**Table S1. Leukemogenic driver mutations used for CHIP variant calling**

| Gene name | Reported mutations used for variant calling | Accession |
|---|---|---|
| ASXL1 | Frameshift/nonsense/splice-site in exon 11-12 | NM_015338 |
| ASXL2 | Frameshift/nonsense/splice-site in exon 11-12 | NM_018263 |
| BCOR | Frameshift/nonsense/splice-site | NM_001123385 |
| BCORL1 | Frameshift/nonsense/splice-site | NM_021946 |
| BRAF | G464E, G464V, G466E, G466V, G469R, G469E, G469A, G469V, V471F, V472S, L485W, N581S, I582M, I592M, I592V, D594N, D594G, D594V, D594E, F595L, F595S, G596R, L597V, L597S, L597Q, L597R, A598V, V600M, V600L, V600K, V600R, V600E, V600A, V600G, V600D, K601E, K601N, R603*, W604R, W604G, S605G, S605F, S605N, G606E, G606A, G606V, H608R, H608L, G615R, S616P, S616F, L618S, L618W | NM_004333 |
| BRCC3 | Frameshift/nonsense/splice-site | NM_024332 |
| CBL | RING finger missense p.381-421 | NM_005188 |
| CBLB | RING finger missense p.372-412 | NM_170662 |
| CEBPA | Frameshift/nonsense/splice-site | NM_004364 |
| CREBBP | Frameshift/nonsense/splice-site, D1435E, R1446L, R1446H, R1446C, Y1450C, P1476R, Y1482H, H1487Y, W1502C, Y1503D, Y1503H, Y1503F, S1680del | NM_004380 |
| CSF1R | L301F, L301S, Y969C, Y969N, Y969F, Y969H, Y969D | NM_005211 |
| CSF3R | T615A, T618I, truncating c.741-791 | NM_000760 |
| CTCF | Frameshift/nonsense, R377C, R377H, P378A, P378L | NM_006565 |
| CUX1 | Frameshift/nonsense | NM_181552 |
| DNMT3A | Frameshift/nonsense/splice-site, F290I, F290C, V296M, P307S, P307R, R326H, R326L, R326C, R326S, G332R, G332E, V339A, V339M, V339G, L344Q, L344P, R366P, R366H, R366G, A368T, A368V, R379H, R379C, I407T, I407N, I407S, F414L, F414S, F414C, A462V, K468R, C497G, C497Y, Q527H, Q527P, Y533C, S535F, C537G, C537R, G543A, G543S, G543C, L547H, L547P, L547F, M548I, M548K, G550R, W581R, W581G, W581C, R604Q, R604W, R635W, R635Q, S638F, G646V, G646E, L653W, L653F, I655N, V657A, V657M, R659H, Y660C, V665G, V665L, M674V, R676W, R676Q, G685R, G685E, G685A, D686Y, D686G, R688H, G699R, G699S, G699D, P700L, P700S, P700R, P700Q, P700T, P700A, D702N, D702Y, V704M, V704G, I705F, I705T, I705S, I705N, G707D, G707V, C710S, C710Y, S714C, V716D, V716F, V716I, N717S, N717I, P718L, R720H, R720G, K721R, K721T, Y724C, R729Q, R729W, R729G, F731C, F731L, F731Y, F731I, F732del, F732C, F732S, F732L, E733G, E733A, F734L, F734C, Y735C, Y735N, Y735S, R736H, R736C, R736P, L737H, L737V, L737F, L737R, A741V, P742P, P743R, P743L, R749C, R749L, R749H, R749G, F751L, F751C, F752del, F752C, F752L, F752I, F752V, W753G, W753C, W753R, L754P, L754R, L754H, F755S, F755I, F755L, M761I, M761V, G762C, V763I, S770L, S770W, S770P, R771Q, F772I, F772V, L773R, L773V, E774K, E774D, E774G, I780T, D781G, R792H, W795C, W795L, G796D, G796V, N797Y, N797H, N797S, P799S, P799R, P799H, R803S, R803W, P804L, P804S, K826R, S828N, K829R, T835M, N838D, K841Q, Q842E, P849L, D857N, W860R, E863D, F868S, G869S, G869V, M880V, S881R, S881I, R882H, R882P, R882C, R882G, A884P, A884V, Q886R, L889P, L889R, G890D, G890R, G890S, V895M, P896L, V897G, V897D, R899L, R899H, R899C, L901R, L901H, P904L, F909C, P904Q, A910P, C911R, C911Y | NM_022552 |

