

Supplemental Material

In this supplement, we present the full list of studies evaluated in the systematic review [and supplemental tables and figures](#).

References

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PubMed search string:

2017: "heart failure"[TIAB] AND (epidemiology[MeSH Terms] OR prevalence[TIAB] OR incidence[TIAB] OR mortality[TIAB]) AND ("1990/01/01"[PDAT] : "2016/09/02"[PDAT]) NOT "animal model" NOT rat NOT mice NOT diabetes[TIAB] NOT "renal transplant"[TIAB].

2020: "heart failure"[TIAB] OR "cardiac failure"[TIAB] AND (epidemiology[MeSH Terms] OR prevalence[TIAB] OR incidence[TIAB] OR "excess mortality"[TIAB] OR "case fatality"[TIAB]) AND ("2016/01/01"[PDAT] : "2020/1/2"[PDAT]) NOT "animal model" NOT rat NOT mice NOT diabetes[TIAB] NOT "renal transplant"[TIAB]. 4,469 initial studies were returned and 27 sources were added.

[Supplemental Tables](#)[Table S1: Reported Prevalence of Heart Failure Point Estimates and Sample Sizes in 45 Studies Identified in Systematic Review.](#)

[When estimates were only reported in detailed age- or sex-categories \(such as 10-year age groups or both sexes\), we calculated effective sample sizes from reported standard error based on the Wilson Score Interval, and then collapsed cases and sample sizes to re-estimate a mean value for each year of the study.](#)

[Table S2: Reported Incidence of Heart Failure Point Estimates and Sample Sizes in 41 Studies Identified in Systematic Review.](#)

[When estimates were only reported in detailed age- or sex-categories \(such as 10-year age groups or both sexes\), we calculated effective sample sizes from reported standard error based on the Wilson Score Interval, and then collapsed cases and sample sizes to re-estimate a mean value for each year of the study.](#)

[Table S3: Reported One-Year Case Fatality of Heart Failure Point Estimates and Sample Sizes in 44 Studies Identified in Systematic Review.](#)

[When estimates were only reported in detailed age- or sex-categories \(such as 10-year age groups or both sexes\), we calculated effective sample sizes from reported standard error based on the Wilson Score Interval, and then collapsed cases and sample sizes to re-estimate a mean value for each year of the study.](#)

Table S1: Reported Prevalence of Heart Failure Point Estimates and Sample Sizes in 45 Studies Identified in Systematic Review.

Study	Prevalence, %	Sample Size
Abhayaratna WP, 2006	6.28 (4.94-7.63)	1273
Agarwal AK, 2001	0.52 (0.49-0.55)	225000
Alehagen U, 2009	11.2 (9.11-13.29)	886
Ammar KA, 2007	2.41 (1.74-3.09)	2029
Anguita Sánchez M, 2008	6.06 (4.77-7.36)	1322
Azevedo A, 2006	7.66 (5.52-9.79)	609
Carmona M, 2011	0.95 (0.4-1.5)	1279
Ceia F, 2002	10.49 (9.73-11.25)	6300
Ceia F, 2005	6.51 (4.79-8.23)	805
Cho H, 2018	1.17 (1.16-1.19)	1727471
Cortina A, 2001	5.12 (2.88-7.35)	391
Cuthbert JJ, 2019	1.01 (0.81-1.22)	9390
Danielsen R, 2017	3.63 (3.14-4.11)	5706
Davies M, 2001	2.32 (1.85-2.79)	3960
Di Bari M, 2004	9.11 (6.67-11.54)	549
Dongfeng G, 2003	0.87 (0.72-1.01)	15518
Einarsson H, 2017	3.6 (2.93-4.28)	2961
Engelfriet PM, 2011	1.71 (1.59-1.82)	49517
Hao G, 2019	1.41 (0.67-2.15)	1040
Hung YT, 2000	0.23 (0.22-0.24)	744243
Jiménez-García R, 2014	0.65 (0.64-0.66)	6200057
Kannel WB, 1991	4.38 (3.73-5.03)	3819
Khan H, 2014	16.8 (15.44-18.15)	2935
Khera R, 2017	17.66 (17.64-17.68)	12749680
Kitzman DW, 2001	8.57 (7.98-9.17)	8473
Knox SA, 2008	1.8 (1.5-2.1)	7545
Kupari M, 1997	8.18 (5.75-10.61)	501
Lee H, 2016	0.88 (0.87-0.88)	38307984
Leibowitz D, 2011	12 (8.97-15.03)	450
Leibowitz D, 2019	15.08 (8.65-21.51)	126
Lindmark K, 2019	1.63 (1.62-1.63)	37792514
McAlister FA, 2004	0.71 (0.68-0.74)	307741
McSwain M, 1999	2.55 (1.83-3.27)	1887
Mosterd A, 1999	3.45 (2.97-3.94)	5540
Mureddu GF, 2012	6.75 (5.61-7.88)	1881
Murphy NF, 2004	1.5 (1.43-1.57)	114788
Piccinni C, 2017	3.74 (3.68-3.81)	313787
Redfield MM, 2003	2.2 (1.56-2.85)	2042
Shan C, 2014	4.3 (3.66-4.95)	3857
Smeets M, 2019	1.98 (1.96-2)	2559128

