

Chart 2 Group A, 37-Marker Level *Entire R1b-M222 Group Generations to Include MRCA at 99% Probability* 

# Irish R1b-M222 Section

#### Overview

The members of this group demonstrate a wide web of linkage over both clusters and including the unclustered participants. Chart 2 above, although reduced below legibility to fit the space, gives an impression of this linkage web.

R1b-M222 is a haplogroup defined in 2006. A portion of the haplotype profile was identified as distinctive in February of 2006 by the Trinity College Dublin team of Moore, McEvoy, Cape, Simms and Bradley, who called it the Irish Modal Haplotype (IMH).<sup>2</sup> From an examination of an array of e-published haplotype profiles, David Wilson developed a hypothesized extension of this modal haplotype in March 2006, which he called the Northwest Irish Modal Haplotype (NWIMH).<sup>14</sup> R1b-M222 is the subclade of R1b that shows the derived state for the M222 SNP (i.e., shows positive for the M222 change). The correlation of the NWIMH profile with this SNP was first proposed by Wilson, who had a sample of Y-DNA showing the NWIMH tested by EthnoAncestry for the M222 SNP, and announced the positive result in Mar 2006.<sup>15</sup> Sims, Garvey & Ballantyne more formally demonstrated that R1b-M222 is differentiated by the derived state of M222 in a paper submitted in May and published in Aug 2006.<sup>16</sup>

The R1b-M222 subclade has been found to be prevalent among subjects with surnames associated with the Uí Néill by Moore, McEvoy et al.,<sup>2</sup> as well as among participants in various genetic genealogy projects who have surnames particularly associated with northwestern Ireland but also with lowland Scotland, while being relatively rare elsewhere, by Wilson<sup>3</sup>, and so is thought to have originated in Ireland. It has not been established when it arose, but that event likely would have happened in the period 1,500 to 10,000 years ago. The M222 mutation most probably occurred in a man whose haplotype had already diverged significantly from the SWAMH. Substantiation of this pre-existing divergence would be found if a cluster of haplotypes eventually turns up which is negative for M222 but approaches the NWIMH (R1b-M222 Modal Haplotype).

The R1b-M222 profiles differ from the SWAMH in the values of all or most of nine particular markers out of the first 37 markers in the Family Tree DNA (FTDNA) sequence, plus two additional markers among these first 37 which are more variable but still of interest. In these comparison charts, the columns for these nine distinctive markers are colored lavender (light purple). The value boxes in these nine columns are colored turquoise (light blue) where the values are the more common and widespread SWAMH values, and peach (light pinkish tan) where the values are different (aberrant or anomalous) from either of the above. For the additional two markers, only the value boxes are colored lavender, not the whole column, due to the variability of these markers, or turquoise or peach as appropriate. See Chart 1 for the key to the complete color coding.

# **Group A: Mixed Breifne Surnames**

The Mixed Breifne Surnames Section is made up of 83 participants at the 37-marker level or higher, representing 77 independent lineages and 27 surnames. O'Conor would not be a Breifne surname, but is included as a check because by tradition the major lineage it represents is of the same fifth-century origin as the lineages represented by many Breifne surnames. A few of the singleton names may also not be Breifne surnames. Seven participants at the 25-marker level, representing seven independent McTiernan lineages, were also included to establish a 25-marker modal haplotype for the McTiernan version of this surname in this section, and to aid in determining the modal haplotype for the McKiernan version of the surname.

Most of the participants in this section so far are Donohoes (18, representing 13 independent lineages), McGoverns (14, also representing 13 lineages) and O'Reillys (seven, representing sevem lineages), with the Donohoes falling into three lines (plus two unassigned Donohoe participants), the McGoverns into two (plus two unassigned McGovern participants) and the O'Reillys into two. There are a few (three to four each) McKiernans, McTiernans, Faughnans, McGoldrick/Goldens, Clancys and O'Conors, and 17 other surnames with a single representative each. Charts 2-4 below show the names and origins of the members of this section.

The members of this section have been split into two main subgroups. Subgroup A1 has the SWAMH value of 11 at DYS 391 (Marker 4 in the FTDNA sequence) and Subgroup A2 has the aberrant value of 10 at that marker. There are 48 individuals (including five at the 25-marker level) representing 18 surnames in Subgroup A1, and 35 individuals (including one at the 25-marker level) representing 12 surnames in Subgroup A2.

There are some other modal haplotypes which have been presented, such as the South Irish MH and the Colla Uais Dalriadic MH and the R1b-S28 MH, which also have the aberrant value of 10 at DYS 391, which FTDNA presents as a stable marker. These modal haplotypes have five to seven distinctive deviations from the SWAMH within the first 37 markers, and two of them (the CUDMH and the S28MH) have the aberrant value of 30 at DYS 449 (a fastermoving marker) seen in the NWIMH. Otherwise there is no overlap with the NWIMH in distinctive deviations from the SWAMH, suggesting a parallel mutation (or mutations) at DYS 391.

With such a substantial number of different surnames involved, it would seem that the aberrant value at DYS 391 represents a mutation that occurred in a common male-line ancestor before the adoption of surnames in the area. It may have been one additional step in the differentiation of the NWIMH from the SWAMH, to yield a NWI+1MH.

Performing a search on Ysearch for matches to the modal haplotype with this mutation at DYS 391, allowing mismatches  $\leq$ 4, resulted in 259 hits. 86 of these had DYS 391 = 10. Of these 86, 72 indicated a country of origin of their male lines as follows: Ireland = 43, USA = 18, Scotland = 9, England = 2.

Assuming incidences similar to those in FTDNA's "Recent Ancestral Origins", where the number of male lines with origins in England are slightly more than twice those with origins in Scotland and approximately 70% greater than those with origins in Ireland, the bias toward Ireland here would be even greater in percentage terms. The indication of an Irish origin for this modal haplotype is no surprise, since it is so close to the NWIMH. There were 11 surnames (consolidating obvious variants) which occurred more than once (two to six times) and included 33 individuals. Of the 14 of these 33 who gave a town or county of male-line origin, four were placed in Breifne, two in adjoining Co. Monaghan and two (same surname) in a town in Virginia. There were no other multiples. The sample, however, is too small to infer a Breifne origin.

#### Subgroup A1: Donohoe-McTiernan Cluster

Chart 3 below shows the names and origins for the members of this cluster of the subgroup. As can be seen, few of the Donohoes but most of the McTiernans can trace their lineages back to Breifne or adjoining portions of Co. Sligo. One of the Donohoes and one of the McTiernans, unassigned in the last report, have been moved to the McKiernans in the A2 subgroup.