| | | |
|---|---|---|
| EED | Frameshift/nonsense/splice-site, L240Q, I363M | NM_003797 |
| EP300 | Frameshift/nonsense/splice_site, VF1148_1149del, D1399N, D1399Y, P1452L, Y1467N, Y1467H, Y1467C, R1627W, A1629V | NM_001429 |
| ETNK1 | N244S, N244T, N244K | NM_018638 |
| ETV6 | Frameshift/nonsense/splice-site | NM_001987 |
| EZH2 | Frameshift/nonsense/splice-site, Q62R, N102S, F145S, F145C, F145Y, F145L, G159R, E164D, R202Q, K238E, E244K, R283Q, H292R, P488S, R497Q, R561H, T568I, K629E, Y641N, Y641H, Y641S, Y641C, Y641F, D659Y, D659G, V674M, A677G, A677V, R679C, R679H, R685C, R685H, A687V, N688I, N688K, H689Y, S690P, I708V, I708T, I708M, E720K, E740K | NM_001203247 |
| FLT3 | V579A, V592A, V592I, F594L, FY590-591GD, D835Y, D835H, D835E, del835 | NM_004119 |
| GATA1 | Frameshift/nonsense/splice-site | NM_002049 |
| GATA2 | Frameshift/nonsense/splice-site, R293Q, N317H, A318T, A318V, A318G, G320D, L321P, L321F, L321V, Q328P, R330Q, R361L, L359V, A372T, R384G, R384K | NM_001145661 |
| GATA3 | Frameshift/nonsense/splice-site ZNF domain, R276W, R276Q, N286T, L348V, | NM_001002295 |
| GNA13 | I34T, G57S, S62F, M68K, Q134R, Y145F, L152F, E167D, Q169H, R264H, E273K, V322G, V362G, L371F | NM_006572 |
| GNAS | R201S, R201C, R201H, R201L, Q227K, Q227R, Q227L, Q227H, R374C | NM_000516 |
| GNB1 | K57N, K57M, K57E, K57T, I80T, I80N | NM_002074 |
| IDH1 | R132C, R132G, R132H, R132L, R132P, R132V, V178I | NM_005896 |
| IDH2 | R140W, R140Q, R140L, R140G, R172W, R172G, R172K, R172T, R172M, R172N, R172S | NM_002168 |
| IKZF1 | Frameshift/nonsense | NM_006060 |
| IKZF2 | Frameshift/nonsense | NM_016260 |
| IKZF3 | Frameshift/nonsense | NM_012481 |
| JAK1 | T478A, T478S, V623A, A634D, L653F, R724H, R724Q, R724P, T782M, L783F | NM_002227 |
| JAK2 | N533D, N533Y, N533S, H538R, K539E, K539L, I540T, I540V, V617F, R683S, R683G, del/ins537-539L, del/ins538-539L, del/ins540-543MK, del/ins540-544MK, del/ins541-543K, del542-543, del543-544, ins11546-547 | NM_004972 |
| JAK3 | M511T, M511I, A572V, A572T, A573V, R657Q, V715I, V715A | NM_000215 |
| KDM6A | Frameshift/nonsense/splice-site, del419 | NM_021140 |
| KIT | ins503, V559A, V559D, V559G, V559I, V560D, V560A, V560G, V560E, del560, E561K, del579, P627L, P627T, R634W, K642E, K642Q, V654A, V654E, H697Y, H697D, E761D, K807R, D816H, D816Y, D816F, D816I, D816V, D816H, del551-559 | NM_000222 |
| KRAS | G12D, G12A, G12E, G12V, G13D, G13C, G13Y, G13F, G13R, G13A, G13V, G13E, V14I, T58I, G60D, G60A, G60V, Q61K, Q61E, Q61P, Q61R, Q61L, Q61H, K117E, K117N, A146T, A146P, A146V | NM_033360 |
| LUC7L2 | Frameshift/nonsense/splice-site | NM_016019 |
| MLL | Frameshift/nonsense | NM_005933 |
| MLL2 | Frameshift/nonsense | NM_003482 |
| MPL | S505G, S505N, S505C, L510P, del513, W515A, W515R, W515K, W515S, W515L, A519T, A519V, Y591D, W515-518KT | NM_005373 |

