

Goodrich Surname DNA Project

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Goodrich Family Association

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*Visit our website at: www.goodrichfamilyassoc.org
 *Archived newsletters: <http://www.goodrichfamilyassoc.org/Newsletters/>

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– Foreword Review

This issue of the GFA DNA Project Update reviews the historical correlation of Y-SNPs in pages 11-15.

The historical events in the ancient Roman Republic and the later Roman Empire are each critical, so interplay of other SNPs is likely. Another important note: Y-DNA haplogroup E-Z16242 is still suspected to have originated in Hispania, most likely in the extreme southern part of Spain in ~208 BCE; however, this would place its nearest two precursors E-Z5018 and E-BY3880 somewhere in Italy or on the islands of Corsica, Sardinia, or Sicily, which is where the Roman Republic (529-27 BCE) was confined at that time in history. As in previous issues, when kits share a Y-SNP mutation or group of Y-SNP mutations, this is indicated as “ 

When a kit does not have or share an SNP mutation or group of SNP mutations, this is always indicated by “ – ”

In summary: there are now 96 Y-STR kits, 59 mt-DNA kits, 48 NGS Y-SNP kits, and 98 Family Finder at-DNA kits.

Next-Generation-Sequencing (NGS) Y-SNP Results (Y-DNA Haplogroup E-Z16242 from 2014-2025): 34 Kits

In the display, the more ancient Y-SNP mutations on the left are shared by the most kits; the more recent Y-SNP mutations to the right are shared by fewer kits.

Since the July 2024 Goodrich Surname DNA Project Report:

- G-53 has been placed into the Y-ancestry first proposed for G-53 in 2012: Levi⁵ Goodrich (Levi⁴, Gideon³, Ephraim², William¹), with Y-STR mutation 17.a on Y-STR DYS557.
 - This ancestral placement also includes the maternal-linked Goodrich ancestry: Levi⁵ Goodrich (Azubah⁵, Solomon⁴, Richard³, Ephraim², William¹).
 - This dual Goodrich ancestral placement was first postulated in 2012, when the death of Azubah⁵ Goodrich in Middlebury, Addison, Vermont on 04 Feb 1813 was discovered.
- G-121, a Y-descendant of the immigrant William¹ Goodrich/Goodridge of Watertown, Massachusetts, has tested, revealing shared Y-SNPs FGC44078, FGC44085, FGC44086.
- G-19, a Y-descendant of the immigrant Thomas¹ Goodrich of Old Rappahannock, Virginia, has tested, revealing shared Y-SNPs FGC45642, FGC45647.
- Added genealogical information found for the William³ Goodrich (William², William¹) group, which shares Y-SNPs FGC61650, FGC61651, suggests their placements shown.

Next-Generation-Sequencing (NGS) Y-SNP Results (Y-DNA Haplogroups I, J, R from 2014-2025): 15 NGS Y-SNP Kits

| ~Age Analog | | | | | | | | | | | | | | | | |
|------------------------------|------------|---------|--------------|------------|--------------|------------|-------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|
| | YHG - I | Kit | A0-T | A1 | A1b | BT | CT | CF | F | GHIJK | HJK | IJK | U | I | I1 (I-M253) | I-DF29 |
| YHG-I SHARED SNPs | G-139 | 827404 | | | | | | | | | | | | | | (E-BY3880) |
| | G-73 | 332466 | | | | | | | | | | | | | | (E-M35) |
| | G-36 | N35214 | | | | | | | | | | | | | | (E-M215) |
| | G-28 | 114808 | | | | | | | | | | | | | | |
| | G-161 | 999825 | | | | | | | | | | | | | | |
| | G-64 | 281654 | | | | | | | | | | | | | | |
| YHG I-M253 SHARED SNPs | YHG I-M253 | Kit | I-Z17954 | I-S2304 | I-Z17942 | I-Z17928 | I-Z17926 | (E-Z5018) | | | | | | | | |
| YHG-I UNIQUE | G-36 | N35214 | | | | | | | | | | | | | | |
| | G-161 | 999825 | | | | | | | | | | | | | | |
| | G-139 | 827404 | I-Y2592 | I-Z2336 | I-Z2337 | I-S6346 | I-L22 | I-Y3549 | I-S25633 | I-P109 | I-FGC16695 | I-Y3662 | I-S14887 | | | |
| | G-73 | 332466 | I-S14887a | I-S8175 | I-FT3562 | I-FT3867 | I-FT6464 | | | | | | | | | |
| YHG-J SHARED SNPs | G-24 | 109235 | I-Z58 | I-Z59 | I-CTS647 | I-A1141 | I-A14694 | | | | | | | | | |
| | G-112 | B170423 | I-Z17924 | I-S2308 | I-DF112 | I-A8090 | I-FT80974 | I-A18294 | I-FTA31212 | | | | | | | |
| | G-64 | 281654 | I2 (I-M438) | I-L460 | I-M436 | I-M223 | I-Y3259 | I-CTS616 | I-Y3721 | I-M284 | I-L1195 | I-L126 | I-FGC20063 | | | |
| YHG-J UNIQUE SNPs | G-90 | 380928 | J-M410 | J-PF4610 | J-L26 | J-PF5087 | J-PF5160 | J-L24 | J-Y22662 | J-L25 | J-PF4888 | J-PF5366 | J-L264 | J-FGC41825 | | |
| | G-112 | B170423 | J1 (J-M267) | J-Z2215 | J-Z2217 | J-L620 | J-PF4816 | J-L136 | J-P58 | J-Z643 | J-Z1865 | J-Z1853 | J-Z2331 | J-Z2324 | | |
| | | | J-Z2317 | J-Z2313 | J-YSC0000234 | J-Z1884 | J-FGC12834 | J-PF4876 | J-PF4867 | J-L829 | J-CTS2572 | J-Y132415 | J-Z29667 | | | |
| YHG-R SHARED SNPs | YHG - R | Kit | A0-T | A1 | A1b | BT | CT | CF | F | GHIJK | HJK | IJK | U | J | J2 (J-M172) | |
| | G-131 | 174396 | | | | | | | | | | | | | | |
| | G-138 | 181160 | | | | | | | | | | | | | | |
| | G-144 | 141217 | | | | | | | | | | | | | | |
| | G-160 | 998007 | | | | | | | | | | | | | | |
| | G-164 | 1004446 | | | | | | | | | | | | | | |
| | G-110 | 649078 | | | | | | | | | | | | | | |
| | G-71 | 323619 | | | | | | | | | | | | | | |
| | G-97 | 491926 | | | | | | | | | | | | | | |
| | G-98 | B108606 | | | | | | | | | | | | | | |
| YHG-R UNIQUE SNPs | YHG - R | Kit | K | K2 | K2b | P | P1 | P-P337 | P-P226 | R | R-Y482 | R1 | | | | |
| | G-131 | 174396 | | | | | | | | | | | | | | |
| | G-138 | 181160 | | | | | | | | | | | | | | |
| | G-144 | 141217 | | | | | | | | | | | | | | |
| | G-160 | 998007 | | | | | | | | | | | | | | |
| | G-164 | 1004446 | | | | | | | | | | | | | | |
| | G-110 | 649078 | | | | | | | | | | | | | | |
| | G-71 | 323619 | | | | | | | | | | | | | | |
| | G-97 | 491926 | | | | | | | | | | | | | | |
| | G-98 | B108606 | | | | | | | | | | | | | | |
| YHG-R UNIQUE SNPs | YHG - R | Kit | R1b (R-M343) | R-L754 | R-L389 | R-P297 | R-M269 | R-L23 | R-L51 | R-L52 | R-L151 | R-P312 | R-S461 | R-L21 | R-DF13 | R-Z253 |
| | G-131 | 174396 | | | | | | | | | | | | | | |
| | G-144 | 141217 | | | | | | | | | | | | | | |
| | G-138 | 181160 | | | | | | | | | | | | | | |
| | G-144 | 141217 | | | | | | | | | | | | | | |
| | G-160 | 998007 | | | | | | | | | | | | | | |
| | G-164 | 1004446 | | | | | | | | | | | | | | |
| | G-110 | 649078 | | | | | | | | | | | | | | |
| | G-71 | 323619 | | | | | | | | | | | | | | |
| | G-97 | 491926 | | | | | | | | | | | | | | |
| YHG-R UNIQUE SNPs | G-98 | B108606 | R1a (R-M420) | R-M459 | R-M198 | | | | | | | | | | | |
| | G-131 | 174396 | R-FGC3268 | R-FGC3222 | R-BY181473 | R-BY181407 | R-BY188511 | R-FT24855 | | | | | | | | |
| | G-138 | 181160 | R-L371 | R-FGC30633 | R-FGC73637 | | | | | | | | | | | |
| | G-144 | 141217 | R-Z2534 | R-22186 | R-Z2183 | R-L1066 | R-CTS110558 | R-CTS11831 | R-CTS9881 | R-Z18123 | R-CTS9251 | R-CTS4296 | R-FGC32679 | R-A2072 | R-A2076 | R-A2073 |
| | G-160 | 998007 | R-Y15134 | R-L371 | R-FGC10074 | R-FGC73647 | | | | | | | | | | |
| | G-164 | 1004446 | R-FGC5494 | R-FGC5495 | R-FGC7448 | R-FGC5496 | R-FGC5512 | R-BY10339 | R-FGC43417 | R-FGC43428 | R-FGC43418 | R-FGC43432 | R-PF5191 | R-FGC43423 | R-FGC43424 | R-BY33497 |
| | G-110 | 649078 | R-BY1058 | R-BY1717 | R-A7385 | | | | | | | | | | | |
| | G-71 | 323619 | R-U106 | | | | | | | | | | | | | |
| | G-97 | 491926 | R-U106 | | | | | | | | | | | | | |