		Breifne Clans Project	Family	Residential ID				Family Origins in Ire	land	
		Mixed Breifne Surnames	Address	State/Prov.	From	Townland	Year	Civil Parish	Barony	County
		Haplogroup R1b-M222		/County						
BCP		Subgroup A1:								
Code	Kit	Donohoe-McTiernan Cluster								
		Donohoe Line Dnc-A1a								
JAD1	11571	Joseph A. Donohoe V	"Holm Grove"	California	1868	unknown	≤1793	unknown	unknown	Cavan
KCD	82388	Kevin Charles Donahue	Camden	New Jersey	~1880	unknown		unknown	unknown	unknown
RDD	19050	Richard Dibblee Donohoe	"Holm Grove"	California	1868	unknown	≤1793	unknown	unknown	Cavan
RPD	22521	Robert Paul Donohoe	"Holm Grove"	California	1868	unknown	≤1793	unknown	unknown	Cavan
SCD	32877	Sean Carlson Donahue	Camden	New Jersey	~1880	unknown		unknown	unknown	unknown
WJD	16340	William John Donohoe Jr.	"Holm Grove"	California	1868	unknown	≤1793	unknown	unknown	Cavan
		Donohoe Line Dnc-A1b								
BED	82395	Bernard Edward Donahue Jr.	Philadelphia	Pennsylvania	≤1845	unknown	~1817	unknown	unknown	unknown
JAD2	11877	James Aloysius Donohue	Philadelphia	Pennsylvania	~1881	unknown	~1862	unknown	unknown	unknown
JPD3	42569	Joseph Patrick Donahue	Halifax	Nova Scotia	1841	unknown	≤1836	unknown	unknown	unknown
MHD	20744	Michael Hills Donohue	Hudson	Wisconsin	?	unknown	≤1791	unknown	unknown	unknown
T-D	13882	Tuck Donaho	Madison Co.	Texas	1890s	unknown	≤1730	unknown	unknown	unknown
		Donohoe Line Dnc-A1c								
JMD3	19591	Joseph Michael Donahue	New Hope	Kentucky	≤1785	unknown		unknown	unknown	unknown
PAD	142568	Paul Andrew Donohoe	unknown	Sligo?	~1780	unknown	~1780	unknown	unknown	Sligo?
TED	19592	Thomas Edward Donohue	New Hope	Kentucky	≤1785	unknown		unknown	unknown	unknown
TRD	19590	Thomas Reilly Donahue Jr.	Kilmuckridge	Wexford	≤1798	Kilmuckridge	≤1798	Kilmuckridge	Ballaghkeen	Wexford
		Donohoe Line Dnc-A1x Unass.								
JWD	N52872	James Willard Donohoe	C. Geoghegan	Westmeath	≤1825	Castletown G.	≤1825	Castletownkindalen	Moycashel	Westmeath
M-D2	79625	Michael Donahue	Cork	Cork	≤1839	Cork	≤1839	unknown	Cork	Cork
		McTiernan Line Tgr-A1a								
C-McT1	638	Charles McTiernan	Knocks/Glebe	Leitrim	~1779	Knocks/Glebe	~1779	Drumreilly	Carrigallen	Leitrim
J-McT4	9497	Jim McTiernan	Тар	Sligo	1813	Тар	1813	Shancough	Tirerrill	Sligo
JPMcT	1010	James Patrick McTernan	Tullycorka	Leitrim	<1800	Tullycorka	<1800	Inishmagrath	Drumahaire	Leitrim
JCMcT	637	John C. McTernan	Corratawy	Leitrim	~1814	Corratawy	~1814	Killarga	Drumahaire	Leitrim
JWMcT	31885	John W. McTiernan	Kilcoosy	Leitrim	ט <del>ד</del> טו ־ן ו	Kilcoosy	[>1840]	Drumlease	Drumahaire	Leitrim
J-McT3	1028	Joseph McTiernan	Greaghnalogh	Leitrim	~1780	Greaghnalogh	~1780	Inishmagrath	Drumahaire	Leitrim
LVMcT	21151	Leo Vincent McTiernan	Ummeryroe	Sligo	~1800	Ummeryroe	~1800	Shancough	Tirerrill	Sligo
P-McT	636	Phelim McTiernan	Ummeryroe	Sligo	~1789	Ummeryroe	~1789	Shancough	Tirerrill	Sligo
S-McT2	5451	Scott McTiernan	Unknown	Leitrim	~1815	unknown	~1815	Oughteragh	Carrigallen	Leitrim

# Chart 3 Subroup A1 Donohoe – McTiernan Cluster Names & Origins

				Breifne Clans Project			L	ine l	Ds				Н	#	
				Mixed Breifne Surnames	S	F	S	G	S	L	F	М	а		
				Haplogroup R1b-M222	u	a	u	r	u	i	а	е	р	Μ	
				Subgroup A1:	r	m	r	0	b	n	m	m	I	a	
				Donohoe-McTiernan Cluster	n	i	С	u	g	е	i	b	0	r	
				Part 1	а	T	0	р	r		T	е	g	k	
	Ysearch		BCP		m	у	d		0		у	r	r	е	
Database	Code	Kit/ID	Code		е		е		u				р	r	
						sr			р		In			S	
				Donohoe Line Dnc-A1a											
BCP	B942J	11571	JAD1	Joseph A. Donohoe V	1a	1	Dnc	A	1	а	1	1	R1b-M222	67	
BCP	none	19050	RDD	Richard Dibblee Donohoe	1a	1	Dnc	A	1	a	1	2	R1b-M269*	67	
BCP	XCHVH	16340	WJD	William John Donohoe Jr.	1a	1	Dnc	Α	1	а	1	3	R1b-M222	67	
BCP	none	22521	RPD	Robert Paul Donohoe	1a	1	Dnc	Α	1	а	1	4	R1b-M269*	67	
BCP	XVVX6	32877	SCD	Sean Carlson Donahue	1a	2	Dnc	Α	1	а	2	1	R1b-M222	67	
BCP	274R9	82388	KCD	Kevin Charles Donahue	1a	2	Dnc	Α	1	а	2	2	R1b-M222	67	
				Donohoe Line Dnc-A1c											
BCP	9C3G9	42569	JPD3	Joseph Patrick Donahue	1a	5	Dnc	Α	1	C	1	1	R1b-M222	67	
BCP	none	13882	T-D	Tuck Donaho	1a	12	Dnc	Α	1	C	5	1	R1b-M222	37	
BCP	M87QZ	82395	BED	Bernard Edward Donahue Jr.	1a	8	Dnc	A	1	C	2	1	R1b-M222	67	
BCP	none	11877	JAD2	James Aloysius Donohue	1a	6	Dnc	Α	1	C	3	1	R1b-M222	67	
BCP	WTNY3	20744	MHD	Michael Hills Donohue	<b>1</b> a	7	Dnc	A	1	C	4	1	R1b-M222	67	

The following charts, Charts 4 & 5, show all the coding for the participants belonging to this cluster, including indications of known family groups.

