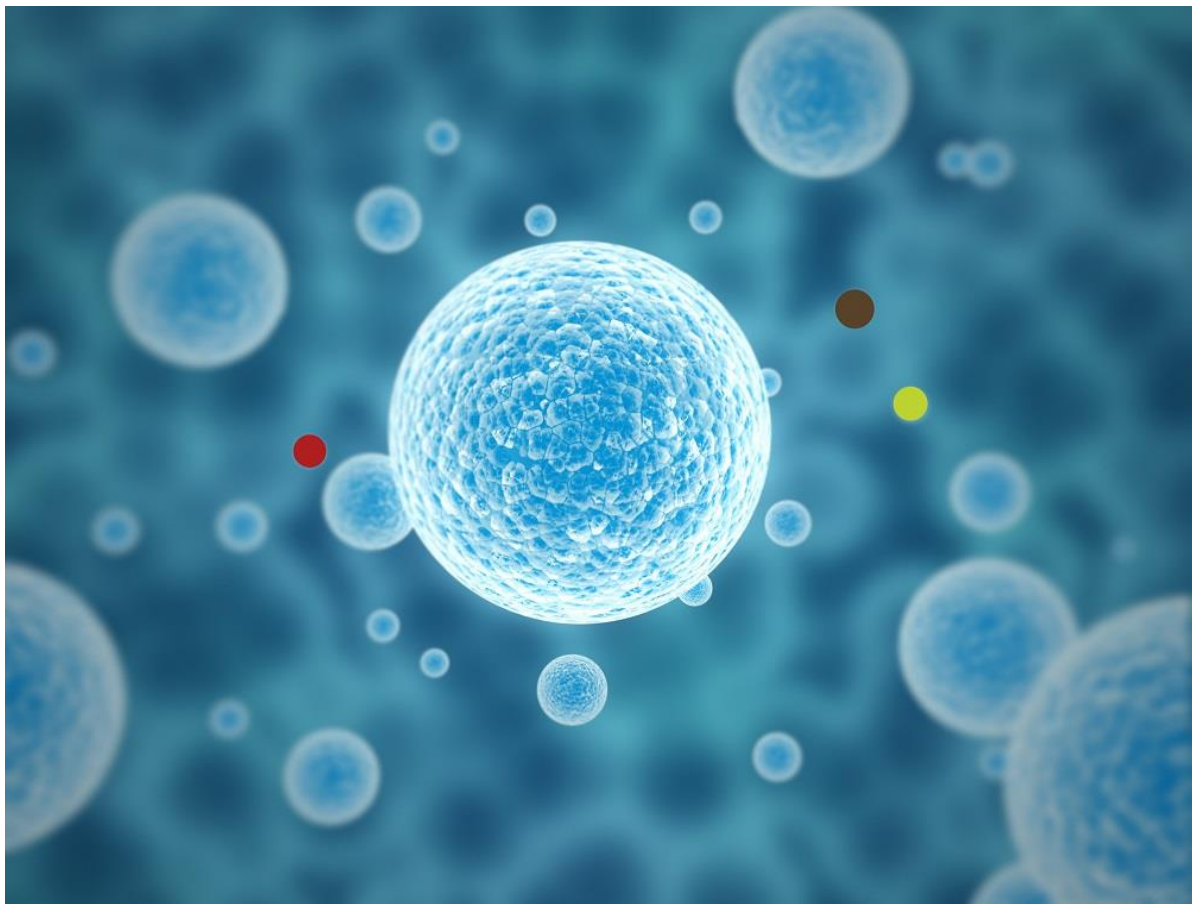


## EBiSC Information Sheet: Genomic data processing for catalogue search

Version 0.2

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## 1 Introduction

The EBiSC catalogue search page (<https://ebisc.org/search>) is testing new search functionality that will enable users to find the cell lines with mutations in disease-related genes.

