

Database: Embase <1980 to 2014 Week 09>, Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) <1946 to Present>

Search Strategy:

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- 1 Coronary Artery Bypass Surgery/ or Off Pump Coronary Surgery/ or Coronary Artery Bypass Graft/ (108228)
 - 2 (cab or cabg or acbg).ti,ab. (36812)
 - 3 ((coronar* or aortocoronar* or aorto coronar* or heart or myocardial* or cardia*) adj5 bypass*).ti,ab. (101315)
 - 4 1 or 2 or 3 (150685)
 - 5 *Mediastinitis/ (4064)
 - 6 *Sternum/ (7400)
 - 7 *Surgical Infection/ (11939)
 - 8 5 or (6 and 7) (4176)
 - 9 exp risk/ or risk factor/ or exp mortality/ or exp morbidity/ (3267921)
 - 10 4 and 8 and 9 (159)
 - 11 limit 10 to (danish or english or french or german or norwegian or swedish) (153)
 - 12 11 use emez (95)
 - 13 Coronary Artery Bypass/ or Coronary Artery Bypass, Off-Pump/ or Internal Mammary-Coronary Artery Anastomosis/ (116462)
 - 14 ((coronar* or aortocoronar* or aorto coronar* or heart or myocardial* or cardia*) adj5 bypass*).ti,ab. (101315)
 - 15 (cab or cabg or acbg).ti,ab. (36812)
 - 16 Mediastinitis/ (6726)
 - 17 (mediastinitis or (mediastin* adj3 (inflamm* or infect*))).ti,ab. (7457)
 - 18 Sternum/ (15234)
 - 19 Surgical Wound Infection/ (54287)
 - 20 (vascular adj3 patenc*).ti,ab. (1380)
 - 21 13 or 14 or 15 (161828)
 - 22 16 or 17 or (18 and 19) (10263)
 - 23 21 and 22 (1519)
 - 24 risk/ or risk assessment/ or risk factors/ (1837592)
 - 25 mortality.fs. (406477)
 - 26 exp morbidity/ or exp mortality/ (1360447)
 - 27 24 or 25 or 26 (3103535)
 - 28 23 and 27 (714)
 - 29 limit 28 to (danish or english or french or german or norwegian or swedish) (672)
 - 30 29 use pmez (270)
 - 31 12 or 30 (365)
 - 32 remove duplicates from 31 (309)
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Appendix: Summary of included studies