### Chart 4 Subroup A1 Donohoe – McTiernan Cluster, Part 1 Coding

		1	I		1		1	1	1		1	1		1	T	T
				Breifne Clans Project		_			ino l	De				н	#	-
				Mixed Breifne Surnames		S	F	S	G	S	L	F	М	a	π	-
				Haplogroup R1b-M222		u	a	u	r	u	i	a	e	p	м	-
				Subaroup A1:		r	m	r	0	b	n	m	m	г 	a	-
				Donohoe-McTiernan Cluster		n	i	С	u	q	е	i	b	0	r	-
				Part 2		a	Т	0	p	r		Т	е	a	k	-
	Ysearch		BCP		McT	m	v	d	<u> </u>	0		v	r	r	е	$\vdash$
ναιανασ	Code	Kit/ID	Code		Code	е	-	е		u		-		р	r	-
Δ							sr			р		In			s	-
									-	•		-			-	-
				Donohoe Line Dnc-A1b			-									$\vdash$
BCP	yes	142568	PAD	Paul Andrew Donohoe		1a	13	Dnc	Α	1	b	4	1	R1b-M269*	67	
BCP	none	19590	TRD	Thomas Reilly Donahue Jr.		1a	3	Dnc	Α	1	b	1	1	R1b-M222	67	$\square$
BCP	TWZX4	19591	JMD3	Joseph Michael Donahue		1a	4	Dnc	Α	1	b	2	1	R1b-M222	67	
BCP	QH25D	19592	TED	Thomas Edward Donohue		1a	4	Dnc	Α	1	b	2	2	R1b-M269*	37	
				Donohoe Line Dnc-A1x Unass.												
BCP	WRN8J	79625	M-D2	Michael Donahue		1a	9	Dnc	Α	1	x	1	1	R1b-M269*	37	
BCP	none	N52872	JWD	James Willard Donohoe		1a	10	Dnc	Α	1	X	2	1	R1b-M222	67	
				McTiernan Line Tgr-A1a												
BCP	none	21151	LVMcT	Leo Vincent McTiernan	Т3	2b	1	Tgr	Α	1	a	1	1	R1b-M222	67	
BCP	none	636	P-McT	Phelim McTiernan	Т3	2b	1	Tgr	Α	1	a	1	3	R1b-M269*	37	
BCP	none	1010	JPMcT	James Patrick McTernan	Т3	2b	1	Tgr	Α	1	a	1	2	R1b-M269*	37	
BCP	none	5451	S-McT2	Scott McTiernan (CO)	Т3	2b		Tgr	Α	1	a		X	R1b-M222	25	
BCP	none	9497	J-McT4	Jim McTiernan (MA)	Т3	2b		Tgr	Α	1	a		X	R1b-M222	25	
BCP	none	31885	JWMcT	John W. McTiernan	Т3	2b	2	Tgr	Α	1	a	2	1	R1b-M269*	67	
BCP	none	1028	J-McT3	Joseph McTiernan	T3(+1)	2b		Tgr	A	1	a		X	R1b-M269*	25	
BCP	none	637	JCMcT	John C. McTernan	T3a	2b		Tgr	Α	1	a		X	R1b-M269*	25	
BCP	none	638	C-McT1	Charles McTiernan	T3(+2)	2b		Tgr	Α	1	а		X	R1b-M222	25	

### Chart 5 Subroup A1 Donohoe – McTiernan Cluster, Part 2 Coding

The following charts, Charts 6 & 7, show the Y-DNA profiles for all the Donohoe and McTiernan participants of this cluster whose results are in and who have tested at the 37-marker level or higher, plus five McTiernans who tested only to the 25-marker level.

Breifne Clans	Project		Mar	ker (	Code	)																																
Mixed Breifne S	Surnames	3	3	1	3	3	3	4	3	4	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	G	Y	Y	4	6	5	5	C	C	4	4
Haplogroup R	1b-M222	9	9	9	9	8	8	2	8	3	8	9	8	5	5	5	5	5	4	3	4	4	6	6	6	6	6	A	C	C	5	0	7	7	D	D	4	3
Subgroup	A1:	3	0		1	5	5	6	8	9	9	2	9	8	9	9	5	4	7	7	8	9	4	4	4	4	0	T	A	A	6	7	6	0	Y	Y	2	8
Donohoe-McTierr	nan Cluster			or		a	b				i		i		a	b							a	b	C	d		A										
Part 1				3																									Ι	Ι					a	b		
	BCP			9																								H	T	Ι								
Kit/ID	Code			4																								4	a	b								
	FTDNA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
Modal Haplotypes																																						
Super W Atlantic	SWAMH	13	24	14	11	11	14	12	12	12	13	13	29	17	9	10	11	11	25	15	19	29	15	15	17	17	11	11	19	23	16	15	18	17	36	38	12	12
Irish TCD	IMH	13	25	14	11				12	12	13	14	29							15							11											12
Northwest Irish	NWIMH	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	23	17	16	18	17	38	39	12	12
Line Dnc-A1a	Donohoe																																					
11571	JAD1	13	25	14	12	11	13	12	12	11	14	14	30	17	9	10	11	11	25	16	18	29	16	16	16	17	11	11	19	23	17	16	18	17	37	39	12	12
19050	RDD	13	25	14	11	11	13	12	12	11	14	14	30	17	9	10	11	11	25	16	18	29	16	16	17	19	11	11	19	23	17	16	18	17	37	39	12	12
16340	WJD	13	25	14	11	11	13	12	12	11	14	14	30	17	9	10	11	11	25	16	18	29	16	16	16	17	11	11	19	23	17	16	18	17	37	39	12	12
22521	RPD	13	25	14	11	11	13	12	12	11	14	14	30	17	9	10	11	11	25	16	18	29	16	16	16	17	11	11	19	23	17	16	18	17	37	39	12	12
32877	SCD	13	25	14	11	11	13	12	12	12	14	14	30	17	9	10	11	11	25	16	18	29	15	16	16	17	11	11	19	23	17	16	18	17	37	39	12	12
82388	KCD	13	25	14	11	11	13	12	12	12	14	14	30	17	9	10	11	11	25	16	18	29	15	16	16	17	11	11	19	23	17	16	18	17	37	39	12	12
Line Dnc-A1c	Donohoe																																					
42569	JPD3	13	25	14	12	11	13	12	12	12	13	14	28	17	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	23	17	16	19	17	38	39	12	12
13882	T-D	13	25	14	11	11	13	12	12	12	13	14	28	17	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	23	17	16	19	18	38	39	12	12
82395	BED	13	25	14	10	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	10	11	19	23	17	16	19	18	37	39	12	12
11877	JAD2	13	25	14	10	11	13	12	12	13	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	10	11	19	23	17	16	18	18	37	37	12	12
20744	MHD	13	25	14	11	11	13	12	12	11	13	14	29	17	9	10	10	11	25	15	18	30	15	16	16	16	11	11	19	24	17	16	20	17	37	39	12	12
	Donohoe																																					
Line Modal	Dnc-A1bMH	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	23	17	16	19	18	37	39	12	12