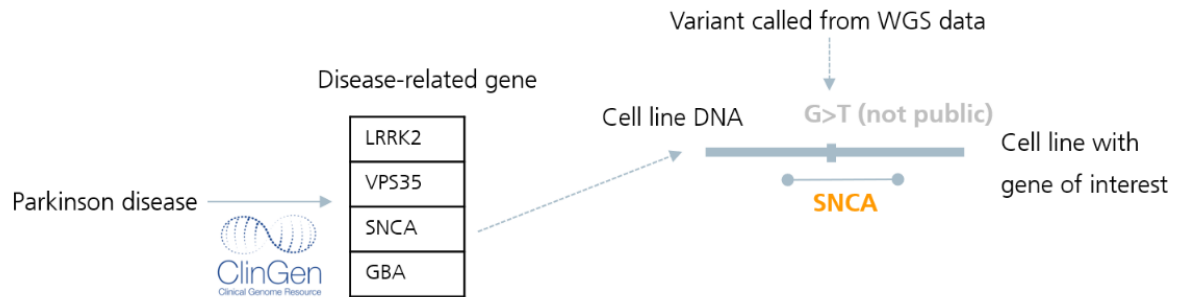


Figure 1. Overview of path from disease to cell line via disease-related genetic variants

## 2 Prerequisites

- 1) GATK (Genome Analysis Toolkit) v4.2.5.0: <https://github.com/broadinstitute/gatk>
- 2) SnpEff (Genetic variant annotation and functional effect prediction toolbox) version 5.0e: <https://pcingola.github.io/SnpEff/>
- 3) ClinVar vcf for GRCh37: [https://ftp.ncbi.nlm.nih.gov/pub/clinvar/vcf\\_GRCh37/](https://ftp.ncbi.nlm.nih.gov/pub/clinvar/vcf_GRCh37/)

## 3 Data source

The gene sequence variations from the VCF (Variant Call Format) data (.genotype.vcf.gz) of 127 HipSci lines, which have open data and were deposited in EBiSC, can be found at the HipSci resource website:

<https://www.hipsci.org/lines/#/lines?Banking%20availability%5B%5D=Banked%20at%20EBiSC&Assays%5B%5D=Whole%20genome%20sequencing>)

A table of all links to each cell line's vcf data can be found in the Annex.

## 4 Workflow

To demonstrate how genes with variants called from WGS datasets (or any other high-throughput genomic data, such as SNP arrays or whole exome sequencing) could be made searchable in the EBiSC catalogue as a proof-of-principle exercise, openly accessible data from the HipSci project (<https://www.hipsci.org/>) was further processed as in Figure 2.

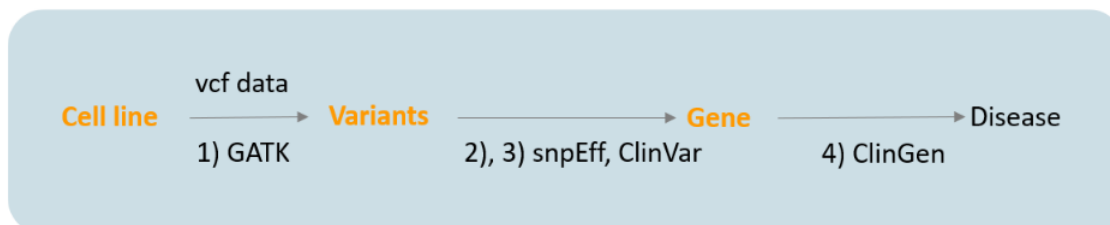


Figure 2. Workflow to obtain genes of interest for every cell lines.

