



Interventional Cardiology in Switzerland

Annual Statistic Report 2014

Data collected and processed by

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On behalf of the Swiss Working Group of
Interventional Cardiology

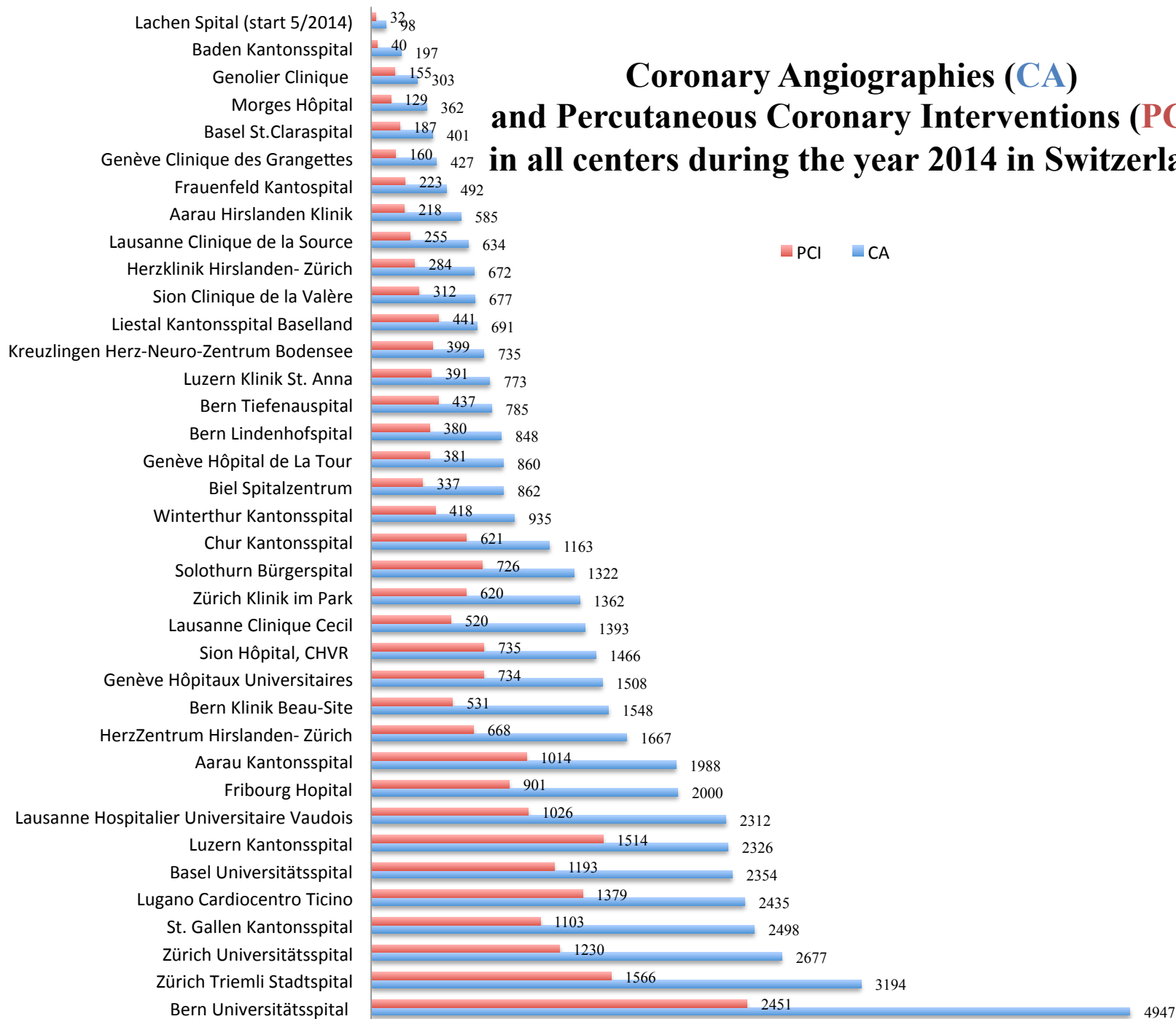


Coronary Angiographies (CA) and Percutaneous Coronary Interventions (PCI) From 2006 to 2014 in Switzerland



