

Supplemental Table 1. Characteristics of the 249 unique studies that were subject of the review including last name of author, year of publication, Continent, Region, MS diagnostic criteria, source of data and comorbidities studied.

Author (Year)	Continent	Region	MS Diagnostic Criteria	Source	Comorbidities	Quality Score
Achiron ¹ (2005)	Asia	Israel	Poser	2	Cancer	5/8
Allen ² (2008)	North America	US/New York State	Administrative data codes	1	Stroke Diabetes IHD Hypertension Hyperlipidemia	4/8
Allen ³ (2013)	Europe	England	Administrative data codes	1	Epilepsy	4/8
Alschuler ⁴ (2012)	North America	US/Washington	Self-report	3	Depression	4/9
Amato ⁵ (2001)	Europe	Italy/Florence	Poser	3	Depression	4/9
Annunziata ⁶ (2011)	Europe	Italy	McDonald 2001	2	AID	4/9
Auger ⁷ (2005)	North America	Canada/Quebec	Neurologist diagnosed: criteria NR	3	Sleep	3/9
Avasarala ⁸ (2003)	North America	US/Washington	Neurologist diagnosed: criteria NR	3	Depression	2/9
Bahmanyar ⁹ (2009)	Europe	Sweden	Administrative data codes	1	Cancer	7/8
Baker ¹⁰ (1972)	Australia/NZ	Australia/Melbourne	Neurologist diagnosed: criteria NR	2	AID	1/8

Bamer ¹¹ (2008)	North America	US/Washington	Self-report	3	Depression	3/9
Barcellos ¹² (2006)	North America	US/California	Neurologist diagnosed	4	AID	4/9
Basiri ¹³ (2009)	Asia	Iran/Isfahan	McDonald	2	IBD	3/8
Baumstarck-Barrau ¹⁴ (2011)	Europe	France/Marseille	McDonald 2001 or 2005	3	Depression	4/9
Bazelier ¹⁵ (2012)	Europe	UK	Administrative data codes	1	Visual Disorders	8/8
Beiske ¹⁶ (2008)	Europe	Norway/Akershus	Poser	3	Anxiety Depression	8/9
Bergamaschi ¹⁷ (2009)	Europe	Italy/Pavia	McDonald	3	Lung Disease	5/8
Bloomgren ¹⁸ (2012)	North America	US	Administrative data codes	1	Cancer	3/8
Bodini ¹⁹ (2008)	Europe	Italy	McDonald 2001	3	Depression	4/8
Bombardier ²⁰ (2004)	North America	US/Washington	Self-report	3	Alcohol abuse Drug abuse	4/9
Borhani ²¹ (2007)	Asia	Iran/Shiraz	Poser	2	AID	4/9
Brajkovic ²² (2009)	Europe	Croatia	NR	3	Anxiety Depression	5/9
Braley ²³ (2012)	North America	US/Michigan	Neurologist diagnosed: criteria NR	4	Sleep	4/9
Brichetto ²⁴ (2003)	Europe	Italy/Genoa	Poser	3	Epilepsy Depression	5/9

Brown ²⁵ (2009)	Australia/NZ	Australia/Sydney	Poser	3	Depression	5/9
Buchanan ²⁶ (2003)	North America	US	Administrative data codes	1	Depression	5/8
Buchanan ²⁷ (2006)	North America	US	Self-report	3	AID Diabetes Hypertension Hyperlipidemia MSK Cancer Depression	2/9
Buchanan ²⁸ (2011)	North America	US	Self-report	2	Depression	4/9
Burns ²⁹ (2013)	North America	US	McDonald 2005	4	Anxiety Depression	5/9
Carta ³⁰ (2004)	Europe	Italy/Cagliari	McDonald 2010	3	Bipolar disorder Depression	5/9
Catenoix ³¹ (1972)	Europe	France/Lyon	Poser	2	Epilepsy	5/8
Cendrowski ³² (1972)	Europe	Poland	Neurologist diagnosed: criteria NR	2	Epilepsy	1/9
Cendrowski ³³ (1989)	Europe	Poland	Neurologist diagnosed: criteria NR	2	IBD AID	0/9
Cetin ³⁴ (2007)	North America	US/Washington	Self-report	3	Depression	3/9
Cheng ³⁵ (2012)	Asia	Taiwan	Poser or McDonald 2001	2	Epilepsy	5/8
Christiansen ³⁶ (2010)	Europe	Denmark	Administrative data codes	1	Cardiac Arrhythmias Stroke CHF	6/8