Chart 6 Subgroup A1 **Donohoe – McTiernan Cluster, Part 1 Results & Patterns** 

	BCP																																					
Kit/ID	Code	ŀ	\1, D	onoh	ioe-l	AcTie	ernar	n Clu	ster,	Part	2																											
	FTDNA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
Line Dnc-A1b	Donohoe																																					
142568	PAD	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	14	18	30	15	16	17	17	11	11	19	23	17	16	18	17	38	39	12	12
19590	TRD	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	14	18	30	15	16	17	17	11	11	19	23	16	16	18	17	38	39	12	12
19591	JMD3	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	14	18	30	15	16	17	17	12	11	19	23	17	16	18	17	38	38	12	12
19592	TED	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	14	18	30	15	16	17	17	12	11	19	23	17	16	18	17	38	38	12	12
	Donohoe																																					
Line Modal	Dnc-A1cMH	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	14	18	30	15	16	17	17	11	11	19	23	17	16	18	17	38	39	12	12
Line Dnc-A1x	Donohoe																																					
79625	M-D2	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	17	17	11	11	19	23	16	15	17	17	36	38	12	13
N52872	JWD	13	25	14	11	11	13	12	12	12	13	14	30	16	9	10	11	11	25	15	18	29	15	15	16	17	11	11	19	23	15	16	20	17	34	38	12	12
	Donohoe																																					
Line Modal	Dnc-A1MH	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	23	17	16	18	17	37	39	12	12
Line Tgr-A1a	McTiernan																																					
21151	LVMcT	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	14	18	30	15	16	17	17	11	11	19	23	17	16	18	17	37	39	12	12
636	P-McT	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	14	18	30	15	16	17	17	12	11	19	23	17	16	18	17	38	39	12	12
1010	JPMcT	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	14	18	30	15	16	17	17	12	11	19	23	17	16	18	17	37	39	12	12
5451	S-McT2	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	14	18	30	15	16	17	17												
9497	J-McT4	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	14	18	30	15	16	17	17												
31885	JWMcT	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	14	18	30	15	16	17	17	13	11	19	23	17	15	18	17	37	39	13	12
1028	J-McT3	13	25	14	11	11	13	12	12	12	13	15	29	17	9	10	11	11	25	14	18	30	15	16	17	17												
637	JCMcT	13	25	14	11	11	13	12	12	12	13	14	28	17	9	10	11	11	25	14	18	29	15	16	16	17												
638	C-McT1	13	25	14	11	11	13	12	12	12	13	14	30	17	9	10	11	11	25	14	18	30	15	16	16	17												
	McTiernan																																					
Line Modal	Tgr-A1aMH	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	14	18	30	15	16	17	17												

Chart 7 Subgroup A1 Donohoe – McTiernan Cluster, Part 2 Results & Patterns

The columns for the markers where the R1b-M222 modal haplotype (the NWIMH) value characteristically deviates from the SWAMH value are colored lavender/light purple. These values will be referred to as the distinctive R1b-M222 modal haplotype values. The values entered in these columns are shown against that color if they are the R1b-M222MH values, against turquoise/light blue if they are the SWAMH values and against peach/light orange-tan if they are some other variant value. The distinctive values for the R1b-M222MH in the first 37 markers are seen in the columns for FTDNA Markers 2 (DYS 390), 6 (DYS 385b), 11 (DYS 392), 20 (DYS 448), 21 (DYS 449), 23 & 24 (DYS 464b & 464c), 30 (DYS 456) and 31 (DYS 607). Two additional distinctive values are often seen for FTDNA Markers 34 & 35 (DYS CDYa & b), but often not; because of this variability the whole column is not colored lavender but only the box when the value there is the distinctive value.

Donohoe Line Dnc-A1a is shown with no modal because the six participants represent only two independent families; there is no third independent family to justify a modal. The evidence, however, suggests that this line deviates from each of the other two Donohoe lines at six markers, and that Dnc-A1b and Dnc-A1c deviate from each other at five markers. Deviating at this many markers brings up the question of whether they share a common Donnchadh eponym or whether they each descend from a different eponymous Donnchadh.

The pattern of Donohoe Line Dnc-A1b resembles that of McTiernan Line Tgr-A1a more than it resembles either of the other two Donohoe lines in this cluster. That suggests, as noted in the last report, that either these Donohoes may be a subclan of these McTiernans, or vice-versa, or both may be subclans of an unidentified clan.

As mentioned above, the FTDNATiP calculator was used to get an estimate, at the 99% probability level, of the number of generations back to the most recent common male-line ancestor (GMRCA) of whichever two participants were being compared. Where there was a group of known relationship (a family group), one of the group was selected to represent the lineage in making the pairwise calculations. This was the one closest to a modal haplotype of the family group, or if there were only two in the family group then the one with the strongest connections to the general group.

The relationships, or links, of course varied in strength among the pairs being compared and were color coded accordingly. Where the two in the pair are of different surnames, and there is no evidence of one belonging to a subclan of the line of the other, the value is sometimes less than it might otherwise be due to the assumption of a minimum of 26 generations of no common male-line ancestor being applied because of the difference in surnames.

In Chart 8 below, it can be seen that the participants of this subgroup may be placed fairly well into four lines or core areas.