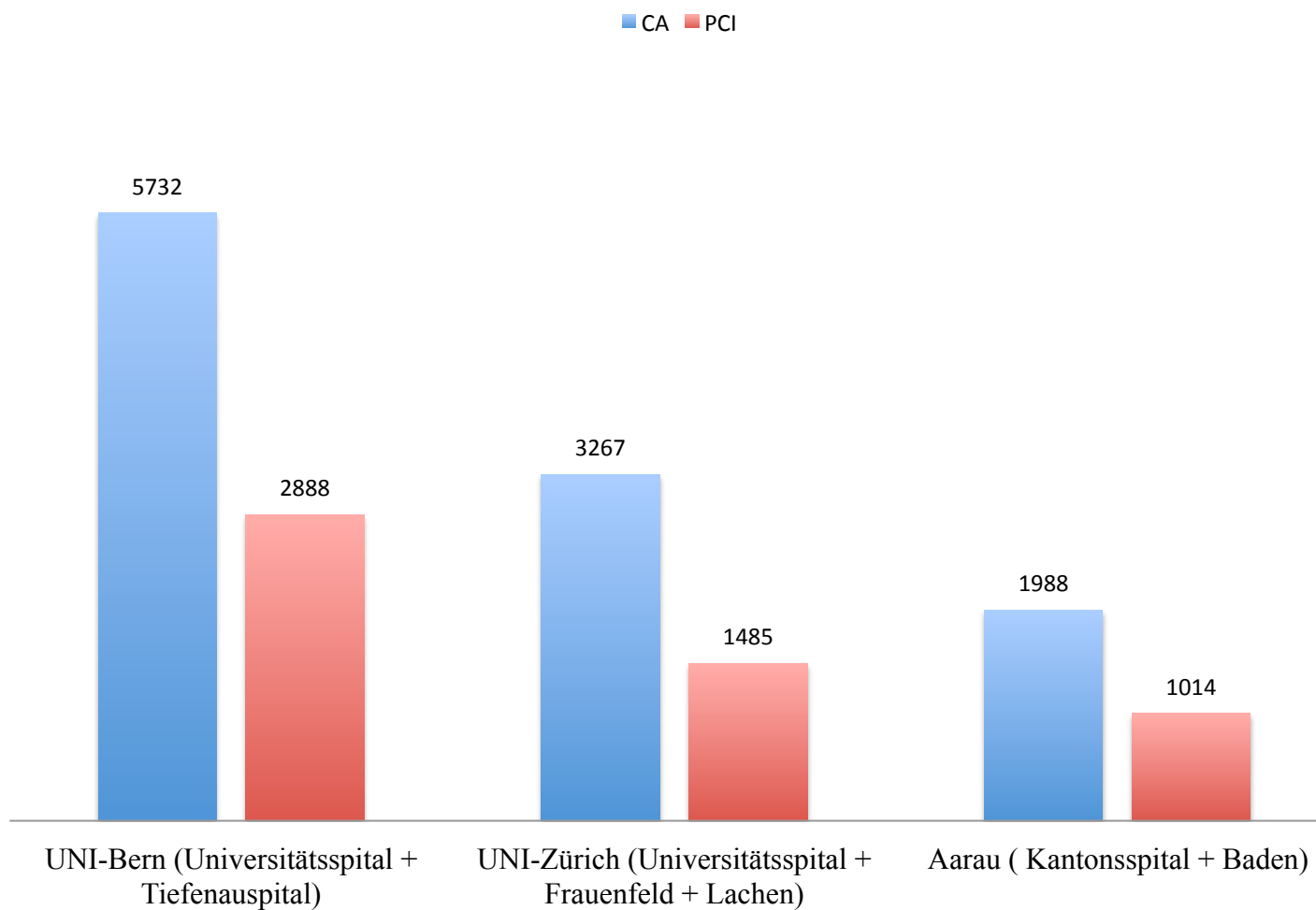


Coronary Angiographies (CA) and Percutaneous Coronary Interventions (PCI) in all centers during the year 2014 in Switzerland