					IHD Diabetes Valvular disease Hypertension GI tract Lung disease MSK Cancer	
Chwastiak ³⁷ (2002)	North America	US/Washington	Self-report	3	Depression	3/9
Da Silva ³⁸ (2011)	Europe	Portugal	McDonald 2005	3	Anxiety Depression	5/8
Dahl ³⁹ (2009)	Europe	Norway/Nord-Trondelag	Poser	3	Anxiety Depression	7/9
Dallmeijer ⁴⁰ (2009)	Europe	Netherlands/Amsterdam	NR	2	Diabetes Lung Disease MSK	2/9
De Keyser ⁴¹ (1988)	Europe	England/London	Poser	2	AID Diabetes GI Tract	3/8
de Seze ⁴² (2005)	Europe	France/Lille	Neurologist diagnosed: criteria NR	2	AID	3/8
Demakis ⁴³ (2009)	North America	US	Administrative data codes	1	Bipolar disorder Psychoses Anxiety Depression	5/9
Deretzi ⁴⁴ (2010)	Europe	Greece	McDonald 2001	2	AID GI Tract Diabetes	6/8
Deriu ⁴⁵ (2009)	Europe	Italy/Cagliari	McDonald 2001	3	Sleep	6/9
Dias ⁴⁶ (2012)	North America	US/California	Self-report	3	Sleep	2/9

Drake ⁴⁷ (1961)	North America	US/California	NR	4	Epilepsy	0/9
Durelli ⁴⁸ (2001)	Europe	Italy	Neurologist diagnosed: criteria NR	2	AID	4/9
Durmus ⁴⁹ (2013)	Europe	Turkey	McDonald 2001	2	Epilepsy	5/8
Eaton ⁵⁰ (2007)	Europe	Denmark	Administrative data codes	1	AID GI Tract Diabetes	4/8
Edwards ⁵¹ (2004)	Europe	England/Nottingham	MS clinic database	2	AID GI Tract Diabetes Lung Disease MSK Cancer Bipolar disorder	2/8
Einarsson ⁵² (2003)	Europe	Sweden/Stockholm	Neurologist diagnosed: criteria NR	3	Depression	3/9
Engelsen ⁵³ (1997)	Europe	Norway/Hordaland County	McAlpine	2	Epilepsy	7/8
Eriksson ⁵⁴ (2002)	Europe	Sweden/Gothenberg	Poser	2	Epilepsy	7/8
Espinola-Nadurille ⁵⁵ (2010)	North America	Mexico	McDonald 2004	4	Psychoses Bipolar disorder Anxiety Depression	4/8
Etemadifar ^{56, 57} (2012) and (2013)	Asia	Iran/Isfahan	McDonald 2005	2	Epilepsy	7/8
Fanouriakis ⁵⁸ (2013)	Europe	Greece/Crete	McDonald 2010	2	AID	6/8

Feinstein ⁵⁹ (2002)	North America	Canada/Ontario	Poser	4	Alcohol abuse Drug abuse Anxiety Depression	5/9
Feinstein ⁶⁰ (2002) and Korostil ⁶¹ (2007)	North America	Canada/Ontario	Poser	4	Anxiety Depression	5/9
Ferini-Strambi ⁶² (1994)	Europe	Italy/Milan	Poser	4	Sleep	4/9
Ferrando ⁶³ (2007)	North America	US/New York	Neurologist diagnosed: criteria NR	3	Depression	3/9
Finlayson ⁶⁴ (2013)	North America	US/Illinois	Self-report	3	Stroke Diabetes Lung Disease MSK	2/9
Fisk ⁶⁵ (1998)	North America	Canada/Nova Scotia	Administrative data codes	1	Bipolar disorder Depression	5/8
Fleming ⁶⁶ (1994)	North America	US	Administrative data codes	1	Cardiac Arrhythmias Stroke CHF IHD Diabetes Hypertension GI tract Lung disease Renal Disease Cancer	4/8
Forbes ⁶⁷ (2006)	Europe	England	Neurologist diagnosed: criteria NR	3	Depression	2/9
Foroughipour ⁶⁸ (2012)	Asia	Iran/Mashhad	McDonald 2000	3	Anxiety	4/9
Fragoso ⁶⁹ (2011)	South America	Brazil	McDonald 2001	4	Sleep	5/9