Y-STR Y1-Y67 Results (Y-DNA Haplogroup E from 2005-2025): 54 Kits

Y-STR Y68-Y111 Results (Y-DNA Haplogroup E from 2011-2025): 33 Kits

Y-STR Y1-Y67 Results (Y-DNA Haplogroups I, J, R from 2005-2025): 42 Kits

Y-STR Y68-Y111 Results (Y-DNA Haplogroups I, J, R from 2011-2025): 17 Kits

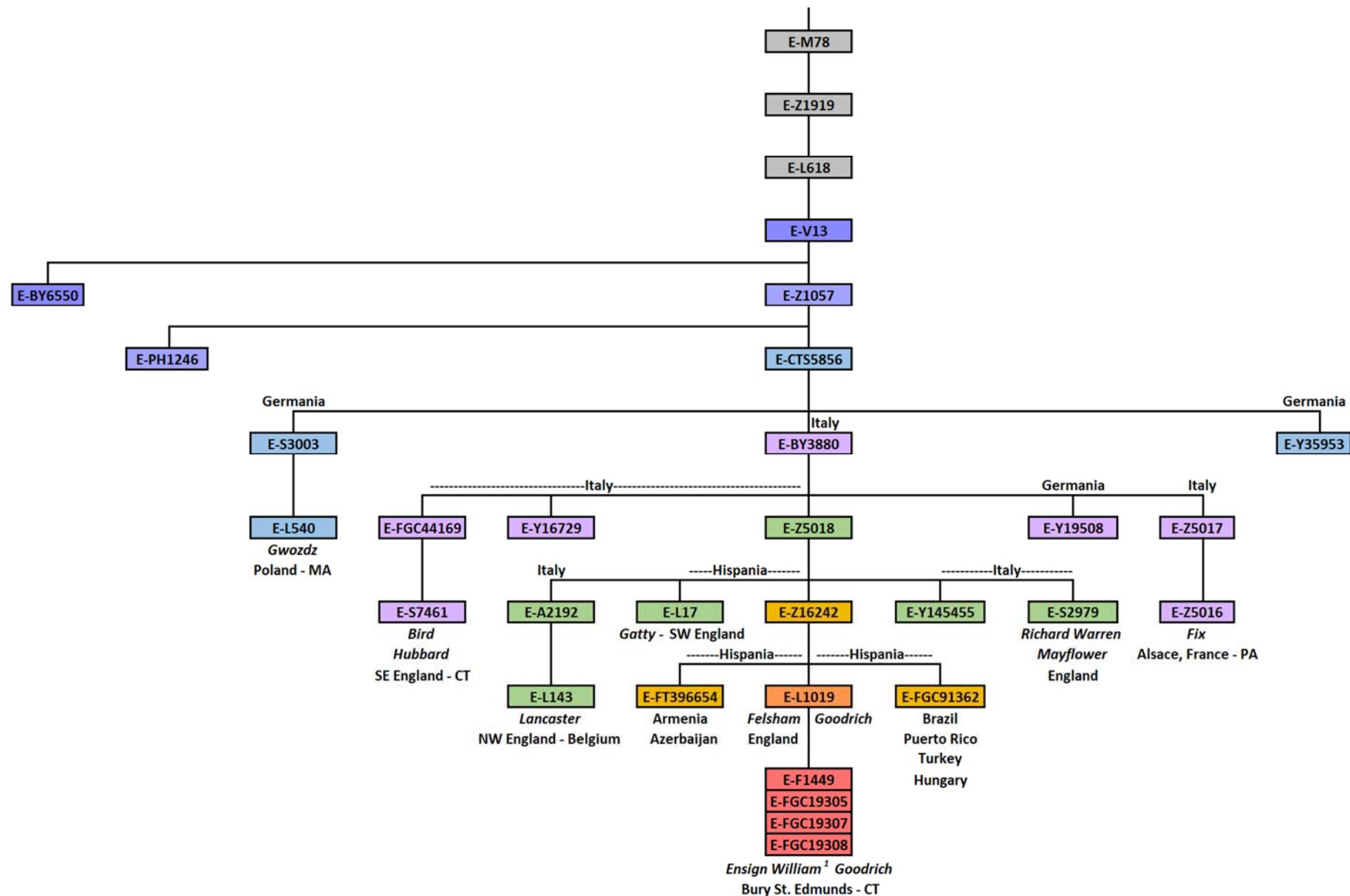
Mitochondrial (mt-DNA) Haplogroups (2005-2025): 59 Kits

| GFA ID | Kit Number | mt-DNA Haplogroup |
|--------|------------|-------------------|
| G-145 | 224081 | A2ah |
| G-147 | 567759 | D |
| G-25 | 108769 | H |
| G-41 | 183387 | H |
| G-79 | 367652 | H |
| G-87 | 411480 | H |
| G-38 | N74283 | H |
| G-88 | N140052 | H1n-T146C1 |
| G-70 | 325912 | H1-T16189C1 |
| G-21 | 93719 | H1u1 |
| G-144 | 141217 | H26a1 |
| G-107 | 389349 | H27 |
| G-106 | B158231 | H31 |
| G-138 | 181160 | H4a1a3 |
| G-95 | N107161 | H55b |
| G-100 | 336189 | H5a1b |
| G-54 | 212594 | H5a1d |
| G-19 | N4557 | H5a4a1a |
| G-36 | N35214 | H5c |
| G-58 | 234311 | H69 |
| G-148 | IN77044 | H6a1b3a |
| G-97 | 491926 | I |
| G-124 | 845281 | I |
| G-18 | 89943 | J1c3c |
| G-128 | 865298 | J1c3c |
| G-129 | 866085 | J1c3c |
| G-67 | 270600 | J1c3e1 |
| G-131 | 174396 | J2a1a1a2 |
| G-77 | 349005 | J2a1a1b |
| G-91 | 391503 | J2a1a1b |
| G-130 | 755653 | K1a11a1 |
| G-123 | 447034 | K1a1b2a1a |
| G-73 | 332466 | K1a2a1 |
| G-112 | B170423 | K1a3a2 |
| G-119 | 721368 | K1a4a1 |
| G-43 | N18663 | L0a1 |
| G-146 | 224082 | L2 |
| G-61 | 256692 | L2a1a2c |
| G-66 | 105967 | L3e |
| G-141 | 522376 | T1a1k |
| G-161 | 999825 | T1a1k |
| G-8 | 50812 | T2b |
| G-93 | 308010 | T2b |
| G-135 | B421400 | T2b5a |
| G-90 | 380928 | U2e2a1a |
| G-64 | 281654 | U4a1a |
| G-45 | 189808 | U5 |
| G-83 | 390961 | U5 |
| G-22 | N7076 | U5 |
| G-96 | B79136 | U5a1a1-T152C1 |
| G-101 | 520264 | U5a2a1d |
| G-47 | 189707 | U5a2-C16294T |
| G-120 | 788392 | U5b2a1a1d |
| G-27 | N59540 | V |
| G-29 | 117958 | V |
| G-127 | 864918 | V |
| G-34 | N68941 | V3a |
| G-156 | 981448 | V7 |
| G-68 | 297350 | W5a1a1 |