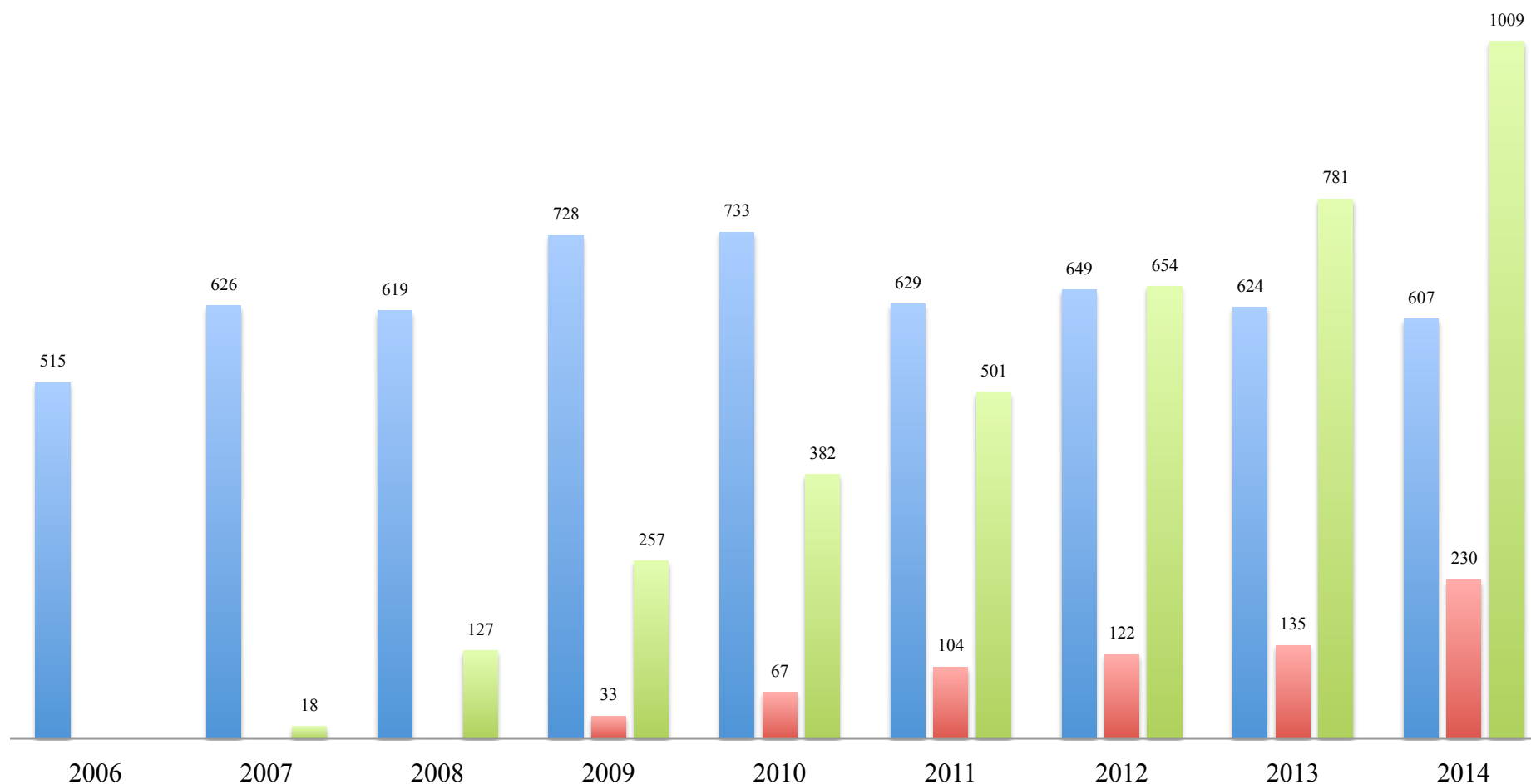
PCI Networks in Switzerland in 2014



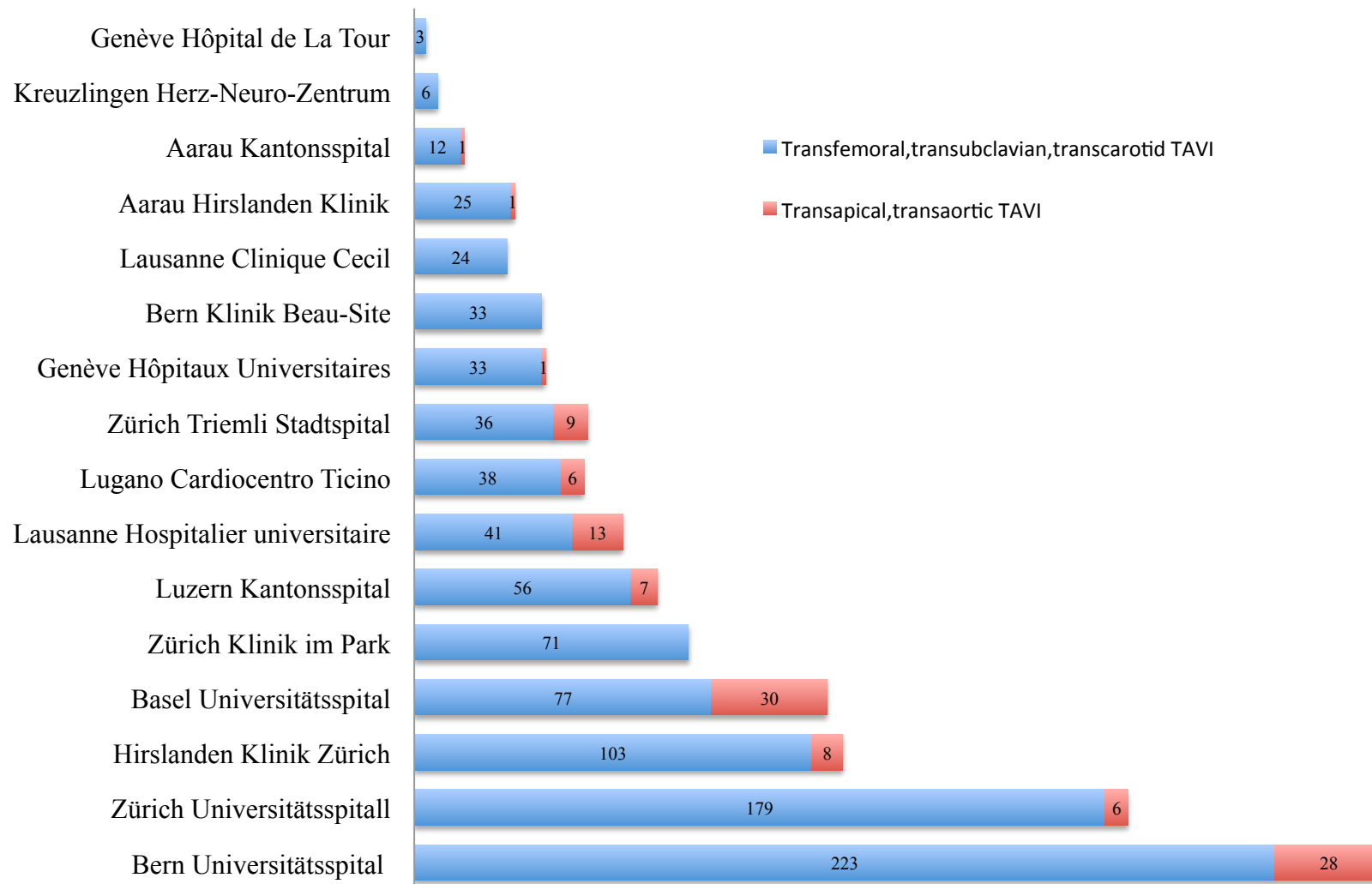
Interventions for Structural Heart Defects Closure of PFO, Transcatheter Aortic Valve Implantation (TAVI) and Transcatheter Mitral Valve Repair (TMVR) From 2006 to 2014 in Switzerland



