

Table S1 Definition of perioperative complications

Complications	Record as postoperative complication requiring reoperation/-intervention or serious intraoperative complication?	Record as any other complication?
(Tension) pneumothorax/hemothorax requiring drainage	Yes	No
Hemothorax without intervention	No	Yes
Pneumothorax without intervention	No	No
Hemato(pneumo)thorax due to trauma	No	No
Pleural effusion/pleuritis exsudativa requiring drainage	Yes	No
Pleural effusion/pleuritis exsudativa without intervention	No	Yes
Bar displacement requiring reoperation	Yes	No
Bar displacement without intervention	No	Yes
Stabilizer dislocation requiring reoperation	Yes	No
Stabilizer dislocation without intervention	No	Yes
Neuropraxia	No	Yes
Cardiac (=myocardial) perforation/laceration	Yes	No
Liver piercing (often due to thoracoscopic trocar)	Yes	No
Early bar removal (for any reason, such as infection, chronic pain etc)	Yes	No
Bar infection for which no surgical intervention (antibiotics)	No	Yes
Chronic pain complaints for which no surgical intervention	No	No
Chronic pain complaints for which surgical intervention (e.g., muscle release, bar removal etc)	Yes	No
Intercostal muscle rupture during surgery	Yes	No
Pericarditis without any surgical treatment	No	Yes
Pericarditis requiring pericardiocentesis	Yes	No
Pericardial tear during surgery	Yes	No
Mucus plugs/atelectasis for which bronchoscopic toilet	Yes	No
Mucus plugs/atelectasis without intervention	No	No
Wire breakage/exteriorization for which reoperation	Yes	No
Wire breakage without intervention	No	No
Hematoma formation requiring reoperation/intervention	Yes	No
Hematoma formation without intervention	No	No
Reoperation for pain control (e.g., intercostal nerve block)	Yes	No
Sternum fracture (during or after surgery)	Yes	No
Bar allergy requiring removal	Yes	No
Bar allergy without intervention	No	No
Wound infection without surgical intervention (this includes opening at the bedside)	No	Yes

Table S1 (continued)

Table S1 (continued)

Complications	Record as postoperative complication requiring reoperation/-intervention or serious intraoperative complication?	Record as any other complication?
Wound infection requiring surgical intervention (e.g., incision and drainage)	Yes	No
Seroma without surgical intervention (this includes opening at the bedside)	No	Yes
Seroma requiring surgical debridement (i.e., incision and drainage)	Yes	No
Wound dehiscence without surgical intervention (this includes opening at the bedside)	No	Yes
Wound dehiscence requiring surgical intervention in the OR	Yes	No
Postoperative heart failure	No	No
Recurrence requiring reoperation or conservative treatment (e.g., vacuum bell etc)	Yes	No
Recurrence without any treatment	No	Yes
Undercorrection requiring reoperation or conservative treatment (e.g., vacuum bell etc)	Yes	No
Undercorrection without any treatment	No	No
Overcorrection requiring reoperation or conservative treatment (e.g., vacuum bell etc)	Yes	No
Overcorrection without any treatment	No	No
Pneumonia	No	Yes
Additional bending of the bar	Yes	No
Empyema, conservative treatment	No	Yes
Empyema requiring surgical intervention	Yes	No
Cardiac arrhythmia	No	No
Gastrointestinal ileus	No	No
Postoperative ICU admission	yes	No
Unintended intra-operative chest tube placement	No	No
Urinary retention requiring catheterization	No	No
Lower extremity paralysis due to epidural placement	No	Yes
Intraoperative conversion to thoracotomy for cardiac massage	Yes	No
Diaphragmatic puncture during surgery	Yes	No
Parenchymal damage during surgery	Yes	No
Neuropathic pain	No	Yes
Death	Yes	No
Horner syndrome	No	No
Subcutaneous emphysema	No	No

PM consider intercostal neuralgia as neuropathic pain. PM intraoperative hypotension, tachycardia and so on without clinical consequences are not considered.