Stork S, 2017	3.9 (3.88-3.92)	3177564
Taylor CJ, 2017	0.99 (0.98-1)	2593510
Tiller D, 2013	9.66 (8.24-11.07)	1688
Tuppin P, 2016	1.09 (1.08-1.09)	48514321
Zarrinkoub R, 2013	3.57 (3.55-3.58)	4625034

~~S1: Reported Prevalence of Heart Failure Point Estimates and Sample Sizes in 45 Studies Identified in Systematic Review [GAR1]~~

Table S2: Reported Incidence of Heart Failure Point Estimates and Sample Sizes in 41 Studies Identified in Systematic Review

Study	Incidence, per 100	Sample Size (in Person-Years)
Al Suwaidi J, 2004	0.14 (0.12-0.15)	134815
Barasa A, 2014	0.72 (0.7-0.75)	443995
Bleumink GS, 2004	1.44 (1.34-1.55)	50269
Borne Y, 2014	0.19 (0.18-0.21)	368053
Conrad N, 2018	0.52 (0.51-0.52)	24877519
Corrao G, 2014	0.73 (0.72-0.74)	3597225
Curtis LH, 2008	4.33 (4.3-4.36)	2070015
Einarsson H, 2017	0.17 (0.15-0.19)	188644
Fox KF, 2001	0.48 (0.46-0.5)	364792
Hinton W, 2018	0.12 (0.12-0.13)	5249994
Hung YT, 2000	0.67 (0.65-0.69)	676997
Huusko J, 2019	0.23 (0.15-0.31)	15594
Kannel WB, 1991	1.98 (1.91-2.04)	167280
Khan H, 2014	1.81 (1.65-1.97)	2935
Khera R, 2017	3.27 (3.26-3.28)	12749680
Lee DS, 2004	2.97 (2.97-2.98)	87491152
Li R, 2019	0.93 (0.84-1.02)	43204
Lindmark K, 2019	0.96 (0.96-0.97)	56268824
Loehr LR, 2008	0.65 (0.61-0.68)	198422
Magnussen C, 2019	0.52 (0.5-0.53)	999833
McAlister FA, 2004	0.2 (0.18-0.22)	307741
Murphy NF, 2004	0.87 (0.83-0.9)	307436
Naylor M, 2016	0.49 (0.42-0.56)	38216
Ohlmeier C, 2015	1.11 (1.07-1.15)	247252
Piccinni C, 2017	0.59 (0.56-0.61)	338506
Rautiainen S, 2013	0.2 (0.18-0.21)	394059
Remes J, 1992	0.26 (0.19-0.33)	23034
Rywik S, 1999	0.44 (0.23-0.66)	4013
Sangaralingham LR, 2016	0.67 (0.67-0.67)	16360058
Senni M, 1999	2.4 (2.33-2.48)	147938
Shah RV, 2018	0.56 (0.27-0.85)	2681
Shah SA, 2013	0.27 (0.21-0.33)	33013
Stork S, 2017	0.65 (0.65-0.66)	4033768
Tsao CW, 2018	2.18 (2.1-2.27)	115703
Tseng C-H, 2011	0.36 (0.35-0.38)	741054
Uijl A, 2019	0.12 (0.11-0.13)	569362
Wasywich CA, 2010	0.19 (0.18-0.19)	80000000