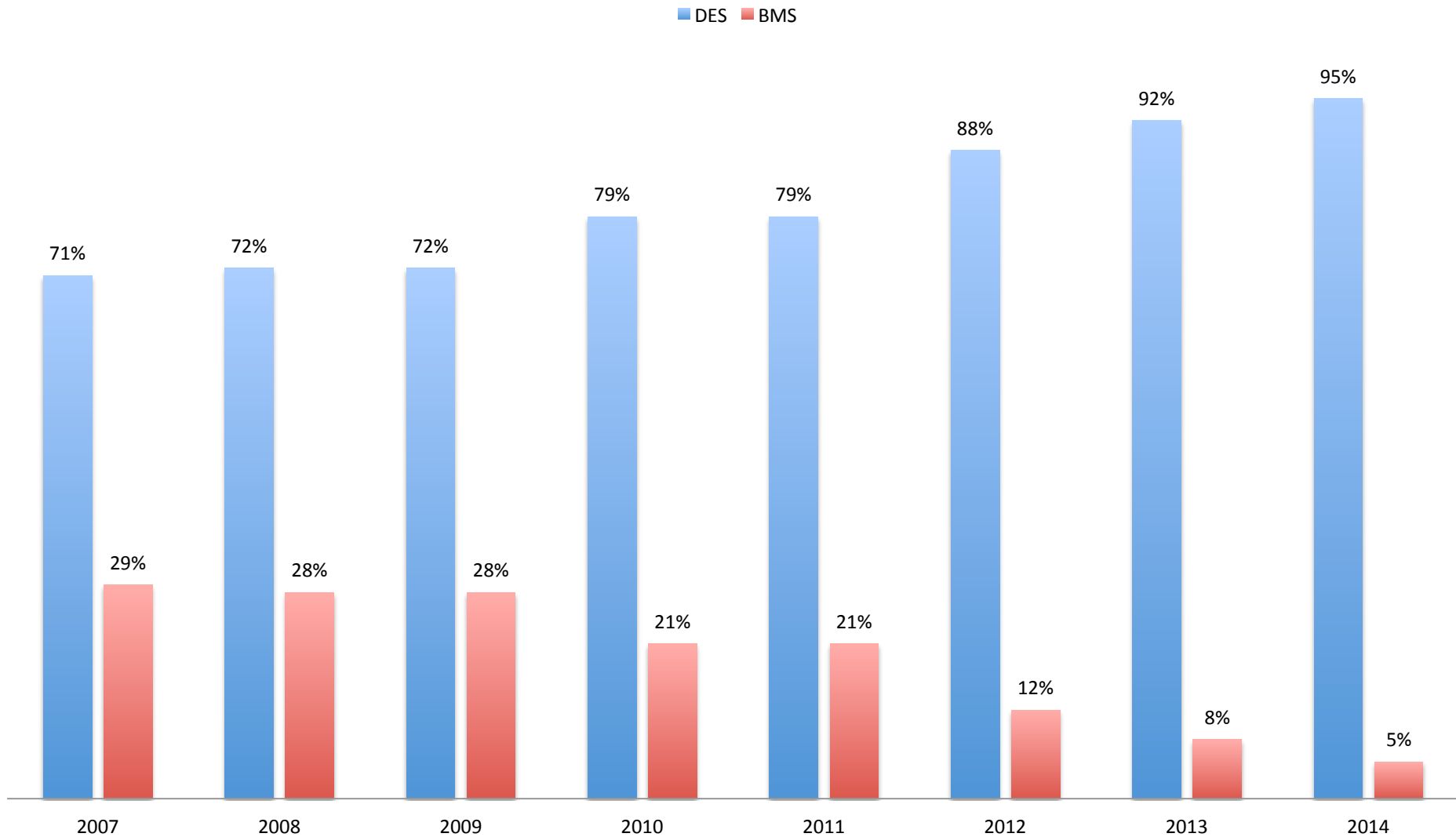
■ PFO ■ TMVR ■ TAVI



Transcatheter Aortic Valve Implantation (TAVI) in all Centers During the Year 2014 in Switzerland



Percentage of Drug-Eluting Stents (DES) and Bare-Metal Stents (BMS) From 2007 to 2014 in Switzerland