First author ^{reference number}	Pubyear	Cases (n)	Total (n)	Place	Latitude	Longitude	CABG (%)	Age (mean)	Females (%)	Design	Prospective
Abboud CS ⁷	2004	46	9136	Brazil	23,55	-46,63		58,4	24,4	cohort	1
Ahmed D ⁸	2011	1	767	Karachi	24,86	67,00	100,0		30,7	cohort	1
Alserius T ⁹	2008	16	605	Stocholm, Sweden	58,19	-18,06	100,0	66,0	21,0	cohort	1
Antunes PE ¹⁰	1997	60	2512	Coimbra, Portugal	40,20	-8,41		56,9	45,0	cohort	0
Ariyaratnam P ¹¹	2010	44	7420	York, England	53,95	-1,09	85,5		22,7	cohort	1
Barros deOlivia Sá MP ¹²	2011	28	500	Recif, Brazil	8,04	-34,87	100,0	62,1	1,6	cohort	0
Baskett RJ ¹³	1999	24	9771	Nova Scotia, Canada	44,68	-63,74		64,2	14,3	cohort	0
Bitkover CY ¹⁴	1998	40	1935	Sweden	58,19	18,06		64,2		cohort	1
Blanchard A ¹⁵	1995	6	4137	Lausanne	46,51	6,63	68,2	57,4	18,4	cohort	0
Borger MA ¹⁶	1998	92	12267	Torento, Canada	43,05	-79,38			27,9	cohort	0
Braxton JH ¹⁷	2004	418	36078	Portland, Maryland	34,06	18,61		65,4	28,4	cohort	0
Breyer RH ¹⁸	1984	7	870	Winston Salem, NC	36,09	-80,24	78,0	54,1	27,0	cohort	1
Cayci C ¹⁹	2008	123	7978	New York	40,71	-74,00		62,9	32,8	cohort	1
Centofanti P ²⁰	2007	7	493	Turin, Italy	45,07	7,68		66,1	30,2	cohort	1
Culliford AT ²¹	1976	39	2594	New York	40,71	-74,00				cohort	0
Danzer D ²²	2001	2	694	Geneva, Swiss	46,19	6,14	100,0	58,6	10,8	cohort	0
De Feo M ²³	2001	112	13420	Napoli	40,85	14,26				cohort	1
De Moraes AA ²⁴	2012	144	1975	Sao Paulo	23,55	-46,63	100,0			cohort	0
Demmy T ²⁵	1990	31	1525	Pittesburg, USA	40,44	-79,99		63,6	33,0	cohort	1
Diez C ²⁶	2007	45	1700	Hall/Saale, Germany	51,41	11,96	84,5	64,1	28,6	cohort	0
Eklund AM ²⁷	2006	120	10000	Helsinki, Finland	60,17	24,94	85,4	62,5	29,0	cohort	1
Elenbass TW ²⁸	2010	100	11748	Ghent, Belgium	51,04	11,96	100,0	64,7	23,0	cohort	0
Engelman RM ²⁹	1973	17	1042	New York	40,71	-74,00	34,5			cohort	0
Fakih MG ³⁰	2007	70	3578	Detroit, Michigan	42,33	-83,04	83,4			cohort	1
Farsky PS ³¹	2011	143	1975	Sao Paulo, Brazil	23,55	-46,63	100,0	62,4	30,3	cohort	1
Filsoufi F ³²	2007	106	5798	New York	40,71	-74,00	47,4	64,0	62,0	cohort	0
Fowler VG ³³	2005	2921	331429	all USA					29,5	cohort	0
Garey KW ³⁴	2006	128	2590	Houston, Texas	29,76	-95,38	66,0	65,0	33,0	cohort	1
Gaynes R ³⁵	1991	20	1120	Ann Harbor, Michigan	44,31	-85,60	100,0	60,6	21,0	cohort	0
Ghotaslou R ³⁶	2008	23	1827	Tabriz, Iran	35,70	51,40	70,0	59,0		cohort	0
Grmoljez PF ³⁷	1975	10	1500	St Lous, Missouri	38,62	-90,19	38,6			cohort	0
Grossi EA ³⁸	1985	77	7949	New York	40,71	-74,00	47,0	57,8	43,0	cohort	1
Grossi EA ³⁹	1991	39	2356	New York	40,71	-74,00	100,0	62,8	7,4	cohort	1
Gwely NDN ⁴⁰	2001	28	600	Mansoura, Egypt	31,04	31,37	95,3		60,7	cohort	1
Gårdlund B ⁴¹	2002	126	9557	Stocholm, Sweden	58,19	18,06				cohort	1
Harrington G ⁴²	2004	349	4474	Victoria, Australia	37,47	144,78		65,2	24,0	cohort	1
Hassan M ⁴³	2006	89	7889	Cincinnati, Ohio	39,10	-85,41	100,0	57,3		cohort	1