| | | |
|---|---|---|
| NF1 | Frameshift/nonsense | NM_000267 |
| NPM1 | Frameshift p.W288fs (insertion at c.859_860, 860_861, 862_863, 863_864) | NM_002520 |
| NRAS | G12S, G12R, G12C, G12N, G12P, G12Y, G12D, G12A, G12V, G12E, G13S, G13R, G13C, G13N, G13P, G13Y, G13D, G13A, G13V, G13E, G60E, G60R, Q61R, Q61L, Q61K, Q61P, Q61H, Q61Q | NM_002524 |
| PDS5B | Frameshift/nonsense/splice-site, R1292Q | NM_015032 |
| PDSS2 | Frameshift/nonsense | NM_020381 |
| PHF6 | Frameshift/nonsense/splice-site, A40D, M125I, S246Y, F263L, R274Q, C297Y, H302Y, H329L | NM_001015877 |
| PHIP | Frameshift/nonsense/splice-site | NM_017934 |
| PPM1D | Frameshift/nonsense, exon 5 or 6 | NM_003620 |
| PRPF40B | Frameshift/nonsense/splice-site, P15H, M58I, P405L, P562S, | NM_001031698 |
| PRPF8 | M1307I, C1594W, D1598Y, D1598N, D1598V | NM_006445 |
| PTEN | Frameshift/nonsense/splice-site, D24G, R47G, F56V, L57W, H61R, K66N, Y68H, C71Y, F81C, Y88C, D92G, D92V, D92E, H93Y, H93D, H93Q, N94I, P95L, I101T, C105F, C105S, D107Y, L112V, H123Y, C124R, C124S, K125E, A126D, K128N, R130G, R130Q, R130L, G132D, I135V, I135K, C136R, C136F, K144Q, A151T, D153Y, D153N, Y155H, Y155C, R159K, R159S, R161K, R161I, G165R, G165E, S170N, S170I, R173C, Y174D, Y177C, H196Y, R234W, G251C, D252Y, F271S, D326G | NM_000314 |
| PTPN11 | G60V, G60R, G60A, D61Y, D61V, D61G, Y63C, E69K, E69G, E69D, E69Q, F71L, F71K, A72T, A72V, A72D, T73I, E76K, E76Q, E76M, E76A, E76G, E139G, E139D, N308D, N308T, N339S, P491L, S502P, S502A, S502L, G503V, G503G, G503A, G503E, Q506P, T507A, T507K | NM_002834 |
| RAD21 | Frameshift/nonsense/splice-site, R65Q, H208R, Q474R | NM_006265 |
| RUNX1 | Frameshift/nonsense/splice-site, S73F, H78Q, H78L, R80C, R80P, R80H, L85Q, P86L, P86H, S114L, D133Y, L134P, R135G, R135K, R135S, R139Q, R142S, A165V, R174Q, R177L, R177Q, A224T, D171G, D171V, D171N, R205W, R223C | NM_001001890 |
| SETBP1 | D868N, D868T, S869N, G870S, I871T, D880N, D880Q | NM_015559 |
| SETD2 | Frameshift/nonsense, V1190M | NM_014159 |
| SETDB1 | Frameshift/nonsense, K715E | NM_001145415 |
| SF1 | Frameshift/nonsense/splice-site, T454M, Y476C, A508G | NM_004630 |
| SF3A1 | Frameshift/nonsense/splice-site, A57S, M117I, K166T, Y271C | NM_005877 |
| SF3B1 | G347V, R387W, R387Q, E592K, E622D, Y623C, R625L, R625C, R625G, H662Q, H662D, T663I, K666N, K666T, K666E, K666R, K700E, V701F, A708T, G740R, G740E, A744P, D781G, E783K, R831Q, L833F, E862K, R957Q | NM_012433 |
| SRSF2 | Y44H, P95H, P95L, P95T, P95R, P95A, P107H, P95fs | NM_003016 |
| SMC1A | K190T, R586W, M689V, R807H, R1090H, R1090C | NM_006306 |
| SMC3 | Frameshift/nonsense, R155I, Q367E, D392V, K571R, R661P, G662C | NM_005445 |
| STAG1 | Frameshift/nonsense/splice-site, H1085Y | NM_005862 |
| STAG2 | Frameshift/nonsense/splice-site | NM_006603 |
| SUZ12 | Frameshift/nonsense | NM_015355 |
| TET2 | Frameshift/nonsense/splice-site, missense mutations in catalytic domains (p.1104-1481 and 1843-2002) | NM_001127208 |