- 1) Original VCF files are processed by GATK to capture the sites with variants.
- 2) The chromosomal locations of the genetic variants in the VCF data were annotated to genes using the *snpEff* software package (<https://pcingola.github.io/SnpEff/>).
- 3) Variants were filtered according to the following criteria: 1) The variant has an entry in ClinVar (<https://www.ncbi.nlm.nih.gov/clinvar/>); 2) The variant is located in the coding region; 3) The impact of the variant is high according to *snpEff* impact prediction ([https://pcingola.github.io/SnpEff/se\\_inputoutput/](https://pcingola.github.io/SnpEff/se_inputoutput/)).
- 4) Genes affected by the filtered variants were recorded for 127 HipSci lines. Importantly, as a data protection measure, the precise gene variant was not recorded in the database. For example, with the variant *NM\_007262.5:c.105dupT*, only the gene (*PARK7*) is recorded, not the exact description of the genetic variant. These genes were then annotated with disease (if extant) according to disease-gene associations from ClinGen (<https://clinicalgenome.org/>).

In principle, the workflow could be applied to any variant call file, regardless of the method used to generate the VCF data.

## 5 Annex

Table S1. Source links to variant call format files from open genomic datasets from HipSci

No.	Cell id	Download link
1	WTSli041-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448214/HPSI0114i-bezi_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448214/HPSI0114i-bezi_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
2	WTSli020-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448189/HPSI0114i-eipl_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448189/HPSI0114i-eipl_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
3	WTSli020-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447849/HPSI0114i-eipl_3.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447849/HPSI0114i-eipl_3.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
4	WTSli072-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448022/HPSI0114i-fikt_3.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448022/HPSI0114i-fikt_3.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
5	WTSli019-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448198/HPSI0114i-iisa_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448198/HPSI0114i-iisa_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
6	WTSli019-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447908/HPSI0114i-iisa_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447908/HPSI0114i-iisa_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
7	WTSli074-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448028/HPSI0114i-joxm_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448028/HPSI0114i-joxm_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
8	WTSli018-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447925/HPSI0114i-kolf_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447925/HPSI0114i-kolf_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
9	WTSli018-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447889/HPSI0114i-kolf_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447889/HPSI0114i-kolf_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
10	WTSli017-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448081/HPSI0114i-lexy_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448081/HPSI0114i-lexy_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
11	WTSli017-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447860/HPSI0114i-lexy_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447860/HPSI0114i-lexy_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
12	WTSli016-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448111/HPSI0114i-oevr_3.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448111/HPSI0114i-oevr_3.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
13	WTSli015-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447912/HPSI0114i-rozh_4.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447912/HPSI0114i-rozh_4.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
14	WTSli015-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448206/HPSI0114i-rozh_5.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448206/HPSI0114i-rozh_5.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
15	WTSli024-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448064/HPSI0114i-vabj_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448064/HPSI0114i-vabj_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
16	WTSli075-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447957/HPSI0114i-vass_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447957/HPSI0114i-vass_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
17	WTSli144-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ486/ERZ486063/HPSI0114i-wegi_1.wgs.gatk.haplotype_caller.20171212.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ486/ERZ486063/HPSI0114i-wegi_1.wgs.gatk.haplotype_caller.20171212.genotypes.vcf.gz</a>
18	WTSli023-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448055/HPSI0114i-zapk_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448055/HPSI0114i-zapk_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
19	WTSli023-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448083/HPSI0114i-zapk_3.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448083/HPSI0114i-zapk_3.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
20	WTSli037-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448133/HPSI0114i-zoxy_3.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448133/HPSI0114i-zoxy_3.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
21	WTSli048-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448132/HPSI0214i-datg_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448132/HPSI0214i-datg_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
22	WTSli044-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448229/HPSI0214i-eiwy_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448229/HPSI0214i-eiwy_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
23	WTSli135-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447884/HPSI0214i-feec_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447884/HPSI0214i-feec_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>