Autosomal (at-DNA) Family Finder Kits (2010-2025): 98 Kits

| GFA ID | Family Finder Kit Number |
|--------|--------------------------|
| G-7 | 48628 |
| G-18 | 89943 |
| G-20 | 97658 |
| G-66 | 105967 |
| G-28 | 114808 |
| G-29 | 117958 |
| G-144 | 141217 |
| G-131 | 174396 |
| G-138 | 181160 |
| G-47 | 189707 |
| G-46 | 190464 |
| G-51 | 196109 |
| G-53 | 208514 |
| G-145 | 224081 |
| G-146 | 224082 |
| G-57 | 225395 |
| G-58 | 234311 |
| G-60 | 249123 |
| G-64 | 281654 |
| G-68 | 297350 |
| G-93 | 308010 |
| G-71 | 323619 |
| G-70 | 325912 |
| G-73 | 332466 |
| G-100 | 336189 |
| G-77 | 349005 |
| G-76 | 353472 |
| G-79 | 367652 |
| G-90 | 380928 |
| G-82 | 387519 |
| G-107 | 389349 |
| G-83 | 390961 |
| G-80 | 393517 |
| G-92 | 419879 |
| G-94 | 443588 |
| G-123 | 447034 |
| G-97 | 491926 |
| G-101 | 520264 |
| G-99 | 522009 |
| G-141 | 522376 |
| G-102 | 552105 |
| G-147 | 567759 |
| G-103 | 569864 |
| G-109 | 593190 |
| G-110 | 649078 |
| G-111 | 659391 |
| G-113 | 679586 |
| G-115 | 708100 |
| G-119 | 721368 |
| G-116 | 725466 |
| G-130 | 755653 |
| G-120 | 788392 |
| G-124 | 845281 |
| G-127 | 864918 |
| G-128 | 865298 |
| G-129 | 866085 |
| G-140 | 904923 |
| G-152 | 958215 |
| G-154 | 968807 |
| G-158 | 989586 |
| G-161 | 999825 |
| G-164 | 10004446 |
| G-168 | 1012928 |
| G-165 | B1057186 |
| G-166 | B1057803 |
| G-167 | B1059594 |
| G-98 | B108606 |
| G-104 | B141815 |
| G-106 | B158231 |
| G-112 | B170423 |
| G-78 | B18637 |
| G-133 | B211481 |
| G-117 | B232890 |
| G-118 | B236680 |
| G-163 | B236703 |
| G-121 | B293764 |
| G-81 | B32128 |
| G-153 | B330570 |
| G-122 | B330944 |
| G-125 | B338380 |
| G-126 | B383043 |
| G-135 | B421400 |
| G-143 | B665886 |
| G-151 | B759394 |
| G-96 | B79136 |
| G-108 | B89395 |
| G-159 | B895446 |
| G-148 | IN77044 |
| G-134 | MK36543 |
| G-150 | MK73278 |
| G-149 | MK73279 |
| G-95 | N107161 |
| G-88 | N140052 |
| G-132 | N202634 |
| G-36 | N35214 |
| G-17 | N41657 |
| G-19 | N4557 |
| G-27 | N59540 |

Y-DNA Haplogroup E-V13 Ancient Relations of Felsham, Suffolk, England Goodrich



Historical Correlations with Estimated Divergence Times of E-Z16242+ in Armenia

| Year | YF078870 Georgia (from Armenia) | YF112335 Azerbaijan | Year | Y-SNP England | Year | YF002189 (G-18) England | Year | YF074404 (G-147) Brazil (from Portugal) |
|------|------------------------------------|---|------|------------------|------|---|------|--|
| 1535 | | | 1535 | E-FGC14554 | 1535 | | 1535 | |
| 1492 | | | 1492 | E-FGC14555 | 1492 | | 1492 | |
| 1448 | | | 1448 | E-FGC14556 | 1448 | | 1448 | |
| 1404 | | | 1404 | E-FGC14557 | 1404 | | 1404 | |
| 1361 | | | 1361 | E-FGC14558 | 1361 | | 1361 | |
| 1317 | | | 1317 | E-FGC14560 | 1317 | | 1317 | |
| 1274 | | | 1274 | E-FGC14561 | 1274 | | 1274 | |
| 1230 | | | 1230 | E-FGC14562 | 1230 | | 1230 | |
| 1187 | | | 1187 | E-FGC14563 | 1187 | | 1187 | |
| 1143 | | | 1143 | E-FGC14565 | 1143 | | 1143 | |
| 1099 | | | 1099 | E-FGC14567 | 1099 | | 1099 | |
| 1056 | | | 1056 | E-FGC14568 | 1056 | | 1056 | |
| 1012 | | | 1012 | E-FGC14570 | 1012 | | 1012 | |
| 969 | | | 969 | E-FGC14571 | 969 | | 969 | |
| 925 | | | 925 | E-FGC14572 | 925 | | 925 | |
| 882 | | | 882 | E-FGC19295 | 882 | | 882 | |
| 838 | | | 838 | E-FGC19296 | 838 | | 838 | |
| 794 | | | 794 | E-FGC19297 | 794 | | 794 | |
| 751 | | | 751 | E-FGC19298 | 751 | | 751 | |
| 707 | | | 707 | E-FGC19299 | 707 | | 707 | |
| 664 | | | 664 | E-FGC19300 | 664 | | 664 | |
| 620 | | | 620 | E-FGC19301 | 620 | | 620 | |
| 576 | E-FGC2100 (YF112335) | PERPETUAL PEACE 532-540 CE | 576 | E-FGC19302 | 576 | | 576 | |
| 533 | E-FGC33591 | Kingdom of Armenia vs. Persian Empire | 533 | E-FGC19303 | 533 | | 533 | |
| 489 | E-FGC57423 | https://en.wikipedia.org/wiki/Perpetual_Peace_(532)_/ | 489 | E-FGC19304 | 489 | | 489 | |
| 446 | E-FT187571 | | 446 | E-FGC19309 | 446 | | 446 | |
| 402 | E-FT201790 | | 402 | E-FGC19310 | 402 | | 402 | |
| 359 | E-FT394894 | https://en.wikipedia.org/wiki/Perpetual_Peace_%2828532%29#/media/File:Roman_Persian_Frontier_in_Late_Antiquity.svg | 359 | E-FGC19311 | 359 | | 359 | |
| 315 | E-FT395225 | | 315 | E-FGC19312 | 315 | | 315 | |
| 271 | E-FT395284 | | 271 | E-FGC19313 | 271 | | 271 | |
| 228 | E-FT395640 | Nagorno-Karabakh (stated Y-origin of YF078870) | 228 | E-FGC19314 | 228 | | 228 | |
| 184 | E-PF1603 | is a region still contested: Armenia vs. Azerbaijan | 184 | E-FGC19315 | 184 | | 184 | |
| 141 | E-Y179729 | for more than 100 years (recently in 2020): | 141 | E-FGC44079 | 141 | | 141 | |
| 97 | E-Y222317 | https://www.news.com.au/technology/innovation/military/nagorno-karabakh-armenia-and-azerbaijan-clash-over-disputed-region/news-story/a69fd156d3698489a7268ba6257c3a0 | 97 | E-FGC86594 | 97 | Boudican Revolt | 97 | E-FGC91366 |
| 53 | E-Y222412 | | 53 | E-L1019 | 53 | 61-96 CE | 53 | E-FGC91369 |
| 10 | E-Y222458 | | 10 | E-YFS287736 | 10 | Ala I Hispanorum Asturum(?) | 10 | E-FGC91379 |
| -34 | E-Y222487 | | -34 | E-YFS153872 | -34 | Ixworth Roman Fort 10 miles | -34 | E-FGC91388 |
| -77 | E-Y222585 | Conquest of Armenia (Trajan) 115-117 CE | -77 | E-YFS287746 | -77 | North of Felsham ~69-96 CE | -77 | E-FGC91389 |
| -121 | E-Y58563 | https://en.wikipedia.org/wiki/Trajan%27s_Parthian_campaign | -121 | E-YFS287777 | -121 | https://en.wikipedia.org/wiki/Boudican_revolt | -121 | E-FGC91393 |
| -164 | E-Z4390 | | -164 | E-Y20431 | -164 | https://www.roman-britain.co.uk/places/ixworth/ | -164 | E-Y178966 |
| -208 | E-Z16242 | | | | | | | |
| -252 | E-Z5018 | | | | | | | |
| -295 | E-BY3880 | | | | | | | |

GFA kit G-18 has 11 Y-SNPs that occurred between 1535-2020 CE, with average spacing 44 years. However, the Y-SNPs E-F1449, E-FGC19305, E-FGC19307, E-FGC19308 are known to have arisen in William Goodrich of Hessett, John Goodrich the Clothier, and Ensign William Goodrich between 1580-1652 CE, with average SNP spacing of 18 years. GFA kits G-118 and G-136 have SNP E-FTC76208 (~1692 CE), followed by a gap of ~280 years before 5 unique G-118 SNPs: E-FTC74786, E-FTC74787, E-FTC74796, E-FTC74797, E-FTC74914; spacing ~10 years, versus the 1 unique SNP E-FTA92269 for GFA kit G-136 (G-136 is the father of G-118), with an average SNP spacing greater than 70 years. So the G-18 SNP spacing of 44 years from 1535-2020 CE is only an average that represents a known 485-year time interval with alternating "gaps" and "runs" in Y-SNPs.

If the origin of E-Z16242 is set at 208 BCE, and the 40 post-Z16242 Y-SNPs shared by E-L1019+ kits are spaced 43.58 years apart, the 40 SNPs fit 208 BCE to 1535 CE, with no gaps in Y-SNP mutations. If the average SNP spacing of 43.58 years is extended to all current E-Z16242+ kits, a number of possible historical correlations are observed:

- * YF078870 (Armenia) and YF112335 (Azerbaijan), who possibly arrived in the Conquest of Armenia by Roman General Trajan in 115 CE, diverge from each other in ~576 CE.
- This is ~44 years after the "Perpetual Peace" of 532 CE allowed free settlement in parts of what is now Armenia-Azerbaijan once divided as Roman vs. Persian Empires.
- Nagorno-Karabakh; the stated Y-origin of YF078870, is still contested between Armenia (backed by Russia) and Azerbaijan (backed by Turkey) as recently as 2020 CE.
- YF078870, YF112335, and G-18 share no SNPs beyond E-Z16242 with YF074404; a native of Brazil with Y-origin in Portugal.