| | | |
|---|---|---|
| TP53 | Frameshift/nonsense/splice-site, S46F, G105C, G105R, G105D, G108S, G108C, R110L, R110C, T118A, T118R, T118I, S127F, S127Y, L130V, L130F, K132Q, K132E, K132W, K132R, K132M, K132N, F134V. F134L, F134S, C135W, C135S, C135F, C135G, C135Y, Q136K, Q136E, Q136P, Q136R, Q136L, Q136H, A138P, A138V, A138A, A138T, T140I, C141R, C141G, C141A, C141Y, C141S, C141F, C141W, V143M, V143A, V143E, L145Q, W146C, W146L, L145R, V147G, P151T, P151A, P151S, P151H, P151R, P152S, P152R, P152L, T155P, T155A, V157F, R158H, R158L, A159V, A159P, A159S, A159D, A161T, A161D, Y163N, Y163H, Y163D, Y163S, Y163C, K164E, K164M, K164N, K164P, H168Y, H168P, H168R, H168L, H168Q, M169I, M169T, M169V, E171K, E171Q, E171G, E171A, E171V, E171D, V172D, V173M, V173L, V173G, R174W, R175G, R175C, R175H, C176R, C176G, C176Y, C176F, C176S, P177R, P177R, P177L, H178D, H178P, H178Q, H179Y, H179R, H179Q, R181C, R181Y, D186G, G187S, P190L, P190T, H193N, H193P, H193L, H193R, L194F, L194R, I195F, I195N, I195T, R196P, V197L, G199V, Y205N, Y205C, Y205H, D208V, R213Q, R213P, R213L, R213Q, H214D, H214R, S215G, S215I, S215R, V216M, V217G, Y220N, Y220H, Y220S, Y220C, E224D, I232F, I232N, I232T, I232S, Y234N, Y234H, Y234S, Y234C, Y236N, Y236H, Y236C, M237V, M237K, M237I, C238R, C238G, C238Y, C238W, N239T, N239S, S241Y, S241C, S241F, C242G, C242Y, C242S, C242F, G244S, G244C, G244D, G245S, G245R, G245C, G245D, G245A, G245V, G245S, M246V, M246K, M246R, M246I, N247I, R248W, R248G, R248Q, R249G, R249W, R249T, R249M, P250L, I251N, L252P, I254S, I255F, I255N, I255S, L257Q, L257P, E258K, E258Q, D259Y, S261T, G262D, G262V, L265P, G266R, G266E, G266V, R267W, R267Q, R267P, E271K, V272M, V272L, R273S, R273G, R273C, R273H, R273P, R273L, V274F, V274D, V274A, V274G, V274L, C275Y, C275S, C275F, A276P, C277F, C277Y, P278T, P278A, P278S, P278H, P278R, P278L, G279E, R280G, R280K, R280T, R280I, R280S, D281N, D281H, D281Y, D281G, D281E, R282G, R282W, R282Q, R282P, E285K, E285V, E286G, E286V, E286K, K320N, L330R, G334V, R337C, R337L, A347T, L348F, T377P | NM_001126112 |
| U2AF1 | D14G, S34F, S34Y, R35L, R156H, R156Q, Q157R, Q157P | NM_006758 |
| U2AF2 | R18W, Q143L, M144I, L187V, Q190L | NM_007279 |
| WT1 | Frameshift/nonsense/splice-site | NM_024426 |
| ZRSR2 | Frameshift/nonsense, R126P, E133G, C181F, H191Y, I202N, F239V, F239Y, N261Y, C280R, C302R, C326R, H330R, N382K | NM_005089 |

**Table S2. Associations of Clonal Hematopoiesis with 40% Decline in eGFR**

| | CHIP | Number of participants | Number of eGFRs | Median follow-up time, years (IQR) | Number of events | Incidence per 100 person-years | Unadjusted HR (95% CI) | Adjusted* HR (95%CI) |
|---|---|---|---|---|---|---|---|---|
| ARIC | Yes | 584 | 3 (3,4) | 9 (8,22) | 81 | 1.20 | 1.26 (1.00,1.59) | 1.21 (0.96,1.52) |
| | No | 5,991 | 3 (3,4) | 9 (8,23) | 757 | 1.03 | reference | reference |
| | | | | | | | | |
| CHS | Yes | 240 | 3 (2,3) | 7 (3,7) | 12 | 0.53 | 0.84 (0.46, 1.52) | 0.84 (0.46, 1.54) |
| | No | 1,461 | 3 (2,3) | 7 (4,7) | 103 | 0.70 | reference | reference |
| | | | | | | | | |
| MESA | Yes | 178 | 4 (4, 4) | 9 (9, 10) | 4 | 0.26 | 0.41 (0.15, 1.09) | 0.32 (0.12, 0.89) |
| | No | 3,550 | 4 (4, 4) | 9 (9, 10) | 179 | 0.57 | reference | reference |
| | | | | | | | | |
| Meta-Analysis | Yes | 1,002 | 3 (3,4) | 8 (7, 14) | 97 | 0.87 | 0.98 (0.60, 1.65) | 0.79 (0.40, 1.56) |
| | No | 11,002 | 3 (3,4) | 8 (7, 15) | 1039 | 0.84 | reference | reference |
| | | | | | | | p = 0.765 | p = 0.494 |

ARIC = Atherosclerosis Risk in Communities Study; CHS = Cardiovascular Health Study; MESA = Multi-Ethnic Study of Atherosclerosis; CHIP = Clonal hematopoiesis of indeterminate potential; eGFR = estimated glomerular filtration rate.*Adjusted for age, age-squared, sex, baseline eGFR, diabetes and log-urine albumin to creatinine ratio (where available at baseline).