Fromont ⁷⁰ (2013)	Europe	France	Administrative data codes	1	AID Diabetes IHD GI Tract Cancer	7/8
Fuvesi ⁷¹ (2010)	Europe	Hungary	McDonald 2001	3	Hypertension Depression	4/9
Galeazzi ⁷² (2005)	Europe	Italy	Poser	4	Alcohol abuse Bipolar disorder Anxiety Depression	6/9
Gambardella ⁷³ (2003)	Europe	Italy/Catanzaro	Poser	2	Epilepsy	5/8
Garfield ⁷⁴ (2012)	Europe	UK/Nottingham	Neurologist diagnosed: criteria NR	3	Anxiety	3/9
Ghadirian ⁷⁵ (2001)	North America	Canada/Quebec	Self-report	3	AID Visual Disorder Cancer	3/9
Ghajarzadeh ⁷⁶ (2002)	Asia	Iran/Tehran	McDonald	3	Depression	4/9
Ghezzi ⁷⁷ (1990)	Europe	Italy/Milano	McAlpine	2	Epilepsy	6/8
Gold ⁷⁸ (2003)	Europe	Germany	Poser	3	Anxiety Depression	5/8
Goldacre ⁷⁹ (2004)	Europe	England/Oxford	Administrative data codes	1	Sleep	5/9
Gomez-Choco ⁸⁰ (2007)	Europe	Spain/Barcelona	Poser	4	Sleep	5/9
Goodin ⁸¹ (1999)	North America	US/Northern California	Neurologist diagnosed: criteria NR	3	Depression	3/9

Goretti ⁸² (2009)	Europe	Italy/Florence	McDonald 2000	3	Anxiety Depression	4/9
Goretti ⁸³ (2010)	Europe	Italy	McDonald 2001	4	Bipolar disorder Anxiety Depression	6/8
Gottberg ⁸⁴ (2007)	Europe	Sweden/Stockholm	Medical records	3	Depression	7/9
Hakim ⁸⁵ (2000)	Europe	England/Hampshire	Poser	3	Anxiety Depression	7/9
Hanrahan ⁸⁶ (1988)	North America	Canada/Alberta	Neurologist diagnosed: criteria NR	2	AID	2/8
Harel ⁸⁷ (2007)	Asia	Israel	Poser	4	Psychoses Personality disorder Anxiety Depression	6/9
Hemminki ⁸⁸ (2011)	Europe	Sweden	Administrative data codes	1	Cancer Lung Disease	5/8
Hemminki ⁸⁹ (2012)	Europe	Sweden	Administrative data codes	1	Cancer	5/8
Hemminki ⁹⁰ (2012)	Europe	Sweden	Administrative data codes	1	Cancer	5/8
Hemminki ⁸⁹ (2012)	Europe	Sweden	Administrative data codes	1	Cancer	5/8
Hemminki ⁹¹ (2013)	Europe	Sweden	Administrative data codes	1	Cancer	5/8
Hemminki ⁹² (2013)	Europe	Sweden	Administrative data codes	1	Cancer	5/8
Henderson ⁹³ (2000)	Australia/NZ	Australia Queensland	Medical Records and Poser	2	AID Diabetes GI Tract	4/9