The conquest of Hispania by the Roman Republic (509-27 BCE) is also known as the Second Punic War (218-201 BCE; Punic = Carthaginian). A decade later in 208-206 BCE, the Romans defeated the Carthaginians in Hispania decisively. During the Second Punic War, the Roman Republic was centered in Italy, Corsica, Sardinia, Sicily, so E-Z16242 precursors E-Z5018 and E-BY3880 likely originated in Italy rather than in the Balkans region of the later Imperial Roman Empire from 27 BCE to its maximum extent in 117 CE.

E-Z16242+ kit G-18 also descends from immigrant Andrew Cunningham (1653-1735) of Leith, Midlothian, Scotland; 20 miles E-SE of the E end of the Antonine Wall built by the Roman Empire at the border of Roman Britannia and Caledonia / Scotland in 142 CE. The Y-haplogroup of Andrew: (E-V12), E-Y2846 is parallel to (E-V13), E-Z16242, and has been found in Tunisia, Africa: once the center of Punic power. Possibly an E-Z16242+ proto-Goodrich and E-Y2846+ proto-Cunningham engaged in the Second Punic War.

No other E-Z16242+ kits in England other than Felsham, Suffolk, England Goodrich have been found in the 10 years since the NGS Y-SNP test results became available in 2014. Though this situation would be easier to visualize if Goodrich came to England much later, yet before the first attestation of Robert Goodrich of Felsham in its subsidy list of 1327 CE, a later arrival likely coincides with multiple post-Z16242 SNPs currently unique to Felsham Goodrich being found in non-Goodrich in other geographic locations.

If E-Z16242 formed ~3,600 years ago vs. ~2,232 years ago, then ~19 SNPs vs. ~5 SNPs unique to Felsham Goodrich should be found in non-Goodrich kits in other locations.

If the spacing ~43.58 years between Y-SNP mutations from ~208 BCE through ~1535 CE is reasonably accurate, then it is easier to understand how the average SNP spacing could be just ~18 years from 1580-1652 CE, and yet no SNP is found for 1535-1580 required to establish that the immigrants William Goodrich/Goodridge of Watertown, MA and Ensign William Goodrich of Wethersfield, CT were more closely related to each other than they were related to the immigrant Thomas Goodrich of Old Rappahannock, VA. For instance, if Y-SNP mutations did occur in 1492 CE and in 1535 CE, and the next Y-SNP mutation occurred in 1580 rather than in 1579 (a 3.3% fluctuation in SNP spacing), the delay causes the Y-SNP to occur after William Goodrich II of Hessett was conceived in ~Dec 1579, so it would be a unique Y-SNP for him and for his Y-descendants only.

Perpetual Peace (532 CE): [https://en.wikipedia.org/wiki/Perpetual_Peace_\(532\)](https://en.wikipedia.org/wiki/Perpetual_Peace_(532))

Roman-Persian Border: [https://en.wikipedia.org/wiki/Perpetual_Peace_\(532\)#/media/File:Roman-Persian_Frontier_in_Late_Antiquity.svg](https://en.wikipedia.org/wiki/Perpetual_Peace_(532)#/media/File:Roman-Persian_Frontier_in_Late_Antiquity.svg)

Nagorno-Karabakh: <https://www.news.com.au/technology/innovation/military/nagorno-karabakh-armenia-and-azerbaijan-clash-over-disputed-region/news-story/a69fd156d3698489a7268ba6257c3a0>

Conquest of Armenia (Trajan): https://en.wikipedia.org/wiki/Trajan%27s_Parthian_campaign

Conquest of Hispania Map (218-19 BCE): https://en.wikipedia.org/wiki/Roman_conquest_of_the_Iberian_Peninsula#/media/File:Conquista_Hispania.svg

Boudican Revolt: https://en.wikipedia.org/wiki/Boudican_revolt

Ixworth Roman Fort: <https://www.roman-britain.co.uk/places/ixworth/>

Campaigns of Conquest Map: <https://www.mylearning.org/resources/roman-military-campaigns-in-britain-43-60-ce>

Historical Correlations with Estimated Divergence Times of E-Z16242+ in Portugal, Spain, Turkey, and Hungary

| | YF074404 (G-147) Brazil (from Portugal) | YF065750 (G-145) Brazil (from Portugal) | HG01107 (1000 Genomes Project) Puerto Rico (from Spain) | Big Y-700 Block Tree Turkey | Big Y-700 Block Tree Hungary |
|------|--|--|--|--|--|
| Year | | | | | |
| 1535 | 29-19 BCE 75-29 BCE | 133-123 BCE 154-138 BCE 218 - 216 BCE | Kingdom of Asturias 718 CE | ROMAN EMPIRE Divides 286-395 CE: Western Roman Empire Capital: Rome Eastern Roman Empire Capital: Constantinople (now Istanbul, Turkey) | Visigoth Alaric I in Pannonia / Hungary 402-407 CE |
| 1492 | | | | | |
| 1448 | | | | | |
| 1404 | | | | | |
| 1361 | | | | | |
| 1317 | | | | | |
| 1274 | | | | | |
| 1230 | | | | | |
| 1187 | | | | | |
| 1143 | | | | | |
| 1099 | | | | | |
| 1056 | | | | | |
| 1012 | E-CTS9966 (YF065750) | SECOND COUNTY OF PORTUGAL 987-1064 CE | KINGDOM OF ASTURIAS 710-718 CE | WESTERN ROMAN EMPIRE COLLAPSE 440-476 CE | VISIGOTH RETREAT TO PANNONIA 402-407 CE |
| 969 | E-CTS9967 | Kingdom of Asturias Subdivides into 1st County of Portugal (868 CE); grows to 2nd County by 987-1064 CE https://en.wikipedia.org/wiki/County_of_Portugal | Visigoth Nobleman Pelagius Defeats Umayyad Caliphate Invaders (710 CE) at the Battle of Covadonga Forming Kingdom of Asturias (Northern Spain) https://en.wikipedia.org/wiki/Reconquista | Survival of Eastern Byzantine Empire Capital Constantinople / Istanbul, Turkey https://en.wikipedia.org/wiki/List_of_Byzantine_wars | ILL-FATED TRUCE WITH VISIGOTH ALARIC I BY THE ROMAN GENERAL FLAVIUS STILICO ROMAN TROOPS DEPLOYED TO CONTAIN PANNONIA https://en.wikipedia.org/wiki/Stilicho |
| 925 | E-FGC91365 | | | | |
| 882 | E-FGC91367 | | | | |
| 838 | E-FGC91368 | | | | |
| 794 | E-FGC91370 (HG01107) | | | | |
| 751 | E-FGC91371 | | | | |
| 707 | E-FGC91373 | | | | |
| 664 | E-FGC91381 | | | | |
| 620 | E-FGC91390 | | | | |
| 576 | E-S1896 | | | | |
| 533 | E-Y144293 | | | | |
| 489 | E-Y178967 | | | | |
| 446 | E-FGC91392 (Turkey Big Y Block Tree) | | | | |
| 402 | E-CTS1357 (Hungary Big Y Block Tree) | | | | |
| 359 | E-CTS4698 | | | | |
| 315 | E-CTS5680 | | | | |
| 271 | E-FGC91361 | | | | |
| 228 | E-FGC91362 | | | | |
| 184 | E-FGC91363 | | | | |
| 141 | E-FGC91364 | | | | |
| 97 | E-FGC91366 | | | | |
| 53 | E-FGC91369 | | | | |
| 10 | E-FGC91379 | | | | |
| -34 | E-FGC91388 | | | | |
| -77 | E-FGC91389 | | | | |
| -121 | E-FGC91393 | | | | |
| -164 | E-Y178966 | | | | |
| -208 | E-Z16242 | | | | |
| -252 | E-Z5018 | | | | |
| -295 | E-BY3880 | | | | |

If the origin of E-Z16242 is set at 208 BCE, and if the Y-SNP mutations of all E-Z16242+ kits are spaced a consistent 43.58 years apart, a number of possible historical correlations are observed:

- * The (E-Z16242+) GFA kits G-145 (YF065750) and G-147 (YF074404), who are both natives of Brazil whose Y-ancestries presumably originated in Portugal, diverge in ~1012 CE.
- Coincidentally or not, this was ~25 years after the 1st County of Portugal (868 CE) grew in size to the 2nd County of Portugal (987 CE), and ~52 years before the 2nd county was secured from the caliphate (1064 CE).
- * The (E-Z16242+) GFA kits G-145 and G-147; natives of Brazil via Portugal, and E-Z16242+ YFull Kit HG01107; a native of Puerto Rico whose Y-origin is presumably in Spain, diverge in ~794 CE.
- Coincidentally or not, this was ~76 years after the Visigoth Nobleman Pelagius defeated Umayyad Caliphate invaders at the Battle of Covadonga in 718 CE, forming the Kingdom of Asturias, Spain.
- * The (E-Z16242+) Big Y-700 Block Tree kit from Turkey, with no current FTDNA, YFull or GFA identifiers, diverges from the E-Z16242+ kits from Portugal / Brazil and Puerto Rico / Spain in ~446 CE.
- Coincidentally or not, this is ~6 years after the Western Roman Empire began its eventual collapse 440-476 CE; leaving the Eastern Byzantine Empire with its capital at Constantinople, which is now Istanbul, Turkey.
- * The (E-Z16242+) Big Y-700 Block Tree kit from Hungary, with no current FTDNA, YFull or GFA identifiers, diverges from the E-Z16242+ kits from Portugal / Brazil and Puerto Rico / Spain in ~402 CE.
- Coincidentally or not, this is the same year that Visigoth troops of Alaric I were allowed to occupy Pannonia / Hungary dangerously, through ill-advised terms of truce with the Roman General Flavius Stilicho in 402 CE.