Table S2 PubMed

Overview		
Database	PubMed	
Platform	National Library of Medicine	
Date of search	June 24 th , 2023	
Number of results	968	
Syntax guide		
Mesh	Medical subject headings	
tiab	Words in title or abstract	
*	Truncation	
Search	Query	Items found
#1	"Funnel chest"[Mesh]	2,719
#2	Funnel chest*[tiab] OR "pectus excavatum"[tiab] OR funnel breast*[tiab] OR chonechondrosternon[tiab] OR foveated chest*[tiab] OR koilosternia[tiab]	3,141
#3	Nuss[tiab] OR bar[tiab] OR MIRPE[tiab] OR minimal* invasive repair[tiab]	32,921
#4	#1 OR #2	3,548
#5	#3 AND #4	968

Table S3 EMBASE

Overview		
Database	EMBASE	
Platform	Ovid	
Date of search	June 24 th , 2023	
Number of results	371	
Syntax guide		
/exp	EMtree keyword with explosion	
:ab,ti	Words in title or abstract	
*	Truncation	
Search	Query	Items found
#1	'funnel chest'/exp	1,427
#2	('funnel breast*' or 'funnel chest*' or 'chonechondrosternon' or 'foveated chest*' or 'koilosternia' or 'pectus excavatum').ti,ab.	1,169
#3	('nuss' or 'bar' or 'mirpe' or 'minimal* invasive repair').ti,ab.	13,037
#4	#1 OR #2	1,507
#5	#3 AND #4	371

Table S4 Individual study characteristics

First author
Article title
Year of publication (year)
Study design
Range of inclusion (date/year – date/year)
Number of months (months)
Number of years (years)
Number of included patients (n)
Annual case volume (number of patients / years)
Country
City
Institution
Age (mean, years)
Age (standard deviation, years)
Males (n)
Haller index (mean)
Haller index (standard deviation)
Prior treatment (n, further specified)
Duration of surgery (minutes, mean)
Duration of surgery (minutes, standard deviation)
Length of hospital stay (days, mean)
Length of hospital stay (days, standard deviation)
Clinically significant perioperative complications (n)
Clinically significant perioperative complications (% , number/sample size)
Bar displacement (n)
Bar displacement (% , number/sample size)

Table S5 Individual study characteristics

Author	Publication Year	Study type	Country/region	City	Institution	Start enrollment period	End enrollment period	Number of months
Al-Assiri (36)	2009	Prospective observational	Canada	Calgary	Alberta Children's Hospital	01/06/2003	01/04/2005	22
Anbarasu (8)	2022	Retrospective observational	USA	Houston	Texas Children's Hospital	01/02/2016	01/02/2020	48
Antonoff (37)	2009	Retrospective observational	USA	Minneapolis	University of Minnesota	01/01/2004	01/01/2018	168
Barua (38)	2012	Retrospective observational	UK	Nottingham	Nottingham City Hospital	01/01/2006	01/12/2010	59
Boehm (39)	2024	Retrospective observational	Germany	Munich	Children's Hospital	01/01/2000	01/12/2002	35
Bohosiewicz (40)	2005	Retrospective observational	Poland	Katowice	Upper-Silesian Child and Mother's Health Centre	01/07/1998	01/03/2003	56
Castellani (3)	2008	Retrospective observational	Austria	Graz	Medical University of Graz	01/04/2000	01/04/2006	72
Chen (41)	2023	Retrospective observational	China	Hong Kong	Queen Elizabeth Hospital	01/11/2013	01/11/2021	96
Choi (42)	2017	Retrospective observational	Korea	Seoul	Seoul St. Mary's Hospital	01/03/2011	01/12/2015	57
Cierpikowski (43)	2018	Retrospective observational	Poland	Wroclaw	Wroclaw Medical University	01/01/2002	01/12/2016	179
Clark (44)	2011	Retrospective observational	USA	Honolulu	Kapi'olani Medical Center for Women and Children	01/01/2007	01/12/2010	47
Coelho (45)	2009	Prospective observational	Brazil	Curitiba	Hospital Universitario Cajuru and Santa Casa de Misericordia	01/01/2003	01/07/2008	66
de Loos (25)	2021	Retrospective observational	the Netherlands	Heerlen	Zuyderland Medical Centre	01/06/2006	01/12/2018	150
Del Frari (46)	2013	Retrospective observational	Austria	Innsbruck	Innsbruck Medical University	01/08/2002	01/06/2012	118
Densmore (47)	2010	Retrospective observational	USA	Milwaukee	Children's Hospital of Wisconsin	01/01/1999	01/12/2004	71
Dzielicki (48)	2006	Retrospective observational	Poland	Abrze	Silesian Medical University	01/01/1999	01/12/2005	83
Esteva Miró (49)	2020	Retrospective observational	Spain	Barcelona	Consorci Corporació Sanitària Parc Taulí de Sabadell	01/01/2010	01/01/2018	96
Gould (50)	2017	Retrospective observational	USA	Kansas City	Children's Mercy Hospital	01/12/1999	01/09/2015	189
Haecker (51)	2003	Retrospective observational	Switzerland	Basel	University Children's Hospital Basel	01/02/2000	01/03/2003	37