Hjalgrim ⁹⁴ (2004)	Europe	Denmark	Administrative data codes	1	Cancer	7/8
Holper ⁹⁵ (2010)	Europe	Germany and Switzerland	Poser and McDonald 2005	3	Hypertension Depression	6/9
Hopman ⁹⁶ (2007)	North America	Canada/Ontario	Neurologist diagnosed: criteria NR	3	Hypertension Depression	6/9
Hoppenbrouwers ⁹⁷ (2007)	Europe	Netherlands	Poser	2	AID Diabetes	8/9
Horton ⁹⁸ (2010)	North America	US and Canada	McDonald 2005	3	AID Diabetes IHD Hypertension Hyperlipidemia Visual disorder Epilepsy GI Tract Lung Disease MSK Renal Disease Cancer Psychoses Bipolar disorder Anxiety Depression	5/8
Hussein ⁹⁹ (2006)	Asia	Saudi Arabia	NR	2	Diabetes	1/8
Isaksson (2007)	Europe	Sweden/Orebro	Poser	3	Depression	4/9
Jadidi ¹⁰⁰ (2013)	Europe	Sweden	Administrative data codes	1	Cardiac Arrhythmias Stroke CHF IHD Diabetes	5/8

					Valvular disease Hypertension GI tract Lung disease	
Janardhan ¹⁰¹ (2002)	North America	US	Poser	4	Depression	4/9
Janssens ¹⁰² (2003) and Siepman ¹⁰³ (2008)	Europe	Netherlands	Poser	3	Anxiety Depression	7/9
Janssens ¹⁰⁴ (2006)	Europe	Netherlands	Poser	3	Anxiety	5/9
Joffe ¹⁰⁵ (1987)	North America	Canada/Toronto	Neurologist diagnosed: criteria NR	4	Psychoses Anxiety Bipolar disorder Depression	3/9
Johansson ^{106, 107} (2007) and (2008)	Europe	Sweden/Stockholm	Poser	3	Depression	5/9
Jonsson ¹⁰⁸ (1996)	Europe	Denmark/Haslev	Schumacher	3	Depression	5/9
Julian ¹⁰⁹ (2009)	North America	US	Neurologist diagnosed: criteria NR	3	Depression	3/9
Kahn ¹¹⁰ (2007)	Australia/NZ	Australia/Melbourne	Poser and Paty	2	Stroke Diabetes IHD Hypertension Hyperlipidemia Depression	3/9
Kaminska ¹¹¹ (2012)	North America	Canada/Montreal	McDonald 2001	3	Sleep	4/9
Kang ¹¹² (2010)	Asia	Taiwan	Administrative data codes	1	Cardiac Arrhythmias Stroke CHF AID IHD	4/8

					Peripheral Vascular Disease Diabetes Hypertension Hyperlipidemia Epilepsy Cancer GI Tract Lung Disease Renal Disease Psychoses Depression	
Kanjwal ¹¹³ (2010)	North America	US/Ohio	Neurologist diagnosed: criteria NR	2	Diabetes IHD Hyperlipidemia	3/8
Karara ¹¹⁴ (2013)	Asia	Egypt/Cairo	McDonald	2	AID	3/9
Kargarfard ¹¹⁵ (2012)	Asia	Iran/Isfahan	Neurologist diagnosed: criteria NR	3	Depression	3/8
Karimi ¹¹⁶ (2013)	Asia	Iran/Tehran	Neurologist diagnosed: criteria NR	4	Lung Disease	4/9
Karni ¹¹⁷ (1999)	Asia	Israel	Poser	2	AID	5/9
Kehler ¹¹⁸ (2009)	North America	Canada	Self-report	3	Anxiety Depression	4/9
Ketelslegers ¹¹⁹ (2010)	North America	Canada	Self-report	3	Depression	4/9
Kingwell ¹²⁰ (2012)	North America	Canada/British Columbia	Poser	1	Cancer	7/8
Kinnunen ¹²¹ (1986)	Europe	Finland/Uusimaa	Schumacher	2	Epilepsy	8/8