Conquest of Hispania Map (218-19 BCE): https://en.wikipedia.org/wiki/Roman_conquest_of_the_Iberian_Peninsula#/media/File:Conquista_Hispania.svg

County of Portugal / Coimbra: County of Portugal including County of Coimbra: https://en.wikipedia.org/wiki/County_of_Portugal#/First_county

Kingdom of Asturias: Reconquista: <https://en.wikipedia.org/wiki/Reconquista> Kingdom of Asturias: https://en.wikipedia.org/wiki/Kingdom_of_Asturias

Collapse of Western Roman Empire: Byzantine Wars: https://en.wikipedia.org/wiki/List_of_Byzantine_wars Western Roman Empire: https://en.wikipedia.org/wiki/Western_Roman_Empire

Visigoth Retreat to Pannonia: <https://en.wikipedia.org/wiki/Stilicho>

The Visigoth Retreat to Pannonia (Hungary) in 402 CE and the Collapse of the Mainland Western Roman Empire Afterward

<https://www.thecollector.com/barbarians-crossing-the-rhine-the-end-of-rome/>

Across many borders, the Romans had long maintained relationships with barbarian groups living on or beyond the frontier. Through the giving of gifts and conferment of imperial legitimacy, the Romans were able to build alliances with friendly barbarian chieftains, who in turn acted as buffers against potentially hostile barbarian groups beyond. The breakdown of central authority and the fragmentation of power in the late Western Roman Empire meant these relations were neglected, even to the point of former border allies moving into Roman territory, and assuming control of the local area. In many cases, this happened with the support of the local Roman population. If the [central government in Rome](#) was not able to send troops to maintain order and political control, why not allow a local chieftain, with the military might to protect the region, to take charge? In this way the [Western Roman Empire broke down and was replaced by barbarian kingdoms](#).

The Crossing of Barbarian Tribes Into the Western Roman Empire in 406 CE It is the contemporary author, [Prosper of Aquitaine](#), who gives us the precise date for 31st December 406 for the crossing of the Rhine. Although it is unknown exactly how the river would have been crossed, a suggestion by the 18th-century historian Edward Gibbon that the Rhine was frozen has become popular – of course, it is also highly possible that the barbarians used boats or an existing Roman bridge. It is unknown how many people crossed, or what they would have looked like, although it seems likely that they would have been organized in tribal societies formed through the process of 'ethnogenesis' – the formation of an ethnic group, perhaps with a shared language. We do have a list of the peoples who crossed from contemporary authors, but the accuracy of these lists is all but impossible to ratify. Jerome, writing in 409 CE, informs us that the migration involved Quadi, [Vandals](#), Sarmatians, [Alans](#), [Gepids](#), Herules, Saxons, [Burgundians](#), Alemanni, and Pannonians. It is important to note that some of these groups were strongly associated with literary and historical tradition at the time and were likely to have been synonymous with barbarians in general. Following their crossing of the river, it is unclear whether the groups involved in the barbarian invasion moved together as a tribal confederation or diverged and separated. What is clear is that a wave of violence ensued, and several Roman cities in the region were sacked, including Mainz, Worms, and Strasbourg. This upheaval in northern Gaul continued until at least 409 CE. It met little resistance from the Western Roman Emperor [Honorus](#), who had just repulsed an invasion of Italy by the Gothic King Radagaisus, and was preoccupied with political machinations in Rome. How did barbarians cross the Rhine in 406 CE? The fact that the border was lightly defended could have been one of the primary reasons, since the Roman general Stilicho weakened the Rhine's defenses in 402 CE, withdrawing troops to deal with Alaric I's Visigoth invasion of Italy, and leaving the border defenses in the hands of Frankish and Alemanni allies.

Roman General Flavius Stilicho: The Gothic War and the Retreat of Alaric and the Visigoths from Italy to Pannonia that Stilicho Allowed in 401-403 CE (in Greater Detail)

<https://en.wikipedia.org/wiki/Stilicho> ...In order to protect Italy from invasions by Alaric (401–402 CE) and Radagaisus (405–406 CE), Stilicho had seriously depleted the Roman forces defending the Rhine frontier. He left it defended "only by the faith of the Germans and the ancient terror of the Roman name". In 401 Stilicho led the praesental army from Italy into [Raetia](#) and [Noricum](#) in response to an invasion by Vandals and Alans. Sensing an opportunity, [Alaric](#) invaded Italy and lay siege to Mediolanum (Milan) where Honorus was residing. In 402 Stilicho returned to Italy and hastened forward with a selected vanguard in advance of his main body, breaking the siege of Mediolanum and rescuing the besieged emperor. One of his chieftains implored him to retreat from Italy, but Alaric refused. In a surprise attack on Easter Sunday in 402, Stilicho defeated Alaric at the [Battle of Pollentia](#), capturing his camp and his wife. Alaric himself managed to escape with most of his men. This battle was the last victory celebrated in a triumphal march in Rome, which was saved for the time being. At [Verona](#), Stilicho again bested Alaric, who managed to escape with a diminished force. [https://en.wikipedia.org/wiki/Gothic_War_\(401%E2%80%93403\)](https://en.wikipedia.org/wiki/Gothic_War_(401%E2%80%93403)) ...

Despite the defeat, Alaric and the Visigoths were given a free retreat in a truce brokered by Stilicho. Stilicho offered Alaric a truce and allowed him to withdraw from Italy. He was allowed to travel to Illyria with his remaining troops and even received financial support for food...Halsall argues that the Roman general's "decision to allow Alaric to withdraw to Pannonia makes sense when we see that Alaric's force falls into the service of Stilicho...Perhaps more revealing is the account of the Greek historian [Zosimus](#) - who wrote half a century later: "an agreement was made between Stilicho and Alaric in 405 CE" - suggesting that Alaric was at that time in 'western service', probably as a result of an arrangement made in 402. Between 404 and 405, Alaric and the Visigoths stayed in one of the four Pannonian provinces, from which he could "play East against West while potentially threatening both"...

Soon afterward, in 406 CE a coalition of Vandals, [Alans](#), and [Suevi](#) (Quadians, Marcomanni, and Alemanni) from central Europe arrived at the Rhine frontier. The Franks, Rome's allies on the northern Rhine, tried to stop the Vandals from entering the Roman Empire and fought them on the far bank of the Rhine. The Vandals defeated the Franks with the aid of the Alans, yet they lost their King [Godigisel](#). On 31 December 406, the coalition [crossed the poorly defended Rhine frontier](#). These new migrants proceeded to devastate the provinces of [Gaul](#), as well as triggering military revolts there and in [Britannia](#). Stilicho's reputation would never recover from this disaster. The destruction that occurred in Gaul and the lack of an effective response from the court in [Ravenna](#) lent support to the rebellion of [Constantine III](#) in Britain, which Stilicho proved unable to quash. As Constantine moved his forces into Gaul, Stilicho sent his subordinate [Sarus](#) to oppose him. Sarus had some initial success, winning a major victory and killing both of Constantine's magistri militum, but a relief force drove him back and saved the rebellion. Sarus withdrew and Stilicho decided to seal off the Alps to prevent Constantine from threatening Italy. Meanwhile, Constantine's rebellion having interrupted the negotiations between Alaric and Stilicho for the joint attack on Illyria, Alaric demanded the payment he was owed, threatening to attack Italy again if he did not receive a large amount of gold. The senate, "inspired by the courage, rather than the wisdom, of their predecessors", favored war with Alaric until Stilicho persuaded them to give into Alaric's demands. They were angry at Stilicho for this, and one of the most outspoken of them, Lampadius, said: "...This is not peace, but a pact of servitude". Stilicho's unsuccessful attempts to deal with Constantine, and rumors that he had earlier planned the assassination of [Rufinus](#) and that he planned to place his son on the throne following the death of emperor [Arcadius](#) (1 May 408), caused a revolt. The Roman army at [Ticinum](#) mutinied on August 13, 408, killing at least seven senior imperial officers. John Matthews observed that the following events "have every appearance of a thoroughly coordinated [coup d'état](#) organized by Stilicho's political opponents". Stilicho retired to Ravenna, where he was taken into captivity. Stilicho did not resist and was executed on August 22, 408, as was his son, Eucherius, shortly afterwards.

Conclusion: the modern Hungary / ancient Pannonia kit shares Y-ancestry with the two modern Brazil via Portugal / ancient Hispania kits to ~402 CE (which share Y-ancestry to ~1012 CE) and could have been deployed in ~402 CE from Hispania to Pannonia, where the sustained presence of Visigoths led by Alaric I was perceived as a potentially collaborative and yet potentially dangerous situation. Likewise, Pannonia was adjacent west of the Eastern Roman Empire, where the kit from Turkey has its Y-origin and shares Y-ancestry with the Brazil via Portugal kits to ~446 CE when the Western Roman Empire began its mainland collapse ~440-476 CE. Conversely, from 402-476 CE the Y-ancestors of kits in modern Azerbaijan and England/Britannia were not or were no longer contributing to the defense of the Roman Empire, and so they were not deployed to defend its mainland borders, where their Y-descendants do not have shared Y-SNPs.

