

Supplementary Table 1A Results of panel testing (high-penetrance genes)

Author	Year	N	BRCA1	BRCA2	MLH1	MSH2	MSH6	PMS2	EPCAM	APC	MUTYH(bi)	TP53	CDH1	PTE N	SMAD4	STK11	CDKN2A
Walsh ¹	2011	360	40	23			1					3					
Cragun ²	2014	586			5	8	4	6		6	4	1	2	1	4	1	
Kurian ³	2014	198	57		1								1				1
Laduca breast ⁴	2014	874	NT	NT								4		3		1	
Laduca Colon ⁴	2014	557	NT	NT	7	7	5	6		6	6	1	1	3	4	1	
Laduca Ovary ⁴	2014	223	NT	NT				3	1			1	1				
Laduca "Pan-cancer" ^{3,4}	2014	425	NT	NT	2	1	3	2			2	4					
Couch ⁵	2015	1784	155	49								1		1			
Lincoln ⁶	2015	735	155	49	1	1		4					1				1
Lincoln ⁶	2015	327	70	58		1						2	3				
Maxwell ⁷	2015	278	NT	NT		1		1			1	4					1
Minion ⁸	2015	911	NT	NT	2		10	1				3	1	2			
Tung ⁹	2015	1781	165			1	2	4			1	2					
Tung ⁹	2015	377	NT	NT						1	1		2				1
Yurgelun ¹⁰	2015	1260	6	9	31	40	26	12	3	5	3						1
Li ¹¹	2015	660	NT	NT								6	1	1			1
Li ¹¹	2015	660	NT	NT								6					1
Rosenthal ¹²	2015	76574	1311	1228	141	176	194	246	9	96	25	76	36	21	5	10	2

Supplementary Table 2B. Results of panel testing (moderate-penetrance genes)

Author	Year	N	ATM	BARD1	BRIP1	CHEK2	MRE11	NBN	PALB2	RAD50	RAD51C	RAD51D	XRCC2	SLX4	MUTYH (mono)	% mut in mod penetrance
Walsh ¹	2011	360		1	4	5	1	1	2	1	2					4.7%
Cragun ²	2014	586				8									11	1.4%
Kurian ³	2014	198	2					2						2	5	3.5%
Laduca breast ⁴	2014	874	18		1	19	1	1	15	3	2					6.9%
Laduca Colon ⁴	2014	557				6										1.1%
Laduca Ovary ⁴	2014	223	2		2	1	1	3	1		1					4.9%
Laduca "Pan-cancer" ^{3,4}	2014	425	7		4	8	1	1	4	2						6.4%
Couch ⁵	2015	1784	2	9	8		2	1	21	6	6	7	3			3.6%
Lincoln ⁶	2015	735	5		1	3			5		2				18	2.2%
Lincoln ⁶	2015	327	3			2					1				3	1.8%
Maxwell ⁷	2015	278	8		1	12	2	1	1	1						9.4%
Minion ⁸	2015	911	7	2	10	16	1	4	4	2	3					5.4%
Tung ⁹	2015	1781	12	6	7	29		3	12						32	3.9%
Tung ⁹	2015	377	1	1		5		1	1						10	2.4%
Yurgelun ¹⁰	2015	1260	8	1	2	5		1	1		1				27	1.5%
Li ¹¹	2015	660	8	4	16	14	4	1	14	1	1	3				10.0%
Li ¹¹	2015	660	5	2	3	14		1	10	1	1	1				5.8%
Rosenthal ¹²	2015	76574	503	109	216	641		140	392		116	47				2.8%

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