	N.a.	N.a.	N.a.	Yes	Baseline characteristics, procedural characteristics, in-hospital events, prescriptions at discharge	N.a.	N.a.	12 M	No	No	411 patients from 37 centers	Small size is the main limitation
	The Tacrolimus-Eluting STent (TEST) registry [46]	Taken from centralized information database of the center, hospital records, telephone contacts	N.a.	N.a.	Yes	Patient characteristics, angiographic findings, procedural characteristics; in-hospital and long-term outcome	N.a.	N.a.	6, 9 M	No	No	140 PAT	N.a.
	Artery Angioplasty-Stent Registry III [47]	Online 3-page sheet	Website, Access, Excel Crystal Reports XI for business objects software	N.a.	Yes	Complications	N.a.	N.a.	No	No	No	37 centers	No long-term follow-up
	The Frontier stent registry [48]	N.a.	N.a.	N.a.	Yes	Patient characteristics, procedural characteristics; MACE	N.a.	N.a.	180 days	No	No	130 PAT	Larger in profile, less flexible
	The China CYPHER	Internet base, through	All data were submitted	Audit check was undertaken	Yes	Patient characteristics, MACE, the	SES	N.a.	6, 12 M	No	No	20 Center	Different from “all comers”

	Select registry [49]	phone call or visit	to a data-coordinating center and core laboratory via internet	for all patients to assess data entry accuracy		QCA measurements						1189 PAT	registry, patients selection bias may exist
	A novel computer based stent registry [50]	Computer-based, hospital information system	N.a.	N.a.	Yes	N.a.	N.a.	N.a.	N.a.	No	No	21 Cases	N.a.
	The j-Cypher Registry [51]	N.a.	Data entry	N.a.	Yes	Patient characteristics, procedural characteristics	N.a.	N.a.	5 years	No	No	37 centers	Patients participating in the registry were not fully monitored.
	the DATE registry [52]	A dedicated web-based case report form, medical record, telephone contact	N.a.	All outcome data were confirmed by source documentation collected from each participating center and were reviewed by an independent clinical event adjudication committee	Yes	Patient characteristics, procedural characteristics; Clinical outcome	ZES	N.a.	1, 3, 6, 12 M	No	No	17 centers 851 PAT	Sample size small, specific to one DES type
	FOCUS registry [53]	Via electronic data capture using web-based case report forms	Data management	N.a.	Yes	Lesion and procedural characteristics, clinical outcomes	N.a.	N.a.	30D, 6, 12, 24, 36 M	No	No	83 Center50 84 PAT	N.a.
	The 'all comer' Coroflex Please drug-eluting stent registry in Europe and Asia [54]	Paper hard copies and entry into database	Database	Accuracy of data	Yes	Patient characteristics, procedural characteristics; MACE	N.a.	N.a.	10.5+3.8 M	No	No	29 centers, 1230 PAT	A less stringent control of data collection and study monitoring
	DESERT (international Drug-Eluting Stent Event Registry of Thrombosis) [55]	N.a.	N.a.	N.a.	Yes	Patient characteristics, procedural characteristics	N.a.	N.a.	N.a.	No	No	984 patients from 21 sites	Case-control study cannot provide direct insight in to the incidence
	The TIMI 38 Coronary Stent Registry (CSR) [56]	N.a.	N.a.	N.a.	Yes	Patient characteristics, procedural characteristics	N.a.	N.a.	6-15 M	No	No	38 sites 20 countries; 2110 patients	N.a.
	E-Five Registry [57]	N.a.	N.a.	N.a.	Yes	Patient characteristics, angiographic and procedural characteristACics; Adverse Events	Promus	N.a.	1, 6, 12, 24 M	No	No	40 centers 1121 PAT	Bias in participants selection
	The Korean Multicenter Drug-Eluting Stent Registry [58]	A Web-based reporting system	N.a.	For any clinical event, all relevant medical records were reviewed and adjudicated by an external clinical event adjudication committee.	Yes	Demographics, Coexisting condition, Cardiac risk factors, Clinical Indication of PCI	Stent	N.a.	35 months	N.a.	N.a.	12,426 patients	Possibility of unmeasured confounders
TAVI Registry	The STS/ACC TVT Registry [59]	Electronic data support	N.a.	Data quality checks have been implemented at the National Cardiovascular Data Registry data warehouse and Duke Clinical Research Institute to optimize data completeness and accuracy.	Yes	Patient demographics, comorbidities, functional status, quality-of-life indexes, and procedural details and outcomes	N.a.	N.a.	Yearly follow-up	Yes, annual report	Yes	N.a.	N.a.