First author ^{reference number}	Pubyear	Cases (n)	Total (n)	Place	Latitude	Longitude	CABG (%)	Age (mean)	Females (%)	Design	Prospective
Hazelrigg SR ⁴⁴	1989	6	2582	Springfield Illinois	39,78	-89,65	100,0	60,3		cohort	0
Hosseinrezaei H ⁴⁵	2012	52	520	Shahrekord, Iran	32,32	50,86		57,5	32,0	cohort	1
Immer FF ⁴⁶	2005	55	5690	Berne, Swiss	46,94	7,44		64,1	31,0	cohort	0
Ivert T ⁴⁷	1991	27	6323	Stockholm, Sweden	58,19	18,06		63,0		cohort	0
Jakob HG ⁴⁸	2000	14	376	Heidelberg, Germany	49,38	8,67	74,7	62,6	30,8	cohort	1
Jiménez-Martínez M ⁴⁹	1970	13	257	Mexico City	19,43	-99,13				cohort	1
Jonkers D ⁵⁰	2003	25	1885	Massterich, Holland	50,85	5,69	75,0		31,0	cohort	1
Jurkewicz MJ ⁵¹	1980	49	3239	Atlanta, USA	33,74	-84,38				cohort	1
Khoo AK ⁵²	1994	13	2193	Singapor	1,28	103,83	100,0			cohort	0
Kim J ⁵³	2003	53	6728	Stockholm, Sweden	58,19	18,06	100,0	57,9		cohort	0
Kohli M ⁵⁴	2003	133	11508	Totronto, Canada	43,65	-74,39	68,0	60,0	27,0	cohort	1
Kubota H ⁵⁵	2013	1326	73700	Tokyo	35,68	139,69	36,6			cohort	1
Lepelletier D ⁵⁶	2005	18	1268	Nantes, France	47,21	-1,55	38,7	61,0	29,0	cohort	0
Loop FD ⁵⁷	1990	72	6504	Cleveland, Ohio	41,49	-81,69		60,3	21,7	cohort	1
Lu JC ⁵⁸	2003	28	4228	Liverpool, UK	53,40	-2,99	100,0	63,9	19,7	cohort	1
Macmanus Q ⁵⁹	1976	9	619	Oregon, Portland	45,52	-122,67		51,0		cohort	0
Magedanz EH ⁶⁰	2010	94	2809	Allegre Rio Grande do sul	28,31	-52,79	100,0			cohort	1
Matros E ⁶¹	2010	285	21191	Boston, USA	42,35	71,59	77,0	64,8	34,0	cohort	0
Milano CA ⁶⁴	1995	83	6459	Durham, USA	35,99	-78,89		62,0	26,0	cohort	0
Muñoz P ⁶⁵	1997	81	3711	Madrid, Spain	40,41	-3,70	69,0	56,0	30,0	cohort	0
Nagachinta T ⁶⁶	1987	69	1009	Baltimore, Maryland	39,29	-76,61	80,0			cohort	1
Newman LS ⁶⁷	1998	68	9965	Atlanta	33,74	-84,38		56,1	15,0	cohort	0
Noyez L ⁶⁸	2001	101	3815	Nijmegen, Netherlands	51,81	5,83	100,0		22,0	cohort	1
Ochsner JL ⁶⁹	1972	3	700	New orleans	29,98	-90,07			50,0	cohort	0
Olsen MA ⁷⁰	2002	37	1980	St Louis	38,62	-90,19	83,4	66,0	32,6	cohort	0
Orita H ⁶²	1992	41	782	Yamagata, Japan	38,25	140,23				cohort	1
Ottino G ⁷¹	1987	48	2579	Torino	45,07	7,68				cohort	0
Parisian Study ⁷²	1996	42	1830	Paris	48,85	2,35	52,5		29,8	cohort	1
Parissis H ⁷³	2011	52	3896	Belfast, Irland	54,61	-5,90		63,7	22,0	cohort	1
Paul M ⁶³	2007	29	809	Tel Aviv	32,08	34,78	85,0	65,6	21,5	cohort	1
Popovic B ⁷⁴	2013	93	4210	Nancy, France	48,69	6,18	100,0	64,5	33,3	cohort	0
Prabhakar G ⁷⁵	2002	3333	559004	all USA				64,8	29,4	cohort	0
Rahmanian PB ⁷⁶	2010	111	6641	Cologne, Germany	50,93	6,90	43,0	64,0	38,0	cohort	0
Reyna GC ⁷⁷	2006	27	7862	Mexico	19,43	-99,13	43,7	58,1		cohort	0
Ridderstolpe L ⁷⁸	2001	47	3008	Linkoping, Sweden	58,41	16,52	70,0	65,4	27,7	cohort	0
Risnes I ¹	2010	107	18532	Oslo, Norway	59,91	10,78		62,4	24,3	cohort	0
Russo PL ⁷⁹	2005	21	3398	Victoria, Australia	37,47	144,78		66,0	28,0	cohort	1
Sachithanandan A ⁸⁰	2008	76	4586	Birmingham, UK	52,48	-1,89	63,6	64,3	26,1	cohort	1
Sakamoto H ⁸¹	2003	17	863	Hirosaki,Aomori, Japan	40,60	140,46	61,6	61,2	3,5	cohort	0