No.	Cell id	Download link
24	WTSli014-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447959/HPSI0214i-heja_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447959/HPSI0214i-heja_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
25	WTSli014-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448188/HPSI0214i-heja_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448188/HPSI0214i-heja_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
26	WTSli045-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448234/HPSI0214i-heth_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448234/HPSI0214i-heth_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
27	WTSli076-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448161/HPSI0214i-keh_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448161/HPSI0214i-keh_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
28	WTSli013-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447992/HPSI0214i-kucg_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447992/HPSI0214i-kucg_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
29	WTSli030-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447865/HPSI0214i-pelm_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447865/HPSI0214i-pelm_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
30	WTSli030-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447916/HPSI0214i-pelm_3.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447916/HPSI0214i-pelm_3.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
31	WTSli168-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448196/HPSI0214i-poih_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448196/HPSI0214i-poih_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
32	WTSli168-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448117/HPSI0214i-poih_4.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448117/HPSI0214i-poih_4.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
33	WTSli143-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448215/HPSI0214i-rayr_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448215/HPSI0214i-rayr_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
34	WTSli046-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447893/HPSI0214i-wibj_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447893/HPSI0214i-wibj_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
35	WTSli046-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447910/HPSI0214i-wibj_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447910/HPSI0214i-wibj_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
36	WTSli178-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448149/HPSI0215i-fawm_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448149/HPSI0215i-fawm_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
37	WTSli178-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448084/HPSI0215i-fawm_4.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448084/HPSI0215i-fawm_4.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
38	WTSli191-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448026/HPSI0215i-oilg_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448026/HPSI0215i-oilg_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
39	WTSli031-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448072/HPSI0314i-bipt_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448072/HPSI0314i-bipt_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
40	WTSli012-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448125/HPSI0314i-bubh_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448125/HPSI0314i-bubh_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
41	WTSli012-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447866/HPSI0314i-bubh_3.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447866/HPSI0314i-bubh_3.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
42	WTSli077-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448218/HPSI0314i-cuhk_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448218/HPSI0314i-cuhk_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
43	WTSli078-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448096/HPSI0314i-fafq_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448096/HPSI0314i-fafq_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
44	WTSli026-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448006/HPSI0314i-hoik_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448006/HPSI0314i-hoik_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
45	WTSli040-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447939/HPSI0314i-qaqx_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447939/HPSI0314i-qaqx_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
46	WTSli011-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448046/HPSI0314i-qonc_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448046/HPSI0314i-qonc_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
47	WTSli073-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448211/HPSI0314i-sojd_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448211/HPSI0314i-sojd_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
48	WTSli073-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448150/HPSI0314i-sojd_3.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448150/HPSI0314i-sojd_3.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>

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49	WTSli179-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448137/HPSI0314i-wigw_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448137/HPSI0314i-wigw_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
50	WTSli010-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447901/HPSI0314i-xugn_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447901/HPSI0314i-xugn_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
51	WTSli010-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447871/HPSI0314i-xugn_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447871/HPSI0314i-xugn_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
52	WTSli138-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448104/HPSI0414i-mita_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448104/HPSI0414i-mita_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
53	WTSli173-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447891/HPSI0414i-naju_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447891/HPSI0414i-naju_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
54	WTSli183-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448047/HPSI0414i-oaqd_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448047/HPSI0414i-oaqd_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
55	WTSli183-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447882/HPSI0414i-oaqd_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447882/HPSI0414i-oaqd_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
56	WTSli185-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448168/HPSI0414i-seru_7.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448168/HPSI0414i-seru_7.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
57	WTSli177-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448144/HPSI0414i-xojn_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448144/HPSI0414i-xojn_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
58	WTSli180-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447903/HPSI0514i-puie_4.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447903/HPSI0514i-puie_4.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
59	WTSli180-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447883/HPSI0514i-puie_5.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447883/HPSI0514i-puie_5.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
60	WTSli181-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447993/HPSI0514i-rutc_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447993/HPSI0514i-rutc_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
61	WTSli049-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447966/HPSI0514i-wiii_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447966/HPSI0514i-wiii_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
62	WTSli049-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447926/HPSI0514i-wiii_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447926/HPSI0514i-wiii_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
63	WTSli182-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447955/HPSI0614i-kegd_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447955/HPSI0614i-kegd_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
64	WTSli169-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448114/HPSI0614i-miaj_4.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448114/HPSI0614i-miaj_4.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
65	WTSli169-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448102/HPSI0614i-miaj_6.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448102/HPSI0614i-miaj_6.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
66	WTSli174-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448152/HPSI0614i-paab_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448152/HPSI0614i-paab_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
67	WTSli174-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447900/HPSI0614i-paab_4.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447900/HPSI0614i-paab_4.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
68	WTSli176-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447897/HPSI0714i-iudw_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447897/HPSI0714i-iudw_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
69	WTSli176-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448230/HPSI0714i-iudw_4.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448230/HPSI0714i-iudw_4.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
70	WTSli047-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448051/HPSI0814i-bokz_5.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448051/HPSI0814i-bokz_5.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
71	WTSli047-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448228/HPSI0814i-bokz_6.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448228/HPSI0814i-bokz_6.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
72	WTSli009-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448008/HPSI0913i-diku_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448008/HPSI0913i-diku_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
73	WTSli002-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447857/HPSI0913i-eika_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447857/HPSI0913i-eika_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>