Zannad F, 1999	0.1 (0.1-0.11)	1592263
Zarrinkoub R, 2013	0.66 (0.66-0.67)	4625034
de Giuli F, 2005	3.4 (3.4-3.4)	72608310
van Jaarsveld CHM, 2006	1.28 (1.14-1.42)	25662

~~Table S2: Reported Incidence of Heart Failure Point Estimates and Sample Sizes in 41 Studies Identified in Systematic Review~~

Table S3: Reported One-Year Case Fatality of Heart Failure Point Estimates and Sample Sizes in 44 Studies Identified in Systematic Review

Study	Mortality at 1 year, %	Sample Size
AHRI, 2013	30.79 (28.18-33.4)	1205
Alexander M, 1999	32.2 (31.9-32.5)	90316
Ammar KA, 2007	4.08 (1.13-13.71)	49
Amsalem Y, 2008	28.82 (27.38-30.27)	3792
Atzema CL, 2015	14.77 (14.58-14.97)	125691
Barasa A, 2014	30.51 (30.37-30.64)	443995
Berkovitch A, 2015	30.02 (28.11-31.93)	2212
Bleumink GS, 2004	37 (33.48-40.52)	725
Chamberlain AM, 2013	9.66 (6.53-12.79)	352
Chen J, 2011	31.28 (31.24-31.32)	4866309
Coles AH, 2015	44.75 (42.9-46.6)	2780
Corrao G, 2014	29.36 (28.71-30.02)	18795
Cowie MR, 2000	38 (31.53-44.47)	220
Ezekowitz JA, 2011	17.02 (16.75-17.3)	72043
Gamble J-M, 2011	16.9 (16.62-17.17)	72043
Gioli-Pereira L, 2019	6.76 (4.88-8.65)	695
Goda A, 2010	4.36 (2.69-6.02)	597
Hai J-J, 2016	14.08 (11.86-16.29)	952
Heller RF, 2000	28.65 (25.65-31.65)	877
Hoekstra T, 2013	36.36 (31.53-41.19)	385
Kaplon-Cieslicka A, 2016	19.68 (16.53-22.82)	620
Lassus JPE, 2013	27.1 (23.58-30.61)	620
Lee DS, 2004	35.71 (35.39-36.02)	88440
Lyu S, 2019	7.02 (5.18-8.86)	755
Maison P, 2013	20.64 (15.86-25.42)	281
Makubi A, 2016	23.6 (19.47-27.73)	411
McAlister FA, 2013	33.27 (32.77-33.77)	34369
McManus DD, 2013	34.66 (33.72-35.61)	9748
Nakano A, 2013	15.11 (14.16-16.06)	5433
Nakano A, 2016	17.11 (16.64-17.59)	24301
Novack V, 2010	28.68 (27.7-29.66)	8246
Ohlmeier C, 2015	33.69 (33.41-33.97)	109363
Oster HS, 2013	29.16 (27.31-31.01)	2332
Ozieranski K, 2016	13.8 (10.99-16.61)	587
Parenica J, 2013	20.3 (18.95-21.65)	3438
Rathore SS, 2006	35.6 (35.01-36.19)	25086
SCTIMST, 2001	35.84 (32.32-39.36)	717
SCTIMST, 2006	30.53 (27.31-33.76)	786

Sartipy U, 2014	20.12 (19.77-20.47)	51043
Schmidt M, 2016	38.98 (38.79-39.16)	266692
Sosin MD, 2004	45.06 (38.62-51.51)	233
Staszewsky L, 2016	16 (15.4-16.61)	14111
Tuppin P, 2014	29.22 (28.89-29.56)	69958
Vanhercke D, 2015	26.93 (22.56-31.3)	401

~~Table S3: Reported One Year Case Fatality of Heart Failure Point Estimates and Sample Sizes in 44 Studies Identified in Systematic Review~~

Supplemental Figures

Figure S1: PRISMA diagram

Caption: Flowchart of studies identified in systematic review.