Klevan ¹²² (2014)	Europe	Norway/Hordaland County	Poser	3	Depression	8/9
Koshiol ¹²³ (2011)	North America	US	Administrative data codes	1	Cancer	5/8
Krokki ¹²⁴ (2006)	Europe	Finland/Northern Ostrobothnia	Administrative data codes/ neurologist	2	Stroke Epilepsy	6/8
Landgren ¹²⁵ (2011)	North America	US	Administrative data codes	1	Cancer	3/8
Langer Gould ¹²⁶ (2010)	North America	US/Northern California	Diagnostic codes entered by neurologists	2	AID IBD Diabetes GI Tract	6/8
Laroni ¹²⁷ (2006)	Europe	Italy/Veneto	Poser	2	AID Diabetes	5/9
LaVela ¹²⁸ (2012)	North America	US	Self-report	3	Stroke IHD Diabetes Hypertension Hyperlipidemia	4/8
Lawrenson ¹²⁹ (2001)	Europe	UK	Administrative data codes	1	Renal Disease	6/8
Le Scanff ¹³⁰ (2008)	Europe	France/Lyon	Poser	2	AID	6/8
Lebrun ¹³¹ (2008)	Europe	France	Poser and McDonald 2001	2	Cancer	6/8
Lebrun ¹³² (2011)	Europe	France	Poser and McDonald 2001	2	Cancer	8/9
Lehan ¹³³ (2012)	North America	Mexico/Guadalajara	Neurologist diagnosed: criteria NR	3	Anxiety Depression	1/9

Leonavicius ^{134, 135} (2011) and (2012)	Europe	Lithuania	Neurologist diagnosed: criteria NR	3	Depression	3/9
Leonavicius ¹³⁶ (2013)	Europe	Lithuania	Neurologist diagnosed: criteria NR	3	Anxiety	3/9
Levinthal ¹³⁷ (2013)	North America	US/Pittsburgh	Neurologist diagnosed: criteria NR	2	AID GI Tract Anxiety Depression	6/9
Li ¹³⁸ (2012)	North America	US	Self-report	3	Sleep	4/8
Lindgard ¹³⁹ (1985)	Europe	Sweden	Administrative data codes	1	Diabetes IHD Hypertension GI Tract Alcohol abuse Lung Disease	5/8
Liu ¹⁴⁰ (2013)	Europe	Sweden	Administrative data codes	1	Cancer	3/9
Lu ¹⁴¹ (2013)	North America	Canada/British Columbia	Poser, McDonald 2005	1	Diabetes Hypertension	6/8
Lobentanz ¹⁴² (2004)	Europe	Austria/Vienna	Self-report	3	Depression	6/9
Lutterotti ¹⁴³ (2011)	Europe	Austria/Innsbruck	McDonald 2005	3	Depression	4/8
Manconi ¹⁴⁴ (2007)	Europe	Italy/Milan	McDonald 2001	4	Sleep	5/9
Manconi ¹⁴⁵ (2008)	Europe	Italy/Milan	McDonald 2005	4	Sleep	6/9
Maor ¹⁴⁶ (2001)	Asia	Israel	Neurologist diagnosed: criteria NR	3	Depression	3/9

Marrie ^{147, 148} (2008) and (2011)	North America	US	Self-report	2	AID Diabetes Hypertension Hyperlipidemia GI Tract Peripheral Vascular Disease Visual disorders Epilepsy IHD Lung Disease Renal Disease MSK Cancer	5/9
Marrie ¹⁴⁹ (2009)	North America	US	Self-report	2	Psychoses Bipolar disorder Anxiety Alcohol abuse Depression	5/9
Marrie ¹⁵⁰ (2011)	North America	US	Self-report	2	AID	5/9
Marrie ¹⁵¹ (2012)	North America	Canada/Manitoba	Administrative data codes	1	AID	8/8
Marrie ¹⁵² (2012)	North America	Canada/Manitoba	Administrative data codes	1	Diabetes Hypertension Hyperlipidemia	8/8
Marrie ¹⁵³ (2012)	North America	Canada/Manitoba	Administrative data codes	1	MSK	8/8
Marrie ¹⁵⁴ (2013)	North America	Canada/Manitoba	Administrative data codes	1	AID Epilepsy Lung Disease	8/8
Marrie ¹⁵⁵ (2013)	North America	Canada/Manitoba	Administrative data codes	1	IHD	8/8