		15	· -	18		27	-	30		39	-	42	Le	ast	# of (	Gene	erations	Need	ded						
Breifn	e Clans	19	-	22		31	-	34		43	-	46		to Ir	Iclud	le th	e Most R	ecer	nt						
Projec	t (BCP)	23	—	26		35	-	38		47	-	50	C	omn	n <mark>on</mark> l	Male	-Line An	cest	or						
Subro	oup A1:	С	olor	Code	e for	Deg	ree	of Cl	osen	ess	of L	ink		at the	e 99%	% Pro	obability	Lev	el						
Done	ohoe-																								
McTi	ernan	J	R	W	R	S	K		L	Ρ	J	J	P	Т	J	Т	J	Т	В	J	М		М	J	
Clu	ister	Α	D	J	Ρ	С	С		V	-	Ρ	W	Α	R	Μ	E	P	-	E	Α	н		-	W	
Kit	Code								Мс	Мс	Мс	Мс													
		D	D	D	D	D	D		Т	Т	Т	Т	D	D	D	D	D	D	D	D	D		D	D	
		1													3		3			2			2		
			<u> </u>			L	<u>_</u>	Ļ	Ļ	L	Ļ	L	+-	L	Ļ	Ļ		Ļ	Ļ	Ļ					
11571	JAD1	×	1	2	2	-	-	1	-	-	-		-	-	-	-		-	-	-	-		-	- i	
19050	RDD	1	х	2	2	-	-		-	-	-	- 1	-	-	-	-		-	-	-	- :		-	-	
16340	WJD	2	2	X	1	21	21		46	-	-		50	_		-					44			i	
22521	RPD	2	2	1	Х	-	-		-	-	-	- 1	-	-	-	-		-	-	-	-		-	-	
32877	SCD	25	21	21	21	х	1		42	-	-	47	36	42		-			47					i	
82388	KCD					1	Х		<u>;</u>		L				L	L	<u> </u>	L	L						
		<u>.</u>	Don	iohoe	Dno	c-A1a	a 				L				L	<b>.</b>		ļ			L			į	
21151	LVMcT		-	46	-	42	-		х	5	5	24	38	40	42	-	47		46	50	47	L			
636	P-McT	i -	-	-	-	-	-	ł.	5	X	5	-	-	-	-	-		-	-	-	-		-	- i	
1010	JPMcT		-	-	-	-	-	1	5	5	Х		-	-	-	-		-	-	-	-		-	-	
31885	JWMcT	_ <u>1</u> .7			<u> </u>	47		<u> </u>	24	29	25	×	42	44	45		L								
					<b>.</b>		<b>.</b>		McTi	erna	n Tg	r-A1a					<u> </u>	L	<b>.</b>					;	
142568	PAD	! _	-	50	-	36	-		38	-	-	42	×	18	22	22	33	34	_					_!	
19590	TRD		-	_	-	42	-	i.	40	-	-	44	18	X	26	26	39	46	_				45		
19591	JMD3	<u> </u>	-	_	-		-		42	-	-	45	22	26	X	2	49	50					47	!	
19592	TED				ļ	ļ	ļ	_	÷		ļ			.L.=.	2	X	L	ļ	ļ						
10700		<u>.</u>						_					Don	ahue	Dnc	-A1b	·			<b>.</b>					
42569	JPD3		-		-	_	-		47	-	-		33	39	49	-	X	21	36	_				45	
13882	1-D		-		-	47	-	÷ .	10	-	-		34	46	50	-	21	X	30	00					
82395	BED		-		-	47	-	÷	46	-	-			_		-	36	30	X	26				-i	
118//	JAD2		-		-	_	-	÷	50	-	-			_	_	-			26	х				!	
20744	MHD			44	ļ			-	47		ļ						Densk				X	1.		;	
70625	M D2			. <b>.</b>		÷	÷	<u> </u>	ļ					45	47	<b>.</b>	Donahi	Je/D	onoh	ue L	nc-A			}	
19025			-		-	-	-	1		-	-	-		45	47	-							X	H	
N528/2	JWD	<u>.</u>			ļ			-	÷		ļ					ļ	45			<u>-</u> -	L			× I	
			4-	<u> </u>	∔	<u>+</u>	<u>+</u> _	<u>+</u>	<u>+</u>	<b>-</b> -	<u> </u>	Ļ_l		L	<u> </u>	L	+ - +	่⊢	∔		onone		nah	ue D	nc-A1x
			1		1			1	L		Dono	onoe-	Mcliern	an C	luste	r			1						

Chart 8 Subroup A1, 37-Marker Level Donohoe – McTiernan Cluster Generations to Include MRCA at 99% Probability