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Salehi OA ⁸²	2007	21	9201	Teheran	36,69	51,42		58,5	25,5	cohort	1
Sang LWS ⁸³	2013	108	6653	Montreal, Canada	45,50	-73,55	64,9	66,0	30,0	cohort	0
Serry C ⁸⁴	1980	38	4124	Chicago	41,87	-87,62				cohort	1
Sharma M ⁸⁵	2004	51	3443	Detroit	42,33	-83,04	100,0	64,6	42,6	cohort	0
Steingrimssson S ⁸⁶	2008	41	1650	Reykjavik, Island	64,13	-21,93	75,0			cohort	1
Strecker T ⁸⁷	2007	63	3016	Erlangen Nuremberg	49,50	11,04	65,6	66,6	29,0	cohort	0
Ståhle E ⁸⁸	1997	168	9987	Uppsala, Sweden	59,85	17,63	75,2	64,8	25,3	cohort	0
Sutherland RD ⁸⁹	1977	13	904	Amarillos, Texas	35,21	-101,70				cohort	1
Szabó Z ⁹⁰	2002	57	2779	Linköping, Sweden	58,41	16,52	100,0	65,7	20,3	cohort	1
Tang GH ⁹²	2004	232	30102	Toronto, Canada	43,65	-74,39	66,0		27,4	cohort	0
Thurer RJ ⁹³	1974	14	645	Miami	25,78	-80,20				cohort	1
Tiveron MG ⁹⁴	2012	35	2768	Sao Paulo, Brazil	23,35	-46,63		59,9	35,3	cohort	0
Toumpolis1 IK ⁹¹	2005	36	3760	New York	40,71	-74,00	100,0		31,0	cohort	1
Toumpolis2 IK ⁹⁵	2005	40	3750	New York	40,71	-74,00	100,0	64,1	30,9	cohort	1
Trick WE ⁹⁶	2000	30	1796	Madison, Wisconsin	43,07	-89,40	100,0	65,0		cohort	0
Upton A ⁹⁷	2005	60	5176	Auckland, New Zealand	36,84	174,76	100,0	64,2	75,0	cohort	0
Walkes JC ⁹⁸	2002	25	1069	Houston, Texas	29,76	-95,36	100,0	60,6	1,0	cohort	0
Wang FD ⁹⁹	2000	17	620	Taipe, Taiwan	25,09	121,55	100,0	67,9	9,5	cohort	1
Wilson SJ ¹⁰⁰	2003	129	5128	Durham, North Carolina	35,99	-78,89				cohort	1
Wouters R ¹⁰¹	1994	23	1368	Aalst, Belgium	50,93	4,04	100,0	63,2	23,9	cohort	1
Zacharias A ¹⁰²	1996	21	2317	Toledo, Ohio	41,66	-83,57	82,2	62,0	31,7	cohort	0

Abbreviations: Pubyear: Publication year, Cases: incident cases of mediastinitis in the 30 days after operation, Total: total number of operated patients in the cohort, Place: Place of the study town and country, Latitude: latitude of study place, Longitude: Longitude of study place, CABG: frequency of Coronary Aorto Bypass Surgery, Age: Mean age of the patients in the cohort, Females: frequency of female patients, Prospective: Presence of prospective design 1=Yes 0=No.