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74	WTSli071-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448000/HPSI0913i-lise_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448000/HPSI0913i-lise_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
75	WTSli071-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448023/HPSI0913i-lise_3.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448023/HPSI0913i-lise_3.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
76	WTSli027-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448171/HPSI0913i-oapg_5.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448171/HPSI0913i-oapg_5.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
77	WTSli190-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448095/HPSI0914i-kajh_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448095/HPSI0914i-kajh_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
78	WTSli190-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447895/HPSI0914i-kajh_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447895/HPSI0914i-kajh_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
79	WTSli172-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448143/HPSI0914i-laey_4.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448143/HPSI0914i-laey_4.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
80	WTSli172-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447948/HPSI0914i-laey_6.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447948/HPSI0914i-laey_6.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
81	WTSli171-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447947/HPSI0914i-zerv_7.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447947/HPSI0914i-zerv_7.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
82	WTSli171-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447914/HPSI0914i-zerv_8.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447914/HPSI0914i-zerv_8.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
83	WTSli082-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448179/HPSI1013i-cups_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448179/HPSI1013i-cups_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
84	WTSli029-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448174/HPSI1013i-garx_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448174/HPSI1013i-garx_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
85	WTSli079-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448076/HPSI1013i-hiaf_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448076/HPSI1013i-hiaf_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
86	WTSli042-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447990/HPSI1013i-jufd_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447990/HPSI1013i-jufd_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
87	WTSli042-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448224/HPSI1013i-jufd_3.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448224/HPSI1013i-jufd_3.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
88	WTSli008-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448088/HPSI1013i-kuxp_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448088/HPSI1013i-kuxp_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
89	WTSli025-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448123/HPSI1013i-pamv_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448123/HPSI1013i-pamv_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
90	WTSli025-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448009/HPSI1013i-pamv_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448009/HPSI1013i-pamv_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
91	WTSli080-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448069/HPSI1013i-sebz_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448069/HPSI1013i-sebz_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
92	WTSli187-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448175/HPSI1013i-sita_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448175/HPSI1013i-sita_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
93	WTSli039-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448099/HPSI1013i-wopl_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448099/HPSI1013i-wopl_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
94	WTSli021-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447982/HPSI1013i-wuye_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447982/HPSI1013i-wuye_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
95	WTSli021-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448203/HPSI1013i-wuye_3.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448203/HPSI1013i-wuye_3.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
96	WTSli022-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447981/HPSI1013i-yemz_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447981/HPSI1013i-yemz_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
97	WTSli022-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447853/HPSI1013i-yemz_3.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447853/HPSI1013i-yemz_3.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
98	WTSli186-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448071/HPSI1014i-babz_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448071/HPSI1014i-babz_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>