Trans-radial Access (TRA) and More in Switzerland in 2014



	Cath labs N°	N° of operators (diagnostic only)	N° of diagnostic and interventional operators	Centre with cardiac surgery (yes or no)	Total number of cases (CA + PCI)	N° of Diagnostic cases only	N° of PCI	TRA for total number of cases	% of TRA for total number of cases	TRA for PCI	% of TRA for PCI
Aarau Hirslanden Klinik	2	6	6	yes	585	373	218	110	18.8	62	28.4
Aarau Kantonsspital	2	n.a	n.a	no	1988	974	1014	n.a	n.a	n.a	n.a
Baden Kantonsspital	1	n.a	n.a	no	197	155	40	n.a	n.a	n.a	n.a
Basel St.Claraspital	1	2	2	no	401	n.a	187	1	0.2	0	0.0
Basel Universitätsspital	2	2	8	yes	2354	1161	1193	84	3.6	35	2.9
Bern Klinik Beau-Site	3	1	5	yes	1548	1017	531	31	2.0	11	2.1
Bern Lindenhofspital	1	6	3	n	848	468	380	147	17.3	73	19.2
Bern Tiefenauspital	1	2	2	no	785	348	437	443	56.4	230	52.6
Bern Universitätsspital	3	n.a	11	yes	4947	2496	2451	816	16.5	n.a	n.a
Biel Spitalzentrum	1	0	7	no	862	n.a	337	101	11.7	89	26.4
Chur Kantonsspital	1	0	4	no	1163	542	621	785	67.5	381	61.4
Frauenfeld Kantospital	1	1	1	no	492	269	223	77	15.7	n.a	n.a
Fribourg Hopital	1	0	5	no	2000	1099	901	717	35.9	323	35.8
Genève Clinique des Grangettes	1	4	7	no	427	267	160	297	69.6	105	65.6
Genève Hôpital de La Tour	1	10	8	yes	860	478	381	532	61.9	n.a	n.a
Genève Hôpitaux universitaires	2	0	5	yes	1508	774	734	1048	69.5	544	74.1
Genolier Clinique	1	0	5	no	303	148	155	60	19.8	44	28.4
HerzKlinik Hirslanden- Zürich	2	0	3	yes	672	388	284	n.a	n.a	n.a	n.a
HerzZentrum Hirslanden- Zürich	*	0	7	yes	1667	999	668	n.a	n.a	n.a	n.a
Kreuzlingen Herz-Neuro-Zentrum Bodensee	1	2	1	yes	735	336	399	104	14.1	89	22.3
Lachen Spital (start 5/2014)	1	1	2	no	98	66	32	63	64.3	20	62.5
Lausanne Clinique Cecil	2	8	5	yes	1393	873	520	527	37.8	338	65.0
Lausanne Clinique de la Source	1	0	3	no	634	379	255	326	51.4	144	56.5
Lausanne Hospitalier universitaire vaudois	2	0	6	yes	2312	1286	1026	865	37.4	352	34.3
Liestal Kantonsspital Baseland	1	0	2	no	691	250	441	521	75.4	324	73.5
Lugano Cardiocentro Ticino	4	1	9	yes	2435	1056	1379	502	20.6	505	36.6
Luzern Kantonsspital	2	8	5	yes	2326	812	1514	1821	78.3	1282	84.7
Luzern Klinik St. Anna	n.a	n.a	n.a	n.a	773	n.a	391	16	2.1	14	3.6
Morges Hôpital	1	0	4	yes	362	233	129	211	58.3	82	63.6
Sion Clinique de la Valère	1	0	3	no	677	355	312	350	51.7	311	99.7
Sion Hôpital, CHVR	1	0	5	yes	1466	735	735	498	34.0	236	32.1
Solothurn Bürgerspital	1	0	3	no	1322	596	726	254	19.2	125	17.2
St. Gallen Kantonsspital	3	0	7	no	2498	1395	1103	1058	42.4	568	51.5
Winterthur Kantonsspital	1	4	4	no	935	455	418	328	35.1	370	88.5
Zürich Klinik im Park	3	1	7	yes	1362	742	620	61	4.5	26	4.2
Zürich Triemli Stadtspital	2	0	6	yes	3194	1628	1566	2163	67.7	1140	72.8
Zürich Universitätsspital	3	1	6	yes	2677	1447	1230	138	5.2	n.a	n.a
TOTAL	57	60	167	yes = 18	49497	24600	23711	15055	Median: 35.1%	7823	Median: 36.6%

*: HerzZentrum Hirslanden and HerzKlinik Hirslanden shares the same two cath-lab.