Marrie ¹⁵⁶ (2013)	North America	Canada/Manitoba	Administrative data codes	1	Psychoses Bipolar disorder Anxiety Depression	8/8
Marrosu ¹⁵⁷ (2002)	Europe	Italy/Sardinia	Poser	2	Diabetes	4/9
Marrosu ¹⁵⁸ (2004)	Europe	Italy/Sardinia	Poser	2	Diabetes	3/9
Martinez-Lapiscina ¹⁵⁹ (2013)	Europe	Spain	McDonald 2001 or 2005	2	Epilepsy	5/8
Mattioli ¹⁶⁰ (2011)	Europe	Italy/Brescia	McDonald 2005	3	Depression	4/9
McGuigan ¹⁶¹ (2006)	Europe	Ireland	Poser	2	Depression	3/9
Merlino ¹⁶² (2009)	Europe	Italy/Udine	McDonald 2001	3	Anxiety Depression	8/9
Metz ¹⁶³ (1989)	North America	Canada/Alberta	Poser	2	AID	5/9
Midgard ¹⁶⁴ (1996)	Europe	Norway	McAlpine	1	Cancer	7/8
Midgard ¹⁶⁵ (1996)	Europe	Norway/Hordaland County	Bauer	4	AID Diabetes	6/9
Miri ¹⁶⁶ (2013)	Asia	Iran/Tehran	McDonald 2001	4	Sleep	5/9
Miro ¹⁶⁷ (1990)	Europe	Spain	Poser	2	AID	4/9
Mohr ¹⁶⁸ (2007)	North America	US/Northern California	Administrative data codes	1	Depression	7/8
Moller ¹⁶⁹ (1991)	Europe	Denmark	Administrative data codes	1	Cancer	6/8

Montel ¹⁷⁰ (2007)	Europe	France	Poser	4	Anxiety Depression	5/9
Monzani ¹⁷¹ (1999)	North America	Italy/Pisa	Lublin	2	AID	3/9
Moreau ¹⁷² (1998)	Europe	France/Dijon	Poser	2	Epilepsy	4/9
Moreau ¹⁷³ (2009)	Europe	France	Poser	3	Anxiety Depression	6/9
Moreira ¹⁷⁴ (2008)	South America	Brazil	Neurologist diagnosed: criteria NR	3	Sleep	5/9
Munteis ¹⁷⁵ (2007)	Europe	Spain/Cataluña	McDonald 2001	2	AID	4/9
Nicholl ¹⁷⁶ (2001)	Europe	UK/Nottingham	Neurologist diagnosed: criteria NR	3	Anxiety Depression	6/9
Nicoletti ¹⁷⁷ (2003)	Europe	Italy/Catania	Poser	2	Epilepsy	8/8
Niederweiser ¹⁷⁸ (2003)	Europe	Austria/Graz	Poser	2	AID	5/9
Nielsen ¹⁷⁹ (2006)	Europe	Denmark	Allison or Poser	1	Cancer	6/8
Nielsen ¹⁸⁰ (2008)	Europe	Denmark	Allison or Poser	1	AID IBD GI Tract	6/8
Noseworthy ¹⁸¹ (1989)	North America	Canada/Ontario	Neurologist diagnosed: criteria NR	2	AID	3/9
Noy ¹⁸² (1995)	Asia	Israel	Poser	3	Anxiety Depression	5/8

Nuyen ¹⁸³ (2006)	Europe	Netherlands	Administrative data codes	1	AID Stroke Diabetes IHD Hyperlipiemia Visual disorders Epilepsy GI Tract Lung Disease Renal Disease Cancer Psychoses Drug abuse Anxiety Depression	5/8
Nyquist ¹⁸⁴ (2001)	North America	US/Minnesota	Poser	2	Epilepsy	7/8
Olafsson ¹⁸⁵ (1999)	Europe	Iceland	Poser	2	Epilepsy	8/8
Palo ¹⁸⁶ (1977)	Europe	Finland	Schumacher	1	Cancer	7/8
Pandya ¹⁸⁷ (2005)	North America	Canada/Alberta	Poser	4	Depression	3/8
Patten ¹⁸⁸ (2000) and Zabad ¹⁸⁹ (2005)	North America	Canada/Alberta	Poser	2	Depression	7/9
Patten ¹⁹⁰ (2003)	North America	Canada	Self-report	3	Depression	8/9
Patten ¹⁹¹ (2005)	North America	Canada/Alberta	Poser	2	Depression	4/8
Patten ¹⁹² (2005)	North America	Canada/Alberta	Administrative data codes	1	Psychoses	6/8