Table S5 (continued)

Table S5 (continued)

Author	Publication Year	Study type	Country/region	City	Institution	Start enrollment period	End enrollment period	Number of months
Holmes (52)	2019	Retrospective observational	USA	Rochester	Mayo Clinic	01/01/1998	01/12/2017	239
Hurme (53)	2008	Retrospective observational	Finland	Turku	Turku University Hospital	01/11/2002	01/02/2007	51
Inge (2)	2003	Retrospective observational	USA	Birmingham	Children's Hospital of Alabama	01/06/1996	01/12/1999	42
Jacobs (54)	2002	Retrospective observational	USA	Saint Petersburg	All Children's Hospital	-	-	40
Katrancıoğlu (55)	2018	Retrospective observational	Turkey	Sivas	Medicine faculty of Cumhuriyet University	01/07/2007	01/05/2016	106
Kelly (56)	2022	Prospective observational	USA	Norfolk	Children's Hospital of the King's Daughters	01/07/2008	01/07/2018	120
Kim (57)	2007	Retrospective observational	Korea	Seoul	Guro Hospital	01/08/1999	01/07/2004	59
Kirupaharan (58)	2022	Retrospective observational	Canada	Hamilton	McMaster Children's Hospital	01/07/2003	01/09/2019	194
Krasopoulos (59)	2006	Retrospective observational	United Kingdom	London	Royal Brompton Hospital	NR	NR	24
Li (60)	2023	Retrospective observational	China	Shanghai	Shanghai Ninth People's Hospital	01/08/2020	01/08/2021	12
Lo (61)	2020	Retrospective observational	Taiwan	New Taipei City	Taipei Tzu Chi Hospital	01/08/2014	01/01/2018	41
Mao (62)	2009	Retrospective observational	China	Wuhan	Pediatric Center of Union Hospital	01/07/2003	01/02/2008	25
Meng (63)	2018	Retrospective observational	China	Shanghai	Xinhua Hospital	01/01/2009	01/01/2012	36
Mennie (64)	2018	Retrospective observational	Australia	Melbourne	The Royal Children's Hospital	01/01/2005	01/06/2015	125
Molik (65)	2001	Retrospective observational	USA	Indianapolis	James Whitcomb Riley Children's Hospital	01/01/1995	01/12/1999	59
Nguyen (66)	2021	Retrospective observational	Vietnam	Hanoi	Viet Duc University Hospital	01/01/2015	01/12/2019	59
Park (67)	2010	Retrospective observational	Korea	Ansan	Korea University Ansan Hospital	01/08/1999	01/09/2008	109
Parrado (68)	2019	Retrospective observational	USA	Phoenix	Phoenix Children's Hospital	01/06/2017	01/07/2018	26
Pawlak (69)	2018	Retrospective observational	Poland	Poznan	Poznan University of Medical Sciences	01/07/2002	01/09/2016	170
Pilegaard (70)	2016	Retrospective observational	Denmark	Aarhus	Aarhus University Hospital	01/09/2001	01/03/2016	174

Table S5 (continued)

Table S5 (continued)