Percutaneous Coronary Intervention (PCI) in Switzerland in 2014

	N° of PCI cases	PCI directly following diagnostic study (ad hoc PCI)	Single vessel PCI	Multivessel PCI (in one session)	PCI for NST-ACS	PCI for STEMI (primary and rescue PCI)	PCI for cardiogenic shock/ cardiac arrest	PCI for chronic total occlusions (CTO)	Antegrade CTO recanalization (attempted or succeeded)	Retrograde CTO recanalization (attempted or succeeded)
Aarau Hirslanden Klinik	218	193	192	24	33	26	6	11	9	2
Aarau Kantonsspital	1014	188	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Baden Kantonsspital	40	5	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Basel St.Claraspital	187	166	152	35	24	20	0	2	n.a	n.a
Basel Universitätsspital	1193	1124	812	381	336	258	63	41	39	0
Bern Klinik Beau-Site	531	503	429	102	77	58	4	16	16	0
Bern Lindenhofspital	380	380	154	104	51	48	2	41	41	0
Bern Tiefenauspital	437	420	302	135	45	25	5	29	29	0
Bern Universitätsspital	2451	2402	n.a	n.a	491	454	78	49	n.a	n.a
Biel Spitalzentrum	337	168	314	23	59	74	2	1	1	n.a
Chur Kantonsspital	621	515	555	66	116	142	3	43	39	4
Frauenfeld Kantospital	223	196	182	41	44	3	2	0	0	0
Fribourg Hopital	901	863	720	162	329	94	22	107	n.a	0
Genève Clinique des Granettes	160	153	129	30	12	1	1	9	9	0
Genève Hôpital de La Tour	381	367	314	59	47	35	0	12	10	2
Genève Hôpitaux universitaires	734	601	498	237	157	204	35	33	n.a	n.a
Genolier Clinique	155	141	130	25	3	0	0	7	7	0
Herzkllinik Hirslanden- Zürich	284	264	160	128	n.a	n.a	n.a	n.a	n.a	n.a
HerzZentrum Hirslanden- Zürich	668	637	385	279	n.a	n.a	n.a	n.a	n.a	n.a
Kreuzlingen Herz-Neuro-Zentrum Bodensee	399	314	358	41	64	92	13	27	27	0
Lachen Spital (start 5/2014)	32	30	15	15	3	0	0	0	n.a	n.a
Lausanne Clinique Cecil	520	444	429	88	8	2	0	n.a	n.a	n.a
Lausanne Clinique de la Source	255	241	194	62	14	6	0	20	20	0
Lausanne Hospitalier Universitaire Vaudois	1026	947	885	62	367	249	18	51	40	11
Liestal Kantonsspital Baselland	441	429	285	156	109	37	4	28	28	0
Lugano Cardiocentro Ticino	1379	1269	698	681	278	312	46	16	12	4
Luzern Kantonsspital	1514	1373	860	654	944	205	31	29	22	9
Luzern Klinik St. Anna	391	362	283	108	34	25	6	26	n.a	n.a
Morges Hôpital	129	106	118	9	18	0	0	5	5	0
Sion Clinique de la Valère	312	292	275	37	4	1	0	0	0	0
Sion Hôpital, CHVR	735	285	659	54	154	133	8	25	23	2
Solothurn Bürgerspital	726	693	0	0	130	101	0	0	0	0
St. Gallen Kantonsspital	1103	1009	848	255	146	258	14	78	49	29
Winterthur Kantonsspital	418	393	341	34	93	87	4	24	21	3
Zürich Klinik im Park	620	569	390	154	51	33	11	17	15	2
Zürich Triemli Stadtpital	1566	n.a	1308	258	377	410	72	n.a	n.a	n.a
Zürich Universitätsspital	1230	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
TOTAL	23711	18042	13374	4499	4618	3393	450	736	462	68

Coronary Stents, Devices and Diagnostic Tools in Switzerland in 2014