YFull Tree: Geography of Parallel Y-SNP Mutations (E-V13)...E-Z16242 and (E-V12)...E-Y2846

Home | A0-T | A1 | A1b | BT | CT | DE | E | E-M5479 | E-P147 | E-P177 | E-M215 | E-M35 | E-L539 | E-M78 | E-Z1902 | **E-V12**

E-CTS8411 CTS8411 * CTS7178 formed 3700 ybp, TMRCA 3700 ybp info

E-CTS8411*

- id:YF127361 new

E-BY8505 BY8505 formed 3700 ybp, TMRCA 3400 ybp info

E-BY8505*

- id:YF071150 ARM Armenia
- id:YF005142 TUR [TR-27] Turkey

E-BY8508 BY8522 * Y182950 * Y182988 +8 SNPs formed 3400 ybp, TMRCA 2500 ybp info

E-BY8508*

E-BY8500 BY8521 * BY8500 * BY8527 +14 SNPs formed 2500 ybp, TMRCA 600 ybp info

- id:YF066501 ESP Spain
- id:YF005142 TUR [TR-27] Turkey

E-Y199159 FT279626/Y199550 * FT279566/Y199623 * FT279516/Y19937

E-Y199159*

E-Y199604 Y200023 * FT279586/Y199604 * MF179064/Y199943

- id:YF078680 UZB [UZ-BU] Uzbekistan
- id:YF073411 UZB [UZ-BU] bkh

E-CTS9977 CTS9977 * Y2874/FGC2195 * FGC7719 +5 SNPs formed 3700 ybp, TMRCA 3300 ybp info

E-CTS9977*

- id:YF086842 ITA [IT-LE] Italy

E-Y2846 Y2846/FGC2183 * FGC2219/FG1120 formed 3300 ybp, TMRCA 3200 ybp info

E-Y2846*

E-CTS9507 YFS050347 * Y2860/FGC2190 * Y2864/FG1114/FGC2213 +15 SNPs formed 3200 ybp, TMRCA

- id:YF071704 TUN [TN-11] Tunisia (Formerly Carthage)
- id:YF001420 IRL Ireland (County Fermanagh, Ulster, Northern Ireland; Y-STR match 45/67)
- id:HG01497 COL [CO-AN] Colombia (Colonized by Spain post-1499 CE)

E-FTA63816 FGC76136 * FGC76139 * FTA63893/FGC76119 +20 SNPs formed 3200 ybp, TMRCA 1550 ybp

E-FTA63816*

- id:HU9AF7CC USA USA

E-Y180735 BY192615 * Y508577(H) * FTA62523 +4 SNPs formed 1550 ybp, TMRCA 550 ybp info

- id:YF104803 Scotland (Cunningham of Leith North, Midlothian; Y-STR match 63/67)
- id:YF097890 + ENG eng
- id:YF086945

E-Y32552 Y32552 * Y32559 * Y32561 +27 SNPs formed 3700 ybp

E-Y32552*

- id:YF009448 RUS Russia

E-Y32552*

E-Y182336 FT84126 * Y182336 formed 550 ybp, TMRCA 550 ybp

E-Y182336*

- id:YF066969 UKR Ukraine
- id:YF066793

E-FT81835 FT81835 * FT81986 formed 550 ybp, TMRCA 550 ybp

E-FT81835*

- id:YF066778 ITA Italy
- id:YF066705 DEU Germany
- id:YF009416

https://en.wikipedia.org/wiki/Plantation_of_Ulster (Plantation of Ulster)

Home | A0-T | A1 | A1b | BT | CT | DE | E | E-M5479 | E-P147 | E-P177 | E-M215 | E-M35 | E-L539 | E-M78 | E-Z1919 | E-L618 | E-CTS10912 | **E-V12**

E-Z16242 Z16242/A160 formed 3600 ybp, TMRCA 3100 ybp info

E-Z16242*

E-Y222317 Y222487 * FT396654/Y222317 * Y222412 +9 SNPs formed 3100 ybp, TMRCA 2300 ybp info

- id:YF112335 AZE [AZ-QBA] jdt Azerbaijan
- id:YF078870 ARM Armenia

E-Y178966 CTS4698 * FGC91369 * FGC91367 +20 SNPs formed 3100 ybp, TMRCA 950 ybp info

E-Y178966*

E-Z2162 Z2162/FGC2841(H) info

- id:HG01107 PRI Puerto Rico (Colonized by Spain post-1500 CE; HG01107 of the 1000 Genomes Project)

E-FGC91373 FGC91373(H) formed 950 ybp, TMRCA 950 ybp info

- id:YF074404 PRT Portugal (Both in State of Sao Paolo, Brazil; Colonized by Portugal post-1500 CE)
- id:YF065750 PRT

E-Y20431 L1019 * BY254/FGC14556 * FGC14558/BY5245 +34 SNPs formed 3100 ybp, TMRCA 550 ybp info

E-Y20431*

- id:YF105844 + ENG eng
- id:YF005422 + ENG eng

E-FGC45647 FGC45647/FTB12625 * FGC45642(H) formed 550 ybp, TMRCA 500 ybp info

- id:YF15747 + ENG eng
- id:YF105843 + ENG eng
- id:YF005421 + ENG eng

E-FGC19308 FGC19308 * YFS287719/FGC19305(H) * FGC19307/YFS287747 formed 550 ybp, TMRCA 500 ybp info

E-FGC19308*

- id:YF123500 + ENG eng
- id:YF064531 + ENG eng

E-A21920 A21920 formed 500 ybp, TMRCA 475 ybp info

E-A21920*

- id:YF084532 + ENG

E-FGC86595 FGC86595

- id:YF107554 + ENG
- id:YF015669 + ENG

E-FGC14559 FGC14559/BY5

E-FGC14559*

- id:YF108153 + ENG
- id:YF087255 + ENG
- id:YF064533 + ENG

E-FGC14566 FGC14566

- id:YF064312 + ENG
- id:YF016782 + ENG
- id:YF016781 + ENG
- id:YF002189 + ENG
- id:YF001646 + ENG

E-FGC61652 FGC61652

E-FGC61652*

E-FGC97263 FGC97263

- id:YF120563
- id:YF105845 + ENG

Italian campaign (218-203 BCE)

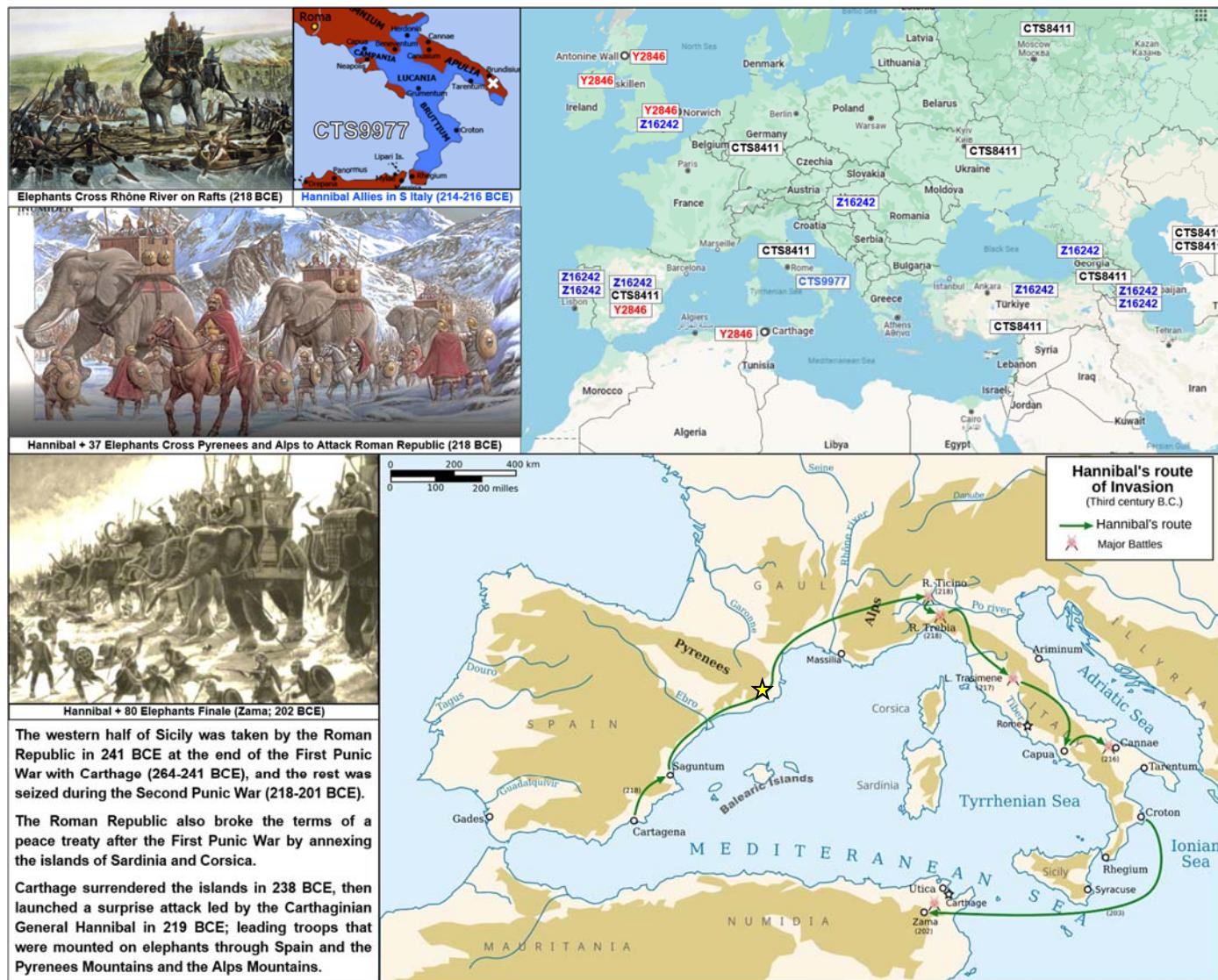
return to Carthage (203 BCE)

route to exile (195 BCE)