Figure S2: Countries with Studies Reporting Estimates of Heart Failure Prevalence or Incidence

Caption: Countries with studies reporting estimates of HF prevalence or incidence. Red represents countries with studies reporting both prevalence and incidence; blue represents countries with only studies reporting incidence; and green represents countries with studies only reporting prevalence. White represents countries with no studies reporting estimates of prevalence or incidence.

Figure S3: Countries with Studies Reporting Estimates of Heart Failure Mortality

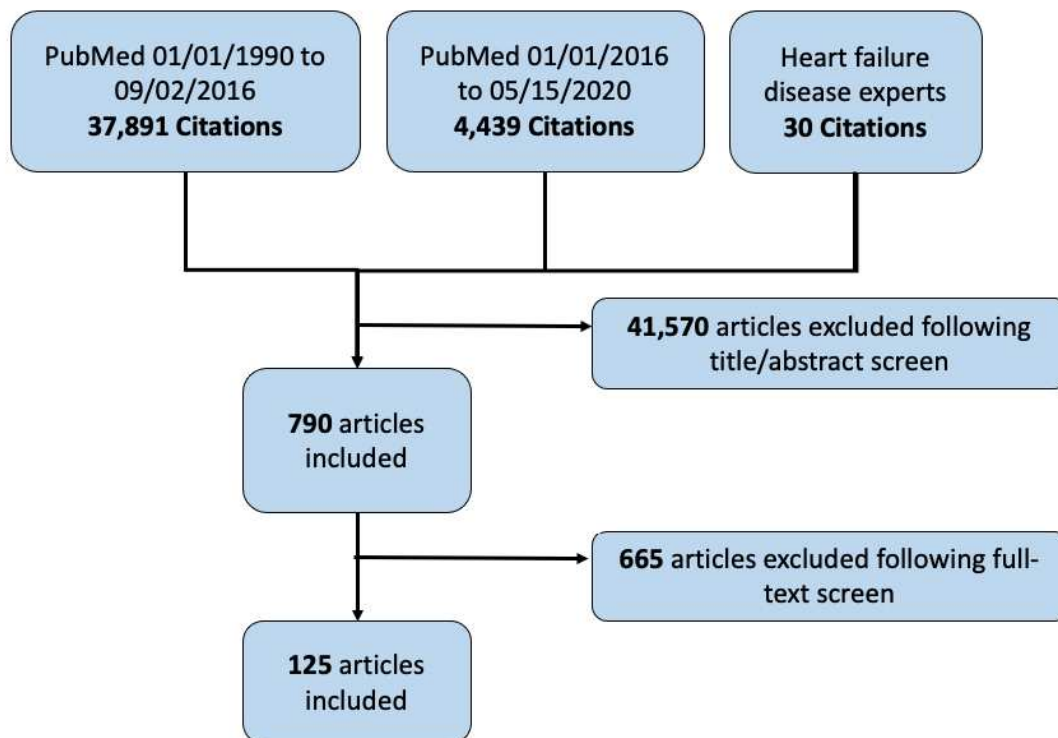
Caption: Countries with studies reporting estimates of HF mortality. White represents countries with no studies reporting estimates of mortality.

Figure S4: Reported Prevalence of HF in 45 Studies Identified in Systematic Review by Year

Caption: Prevalence of heart failure (% or per 100) reported in 45 studies by the mid-year of the data, colored according to study, and arranged by demographic profile. Multi-year studies are shown as same-colored and same-shape points connected by a line. "All adults" refers to studies restricted to patients 18+; "Older adults" refers to studies restricted to patients 50+; "All ages" refers to studies including patients of all ages. When estimates were only available in detailed age- or sex-categories (such as 10-year age groups or both sexes), we calculated effective sample sizes from reported standard error based on the Wilson Score Interval, and then collapsed cases and sample sizes to re-estimate a mean value for each year of the study.