	N° of PCI cases	N° of Bare metal stents (BMS)	% of BMS for PCI	N° of Drug-eluting stents (DES)	% of DES for PCI	N° of Self-expandable stents (DES or BMS)	N° Bioabsorbable scaffolds (Absorb)	N° Bifurcation dedicated stents	N° of Rotablator	N° Distal protection device (filters)	N° of Fractional flow reserve (FFR)	N° of Instant wave free ratio (IFR)	N° of Intravascular ultrasound (IVUS)
Aarau Hirslanden Klinik	218	26	11.9	139	63.8	0	48	0	0	0	7	0	0
Aarau Kantonsspital	1014	149	14.7	865	85.3	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Baden Kantonsspital	40	7	17.5	33	82.5	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Basel St. Claraspital	187	11	5.9	156	83.4	0	17	n.a	1	2	34	n.a	0
Basel Universitätsspital	1193	114	9.6	1027	86.1	47	5	0	13	5	64	0	10
Bern Klinik Beau-Site	531	2	0.4	468	88.1	0	0	0	1	0	3	0	1
Bern Lindenhospital	380	27	7.1	343	90.3	0	0	0	2	0	0	0	0
Bern Tiefenauspital	437	4	0.9	425	97.3	0	3	0	0	5	0	n.a	0
Bern Universitätsspital	2451	17	0.7	2221	90.6	0	8	n.a	23	11	94	n.a	12
Biel Spitalzentrum	337	14	4.2	283	84.0	0	18	n.a	11	0	22	0	0
Chur Kantonsspital	621	12	1.9	526	84.7	0	0	0	5	5	81	0	18
Frauenfeld Kantospital	223	11	4.9	211	94.6	0	0	0	0	0	40	0	0
Fribourg Hopital	901	86	9.5	815	90.5	0	26	0	14	n.a	162	n.a	2
Genève Clinique des Grangettes	160	3	1.9	149	93.1	0	2	0	4	8	27	0	0
Genève Hôpital de La Tour	381	29	7.6	572	150.1	0	10	0	10	2	81	0	7
Genève Hôpitaux Universitaires	734	89	12.1	511	69.6	0	7	0	16	5	51	0	7
Genolier Clinique	155	5	3.2	126	81.3	0	3	0	1	1	72	0	0
HerzKlinik Hirslanden- Zürich	284	7	2.5	223	78.5	1	46	0	3	n.a	88	n.a	11
HerzZentrum Hirslanden- Zürich	668	22	3.3	556	83.2	18	36	1	12	n.a	115	n.a	35
Kreuzlingen Herz-Neuro-Zentrum Bodensee	399	0	0.0	351	88.0	0	0	0	0	0	67	0	0
Lachen Spital (start 5/2014)	32	1	3.1	31	96.9	0	0	0	0	0	5	0	0
Lausanne Clinique Cecil	520	52	10.0	429	82.5	1	0	0	2	0	58	0	0
Lausanne Clinique de la Source	255	27	10.6	248	97.3	0	4	0	0	0	33	0	0
Lausanne Hospitalier Universitaire Vaudois	1026	71	6.9	878	85.6	0	34	0	17	3	219	5	47
Liestal Kantonsspital Baselland	441	10	2.3	410	93.0	0	25	0	0	0	25	0	0
Lugano Cardiocentro Ticino	1379	24	1.7	988	71.6	52	112	0	3	12	219	0	45
Luzern Kantonsspital	1514	8	0.5	1506	99.5	15	285	0	21	3	62	12	12
Luzern Klinik St. Anna	391	34	8.7	239	61.1	0	53	n.a	0	0	13	?	0
Morges Hôpital	129	13	10.1	93	72.1	0	5	0	0	0	14	0	19
Sion Clinique de la Valère	312	3	1.0	199	63.8	0	10	0	0	0	25	0	0
Sion Hôpital, CHVR	735	13	1.8	634	86.3	0	15	0	0	10	45	0	0
Solothurn Bürgerspital	726	34	4.7	632	87.1	0	1	0	0	5	44	0	0
St. Gallen Kantonsspital	1103	40	3.6	1063	96.4	18	45	0	22	9	88	0	14
Winterthur Kantonsspital	418	17	4.1	356	85.2	6	24	0	18	0	99	99	20
Zürich Klinik im Park	620	3	0.5	498	80.3	0	24	0	7	3	121	0	0
Zürich Triemli Stadtpital	1566	45	2.9	1366	87.2	3	48	0	3	7	105	0	0
Zürich Universitätsspital	1230	11	0.9	1137	92.4	0	68	2	22	8	97	n.a	11
TOTAL	23711	1041	Median: 3.5%	20707	Median: 86.2%	161	982	3	231	104	2273	116	271