Author	Publication Year	Study type	Country/region	City	Institution	Start enrollment period	End enrollment period	Number of months
Shu (71)	2011	Retrospective observational	China	Hangzhou	Children's Hospital	01/06/2004	01/02/2011	27
Song (72)	2018	Retrospective observational	Korea	Seoul	Soonchunhyang University Hospital Cheonan	01/04/2006	01/12/2014	104
Stanfill (73)	2012	Retrospective observational	USA	Peoria	Children's Hospital of Illinois	01/11/2000	01/02/2010	111
Torre (5)	2021	Retrospective observational	Italy	Genoa	Giannina Gaslini Institute of Genoa	01/06/2005	01/01/2020	175
Uemura (74)	2003	Retrospective observational	Japan	Iwakuni	Iwakuni National Hospital	01/08/1998	01/12/2001	40
Umuroglu (75)	2013	Retrospective observational	Turkey	Istanbul	Medical School of Marmara University	01/08/2005	01/06/2011	70
Watanabe (76)	2004	Retrospective observational	Japan	Sapporo	Sapporo Medical University School of Medicine	01/07/1999	01/01/2003	42
Žganjer (77)	2006	Retrospective observational	Croatia	Zagreb	Children's Hospital Zagreb	01/01/2000	01/12/2005	71
Zhang (78)	2021	Retrospective observational	China	Chongqing	Chongqing University Three Gorges Hospital	01/09/2011	01/01/2020	100
Zhang (79)	2015	Retrospective observational	China	Guangzhou	Guangdong General Hospital	01/09/2006	01/08/2014	95

Table S6 Individual patient and interventional characteristics

Author	Publication Year	Sample size (n)	Volume (cases/year)	Male (n, %)	Age (years, mean, SD)	Haller index (mean, SD)	Prior treatment (n, %)	Duration of surgery (minutes, mean, SD)	Length of hospital stay (days, mean, SD)
Al-Assiri (36)	2009	30	16	21 (70)	14.3 (3.2)	4.3 (1.3)	NR	NR	4.1 (1.2)
Anbarasu (8)	2022	265	66	226 (85)	15.8 (2.5)	4.3 (1.1)	NR	NR	NR
Antonoff (37)	2009	14	1	12 (86)	19.5 (5.2)	NR	NR	109 (30)	3.9 (2.2)
Barua (38)	2012	11	2	11 (100)	20.8 (5.1)	NR	NR	NR	9.6 (6.0)
Boehm (39)	2024	21	7	20 (95)	14.4 (2.7)	NR	NR	53 (22)	NR
Bohosiewicz (40)	2005	66	14	55 (83)	11.8 (4.6)	NR	NR	NR	NR
Castellani (3)	2008	167	28	135 (81)	16.3 (8.9)	NR	1 silicone implant, 2 Ravitch	NR	NR
Chen (41)	2023	179	22	168 (94)	21.3 (5.5)	4.7 (1.4)	NR	81 (31)	4.5 (2.4)
Choi (42)	2017	994	209	756 (76)	9.6 (13.6)	4.6 (2.0)	NR	NR	NR
Cierpikowski (43)	2018	236	16	197 (83)	17.4 (3.8)	NR	NR	NR	8.3 (no SD)
Clark (44)	2011	32	8	23 (72)	NR	4.4 (no SD)	NR	124 (no SD)	4.7 (no SD)
Coelho (45)	2009	20	4	13 (65)	15.4 (4.6)	4.3 (0.6)	NR	54 (12)	6.3 (5.2)
de Loos (25)	2021	327	26	281 (86)	19.1 (7.2)	3.8 (0.9; n=277)	0	33 (11; n=324)	5.0 (1.5)
Del Frari (46)	2013	29	3	22 (76)	17.6 (6.6)	NR	1 prior Nuss procedure	107 (30)	8.6 (2.0)
Densmore (47)	2010	117	20	88 (75)	12.9 (4.8)	4.0 (1.5; n=65)	3	118 (51)	5.8 (1.3)
Dzielicki (48)	2006	461	67	362 (79)	15.2 (7.3)	NR	20 patients redo after unsuccessful Ravitch	52 (27)	5.3 (2.1)
Esteva Miró (49)	2020	31	4	21 (68)	14.7 (6.0)	6.1 (2.8)	0	NR	7.9 (2.9)
Gould (50)	2017	554	35	443 (80)	14.3 (3.1)	NR	0	52 (17)	4.2 (1.1)
Haecker (51)	2003	22	7	20 (91)	15.5 (7.6)	NR	NR	136 (26)	13.4 (3.1)
Holmes (52)	2019	436	22	NR	15.0 (2.7)	4.4 (1.3)	19 cases of recurrent pectus excavatum	NR	4.0 (1.3)
Hurme (53)	2008	25	6	20 (80)	14.0 (4.7)	4.1 (1.0)	NR	NR	8.5 (3.4)
Inge (2)	2003	43	12	NR	11.6 (3.9)	NR	NR	70 (no SD)	2.4 (no SD)
Jacobs (54)	2002	31	9	NR	14.5 (6.9)	NR	0	NR	4.6 (1.8)
Katrançioğlu (55)	2018	59	7	50 (85)	17.6 (5.1)	NR	NR	NR	4.6 (1.2)
Kelly (56)	2022	996	100	NR	15.2 (6.2)	5.5 (8.2)	NR	NR	4.1 (1.7)
Kim (57)	2007	113	23	82 (73)	7.2 (5.7)	4.3 (1.1)	NR	57 (29)	8.0 (1.6)