* where Hannibal died (183-181 BCE; pursued by Romans)

<https://norfolktalesmyths.wordpress.com/2018/10/21/drovers-scotland-to-london-via-norfolk/> (SW-Scotland to County Norfolk, England Cattle Drovers)

Potential Interplay of Parallel Y-SNPs (E-V13), E-Z16242 and (E-V12), E-Y2846 in Maps of the Second Punic War (218-202 BCE)



E-M78, Z1902, V12, Y2863, CTS693, Y6730, FGC7703, CTS1239, Z5007, CTS6667, FGC2188, Y2862, Y2850, Y2881, Y2875, Y2873, CTS8411, CTS9977, Y2846.

E-M78, Z1919, L618, CTS10912, V13, Z1057, CTS5856, BY3880, Z5018, **Z16242** Inset Photos-Map: Hannibal Crosses Alps to Attack Roman Republic (219-203 BCE)

(Hannibal Route Map): https://en.wikipedia.org/wiki/Hannibal%27s_crossing_of_the_Alps (Elephants Crossing Rhône River): <https://www.sciencephoto.com/media/699611/view/hannibal-s-war-elephants-cross-rhone> (Elephants Crossing the Alps; also note path proximity to the Avellaner Cave ★ in the map): <https://tourdetravoy.wordpress.com/2017/04/03/where-did-hannibal-cross-the-alps-part-3-col-du-petit-saint-bernard/> (Hannibal + 80 elephants Finale at Zama, Carthage/Tunisia in 202 BCE): <https://www.thoughtco.com/punic-wars-battle-of-zama-2360887> (Hannibal Allies in South Italy): <https://www.culturefrontier.com/punic-wars/>

Timeline of the Second Punic War (218-202 BCE)

Second Punic War (218–201 BCE): https://en.wikipedia.org/wiki/List_of_Roman_external_wars_and_battles

Outcome Key (chronological below): Roman Victory in Italy, Roman Victory in Hispania, Roman Victory in Africa, Carthaginian Victory in Italy, Carthaginian Victory in Hispania

- **218 BCE**
 - Battle of Lilybaeum – First naval clash between the navies of Carthage and Rome during the Second Punic War; Roman victory.
 - Battle of Cissa – Romans defeat Carthaginians near Tarraco and gain control of the territory north of the Ebro River.
 - Battle of the Ticinus – Hannibal defeats the Romans under Publius Cornelius Scipio the elder in a cavalry fight.
 - Battle of the Trebia – Hannibal defeats the Romans under Tiberius Sempronius Longus with the use of an ambush.
- **217 BCE**
 - Battle of Ebro River – In a surprise attack, Romans defeat and capture the Carthaginian fleet in Hispania.
 - Battle of Lake Trasimene – In another ambush, Hannibal destroys the Roman army of Gaius Flaminius, who is killed.
 - Battle of Ager Falernus – Avoiding destruction with deceit, Hannibal escapes Fabius' trap in this small skirmish.
- **216 BCE**
 - Battle of Cannae – Hannibal destroys the main Roman army of Lucius Aemilius Paulus and Publius Terentius Varro in a masterpiece of tactical military warfare.
 - Battle of Silva Litana – The Boii ambushed and destroyed a Roman army of 25,000 men.
 - First Battle of Nola – Roman general Marcus Claudius Marcellus holds off an attack by Hannibal.
 - Battle of Cornus.
 - Battle of Hiberia.
 - Battle of Cumae.
- **215 BCE**
 - Second Battle of Nola – Marcellus again repulses an attack by Hannibal.
- **214 BCE**
 - Third Battle of Nola – Marcellus fights an inconclusive battle with Hannibal.
- **212 BCE**
 - First Battle of Capua – Hannibal defeats the consuls Q. Fulvius Flaccus and Appius Claudius, but the Roman army escapes.
 - Battle of the Silarus – Hannibal destroys the army of the Roman praetor M. Centenius Penula.
 - Battle of Herdonia – Hannibal destroys the Roman army of the praetor Gnaeus Fulvius.
- **211 BCE**
 - Battle of the Upper Baetis – Publius and Gnaeus Cornelius Scipio are killed in battle with the Carthaginians under Hasdrubal Barca.
 - Second Battle of Capua – Hannibal is not able to break the Roman siege of the city.
- **210 BCE**
 - Second Battle of Herdonia – Hannibal destroys the Roman army of Fulvius Centumalus, who is killed.
 - Battle of Numistro – Hannibal defeats Marcellus once more.
- **209 BCE**
 - Battle of Asculum – Hannibal once again defeats Marcellus, in an indecisive battle.
- **208 BCE**
 - Battle of Baecula – Romans in Hispania (Iberia) under P. Cornelius Scipio the Younger defeat Hasdrubal Barca.
- **207 BCE**
 - Battle of Grumentum – Roman general Gaius Claudius Nero fights an indecisive battle with Hannibal.
 - Battle of the Metaurus – Hasdrubal is defeated and killed by Nero's Roman army.
 - Battle of Carmona – Romans under Publius Cornelius Scipio besiege the city of Carmona and take it from Hasdrubal Gisco.
- **206 BCE**
 - Battle of Ilipa – Scipio again decisively defeats the remaining Carthaginian forces in Hispania.
 - Battle of the Guadalquivir – Roman army under Gaius Lucius Marcius Séptimus defeats a Carthaginian army under Hannón at Guadalquivir.
 - Battle of Carteia – Roman fleet under Gaius Lælius defeats a Carthaginian fleet under Adherbal.
- **204 BCE**
 - Battle of Crotona – Hannibal fights a drawn battle against the Roman general Sempronius in Southern Italy.
- **203 BCE**
 - Battle of Bagrades – Romans under Scipio defeat the Carthaginian army of Hasdrubal Gisco and Syphax. Hannibal is sent to return to Africa.
- **202 BCE**
 - 19 October – Battle of Zama – Scipio Africanus Major decisively defeats Hannibal in North Africa, ending the Second Punic War.

Y-DNA Haplogroup E-V12 in Punic vs. Other Phoenician Samples<https://www.eupedia.com/forum/threads/e-v12-cts6667.44328/>Jul 9, 2023Pax Augusta said:

Has E-V12 been found in Punic and Phoenician samples?

kingdavid said:

We don't know yet.

However, there is a future DNA paper on **13 Phoenician sites** that should answer this and many other questions.

I can't wait for this paper:

The Story of Phoenician Populations Across the Mediterranean Told Through Ancient DNA

Harald Ringbauer,^{1,3} Ayelet Salman-Minkov,² Iñigo Olalde,^{3,4} Alissa Mitnick,³ Tomer Peled,² Arie Shaus,³ María Bofill,³ Rebecca Bernardos,³ Nasreen Broomandkhoshbacht,³ Kim Callan,³ Elizabeth Curtis,³ Aisling Kearns,³ Ann Marie Lawson,³, Matthew Mah,³ Swapna Mallick,³ Adam Milco,³ Jonas Oppenheimer,³ Liju Qiu,³ Kristin Stewardson,³ Noah Workman,³ Fatma Zalzala,³ Nicholas Márquez-Grant,^{3,5} Antonio M. Sáez Romero,^{3,6} María Luisa Lavado Florido,^{3,6} Juan Manuel Jiménez Arenas,^{3,7} Isidro Jorge Toro Moyano,^{3,8} Enrique Viguera,^{3,9} Jose Suárez Padilla,^{3,10} Alicia Rodero Ríaza,^{3,11} Patricia Smith,^{3,12} Marina Faerman,^{3,12} Luca Sineo,^{3,13} Gioacchino Falsone,^{3,14} Davide Pettener,^{3,15} Peter Van Dommelen,^{3,16} Francesca Oliveri,^{3,17} Pamela Toti,^{3,18} Valentina Giuliana,^{3,19} Alon Barash,^{3,20} Liran Carmel,^{3,21} Elisabetta Cilli,^{3,22} Anna Chiara Fariselli,^{3,22} Donata Luiselli,^{3,22} Brendan Culleton,^{3,23} Elisabetta Boaretto,^{3,24} Nadin Rohland,³ Alfredo Coppa,^{3,25} David Caramelli,^{3,26} Ron Pinhasi,^{3,27} Carles Lalueza-Fox,^{3,29} Dalit Regev,^{3,28} Ilan Gronau,² David Reich.³