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99	WTSli188-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447984/HPSI1014i-kefb_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447984/HPSI1014i-kefb_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
100	WTSli184-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447933/HPSI1014i-qayj_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447933/HPSI1014i-qayj_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
101	WTSli184-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448160/HPSI1014i-qayj_4.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448160/HPSI1014i-qayj_4.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
102	WTSli189-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447862/HPSI1014i-quls_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447862/HPSI1014i-quls_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
103	WTSli175-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448004/HPSI1014i-tixi_4.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448004/HPSI1014i-tixi_4.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
104	WTSli050-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447964/HPSI1014i-toss_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447964/HPSI1014i-toss_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
105	WTSli032-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448163/HPSI1113i-bima_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448163/HPSI1113i-bima_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
106	WTSli007-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448034/HPSI1113i-dons_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448034/HPSI1113i-dons_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
107	WTSli085-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448056/HPSI1113i-eofe_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448056/HPSI1113i-eofe_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
108	WTSli006-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448050/HPSI1113i-hayt_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448050/HPSI1113i-hayt_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
109	WTSli006-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447954/HPSI1113i-hayt_3.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447954/HPSI1113i-hayt_3.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
110	WTSli038-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448219/HPSI1113i-ieki_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448219/HPSI1113i-ieki_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
111	WTSli038-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448177/HPSI1113i-ieki_3.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448177/HPSI1113i-ieki_3.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
112	WTSli139-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447934/HPSI1113i-oaaz_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447934/HPSI1113i-oaaz_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
113	WTSli005-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448044/HPSI1113i-podx_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448044/HPSI1113i-podx_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
114	WTSli004-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448057/HPSI1113i-qolg_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448057/HPSI1113i-qolg_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
115	WTSli004-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448170/HPSI1113i-qolg_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448170/HPSI1113i-qolg_3.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
116	WTSli081-B	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448107/HPSI1113i-qorq_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448107/HPSI1113i-qorq_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
117	WTSli081-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448093/HPSI1113i-qorq_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448093/HPSI1113i-qorq_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
118	WTSli051-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447915/HPSI1113i-uofv_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447915/HPSI1113i-uofv_1.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
119	WTSli052-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447918/HPSI1114i-ziyn_6.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447918/HPSI1114i-ziyn_6.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
120	WTSli028-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448089/HPSI1213i-babk_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448089/HPSI1213i-babk_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
121	WTSli003-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447950/HPSI1213i-hehd_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447950/HPSI1213i-hehd_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz</a>
122	WTSli098-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448098/HPSI1213i-nekd_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448098/HPSI1213i-nekd_1.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>
123	WTSli103-A	<a href="ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448073/HPSI1213i-nusw_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz">ftp://ftp.sra.ebi.ac.uk/vol1/ERZ448/ERZ448073/HPSI1213i-nusw_2.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz</a>

No.	Cell id	Download link
124	WTSli001-A	ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447942/HPSI1213i-pahc_4.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz
125	WTSli170-A	ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447946/HPSI1213i-tolg_4.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz
126	WTSli170-B	ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447999/HPSI1213i-tolg_6.wgs.gatk.haplotype_caller.20161201.genotypes.vcf.gz
127	WTSli083-A	ftp://ftp.sra.ebi.ac.uk/vol1/ERZ447/ERZ447977/HPSI1213i-xuja_2.wgs.gatk.haplotype_caller.20170425.genotypes.vcf.gz

## 6 Change History

Version	Valid from	Changes compared to previous version
0.1	17-Aug-2022	First draft
0.2	18-Aug-2022	<b>Clarification: variants were not selected because they have clinical significance per se, they were selected because they were reported in ClinVar. Reported variants in ClinVar have diverse levels of confidence as to their medical relevance.</b>