	Brazilian TAVI Registry [60]	N.a.	N.a.	N.a.	Yes	N.a.	TAVI	CoreValve and Sapien procedure	N.a.	No	No	18 centers 418 patient	N.a.
	The Austrian TAVI Registry [61]	N.a.	Accessible on the internet and allows an easy assessment of patient data and procedures	N.a.	Yes	Demography, baseline characteristics including comorbidities, STS Score, EuroSCORE, QoL	TAVI	CoreValve and Sapien procedure	1, 3, 6, 12, 24 and 36 month, median follow-up was 182 days	No	No	11 centers	A number of TAVI cases in Austria implanted by surgical centers are not included.
	The Belgian TAVI	Collected and recorded	N.a.	Data pooling and statistical	Yes	Patient characteristics, procedural	TAVI	CoreValve and	1, 6, 12	No	No	15	No centers performing both

	Registry [62]	at site		analysis were performed at the University		characteristics and outcomes, causes of procedural mortality,		Edwards procedure	months			centers	procedures, the number of patients is limited, no central core laboratory monitoring all events.
	The Swiss TAVI registry [63]	Standardized case-report forms from web-based database, follow-up data based on phone calls or clinical visit by each center	An independent monitor and statistician was performed to verify completeness and accuracy of data entry at each site	No on-site monitoring or patient data validation was performed	Yes	Baseline, procedural and in-hospital characteristics, follow-up data	TAVI	5 kinds of devices	30 days, 12 months, 3 and 5 years	No	N.a.	All centers	Clinical practice and expertise might be different in centers
	The Bern TAVI Registry [64]	By either clinical in-hospital visits or a standardized telephone interview.	Data were entered into a dedicated Web-based database, held at an academic clinical trials unit	All suspected events were presented to a dedicated clinical event committee consisting of cardiologists and cardiac surgeons	Yes	Baseline clinical and procedural characteristics as well as follow-up data.	TAVI	N.a.	After discharge, adverse events were assessed through active follow-up at 30 days and 12 months	N.a.	N.a.	N.a.	N.a.
	The Aachen TAVI registry [65]	Dedicated database, follow-up by visit or by telephone	N.a.	N.a.	Yes	Baseline clinical, laboratory, echocardiographic, DSCT as well as procedural data and clinical follow-up data	TAVI	N.a.	1 monthe, 1 year, 2 and 3 year	No	No	01.2008-08.2012: 367 TAVI procedures	N.a.
	The German TAVI Registry [66]	N.a.	N.a.	N.a.	Yes	Patient characteristics, outcome up to 30 days post procedure, preprocedural imaging	TAVI	CoreValve and Edwards procedure	N.a.	No	No	22 centers	Limited number of evaluated variables,
	FRANCE 2 Registry [67]	N.a.	N.a.	N.a.	Yes	Patient characteristics, procedural characteristics and outcomes, causes of procedural mortality,	TAVI	CoreValve and Edwards procedure	Mean 245 days	No	No	34 centers	Long term follow up is needed
	The ATHENS TAVR Registry [68]	Baseline and follow-up clinical and echocardiography data were prospectively gathered in each participating centre.	N.a.	N.a.	Yes	Baseline and follow-up clinical and echocardiography data	TAVI	N.a.	N.a.	No	No	4 centers 126 patients	N.a.
	The POL-TAVI registry [69]	Data was submitted by 20 centers	N.a.	N.a.	Yes	Baseline patient demographic, clinical and echocardiographic variables	TAVI	N.a.	After 6 month	No	No	381 Patients	Data was submitted by 20 centers performing TAVI procedures with different grade of completeness. Data submission was not monitored.
