Supplementary Materials

Table S3. Description of studies included in the systematic review by region, sampling method, method of diagnosis, mean onset age of von Hippel-Lindau disease (vHL), number of participants with vHL, mean cohort age and number of participants with pheochromocytoma and/or paraganglioma (PPGL).

Study	Region	Sampling	Diagnosis, (mean onset age, years)	No. vHL participants, (% males), [mean cohort age, years]	No. of participants with PPGL
Feletti et al, 2016(6)	Europe	Consecutive	Included genetic testing, (-)	128, (-), [-]	39
Ciotti el al, 2009(12)	Europe	Not specified	Included genetic testing, (-)	27, (-), [-]	4
Cybulski et al, 2002(13)	Europe	Consecutive	Included genetic testing, (-)	82, (-), [-]	3
Dollfus et al, 2002(14)	Europe	Consecutive	Included genetic testing, (28.0)	211, (-), [-]	44
Erlic et al, 2010(15)	Europe	Consecutive	Included genetic testing, (-)	469, (-), [-]	177
FJ OB et al, 2014(16)	Europe	Consecutive	Included genetic testing, (-)	36, (41.7%), [-]	9
Frantzen et al, 2012(17)	Europe	Convenience	Included genetic testing, (-)	29, (0.0%), [-]	2
Gergics et al, 2009(18)	Europe	Convenience	Included genetic testing, (-)	14, (-), [-]	4
Graziani et al, 2014(19)	Europe	Convenience	Included genetic testing, (-)	23, (43.5%), [45.0]	3
Losonczy et al, 2013(20)	Europe	Not specified	Included genetic testing, (-)	7, (-), [-]	0
Maher et al, 1990(21)	Europe	Consecutive	Clinical criteria only, (26.3)	152, (52.0%), [-]	11
Stanojevic et al, 2007(22)	Europe	Convenience	Included genetic testing, (-)	13, (61.5%), [-]	6
Wittstrom et al, 2014(23)	Europe	Not specified	Included genetic testing, (-)	15, (53.3%), [39.3]	2
Binderup et al, 2018(24)	Europe	Consecutive	Included genetic testing, (-)	165, (-), [32.3]	24

	2	10, (-), [-]	Included genetic testing, (-)	Not specified	Europe	Glushkova et al, 2017(25)
,	17	110, (-), [-]	Included genetic testing, (-)	Consecutive	Europe	Hes et al, 2007(26)
)	10	35, (51.4%), [-]	Included genetic testing, (29.0)	Not specified	Europe	Ruiz-Llorente et al, 2004(27)
5	115	573, (-), [-]	Included genetic testing, (24.7)	Consecutive	Europe	Ong et al, 2007(28)
	8	20, (40.0%), [44.7]	Included genetic testing, (-)	Consecutive	Europe	Prasad et al, 2016(29)
	3	18, (-), [-]	Clinical criteria only, (-)	Not specified	Europe	Vanbinst et al, 2019(30)
	0	11, (27.3%), [-]	Included genetic testing, (-)	Convenience	Europe	Wiklund et al, 1997(31)
	5	21, (66.7%), [-]	Included genetic testing, (-)	Convenience	Eastern Asia	Chen et al, 2013(32)
	3	25, (-), [-]	Included genetic testing, (-)	Not specified	Eastern Asia	Hattori et al, 2006(33)
	6	25, (44.0%), [-]	Included genetic testing, (-)	Consecutive	Eastern Asia	Hwang et al, 2014(34)
Ļ	64	377, (-), [-]	Not specified, (-)	Consecutive	Eastern Asia	Igarashi et al, 2014(35)
l .	18	72, (58.3%), [37.9]	Included genetic testing, (37.9)	Consecutive	Eastern Asia	Kwon et al, 2014(36)
	3	14, (-), [-]	Included genetic testing, (-)	Not specified	Eastern Asia	Siu et al, 2011(37)
	2	16, (-), [-]	Included genetic testing, (40.3)	Not specified	Eastern Asia	Sriphrapradang et al, 2017(38)
	0	13, (46.2%), [-]	Included genetic testing, (-)	Not specified	Eastern Asia	Huang et al, 2007(39)
	5	24, (66.7%), [-]	Included genetic testing, (39.2)	Consecutive	Eastern Asia	Kim et al, 2008(40)
	4	26, (65.4%), [-]	Included genetic testing, (-)	Not specified	Eastern Asia	Lee et al, 2016(41)
-	11	21, (42.9%), [-]	Included genetic testing, (-)	Convenience	Eastern Asia	Liu et al, 2018(42)
3	64 18 3 2 0 5	377, (-), [-] 72, (58.3%), [37.9] 14, (-), [-] 16, (-), [-] 13, (46.2%), [-] 24, (66.7%), [-] 26, (65.4%), [-]	testing, (-) Not specified, (-) Included genetic testing, (37.9) Included genetic testing, (-) Included genetic testing, (40.3) Included genetic testing, (-) Included genetic testing, (-) Included genetic testing, (39.2) Included genetic testing, (-)	Consecutive Consecutive Not specified Not specified Consecutive Not specified	Asia Eastern Asia	2014(34) Igarashi et al, 2014(35) Kwon et al, 2014(36) Siu et al, 2011(37) Sriphrapradang et al, 2017(38) Huang et al, 2007(39) Kim et al, 2008(40) Lee et al, 2016(41)

Wang et al, 2018(43)	Eastern Asia	Consecutive	Included genetic testing, (31.2)	340, (52.6%), [-]	46
Wang et al, 2018(44)	Eastern Asia	Convenience	Included genetic testing, (-)	7, (85.7%), [-]	1
Zhang et al, 2008(45)	Eastern Asia	Not specified	Included genetic testing, (-)	97, (-), [-]	4
Aufforth et al, 2015(46)	North America	Consecutive	Included genetic testing, (30.5)	273, (46.2%), [-]	84
Bradley et al, 2009(47)	North America	Consecutive	Included genetic testing, (22.4)	19, (-), [-]	2
Chen et al, 1995(48)	North America	Consecutive	Included genetic testing, (-)	522, (-), [-]	92
Salama et al, 2019(49)	North America	Consecutive	Included genetic testing, (24.0)	86, (38.4%), [35.0]	32
Chacon-Camacho et al, 2010(50)	North America	Convenience	Included genetic testing, (-)	20, (35.0%), [29.5]	1
Rasmussen et al, 2010(51)	North America	Not specified	Included genetic testing, (-)	36, (36.1%), [21.8]	3
Fagundes et al, 2019(52)	South America	Not specified	Included genetic testing, (28.3)	31, (-), [-]	17
Gomy et al, 2010(53)	South America	Convenience	Included genetic testing, (-)	12, (-), [-]	1
Ganesh et al, 2010(54)	Southern Asia	Convenience	Clinical criteria only, (-)	7, (42.9%), [33.3]	6
Vikkath et al, 2015(55)	Southern Asia	Not specified	Included genetic testing, (35.6)	31, (54.8%), [-]	3