		15	'	18		27	-	30		39	-	42	I	_east	# of	f Gen	eratio	ns N	leed	led						
Breifn	e Clans	19	-	22		31	-	34		43	-	46		to	nclu	ide th	e Mos	st R	ecer	nt						
Projec	t (BCP)	23	-	26		35	-	38		47	-	50		Com	mor	n Male	-Line	And	cest	or						
Subro	oup A1:	Co	olor	Code	for	Deg	ree	of Cl	osen	iess	of L	ink		at th	1e 99	9% Pi	obabi	lity	Lev	el						
Don	ohoe-																									
McTier	rnan (as	J	R	W	R	S	Κ		L	Ρ	J	J	F	, т	J	T		J	Т	В	J	М		М	J	
Donoho	e) Cluster	Α	D	J	Ρ	С	С		V	-	Ρ	W	4	\ R	N	1 E		Ρ	-	Е	Α	Н		-	W	
Kit	Code								Мс	Мс	Мс	Мс														
		D	D	D	D	D	D		Т	Т	Т	Т	0	) D	D	) D		D	D	D	D	D		D	D	
		1													3	6		3			2			2		
11571	JAD1	х	1	2	2	-	- 1	<u> </u>	-	[=]	Γ-	Γ-	T T -	-   -	Τ-	-   -	TT		-	- 1		-	Ī		[=]	
19050	RDD	1	х	2	2	-	-		-	-	-	-	-	-   -	-	-		-	-	-	-	-		-	– I	
16340	WJD	2	2	x	1	21	21		40	-	-		5	0		-						44				
22521	RPD	2	2	1	Х	-	-	1	-	-	-	-	-		-	-		-	-	-	-	-		-	-	
32877	SCD	25	21	21	21	х	1		30	-	-	43	3	<mark>6</mark> 42	2	-				47					j	
82388	KCD		-			1	х				-	-	-	-   -	-	-   -		_	-	-	-	_		-	I	
		1	Don	ohoe	Dno	-A1a	3																			
21151	LVMcT		-	40	-	30	-	1	х	5	5	24	1	8 24	1 2	7 27		42	43	40	48	44		44	[ ]	
636	P-McT	i -	-	-	-	-	-	1	5	Х	5	-	-	-   -	-			-	-	-	-	-	1	-	- i	
1010	JPMcT		-	-	-	-	-	<u> </u>	5	5	х	-	-			-   -		-	-	-	-	-	1	-	!	
31885	JWMcT	i -				43	-	1	24	29	25	х	2	9 <mark>3</mark>	5 3	7 37						L	1	<u>.</u>	i	
			L		L	L	Mo	Tierr	nan (	as D	onoł	ioe)	Tgr-A1a	a										L		
142568	PAD	i -	-	50	-	36	-		18	17	22	29	)	< 18	3 22	2 22		33	34				1			
19590	TRD		-		-	42	-	<u> </u>	24	21	26	35	1	<mark>8</mark> x	20	6 26		39	46				1	45	ļ	
19591	JMD3	i -	-		-		-	1	27	18	23	37	2	2 26	3 x	2		49	50				1	47	i	
19592	TED					L		<u> </u>	<u> </u>					-   -	2	2 X		_			-		_	<u> </u>		
		_i	L			L	L				L		Do	nahu	e Dr	nc-A1	b					L		L	Li	
42569	JPD3		-		-		-	į.	42	-	-		3	3 39	9 49	9 –		х	21	36			1		45	
13882	T-D	i -	-		-		-	į.	43	-	-		3	4 46	5 50	0 –		21	х	30			1		i	
82395	BED		-		-	47	-	į.	40	-	-					-		36	30	х	26		1			
11877	JAD2	i -	-		-		-	į.	48	-	-					-				26	х		į.	į –	i	
20744	MHD	_		44		L		<u> </u>	44	-												x	<u> </u>	<u>.</u>		
		_i	ļ		ļ	ļ	ļ			ļ	l	ļ					Dor	hahu	ie/D	onoh	ue D	nc-A	\1c	ļ	Li	
79625	M-D2	-	-		-		-	1	44	-	-			4	5 47	7 –							1	х		
N52872	JWD	i -				l		<u> </u>	!				<u> </u>					45		L	L	L	<u> </u>	<u>.</u>	X	
																	$\bot$				Do	onoh	oe/D	onah	iue D	nc-A1x
				1 - 1		- '		1 - 1			Donc	ohoe	-McTier	nan (	Clust	ter	1 T	- 1			1 - 1	_ ·		1	1 7	

#### Chart 9 Subroup A1, 37-Marker Level Donohoe – McTiernan (as Donohoe) Cluster Generations to Include MRCA at 99% Probability

Lines Dnc-A1a, Dnc-A1b and Dnc-A1c include Donohoes and Line Tgr-A1a includes McTiernans. These Donohoe lines and the McTiernan line all display some interlinking with each other mostly at the weak (medium & light blue) levels but also with a few links at the moderate (green & yellow) levels. If the

McTiernan line were treated as a Donohoe surname line there would be more moderate to very strong links with the three Donohoe lines, as can be seen in Chart 9. The fifth "line", Dnc-A1x Unassigned, shows a few weak links (with Lines Dnc-A1b and Dnc-A1c), but is placed here mainly because of the profile pattern and surname.

From Chart 8 it can be seen that while Lines Dnc-A1a and Dnc-A1c show no links of moderate strength with each other, a member of each of them (whose profile is identical or closest to the line modal or the probable line modal) does show links of moderate strength with a member of Dnc-A1b, and each of these members shares a common male-line ancestor with a member of Dnc-A1b at the 99% probability level within 40 generations or less, or about 900 A.D. or more recently. As several eponymous ancestors of Breifne clans are known to have been born in the tenth century, it may be concluded that there is a good possibility that all three lines descend from the same eponymous Donnchadh.

Chart 9 shows that if the McTiernan line is treated as though it were a Donohoe line the strong to very strong links with Dnc-A1b increase, and the strong to moderate links to Dnc-A1a and Dnc-A1c also increase. Three Donohoes from Dnc-A1b and Dnc-A1c show strong links with several other surnames (Golden, Coyne, Clancy and Cullivan) when those surnames are treated as though they were Donohoes, but none of these other surnames share a pattern of deviations from NWIMH values with any of the Donohoe lines. Taking both the haplotype profiles and the strong links into account, as well as the good possibility that all three Donohoe lines may descend from the same eponymous Donnchadh, Tgr-A1a is likely to be a McTiernan subclan of the Donohoes, of the same branch as Donahue Line Dnc-A1b.

#### Subgroup A1: Various Lineages

Chart 10 below shows the names and origins for various members of this subgroup who are not yet assigned to a cluster. Only about a third can trace their lineages back to Breifne or adjoining portions of Co. Sligo.