Figure S5: Reported Incidence of HF in 41 Studies Identified in Systematic Review by Year

Caption: Incidence of heart failure (per 100 person-years) reported in 41 studies by the mid-year of the data, colored according to study, and arranged by demographic profile. Multi-year studies are shown as same-colored and same-shape points connected by a line. "All adults" refers to studies restricted to patients 18+; "Older adults" refers to studies restricted to patients 50+; "All ages" refers to studies including patients of all ages. When estimates were only available in detailed age- or sex-categories (such as 10-year age groups or both sexes), we calculated effective sample sizes from reported standard error based on the Wilson Score Interval, and then collapsed cases and sample sizes to re-estimate a mean value for each year of the study.



[Figure S1: PRISMA diagram](#)

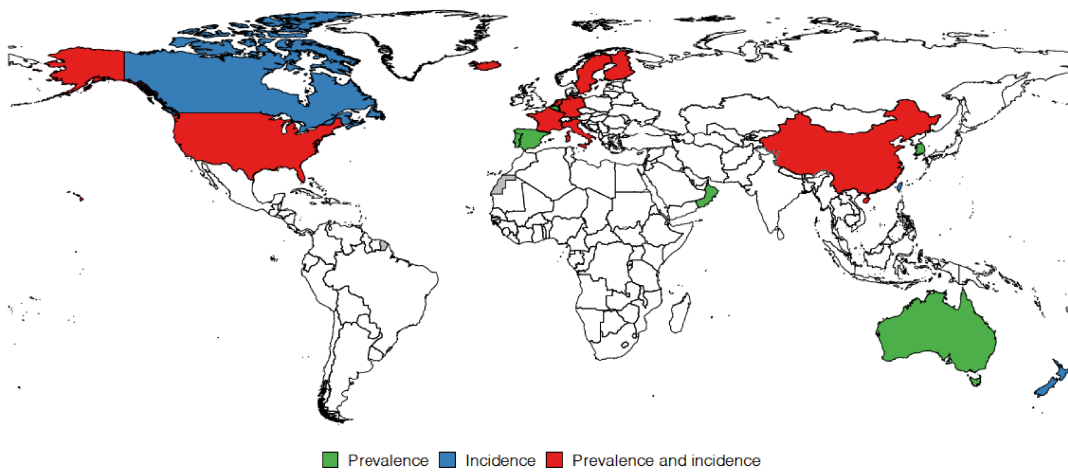


Figure S2: Countries with Studies Reporting Estimates of Heart Failure Prevalence or Incidence