Patten ¹⁹¹ (2005)	North America	Canada/Alberta	Administrative data codes		Depression	8/9
Patten ¹⁹³ (2010)	North America	Canada/Alberta	Poser	2	Depression	5/9
Patti ¹⁹⁴ (2003)	Europe	Italy/Catania	Neurologist diagnosed: criteria NR	3	Depression	6/9
Patti ¹⁹⁵ (2007)	Europe	Italy	Poser	3	Depression	5/9
Paz Soldan ¹⁹⁶ (2012)	North America	US/Minnesota	Poser	2	Diabetes Hypertension Hyperlipidemia Peripheral Vascular Disease	6/8
Pedotti ¹⁹⁷ (2009)	Europe	Italy/Lombardi	McDonald 2005	4	Lung Disease	6/9
Percy ¹⁹⁸ (1971)	North America	US/Minnesota	Allison	2	Cancer AID	6/8
Pittion-Vouyovitch ¹⁹⁹ (2006)	Europe	France/Nancy	Poser	3	Depression	7/9
Pitzalis ²⁰⁰ (2008)	Europe	Italy/Sardinia	NR	2	Diabetes	1/9
Poder ²⁰¹ (2009)	North America	Canada/Nova Scotia	McDonald 2005	2	Anxiety Alcohol abuse Depression	7/9
Poirier ²⁰² (1987)	North America	Canada	Schumacher	4	Sleep	2/9
Ponsonby ²⁰³ (2006)	Australia/NZ	Australia/Tasmania	Poser and MRI	4	Lung Disease	5/9
Porcel ²⁰⁴ (2006)	Europe	Spain	Neurologist diagnosed: criteria NR	3	Anxiety Depression	4/9

Ramagopalan ²⁰⁵ (2007)	North America	Canada	Poser or McDonald 2005	2	AID IBD Diabetes GI Tract	5/9
Rodrigo ²⁰⁶ (2011)	Europe	Spain/Asturias	McDonald 2005	2	AID GI Tract	5/9
Romberg ²⁰⁷ (2008)	Europe	Finland	Poser	3	Depression	4/9
Sadovnick ²⁰⁸ (1989)	North America	Canada/British Columbia	Poser	2	AID GI Tract Depression	4/8
Sahraian ²⁰⁹ (2013)	Asia	Iran/Tehran	McDonald 2005	2	Lung Disease	5/9
Salter ²¹⁰ (2013)	North America	US	Self-report	2	Visual disorders AID	4/9
Salvatore ²¹¹ (2004)	Europe	Italy/Varese	Neurologist diagnosed: criteria NR	2	AID GI Tract	5/9
Sandberg-Wollheim ²¹² (1992)	Europe	Sweden/Lund	Poser	2	AID	1/9
Scott ²¹³ (1996)	North America	US/Pennsylvania	Poser	4	Depression	4/8
Seyed Saadat ²¹⁴ (2013)	Asia	Iran/Guilan	McDonald 2005	3	Depression	5/8
Seyfert ²¹⁵ (1990)	Europe	Germany/Berlin	Neurologist-administered questionnaire	2	AID IBD Diabetes GI Tract	6/9
Shaygannejad ²¹⁶ (2013)	Asia	Iran/Isfahan	McDonald 2005	2	Epilepsy Sleep	6/8
Sheu ²¹⁷ (2013)	Asia	Taiwan	Administrative data codes	1	Diabetes IHD	5/8