		Breifne Clans Project	Famil	y Residential ID			F	amily Origins in	Ireland	-
		Mixed Breifne Surnames	Address	State/Prov.	From	Townland	Year	Civil Parish	Barony	County
		Haplogroup R1b-M222		/County						
BCP		Subgroup A1:								
Code	Kit	Various Lineages								
		Clancy Line Fln-A1a								
JWC	100486	Joseph W. Clancy	Chepstow	Ontario	~1855	Sligo	≤1811	unknown	Carbury	Sligo
PAC	104283	Paul Augustine Clancy	Ballygrania	Sligo	≤1833	~Drumahaire	~1775	unknown	Drumahaire	Leitrim
WGC	103604	William George Clancey	Chepstow	Ontario	~1855	Sligo	≤1811	unknown	Carbury	Sligo
WJC	104281	William Joseph Clancy	Glenade	Leitrim	≤1775	Glenade	≤1775	Rossinver	Rosclogher	Leitrim
		O'Conor Line Cnc-A1a								
AJC	114467	Antony Joseph Connor	Cork	Cork	~1899	Cork	~1899	unknown	unknown	Cork
KDO'C	64493	Kieran Denis O'Conor		Roscommon		Croaghan	≤971	Killukin	Boyle	Connacht
RTO'C	65969	Roland Thomas O'Connor				unknown	~1800	unknown	unknown	unknown
		McGoldrick Line Ulg-A1a								
F-McG	43750	Francis McGoldrick	Collooney?	Sligo	~1820	Collooney?	~1820	(Ballysadare)	(Tirerrill)	Sligo
JJG	35946	James Joseph Golden	Rathlacken	Mayo	~1820	Rathlacken	~1820	Kilcummin	Tirawley	Mayo
tjg III	N18546	Thomas Joseph Golden III	Hawley	Pennsylvania		unknown	~1835	unknown	unknown	unknown
		Misc. A1 Lines								
A-B	6292	A. B.	Swindon	Wiltshire	≤1945	Swindon	≤1945	unknown	unknown	Wiltshire
REC	N32460	Robert Edward Coyne	Toberclare	Meath	≤1830	unknown	~1790	unknown	unknown	unknown
T-C	89281	Terry Cullivan								
JTC	N3035	James Timothy Curry	Manchester	Lancashire	≤1833	Warwick	≤1813	unknown	Kington	Warwickshire
RWD	9469	Robert William Dorsey								
WJG-E	93621	William Joseph Gibbs-Egan								
KJH	94897	Kenneth James Hill	unknown	Antrim	~1720	unknown	~1720	unknown	unknown	Antrim
JLM	34129	John Lawrence Manross	Falmouth	Maine	≤1690	unknown	≤1690	unknown	unknown	unknown
AGMcM	N25846	Albert Guy McMullin	St. George's	Delaware	≤1807	unknown	≤1807	unknown	unknown	unknown
			Hundred							
ESR	142140	Erik Sven Rurikson								
RJMcS	127661	Roger John McSharry	Greeley	Nebraska	~1890s	Cootehill?	~1835	(Drumgoon)	(Tullygarvey)	(Cavan)
	00550	M Smith	unknown	Covon	<1000	unknown	<1000			Covon

# Chart 10 Subroup A1 Various Lineages Names & Origins

The following charts, Charts 11 & 12, show all the coding for the various unclustered participants of Subgroup A1, including indications of known family groups.

							L	ine	Ds				Н	#	
				Breifne Clans Project	S	F	S	G	S	L	F	М	а		
				Mixed Breifne Surnames	u	a	u	r	u	i.	а	е	р	Μ	
				Haplogroup R1b-M222	r	m	r	0	b	n	m	m	I	а	
				Subgroup A1:	n	i	С	u	g	е	i	b	0	r	
				Various Lineages, Part 1	а	Т	0	р	r		Т	е	g	k	
	Ysearch		BCP		m	У	d		ο		У	r	r	е	
Database	Code	Kit/ID	Code		е		е		u				р	r	
						sr			р		In			S	
BCP	none	6292	A-B	A. B.	S	1	Bsn	Α	1	а	1	1	R1b-M269*	37	
				Clancy Line Fln-A1a											
BCP	none	103604	WGC	William George Clancey	8	1	Fln	Α	1	а	1	1	R1b-M222	37	
BCP	none	100486	JWC	Joseph W. Clancy	8	1	Fln	Α	1	а	1	2	R1b-M222	37	
BCP	none	104283	PAC	Paul Augustine Clancy	8	3	Fln	Α	1	а	3	1	R1b-M269*	37	
BCP	none	104281	WJC	William Joseph Clancy	8	2	Fln	Α	1	а	2	1	R1b-M269*	37	
				O'Conor Line Cnc-A1a											
BCP	F66J3	64493	KDO'C	Kieran Denis O'Conor	9	1	Cnc	Α	1	а	1	1	R1b-M222	67	
BCP	9W7J4	65969	RTO'C	Roland Thomas O'Connor	9	2	Cnc	Α	1	а	2	1	R1b-M269*	67	
BCP	yes	114467	AJC	Antony Joseph Connor	9	3	Cnc	Α	1	а	3	1	R1b-M222	37	
BCP	DHU7W	N32460	REC	Robert Edward Coyne	S	1	Cdn	Α	1	а	1	1	R1b-M222	67	
BCP	none	89281	T-C	Terry Cullivan	S	1	Anl	Α	1	а	1	1	R1b-M269*	67	
BCP	HHRWR	N3035	JTC	James Timothy Curry	s	1	Crr	Α	1	a	1	1	R1b-M269*	67	

Chart 11 Subgroup A1 Various Lineages, Part 1 Coding

														_	
							L	ine	IDs				н	#	
				Breifne Clans Project	S	F	S	G	S	L	F	Μ	а		
				Mixed Breifne Surnames	u	a	u	r	u	i	а	е	р	M	
				Haplogroup R1b-M222	r	m	r	0	b	n	m	m	I	a	
				Subgroup A1:	n	i	С	u	g	е	i	b	0	r	
				Various Lineages, Part 2	а	Т	0	р	r		Т	е	g	k	
	Ysearch		BCP		m	У	d		0		У	r	r	е	
Database	Code	Kit/ID	Code		е		е		u				р	r	
						sr			р		In			S	
BCP	none	9469	RWD	Robert William Dorsey	S	1	Drc	Α	1	а	1	1	R1b-M269*	67	
BCP	none	93621	WJG-E	William Joseph Gibbs-Egan	S	1	Adg	Α	1	а	1	1	R1b-M269*	37	
				McGoldrick Line Ulg-A1a											
BCP	none	43750	F-McG	Francis McGoldrick	7	1	Ulg	Α	1	а	3	1	R1b-M269*	37	
BCP	428EC	N18546	TJG	Thomas Joseph Golden III	7	3	Ulg	Α	1	а	2	1	R1b-M269*	37	
BCP	55M3S	35946	JJG	James Joseph Golden	7	2	Ulg	Α	1	а	1	1	R1b-M222	67	
BCP	none	94897	KJH	Kenneth James Hill	S	1	Crn	Α	1	а	1	1	R1b-M222	37	
BCP	4S2V7	34129	JLM	John Lawrence Manross	S	1	Mnr	Α	1	а	1	1	R1b-M222	37	
BCP	H8875	N25846	AGMcM	Albert Guy McMullin	S	1	Min	Α	1	а	1	1	R1b-M222	67	
BCP	4UGHF	142140	ESR	Erik Sven Rurikson	S	1	Rks	Α	1	а	1	1	R1b-M269*	37	
BCP	QRG8Z	127661	RJMcS	Roger John McSharry	S	1	Srr	Α	1	а	1	1	R1b-M269*	37	
BCP	none	32550	M-S	M. Smith	S	1	Gbn	Α	1	а	1	1	R1b-M269*	37	

# Chart 12 Subgroup A1 Various Lineages, Part 2 Coding

The following charts, Charts 13 & 14, show the Y-DNA profiles for all these various participants of Subgroup A1 yet unclustered whose results are in and who have tested at the 37-marker level or higher.