**Table S3. Associations of Clonal Hematopoiesis with Incident eGFR < 60 ml/min/1.73m$^2$**

| | CHIP | Number of participants | Number of eGFRs | Median follow-up time, years (IQR) | Number of events | Incidence per 100 person-years | Unadjusted HR (95% CI) | Adjusted* HR (95%CI) |
|---|---|---|---|---|---|---|---|---|
| ARIC | Yes | 573 | 3 (3,4) | 9 (8,22) | 96 | 1.46 | 1.27 (1.03,1.57) | 1.15 (0.93,1.42) |
| | No | 5,931 | 3 (3,4) | 9 (8,23) | 881 | 1.21 | reference | reference |
| | | | | | | | | |
| CHS | Yes | 197 | 3 (2,3) | 7 (4,8) | 55 | 3.62 | 1.13 (0.85, 1.51) | 1.05 (0.79, 1.41) |
| | No | 1,255 | 3 (2,3) | 7 (4,13) | 326 | 3.25 | reference | reference |
| | | | | | | | | |
| MESA | Yes | 151 | 4 (4, 4) | 9 (9, 10) | 42 | 3.38 | 1.09 (0.80, 1.50) | 0.86 (0.63, 1.18) |
| | No | 3,225 | 4 (4, 4) | 9 (9, 10) | 794 | 2.94 | reference | reference |
| | | | | | | | | |
| Meta-Analysis | Yes | 921 | 3 (3,4) | 8 (7, 14) | 193 | 2.49 | 1.19 (1.02, 1.38) | 1.05 (0.89, 1.23) |
| | No | 10,411 | 3 (3,4) | 8 (7, 15) | 2,001 | 2.22 | reference | reference |
| | | | | | | | p = 0.023 | p = 0.592 |

ARIC = Atherosclerosis Risk in Communities Study; CHS = Cardiovascular Health Study; MESA = Multi-Ethnic Study of Atherosclerosis; CHIP = Clonal hematopoiesis of indeterminate potential; eGFR = estimated glomerular filtration rate.*Adjusted for age, age-squared, sex, baseline eGFR, diabetes and log-urine albumin to creatinine ratio (where available at baseline).

**Table S4. Associations of *DNMT3A* clonal hematopoiesis with 30% decline in eGFR and longitudinal change in eGFR**

| Study | CHIP | Number of participants | Number of eGFRs | Median follow-up time, years (IQR) | 30% decline in eGFR | | | | Percent eGFR decline per year | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Number of events | Incidence per 100 p-y | Unadjusted HR (95% CI) | Adjusted* HR (95%CI) | Mean (SD) | Adjusted[†] difference (95% CI) |
| ARIC | Yes | 253 | 3 (2,3) | 9 (3,9) | 57 | 2.10 | 1.20 (0.92, 1.57) | 1.13 (0.86, 1.47) | -2.37 (3.32) | -0.23 (-0.62, 0.15) |
| | No | 6322 | 3 (2,3) | 8 (3,9) | 1478 | 1.96 | *reference* | *reference* | -2.03 (2.80) | *reference* |
| CHS | Yes | 136 | 3 (2,3) | 7 (3,7) | 19 | 1.64 | 1.11 (0.70, 1.77) | 1.06 (0.66, 1.69) | -0.69 (4.86) | 0.01 (-0.62, 0.63) |
| | No | 1565 | 3 (2,3) | 7 (4,8) | 257 | 1.52 | *reference* | *reference* | -0.94 (3.81) | *reference* |
| MESA | Yes | 110 | 4 (4, 4) | 9 (9, 10) | 14 | 1.46 | 0.99 (0.58, 1.68) | 0.83 (0.49, 1.42) | -1.64 (2. 37) | 0.26 (-0.21, 0.72) |
| | No | 3,618 | 4 (4, 4) | 9 (9, 10) | 441 | 1.39 | *reference* | *reference* | -1.70 (2.44) | *reference* |
| Meta-Analysis | Yes | 499 | 3 (2,3) | 8 (8, 8) | 90 | 1.83 | 1.14 (0.93, 1.42) | 1.06 (0.86, 1.31) | -1.72 (1.79) | -0.01 (-0.34, 0.32) |
| | No | 11,505 | 3 (2,3) | 8 (8, 8) | 2,176 | 1.71 | *reference* | *reference* | -1.67 (1.66) | *reference* |
| | | | | | | | p = 0.212 | p = 0.585 | | p = 0.954 |

ARIC = Atherosclerosis Risk in Communities Study; CHS = Cardiovascular Health Study; MESA = Multi-Ethnic Study of Atherosclerosis; CHIP = Clonal hematopoiesis of indeterminate potential; eGFR = estimated glomerular filtration rate. *Adjusted for age, age-squared, sex, baseline eGFR, diabetes, and log-urine albumin to creatinine ratio (where available at baseline). [†]Adjusted for age, age-squared, sex, diabetes and log-urine albumin to creatinine ratio (where available at baseline)