Table S6 (continued)

Table S6 (continued)

Author	Publication Year	Sample size (n)	Volume (cases/year)	Male (n, %)	Age (years, mean, SD)	Haller index (mean, SD)	Prior treatment (n, %)	Duration of surgery (minutes, mean, SD)	Length of hospital stay (days, mean, SD)
Kirupaharan (58)	2022	115	7	111 (97)	15.5 (1.3)	4.2 (1.4; n=54)	NR	78 (12)	5.0 (1.5)
Krasopoulos (59)	2006	20	10	20 (100)	20.2 (6.2)	NR	NR	NR	6.1 (1.9)
Li (60)	2023	259	259	213 (82)	15.5 (6.7)	4.1 (2.2; n=202)	9 prior pectus excavatum surgery, 1 prior pectus carinatum surgery	NR	4.0 (1.9)
Lo (61)	2020	296	87	257 (87)	23.9 (7.7)	4.0 (1.3)	NR	81 (15)	6.4 (1.7)
Mao (62)	2009	115	55	72 (63)	7.9 (5.1)	4.5 (1.3)	NR	60 (23)	8.5 (2.4)
Meng (63)	2018	132	44	111 (84)	12.5 (5.3)	3.9 (0.4)	NR	57 (22)	4.9 (1.4)
Mennie (64)	2018	217	21	183 (84)	14.9 (1.9)	NR	5 Nuss	98 (28)	4.9 (1.7)
Molik (65)	2001	35	7	NR	9.5 (3.9)	NR	NR	198 (no SD)*	4.8 (no SD)
Nguyen (66)	2021	365	74	309 (85)	15.6 (3.7)	3.8 (1.0)	NR	50 (16)	5.1 (1.6)
Park (67)	2010	1170	129	941 (80)	10.3 (12.9)	6.1 (11.8)	30 Ravitch, 6 Nuss	NR	NR
Parrado (68)	2019	101	47	82 (81)	NR due to missing data	4.8 (1.5)	0	120 (34)	3.5 (0.8)
Pawlak (69)	2018	1006	71	796 (79)	18.6 (5.7)	3.7 (1.4)	44 prior repair	52 (19)	6.3 (2.0)
Pilegaard (70)	2016	1713	118	1457 (85)	16.2 (7.5)	NR	NR	36 (67)	NR
Shu (71)	2011	406	180	313 (77)	6.8 (3.6)	5.2 (1.6)	NR	45 (14)	7.0 (1.0)
Song (72)	2018	306	35	250 (82)	12.4 (7.7)	4.6 (2.2)	NR	68 (21)	7.3 (3.4)
Stanfill (73)	2012	85	9	NR	15.2 (no SD)	4.5 (no SD)	NR	102 (no SD)	4.1 (no SD)
Torre (5)	2021	600	41	506 (84)	15.0 (6.1)	5.2 (5.1)	NR	78 (45)	6.8 (9.4)
Uemura (74)	2003	107	32	75 (70)	7.5 (4.1)	6.1 (3.5)	NR	55 (47)	NR
Umuroglu (75)	2013	214	37	184 (86)	17.9 (5.5)	NR	NR	73 (28)	6.4 (2.5)
Watanabe (76)	2004	53	15	38 (72)	9.0 (4.0)	5.0 (1.4)	NR	76 (25)	8.9 (3.8)
Žganjer (77)	2006	75	13	50 (67)	NR	NR	NR	NR	8.0 (2.3)
Zhang (78)	2021	44	5	36 (82)	9.1 (3.9)	3.8 (0.7)	NR	NR	NR
Zhang (79)	2015	639	81	546 (85)	15.3 (5.8)	4.3 (1.7)	8 traditional procedures (6 sternocoastal elevations and 2 sternal turnovers) and 7 Nuss procedure	64 (42)	5.2 (2.9)

