

DNA INSTALMENT FOUR

**ANALYSIS OF THE
GRIER, ETC. DNA CHART 1d**

TOGETHER WITH COMMENTARY

GENERAL

I have revised the order of presentation for the new Grier Chart 1d, placing M222 at the top because it is of the most interest to our family, and also because no other groups have undertaken additional SNP testing, or extended the range of their STR tests. This being the case, I will also refer the reader to Instalment Three above if the interest is in L21 or Viking ancestry. There is little to add to the commentary therein, other than to point out the addition of a single test result, apparently in the SNP G2a group. This result may well indicate a genetic intrusion to the family by a Roman soldier during the Roman occupation of Britain, but the data is limited. I have maintained the references to MacGregor, of both Scots and Irish varieties, so that readers will have reference points to earlier commentary. No evidence has yet emerged to connect the Griersons and the MacGregors genetically.

Other material shown on the chart deals with various matters of interest. In the light blue highlights are those STR values which I estimate as being the definitive M222 identifiers which distinguish from L21. From line 152 there is a comparison between the "Irish" M222 Greer and the "Irish" MacGregors. My aim there is to demonstrate that Scots Grierson/Greers are incompatible with the Irish (Niall) strain of M222, and incidentally to point out that there is little chance of any genetic relationship between Griersons and MacGregors within the time of surnames, and indeed within the time of the Dalriadic migration from Ireland to Scotland - if such an event took place. Unfortunately in the absence of greater testing, about the only thing we can deduce from this is that the first 12 markers in M222 are remarkably stable.

HAPLOGROUP R-M222

You will see that three of the four Grierson representatives have now been tested out to 111 markers. Using the McGee utility, these families have previously been assessed as being between 350 and 630 years apart, see the appendices on this website. The greatest TMRCA at 67 markers and 50% probability is 630 years, and that places the common ancestor at around the middle of the 14th Century. That man may well be Duncan Grereson (Gilbert 1st of Lag's father), or his father, whose name is unknown at this time. Despite this range, they all carry significant off-modal markers (OMM) compared to the M222 modal. The extended testing has confirmed the hypothesis that all descend from one man. We now have an additional 5 OMM for the family. Extended testing within the American Greer families will doubtless confirm these markers, and I await with interest such results. You should note the correction I have applied to DYS463, now a standard correction for conversion from Ancestry to FTDNA.

So the collection of off-modal markers to M222 now numbers 10 out of 111 markers. We see also that a Milligan who has tested to 111 markers also carries some, but not all of the additional OMM, a total of 7. [He is there for comparative purposes. There are more Milligan test results becoming available, and a more detailed study of the relationship between these families is under way.] Combining this knowledge with the fact that no Milligan or related names tested to date carry the mutation of DYS444=13, whereas all in the M222 Grierson/Greer families do, we can further assume that the Griersons and Milligans have a common ancestor who lived before the Grierson common ancestor. We may further assume that the mutation of DYS444 occurred at or not long before the time of the Grierson common ancestor, because it doesn't appear in any other obviously related surnames either.

Another aspect of interest is DYS533 which at 12 for all the Griersons is not only off-modal for M222, but also (in a limited sample) different from the Milligan outcome. It may turn out to be another "family" marker for us.

In lines 53-54-55, we see 162252 Cool, 78699, and KKE7R Greene. These people are certainly related, quite possibly within the time of surnames. Significantly, they carry the family identifier of DYS444=13, which by my estimation means that they descend from the Grierson common ancestor.

THE SPECULATION ZONE

For those not aware of the process, the existence of M222 as a separate identifying SNP was deduced by David Wilson some years ago. As I understand it, he derived his hypothesis for the existence of M222 on the basis of the matching off-modal markers in a certain cohort of names. I think these were: DYS385b=13, 392=14, 448=18, 449=30, YCAIIb=23, and 607=16. Since then we have further identified DYS413a=21, 534=16, 481=25, 710=35, 714=24, 549=12, and 513=13.

I now find within what I have elected to call the "Nith" clade of M222 another set of distinctive off-modal markers, with respect to the M222 modal. These are: DYS458=18, 464c=17, 570=18, CDYa=37, 444=13, 710=36, 533=12, Y-G-A10=14, 712=22, and 715=23. Most of these are also off-modal to L21. To reduce it to numbers, we are (in 111 markers) off-modal to M222 in 10 locations, and off-modal to L21 in another 14, and what we see is that a significant group within a one-name study can claim descent from one man over a sizeable distance - in this case, about 650 years by my calculation.

On the face of it, this outcome is of the order of difference that led David Wilson to speculate that a downstream SNP within R1b (later identified as M222) existed. I am therefore (going out on a limb - or a branch if you like) suggesting that within "our" sub-group of M222 there is a distinct possibility that we have a "family" SNP yet to be discovered. There is a way of finding out whether this might be true (the "Walk Through the Y" - WTY - experiment within FTDNA), but unfortunately it is a very expensive process, and beyond me at the moment.

THE STANDARD APPEAL

The only way we will advance our knowledge about the interrelationships within the whole group of Grier(son)/Greer families is to convince males bearing these names who are interested in the truth in genealogy to undergo YDNA testing. Once again I challenge such men to "bite the bullet", and take the test, even though the outcomes might lead you to rethink those fables and myths about the Grierson ancestry.

OTHER REFERENCES

In a much broader study of M222, Bill Howard and John McLaughlin have presented a paper in which (inter alia) the Grierson/Greer and Milligan relationship is highlighted. The paper also asserts that M222 is substantially older than is commonly discussed, and furthermore that the M222 mutation probably didn't occur in Ireland, and may well have been in Scotland. The paper is at:

<http://mysite.verizon.net/weh8/sitebuildercontent/sitebuilderfiles/M222Paper.pdf>

and is well worth reading.

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