**Table S5. Associations of non-*DNMT3A* clonal hematopoiesis with 30% decline in eGFR and longitudinal change in eGFR**

| Study | CHIP | Number of participants | Number of eGFRs | Median follow-up time, years (IQR) | 30% decline in eGFR | | | | Percent eGFR decline per year | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Number of events | Incidence per 100 p-y | Unadjusted HR (95% CI) | Adjusted* HR (95%CI) | Mean (SD) | Adjusted† difference (95% CI) |
| ARIC | Yes | 331 | 3 (2,3) | 9 (3,9) | 86 | 2.27 | 1.23 (0.99, 1.53) | 1.24 (0.99, 1.54) | -2.26 (2.89) | -0.24 (-0.58, 0.09) |
| | No | 6244 | 3 (2,3) | 9 (3,9) | 1449 | 1.95 | *reference* | *reference* | -2.03 (2.82) | *reference* |
| CHS | Yes | 104 | 3 (2,3) | 7 (3,7) | 21 | 2.34 | 1.81 (1.10, 2.98) | 1.84 (1.05, 3.20) | -1.10 (3.83) | -0.04 (-0.75, 0.68) |
| | No | 1597 | 3 (2,3) | 7 (4,8) | 235 | 1.57 | *reference* | *reference* | -0.84 (4.01) | *reference* |
| MESA | Yes | 68 | 4 (4, 4) | 9 (9, 10) | 8 | 1.41 | 0.99 (0.49, 1.98) | 0.88 (0.44, 1.78) | -1.53 (2.37) | 0.51 (-0.09, 1.10) |
| | No | 3,660 | 4 (4, 4) | 9 (9, 10) | 447 | 1.39 | *reference* | *reference* | -1.70 (2.45) | *reference* |
| Meta-Analysis | Yes | 503 | 3 (2,3) | 8 (8, 8) | 115 | 2.17 | 1.26 (1.03, 1.63) | 1.27 (1.04, 1.54) | -1.69 (1.66) | 0.03 (-0.43, 0.50) |
| | No | 11,501 | 3 (2,3) | 8 (8, 8) | 2,131 | 1.72 | *reference* | *reference* | -1.67 (1.68) | *reference* |
| | | | | | | | p = 0.026 | p = 0.018 | | p = 0.884 |

ARIC = Atherosclerosis Risk in Communities Study; CHS = Cardiovascular Health Study; MESA = Multi-Ethnic Study of Atherosclerosis; CHIP = Clonal hematopoiesis of indeterminate potential; eGFR = estimated glomerular filtration rate. *Adjusted for age, age-squared, sex, baseline eGFR, diabetes, and log-urine albumin to creatinine ratio (where available at baseline). †Adjusted for age, age-squared, sex, diabetes and log-urine albumin to creatinine ratio (where available at baseline)

**Table S6. Associations of Clonal Hematopoiesis with 30% decline in eGFR and longitudinal change in eGFR among individuals with eGFR<60 at baseline**

| Study | CHIP | Number of participants | Number of eGFRs | Median follow-up time, years (IQR) | 30% decline in eGFR | | | | Percent eGFR decline per year | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Number of events | Incidence per 100 p-y | Unadjusted HR (95% CI) | Adjusted* HR (95%CI) | Mean (SD) | Adjusted† difference (95% CI) |
| ARIC | Yes | 11 | 3 (2,3) | 9 (3,9) | 1 | 1.19 | 0.36 (0.05, 2.79) | 0.38 (0.05, 3.02) | -3.73 (3.98) | 0.53 (-7.74, 8.82) |
| | No | 60 | 3 (2,3) | 8 (3,9) | 13 | 3.16 | *reference* | *reference* | -3.59 (11.1) | *reference* |
| CHS | Yes | 71 | 3 (2,3) | 7 (3,7) | 11 | 2.50 | 1.62 (0.84, 3.14) | 1.53 (0.71, 3.28) | -1.10 (3.83) | -0.03 (-0.75, 0.67) |
| | No | 379 | 3 (2,3) | 7 (3,7) | 46 | 1.80 | *reference* | *reference* | -0.84 (4.01) | *reference* |
| MESA | Yes | 27 | 4 (3, 4) | 9 (4, 9) | 3 | 1.60 | 0.77 (0.24, 2.48) | 0.75 (0.23, 2.45) | -1.74 (4.27) | 0.60 (-1.01, 2.21) |
| | No | 325 | 4 (3, 4) | 9 (9, 10) | 62 | 2.31 | *reference* | *reference* | -1.89 (4.00) | *reference* |
| Meta-Analysis | Yes | 109 | 3 (2,3) | 8 (8, 8) | 15 | 2.15 | 1.07 (0.50, 2.30) | 1.06 (0.52, 2.13) | -2.18 (2.32) | 0.34 (-0.12, 0.79) |
| | No | 764 | 3 (2,3) | 8 (8, 8) | 121 | 2.12 | *reference* | *reference* | -1.50 (2.74) | *reference* |
| | | | | | | | p = 0.852 | p = 0.872 | | p = 0.150 |