Table S7 Study quality assessment

Author	Publication year	Selection			Comparability	Outcome			Overall grade
		Selection of the exposed cohort	Ascertainment of exposure	Demonstration that outcome of interest was not present at start of study	Comparability of cohorts on the basis of the design or analysis	Assessment of outcome	Was follow-up long enough for outcomes to occur	Adequacy of follow-up of cohorts	(maximum grade/points: 8)
Al-Assiri (36)	2009	1	1	1	0	1	0	0	4
Anbarasu (8)	2022	1	1	1	2	1	0	0	6
Antonoff (37)	2009	1	1	1	0	1	1	1	6
Barua (38)	2012	1	1	1	0	1	1	1	6
Boehm (39)	2024	1	1	1	0	1	1	0	5
Bohosiewicz (40)	2005	1	1	1	0	1	0	0	4
Castellani (3)	2008	1	1	1	0	1	1	0	5
Chen (41)	2023	1	1	1	2	1	0	0	6
Choi (42)	2017	1	1	1	2	1	0	0	6
Cierpikowski (43)	2018	1	1	1	0	1	1	1	6
Clark (44)	2011	1	1	1	0	1	1	1	6
Coelho (45)	2009	1	1	1	0	1	1	1	6
de Loos (25)	2021	1	1	1	0	1	1	1	6
Del Frari (46)	2013	1	1	1	0	1	1	1	6
Densmore (47)	2010	1	1	1	0	1	1	1	6
Dzielicki (48)	2006	1	1	1	0	1	1	1	6
Esteva Miró (49)	2020	1	1	1	0	1	1	1	6
Gould (50)	2017	1	1	1	0	1	1	0	5
Haecker (51)	2003	1	1	1	0	1	1	1	6
Holmes (52)	2019	1	1	1	2	1	0	0	6
Hurme (53)	2008	1	1	1	0	1	1	1	6
Inge (2)	2003	1	1	1	0	1	1	1	6
Jacobs (54)	2002	1	1	1	0	1	1	1	6
Katrancioğlu (55)	2018	1	1	1	1	1	1	1	7
Kelly (56)	2022	1	1	1	0	1	1	1	6
Kim (57)	2007	1	1	1	0	1	1	1	6
Kirupaharan (58)	2022	1	1	1	0	1	0	0	4

Table S7 (continued)

Table S7 (continued)

Author	Publication year	Selection			Comparability	Outcome			Overall grade
		Selection of the exposed cohort	Ascertainment of exposure	Demonstration that outcome of interest was not present at start of study	Comparability of cohorts on the basis of the design or analysis	Assessment of outcome	Was follow-up long enough for outcomes to occur	Adequacy of follow-up of cohorts	(maximum grade/ points: 8)
Krasopoulos (59)	2006	1	1	1	0	1	1	1	6
Li (60)	2023	1	1	1	0	1	1	0	5
Lo (61)	2020	1	1	1	0	1	1	1	6
Mao (62)	2009	1	1	1	0	1	1	0	5
Meng (63)	2018	1	1	1	0	1	0	0	4
Mennie (64)	2018	1	1	1	0	1	1	1	6
Molik (65)	2001	1	1	1	0	1	1	0	5
Nguyen (66)	2021	1	1	1	0	1	1	1	6
Park (67)	2010	1	1	1	0	1	1	1	6
Parrado (68)	2019	1	1	1	1	1	1	1	7
Pawlak (69)	2018	1	1	1	0	1	1	1	6
Pilegaard (70)	2016	1	1	1	1	1	1	1	7
Shu (71)	2011	1	1	1	0	1	1	1	6
Song (72)	2018	1	1	1	0	1	1	1	6
Stanfill (73)	2012	1	1	1	0	1	0	0	4
Torre (5)	2021	1	1	1	0	1	1	1	6
Uemura (74)	2003	1	1	1	0	1	1	1	6
Umuroglu (75)	2013	1	1	1	0	1	0	0	4
Watanabe (76)	2004	1	1	1	1	1	1	1	7
Žganjer (77)	2006	1	1	1	0	1	1	1	6
Zhang (78)	2021	1	1	1	0	1	1	1	6
Zhang (79)	2015	1	1	1	0	1	1	1	6

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