					Hypertension Hyperlipidemia Lung Disease Alcohol abuse	
Shiraishi ²¹⁸ (2005)	Asia	Japan/Kyoto	McDonald 2001	2	Epilepsy	4/8
Simioni ²¹⁹ (2007)	Europe	Switzerland	McDonald 2001 or 2005	3	Anxiety Depression	5/9
Sloka ²²⁰ (2005)	North America	Canada/Newfoundland and Labrador	Neurologist diagnosed: criteria NR	2	AID	7/9
Smith ²²¹ (2000)	Europe	UK/Liverpool	Neurologist diagnosed: criteria NR	3	Anxiety Depression	3/9
Soderberg ²²² (2006)	Europe	Sweden	Administrative data codes	1	Hematologic malignancy	2/8
Sokic ²²³ (2001)	Europe	Serbia	Poser	2	Epilepsy	2/8
Sollom ²²⁴ (2007)	Europe	UK	Self-report	3	Depression	6/8
Solomon ²²⁵ (2013)	North America	US/Oregon	McDonald 2005	2	AID	4/8
Somer ²²⁶ (1989)	Europe	Finland	Schumacher	2	IBD	3/9
Spain ²²⁷ (2007)	Australia/NZ	Australia/Victoria	Poser	3	Anxiety Depression	6/8
Striano ²²⁸ (2003)	Europe	Italy/Naples	McDonald 2001	2	Epilepsy	4/8
Sumelahti ²²⁹ (2004)	Europe	Finland	Poser	1	Cancer	7/8

Sun ²³⁰ (2013)	Asia	Taiwan	Administrative data codes	1	Hypertension Hyperlipidemia Cancer	5/8
Sundgren ²³¹ (2013)	Europe	Sweden/Stockholm	McDonald 2005	3	Depression	4/9
Sunesen ²³² (2010)	Europe	Denmark	Administrative data codes	1	Cancer	6/8
Tachibana ²³³ (1994)	Europe	England/London	McDonald 1986	3	Sleep	3/8
Tanriverdi ²³⁴ (2010)	Europe	Turkey	Poser	3	Depression	5/8
Tarrants ²³⁵ (2011)	North America	US	Administrative data codes	1	Depression	3/8
Thielscher ²⁰⁶ (2013)	Europe	Germany	Administrative data codes	1	Depression	4/8
Till ²⁰⁷ (2012)	North America	Canada/Toronto	McDonald 2005	3	Anxiety Depression	5/9
Tourbah ²³⁶ (1998)	Europe	France/Paris	Poser	2	AID	3/8
Tremlett ²³⁷ (2002)	Europe	Wales	Administrative data codes	1	AID Diabetes GI Tract Lung Disease	6/8
Trouillas ²³⁸ (1971)	Europe	France/Lyon	NR	2	Epilepsy	0/9
Turner ²³⁹ (2009)	North America	US	Administrative data codes	1	Alcohol	5/9
Turpin ²⁴⁰ (2007)	North America	Canada/Saskatchewan	GP and drug plan	3	MSK	5/9

Uribe-San Martin ²⁴¹ (2014)	South America	Chile	McDonald 2010	2	Epilepsy	6/8
Valleroy ²⁴² (1984)	North America	US/Washington	Self-report	3	Depression	3/9
Vavrova ²¹⁵ (2012)	Europe	Czech Republic/Prague	McDonald 2001	4	Sleep	6/9
Viveiros ²⁴³ (2010)	South America	Brazil/Rio de Janeiro	McDonald 2001 or 2005	2	Epilepsy	3/9
Vogt ²⁴⁴ (2009)	Europe	Switzerland	McDonald 2005	3	Depression	4/8
Warren ²⁴⁵ (2009)	North America	Canada	Self-report	3	Hypertension	4/8
Wertman ²⁴⁶ (1992)	Asia	Israel	Rose	2	Diabetes	4/9
Williams ²⁴⁷ (2005)	North America	US/Washington	Administrative data codes	1	Depression	7/9
Wood ²⁴⁸ (2013)	Australia/NZ	Australia/Tasmania	McDonald 2001	3	Anxiety Depression	5/8
Wynn ²⁴⁹ (1990)	North America	US/Minnesota	Poser	2	AID Diabetes Cancer	3/8
Zettl ²⁵⁰ (2013)	Europe	Germany	Neurologist diagnosed: criteria NR	3	Depression	4/9
Zorzon ²⁵¹ (2001)	Europe	Italy/Trieste	Poser	4	Depression	5/9
Zorzon ²⁵² (2003)	Europe	Italy/Trieste	McDonald 2001	2	AID	4/9

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