Breifne Clans	Project		Mai	rker	Code	)																																
Mixed Breifne S	Surnames	3	3	1	3	3	3	4	3	4	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	G	Y	Y	4	6	5	5	C	С	4	4
Haplogroup R	1b-M222	9	9	9	9	8	8	2	8	3	8	9	8	5	5	5	5	5	4	3	4	4	6	6	6	6	6	A	C	C	5	0	7	7	D	D	4	3
Subgroup	A1:	3	0		1	5	5	6	8	9	9	2	9	8	9	9	5	4	7	7	8	9	4	4	4	4	0	T	A	A	6	7	6	0	Y	Y	2	8
Various Lineag	es, Part 1			or		a	b				i		ii		a	b							a	b	C	d		A										
				3																									Т	I					a	b		
	BCP			9																								Η	Т	I								
Kit/ID	Code			4																								4	a	b								
	FTDNA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
Modal Haplotypes																																						
Super W Atlantic	SWAMH	13	24	14	11	11	14	12	12	12	13	13	29	17	9	10	11	11	25	15	19	29	15	15	17	17	11	11	19	23	16	15	18	17	36	38	12	12
Irish TCD	IMH	13	25	14	11				12	12	13	14	29							15							11											12
Northwest Irish	NWIMH	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	23	17	16	18	17	38	39	12	12
	В.																																					
6292	A-B	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	16	11	11	19	23	17	17	20	17	38	40	12	12
	Clancy																																					
103604	WGC	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	12	11	19	23	17	16	17	17	39	40	12	12
100486	JWC	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	12	11	19	23	17	16	17	17	39	40	12	12
104283	PAC	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	17	17	11	11	19	23	17	16	18	17	39	40	12	12
104281	WJC	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	12	11	19	23	17	16	18	17	39	39	12	12
	Clancy																																					
Line Modal	Fin-AXaMH	13	35	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	12	11	19	23	17	16	18	17	39	40	12	12
	O'Conor																																					
64493	KDO'C	12	25	14	11	11	13	12	12	12	13	14	29	16	9	11	11	11	25	14	18	30	15	16	16	17	11	11	19	23	17	16	19	17	38	39	12	12
65969	RTO'C	13	25	14	11	11	13	12	12	12	13	14	29	16	9	11	11	11	25	15	18	30	15	16	16	17	11	11	17	23	17	15	19	17	38	39	12	12
114467	AJC	13	25	14	11	11	13	12	12	13	13	14	29	18	9	10	11	11	25	15	18	27	15	16	16	17	11	11	19	23	16	15	19	17	37	38	12	13
	O'Conor																																					
Line Modal	Cnc-A1aMH	13	25	14	11	11	13	12	12	12	13	14	29	16	9	11	11	11	25	15	18	30	15	16	16	17	11	11	19	23	17	15	19	17	38	39	12	12
	Coyne																																					
N32460	REC	S	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	23	17	16	17	17	38	39	12	12
	Cullivan																																					
89281	T-C	13	25	14	12	11	13	12	12	11	13	13	30	19	9	10	11	11	25	15	18	31	15	16	16	17	11	11	19	23	16	16	18	17	37	38	12	12

# Chart 13 Subgroup A1 Various Lineages, Part 1 Results & Patterns

	BCP																																					
Kit/ID	Code			A1, \	/ario	us Li	inea	ges,	Part	2																												
	FTDNA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
	Curry			-									-										_			-							-			-	-	-
N3035	JTC	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	12	11	19	23	17	16	17	17	36	38	12	12
	Dorsey					-		F			-			-												-				-								
9469	RWD	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	23	17	16	19	16	37	38	12	12
	Egan																																					
93621	WJG-E	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	27	15	16	16	17	11	10	19	23	16	16	18	17	37	39	12	12
	McGoldrick																																					
43750	F-McG	13	25	14	11	11	13	12	12	12	12	14	28	17	9	10	11	11	25	15	18	30	15	16	16	16	11	11	19	23	17	16	19	17	38	40	12	12
N18546	TJG	13	25	14	11	11	13	12	12	12	13	14	29	15	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	23	17	15	18	17	38	39	12	12
35946	JJG	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	23	17	16	17	17	38	39	12	12
	McGoldrick																																					
Line Modal	Ulg-A1aMH	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	23	17	16	-	17	38	39	12	12
	Manross			-		-		H	-		-		-	-												-		-		-			-		-			-
34129	JLM	13	25	14	11	11	13	12	12	12	13	14	29	19	9	10	11	11	25	15	18	30	14	16	16	17	10	10	19	23	17	16	17	17	37	39	12	12
	McMullin			-				H					-													_							-			-	-	-
N25846	AGMcM	13	25	14	11	11	13	12	12	12	14	14	30	17	9	10	11	11	25	16	18	29	15	16	16	17	11	11	19	23	17	16	18	17	38	38	12	12
	Rurikson							F																		-												-
142140	ESR	13	25	14	11	11	13	12	12	13	13	15	29	16	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	23	17	15	17	17	37	39	12	12
	McSharry																									_												
127661	RJMcS	13	25	14	11	11	13	12	13	12	13	14	29	16	9	10	11	11	25	15	18	31	15	16	17	17	11	11	19	23	17	16	19	18	39	39	11	12
	Smith							⊢			-												-			-		-								-	-	-
32550	M-S	13	25	14	11	11	14	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	23	17	16	18	18	38	40	12	12
				-							-																						-			_	_	
	MBS A1																									_												
Subgroup M	MBSA1MH	13	25	14	11	11	13	12	12	12	13	14	29	17	9	10	11	11	25	15	18	30	15	16	16	17	11	11	19	23	17	16	18	17	38	39	12	12

# Chart 14 Subgroup A1 Various Lineages, Part 2 Results & Patterns

Chart 25 (GMRCA99 R5 A1&A2), showing the number of generations necessary to include the most recent common male-line ancestor, at the 99% probability level, has combined the unclustered various lineages from both Subgroup A1 and Subgroup A2. This has been done because it is not clear how arbitrary the division of the group into the two subgroups is, to show that the members of these two groups do not fall clearly into to subgroups on the basis of linkages of various strengths, and to show that there are a variety of linkages among most of these participants both within and between the subgroups. Chart 25 may be seen toward the end of the discussion on Subgroup A2.