Percutaneous Valve Interventions in Switzerland in 2014

	Aortic valvuloplasty without percutaneous valve replacement	Percutaneous aortic valve implantation (TAVI)	Transfemoral TAVI	Transapical TAVI	Transsubclavian TAVI	Direct aortic TAVI	Transcatheter TAVI	Mitral valvuloplasty	Mitraclip	Additional transcatheter mitral valve interventions
Aarau Hirslanden Klinik	0	26	25	1	0	0	0	0	2	0
Aarau Kantonsspital + Baden Kantonsspital	0	13	12	1	0	0	0	0	8	0
Basel St. Claraspital	2	0	0	0	0	0	0	0	0	0
Basel Universitätsspital	2	107	77	29	0	1	0	4	18	0
Bern Klinik Beau-Site	1	33	33	0	0	0	0	0	0	0
Bern Universitätsspital	3	251	222	28	n.a	n.a	n.a	n.a	37	n.a
Fribourg Hopital	3	0	0	0	0	0	0	n.a	0	n.a
Genève Hôpital de La Tour	2	3	3	0	0	0	0	1	0	1
Genève Hôpitaux Universitaires	4	35	33	0	1	1	0	2	6	0
Herzkllinik Hirslanden- Zürich	1	111	103	5	0	3	0	1	40	1
Kreuzlingen Herz-Neuro-Zentrum Bodensee	0	6	6	0	0	0	0	0	0	0
Lausanne Clinique Cecil	0	27	24	0	0	0	3	0	0	0
Lausanne Hospitalier Universitaire Vaudois	5	54	41	9	0	4	0	2	7	0
Lugano Cardiocentro Ticino	1	46	38	6	2	0	0	3	16	0
Luzern Kantonsspital	3	63	56	7	0	0	0	1	11	0
Luzern Klinik St. Anna	1	0	0	0	0	0	0	0	0	0
Zürich Klinik im Park	6	n.a	71	0	0	0	0	1	29	0
Zürich Triemli Stadtpital	1	45	36	8	0	1	0	1	0	0
Zürich Universitätsspital	n.a	189	179	5	4	1	0		56	0
TOTAL	35	1009	959	99	7	11	3	16	230	2