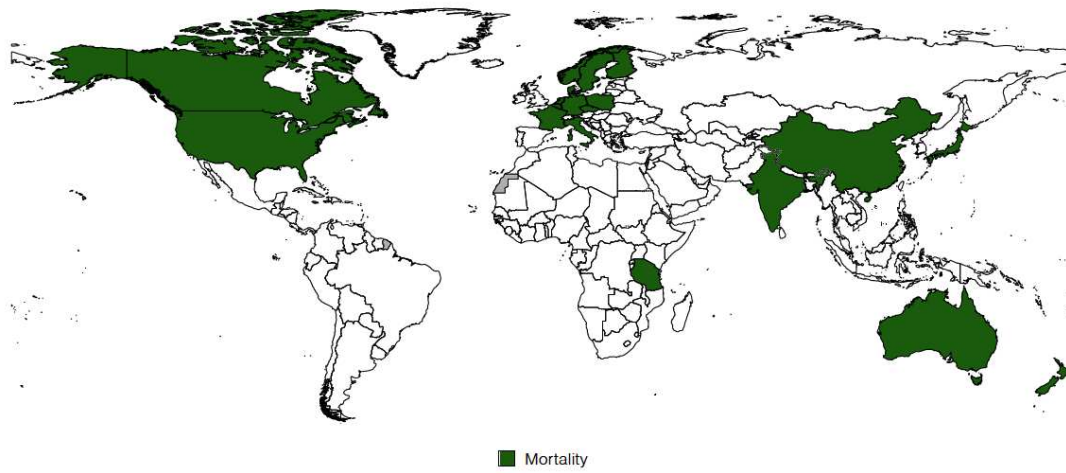


Figure S3: Countries with Studies Reporting Estimates of Heart Failure Mortality

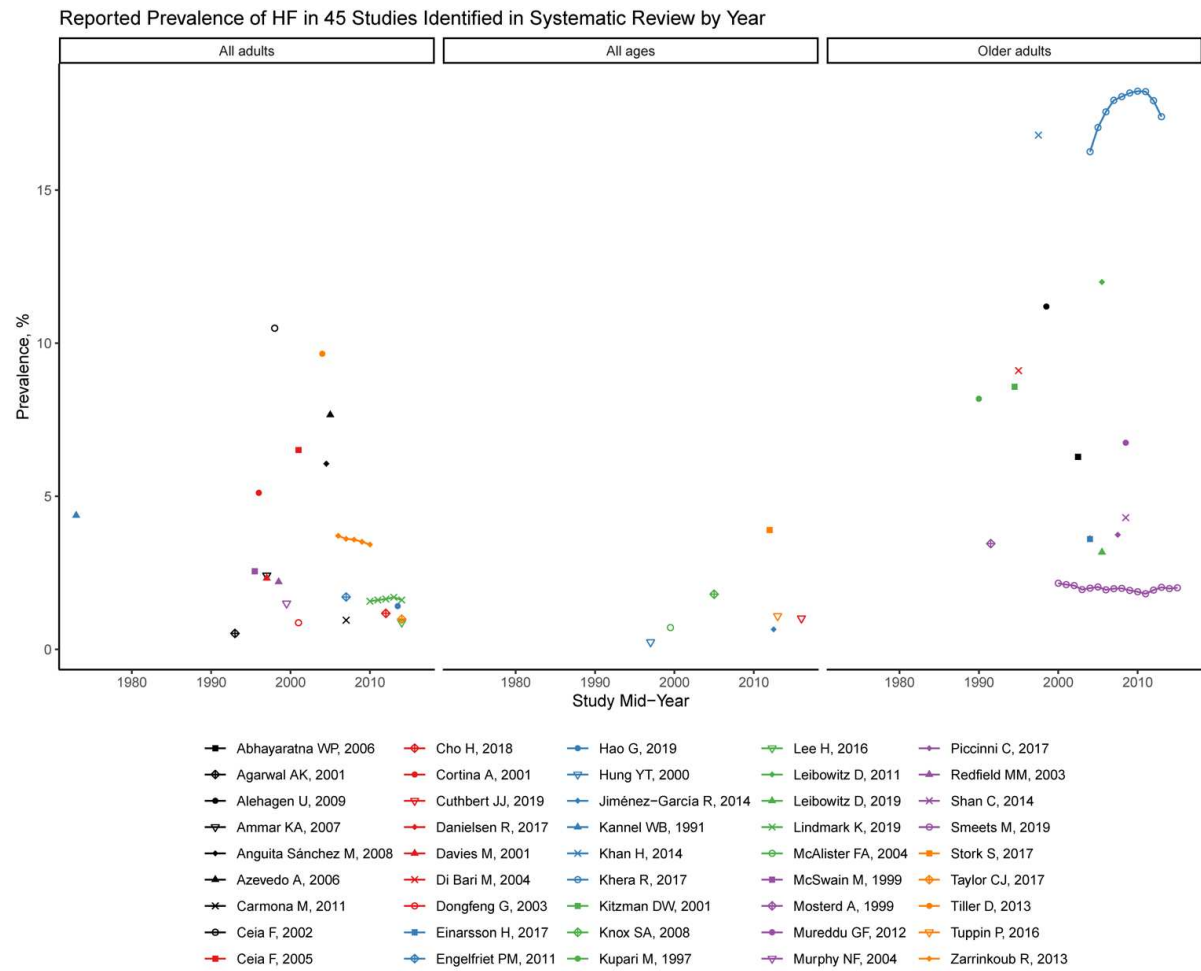


Figure S4: Reported Prevalence of HF in 45 Studies Identified in Systematic Review by Year