ARIC = Atherosclerosis Risk in Communities Study; CHS = Cardiovascular Health Study; MESA = Multi-Ethnic Study of Atherosclerosis; CHIP = Clonal hematopoiesis of indeterminate potential; eGFR = estimated glomerular filtration rate. *Adjusted for age, age-squared, sex, baseline eGFR, diabetes, and log-urine albumin to creatinine ratio (where available at baseline). †Adjusted for age, age-squared, sex, diabetes and log-urine albumin to creatinine ratio (where available at baseline)

**Table S7. Associations of Clonal Hematopoiesis with 30% decline in eGFR and longitudinal change in eGFR among individuals with diabetes at baseline**

| Study | CHIP | Number of participants | Number of eGFRs | Median follow-up time, years (IQR) | 30% decline in eGFR | | | | Percent eGFR decline per year | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Number of events | Incidence per 100 p-y | Unadjusted HR (95% CI) | Adjusted* HR (95%CI) | Mean (SD) | Adjusted[†] difference (95% CI) |
| ARIC | Yes | 64 | 3 (3,3) | 9 (3,9) | 16 | 3.43 | 1.36 (0.81, 2.29) | 1.26 (0.74, 2.14) | -4.31 (5.02) | -1.21 (-2.71, 0.29) |
| | No | 650 | 3 (2,3) | 9 (3,9) | 160 | 2.90 | *reference* | *reference* | -3.03 (5.05) | *reference* |
| | | | | | | | | | | |
| CHS | Yes | 33 | 3 (2,3) | 6 (3,7) | 8 | 3.89 | 1.72 (0.76, 3.89) | 1.26 (0.44, 3.59) | -2.08 (5.29) | 0.49 (-1.59, 2.57) |
| | No | 222 | 3 (2,3) | 7 (3,7) | 37 | 2.54 | *reference* | *reference* | -1.71 (5.39) | *reference* |
| | | | | | | | | | | |
| MESA | Yes | 22 | 4 (3, 4) | 9 (9, 10) | 2 | 1.18 | 0.34 (0.08, 1.37) | 0.28 (0.07, 1.16) | -2.28 (4.35) | 1.42 (-0.13, 2.98) |
| | No | 428 | 4 (4, 4) | 9 (9, 10) | 138 | 3.91 | *reference* | *reference* | -3.09 (3.63) | *reference* |
| | | | | | | | | | | |
| Meta-Analysis | Yes | 119 | 3 (2,3) | 8 (8, 8) | 26 | 3.14 | 1.28 (0.84, 1.95) | 0.93 (0.44, 1.96) | -2.85 (2.79) | 0.20 (-1.42, 1.83) |
| | No | 1,300 | 3 (2,3) | 8 (8, 8) | 335 | 3.17 | *reference* | *reference* | -2.76 (2.59) | *reference* |
| | | | | | | | p = 0.244 | p = 0.856 | | p = 0.807 |

ARIC = Atherosclerosis Risk in Communities Study; CHS = Cardiovascular Health Study; MESA = Multi-Ethnic Study of Atherosclerosis; CHIP = Clonal hematopoiesis of indeterminate potential; eGFR = estimated glomerular filtration rate. *Adjusted for age, age-squared, sex, baseline eGFR, diabetes and log-urine albumin to creatinine ratio (where available at baseline). [†]Adjusted for age, age-squared, sex, diabetes and log-urine albumin to creatinine ratio (where available at baseline)

**Table S8. Associations of Clonal Hematopoiesis with 30% decline in eGFR and longitudinal change in eGFR among individuals without diabetes at baseline**