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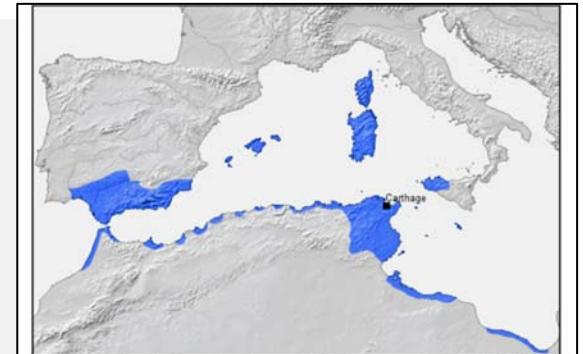
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Phoenicians played a central role in establishing trade routes throughout the Mediterranean during the second and first millennia BCE, with settlements spread from their homeland in the Levant all the way west to the Iberian Peninsula. However, due to the lack of primary written historical records, our knowledge about Phoenician people is quite limited. Ancient DNA can finally help us tell their story.

We sequenced 150 genomes from 13 different Phoenician sites: 4 sites from the Iberian Peninsula and nearby islands, 6 from Sicily and Sardinia, 2 from North Africa, and 1 site from the Levant. Our data set spans a time range from the 8th century BCE until the Roman imperial period. We find that during this time period Phoenicians from the Central and Western Mediterranean did not share significant ancestry with Phoenicians from the Levant. Populations from all sites sampled outside the Levant appear to attribute most of their ancestry to Bronze Age populations in the Central Mediterranean (Sicily or Greece).

We also find evidence of North African ancestry in individuals from various sites, likely facilitated by the Phoenician presence in North Africa. The proportion of North African ancestry appears to increase significantly during the height of Carthage in the 4th and 3rd centuries BCE. We used long shared genomic segments to reconstruct a network of familial relationships within some of these sites. **Interestingly, we also find family relationships between individuals from North Africa and individuals from Sicily, demonstrating the high mobility of Phoenicians across the Mediterranean.**

https://en.wikipedia.org/wiki/Punic_people**Carthaginian Sphere of Influence (264 BCE)**

The Punic people (Carthaginians or Western Phoenicians) were a Semitic people who migrated from Phoenicia (which is now essentially Lebanon) to the Western Mediterranean.

In modern scholarship, the term **Punic** (the Latin equivalent of the Greek-derived **Phoenician**) is used exclusively to refer to Phoenicians in the Western Mediterranean, in following the line of the Greek East and the Latin West.

The largest Punic settlement was Carthage (approximated by modern Tunis), but there were 300 other settlements along the North African coast from Leptis Magna in modern Libya to Mogador in southern Morocco, as well as western Sicily, southern Sardinia, the southern and eastern coasts of the Iberian Peninsula, Malta, and Ibiza.

Potential Interplay of (E-Z5018+, E-L17+) and (E-Z5018+, E-Z16242+) in Iberian Auxiliary Units

1973 Ph.D. Dissertation of Prof. Margaret Roxan (1924-2003), Volume 1

| ID | Y-DNA HAPLOGROUP | Y-SNP TEST KIT STATED ORIGINS | PLAUSIBLE AUXILIARY UNIT | RAISED |
|-----------|-------------------------|--------------------------------------|--------------------------------|---------------|
| 7 | E-Z5018, E-Z16242 | Armenia to Georgia | Ala II Ulphia Auriana | Raetia |
| 5 | E-Z5018, E-Z16242 | Armenia to Georgia | Ala I Hispanorum Auriana | Hispania |
| <i>ID</i> | <i>Y-DNA HAPLOGROUP</i> | <i>Y-SNP TEST KIT STATED ORIGINS</i> | <i>POSSIBLE AUXILIARY UNIT</i> | <i>RAISED</i> |
| 2 | E-Z5018, E-L17 | Romania (Vlach) to Poland | Ala I Hispanorum | Hispania |
| 4 | E-Z5018, E-Z16242 | Portugal to Brazil, Puerto Rico | Cohors II Galica | Hispania |
| 6 | E-Z5018, E-Z16242 | Portugal to Brazil, Puerto Rico | Ala I Hispanorum Asturum | Asturia |
| 3 | E-Z5018, E-Z16242 | Felsham, Suffolk, England Goodrich | Ala I Hispanorum Asturum | Asturia |
| 1 | E-Z5018, E-Z16242 | Felsham, Suffolk, England Goodrich | Ala II Asturum | Asturia |
| 6 | E-Z5018, E-Z16242 | Felsham, Suffolk, England Goodrich | Ala I Hispanorum Vettonum | Lusitania |

| ID | Y-DNA HAPLOGROUP | WHERE FORMED AND LATER STATIONED | POTENTIAL FUTURE Y-SNP GEORGRAPHIC / DIPLOMA ATTESTATION INDICATOR | Pages |
|-----------|-------------------------|---|--|--------------|
| 7 | E-Z5018, E-Z16242 | By Trajan from (5); Cappadocia; Trajan invaded Armenia 114 AD | This is the only known Iberian auxiliary unit deployed to Armenia (114 AD) | 111-114 |
| 5 | E-Z5018, E-Z16242 | Germania, Aquincum-Pannonia, Noricum, Raetia | Armenia Post-Z16242 if shared SNPs also found in Hungary, Switzerland, Slovenia, Germany | 101-110 |
| <i>ID</i> | <i>Y-DNA HAPLOGROUP</i> | <i>WHERE FORMED AND LATER STATIONED</i> | <i>POTENTIAL FUTURE Y-SNP GEORGRAPHIC / DIPLOMA ATTESTATION INDICATOR</i> | <i>Pages</i> |
| 2 | E-Z5018, E-L17 | Trier-Germania, Aquincum-Pannonia; Trajan's Dacian Wars 101 AD, 105 AD | E-L17 has already been found in SW Germany, southern Romania | 124-144 |
| 4 | E-Z5018, E-Z16242 | Permanent garrison at Rosina de Vidriales near Legio VII Gemini in Leon, NW Spain | If Brazil, Puerto Rico Post-Z16242 shared SNPs are found in Iberia, Brazil, Puerto Rico only | *Reference |
| 6 | E-Z5018, E-Z16242 | Spain; to East Anglia, Britannia after Boudican Revolt 61 AD (Ixworth?); then Chester, UK | If Brazil, Puerto Rico Post-Z16242 shared SNPs are found in Iberia, UK only | 320-333 |
| 3 | E-Z5018, E-Z16242 | Spain; to East Anglia, Britannia after Boudican Revolt 61 AD (Ixworth?); then Chester, UK | If Felsham Goodrich Post-Z16242 shared SNPs are found in Iberia, UK only | 320-333 |
| 1 | E-Z5018, E-Z16242 | Spain; Germania; Pannonia with (2), (5) near Legio IX Hispana; to Britannia ~75 AD | If Felsham Goodrich Post-Z16242 shared SNPs are also found in Germany, Hungary, UK | 334-341 |
| 6 | E-Z5018, E-Z16242 | Portugal; Germania; invasion of Britannia in 43 AD; East Anglia, then Bath-Somerset, UK | If Felsham Goodrich Post-Z16242 shared SNPs are also found in Germany, UK | 489-496 |

Possible Roman Military Auxiliary Units in which E-Z16242+ and E-L17+ Y-ancestors may have served:

“The Auxilia of the Roman Army Raised in the Iberian Peninsula,” Volume 1, Ph.D. dissertation, Margaret Roxan (1973); pages indicated in the table above in the far-right column:
<https://discovery.ucl.ac.uk/id/eprint/1318033/>

*Reference for Unit 4, Cohors II Galica: History of the Roman Legions (2015), auxiliary units attached to Legio VII Gemina in Hispania from 75 AD, pages 544-546:
<https://play.google.com/books/reader?id=OLQ2CwAAQBAJ&pg=GBS.PT546>

*There are no specific citations for *ala* or *cohort* auxiliary units deployed to Pannonia/Hungary or Anatolia/Turkey in the 5th century, and even citations for the 4th century are few and limited in detail.
- From 402-476 CE, as the Western Roman Empire abandoned Britannia and defended its nearer frontier regions until its collapse, deployments were likely frequent, urgent and unpredictable.
- Y-SNP kits with Y-origins that were still part of the Roman Empire as of 402-476 CE (page 12) could be deployed abroad, leading to shared post-Z16242 SNPs in multiple nations.
- Y-SNP kits with Y-origins then were no longer part of the Roman Empire as of 402-476 CE (page 11) would not be deployed abroad, leading to relatively localized post-Z16242 SNPs.
- NGS Y-SNP evidence, in combination with available major battle history, is therefore one of the few markers that can be used to attempt to pair geographic origins with major military destinations.