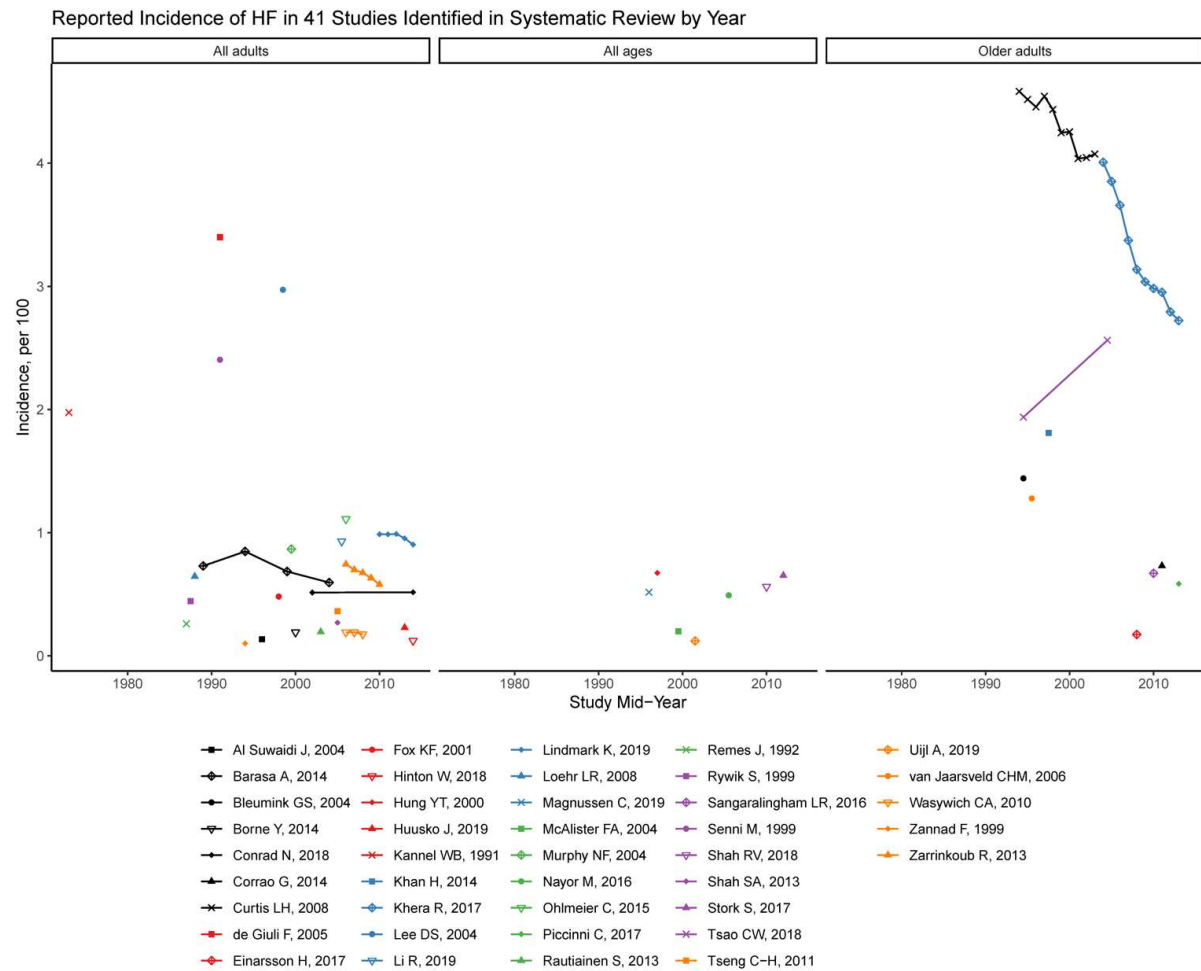


Figure S5: Reported Incidence of HF in 41 Studies Identified in Systematic Review by Year