| Study | CHIP | Number of participants | Number of eGFRs | Median follow-up time, years (IQR) | 30% decline in eGFR | | | | Percent eGFR decline per year | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Number of events | Incidence per 100 p-y | Unadjusted HR (95% CI) | Adjusted* HR (95%CI) | Mean (SD) | Adjusted† difference (95% CI) |
| ARIC | Yes | 520 | 3 (3,4) | 9 (8,23) | 127 | 2.10 | 1.22 (1.02, 1.47) | 1.19 (0.99, 1.44) | -2.06 (2.65) | -0.17 (-0.39, 0.05) |
| | No | 5341 | 3 (3,4) | 9 (9,23) | 1,232 | 1.86 | reference | reference | -1.90 (2.35) | reference |
| CHS | Yes | 207 | 3 (2,3) | 7 (3,7) | 32 | 1.93 | 1.49 (0.99, 2.24) | 1.35 (0.87, 2.12) | -0.81 (4.48) | -0.21 (-0.72, 0.31) |
| | No | 1239 | 3 (2,3) | 7 (4,13) | 179 | 1.36 | reference | reference | -0.69 (3.54) | reference |
| MESA | Yes | 156 | 4 (4, 4) | 9 (9, 10) | 20 | 1.48 | 1.28 (0.81, 2.02) | 1.07 (0.68, 1.68) | -1.50 (2.25) | 0.21 (-0.14, 0.57) |
| | No | 3122 | 4 (4, 4) | 9 (9, 10) | 295 | 1.07 | reference | reference | -1.52 (2.17) | reference |
| Meta-Analysis | Yes | 883 | 3 (2,3) | 8 (8, 8) | 179 | 1.19 | 1.26 (1.08, 1.48) | 1.19 (1.02, 1.40) | -1.62 (1.60) | -0.06 (-0.32, 0.21) |
| | No | 9,702 | 3 (2,3) | 8 (8, 8) | 1,706 | 1.08 | reference | reference | -1.52 (1.45) | reference |
| | | | | | | | p = 0.003 | p = 0.032 | | p = 0.671 |

ARIC = Atherosclerosis Risk in Communities Study; CHS = Cardiovascular Health Study; MESA = Multi-Ethnic Study of Atherosclerosis; CHIP = Clonal hematopoiesis of indeterminate potential; eGFR = estimated glomerular filtration rate. *Adjusted for age, age-squared, sex, baseline eGFR, diabetes and log-urine albumin to creatinine ratio (where available at baseline). †Adjusted for age, age-squared, sex, diabetes and log-urine albumin to creatinine ratio (where available at baseline)

**Table S9. Associations of Clonal Hematopoiesis with 30% decline in eGFR and longitudinal change in eGFR among individuals aged > 60 years at baseline**

| Study | CHIP | Number of participants | Number of eGFRs | Median follow-up time, years (IQR) | 30% decline in eGFR | | | | Percent eGFR decline per year | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Number of events | Incidence per 100 p-y | Unadjusted HR (95% CI) | Adjusted* HR (95%CI) | Mean (SD) | Adjusted† difference (95% CI) |
| ARIC | Yes | 209 | 3 (3,3) | 9 (9,9) | 47 | 2.37 | 1.16 (0.86, 1.58) | 1.15 (0.84, 1.56) | -2.66 (3.56) | -0.35 (-0.84, 0.13) |
| | No | 1583 | 3 (3,3) | 9 (8,9) | 321 | 2.09 | *reference* | *reference* | -2.34 (3.11) | *reference* |
| CHS | Yes | 238 | 3 (2,3) | 7 (3,7) | 35 | 2.14 | 1.48 (1.02,2.13) | 1.38 (0.92, 2.06) | -0.98 (4.60) | -0.15 (-0.68, 0.38) |
| | No | 1,441 | 3 (2,3) | 7 (4,8) | 163 | 1.53 | *reference* | *reference* | -0.85 (3.89) | *reference* |
| MESA | Yes | 138 | 4 (3, 4) | 9 (8, 10) | 20 | 1.76 | 0.97 (0.62, 1.53) | 0.93 (0.59, 1.46) | -1.73 (2.85) | 0.43 (-0.03, 0.89) |
| | No | 2151 | 4 (4, 4) | 9 (9, 10) | 323 | 1.78 | *reference* | *reference* | -1.94 (2.65) | *reference* |
| Meta-Analysis | Yes | 585 | 3 (2,3) | 8 (8, 8) | 102 | 2.13 | 1.21 (0.98, 1.49) | 1.15 (0.93, 1.43) | -1.88 (2.00) | -0.01 (-0.49, 0.46) |
| | No | 5,175 | 3 (2,3) | 8 (8, 8) | 807 | 1.81 | *reference* | *reference* | -1.84 (1.79) | *reference* |
| | | | | | | | p = 0.076 | p = 0.191 | | p = 0.950 |

ARIC = Atherosclerosis Risk in Communities Study; CHS = Cardiovascular Health Study; MESA = Multi-Ethnic Study of Atherosclerosis; CHIP = Clonal hematopoiesis of indeterminate potential; eGFR = estimated glomerular filtration rate. *Adjusted for age, age-squared, sex, baseline eGFR, diabetes and log-urine albumin to creatinine ratio (where available at baseline). †Adjusted for age, age-squared, sex, diabetes and log-urine albumin to creatinine ratio (where available at baseline)