	OBSERVANT TAVI Registry [70]	A unique database for contemporary data collection	Online data entry on a password protected website.	A process of assessment of data completeness and robusness	Yes	Demographic characteristics, health status prior to intervention, comorbidities and complete information on the type of intervention	TAVI	N.a.	30-days follow-up	No	No	101 centers	The incompleteness of the monitoring process
	The UK TAVI registry [71]	95 variables	Data entry is performed by clinical staff and data clerks; A web browser based data entry	No external validation, range checks are applied to appropriate fields	Yes	Patient demographic features, indications, procedural details and outcomes up to the time of hospital discharge	TAVI	N.a.	1-3 years followed up	Yes	Yes, NHS number provides a unique identifier for any person registered with the NHS in England and	All centers	Lack of data validation, apart from life status, later clinical and quality-of-life follow-up.

											Wales		
	The Ibero-American TAVI registry [72]	Online-form	An online-form for data entry	N.a.	Yes	Baseline, procedural, complications	TAVI	CoreValve	Median 238 days	No	No	42 centers	Incomplete data
	The multi-centre European PARTNER TAVI study [73]	QoL questionnairs	N.a.	N.a.	Yes	Baseline, procedural, follow-up data	TAVI	N.a.	30 days, 6 months, and 1 year	No	No	N.a.	Sample size too small
	Rabin Medical Center TAVR registry [74]	Data were collected before TAVR, during hospitalization, and postoperatively at 30 days, 6, 12 months, and yearly after.	All collected data were registered in an electronic database.	N.a.	Yes	Demographic, clinical, and laboratory data	TAVI	N.a.	Postoperatively at 30 days, 6, 12 months, and yearly after.	No	No	319 patients	N.a.
	The Optimized CathEter vAlvular iNtervention (OCEAN-TAVI) registry [75]	N.a.	N.a.	N.a.	Yes	VARC-2	TAVI	TA, TF	N.a.	N.a.	N.a.	4 centers	No long-term outcomes.
	A large multicenter TAVI registry [76]	Prespecified clinical and laboratory data	N.a.	N.a.	Yes	VARC-2	TAVI	transfemoral,transapical, transaxillary, or direct aortic access routes		N.a.	N.a.	3 centers	No cause-and-effect suppositions
	The Italian CoreValve registry [77]	Self-report	Yes	Posteriori	Yes	VARC	TAVI	TF	13 months	N.a.	N.a.	7 centers	Not randomized
	A Multicenter Spanish Registry [78]	Clinical data and ECG data	N.a.	N.a.	Yes	Clinical and echocardiographic parameters, Charlson co-morbidity index,17 EuroSCORE II,18 and hospital characteristics	TAVI	N.a.	1 Year	N.a.	N.a.	726 patients	Not randomized; small sample size
	A Poland single-center registry [79]	N.a.	N.a.	N.a.	Yes	VARC	TAVI	TA, TF	At discharge, 30 days, 6 months and 12 months	N.a.	N.a.	101 patients	Small sample size
	The Transcatheter Valve Treatment Sentinel Pilot Registry [80]	From national registries	Data entered into a web-based case record form (CRF) or transferred from compatible national registries	Yes	Yes	VARC	TAVI	TA, TF	N.a.	N.a.	N.a.	4,571 patients from 137 centers in 10 EU countries	The absence of a centralised analysis process and independent adjudication
	The ROUTE registry [81]	N.a.	N.a.	N.a.	Yes	VARC-2	TAVI	Tao	30-day	N.a.	N.a.	32 patients	Small sample size
	SAPIEN XT Aortic Bioprosthesis Multi-Region Outcome Registry [82]	An independent clinical events committee adjudicated all adverse events	All data were entered in the electronic data capturing system and monitored	N.a.	Yes	VARC	SAPIEN XT valve	N.a.	2 years	N.a.	N.a.	99 sites in 17 countries	Pre- and post-TAVR echocardiographic evaluations were site reported and not reviewed by an independent core laboratory.

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