

qcOnMerge

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Initial setting up

read the merged csv file

```
df = read.csv("/scratch_tmp/grp/msc_appbio/DCDM_group6/outputs/tables/Merged_df_final.csv")
df = df[, -1]
head(df)
```

```
##      analysis_id gene_accession_id gene_symbol mouse_strain mouse_life_stage
## 1 0003b50qbwu5484      MGI:2444120      Spag4      C57BL      Early adult
## 2 0003klt8412603i      MGI:2385619      Klhl12      C57BL Middle aged adult
## 3 00052qirbv4o3tm      MGI:1098826      Coq4      C57BL      Early adult
## 4 00062gd65s37385      MGI:1917237      Spaca9      C57BL      Early adult
## 5 0007p3a8dj350z      MGI:2448580      Myo3b      C57BL      Early adult
## 6 0007psb08ytc999      MGI:2155705      P2ry14      C57BL      Late adult
##      parameter_id
## 1  ESLIM_005_001_702
## 2  KMPCLA_CSD_008_001
## 3  M-G-P_006_001_026
## 4  IMPC_IMM_033_002
## 5  M-G-P_016_001_004
## 6  IMPC_GEO_009_002
##
##      parameter_name      pvalue
## 1      Lean/Body weight 0.70844160
## 2      Coat - color pattern - back 0.42109680
## 3      Fusion of vertebrae 0.08293449
## 4 NaÃ\u0083Ã-ve CD8+ T cells - % of live leukocytes (Panel A) 0.30371250
## 5      Haematocrit 0.17170630
## 6      Hemorrhage 0.85469090
```

Count NA values in each column

```
na_counts = colSums(is.na(df))
print(na_counts)
```

```
##      analysis_id gene_accession_id      gene_symbol      mouse_strain
##      485      505      505      512
## mouse_life_stage      parameter_id      parameter_name      pvalue
##      487      503      535      536
```

Read sop

```
sop = read.csv("/scratch_tmp/grp/msc_appbio/DCDM_group6/metadata/IMPC_SOP.csv")
sop
```

```
##      dataField dataType minValue maxValue
```

```
## 1      analysis_id      String      15      15
## 2 gene_accession_id    String      9      11
## 3      gene_symbol      String      1      13
## 4      mouse_strain      String      3      5
## 5 mouse_life_stage      String      4      17
## 6      parameter_id      String     15      18
## 7      parameter_name      String      2      74
## 8          pvalue      Float      0      1
##
##                               exampleValues
## 1                               0a1yei0604s8275
## 2                               MGI:2679336
## 3                               Satb2
## 4                               C57BL
## 5                               E15.5
## 6                               IMPC_GRS_009_001
## 7 Forelimb and hindlimb grip strength measurement mean
## 8                               0.8004226
##
## 1                               Unique 15 character string containing a
## 2 Unique alphanumeric character string that is used to unambiguously identify a particular record in
## 3                               Offi
## 4                               Name of mouse str
## 5      Developmental stage of mice being analysed. Values are E12.5; E15.5; E18.5; E9.5; Early
## 6
## 7
## 8
```

Set the ranges

```
allFields = sop[,1]
allMins = sop[,3]
allMaxs = sop[,4]
print(allFields)
```

```
## [1] "analysis_id"      "gene_accession_id" "gene_symbol"
## [4] "mouse_strain"      "mouse_life_stage"  "parameter_id"
## [7] "parameter_name"    "pvalue"
```

```
print(allMins)
```

```
## [1] 15  9  1  3  4 15  2  0
```

```
print(allMaxs)
```

```
## [1] 15 11 13  5 17 18 74  1
```

Count how many NA values are there in each row

```
# Identify String and p-value columns based on SOP
string_columns <- allFields[sop$dataType == "String"]
pvalue_columns <- allFields[sop$dataType != "String"]

# Filter for valid columns in df
string_columns <- intersect(string_columns, colnames(df))
pvalue_columns <- intersect(pvalue_columns, colnames(df))

# Create a data frame to store NA counts
na_counts <- data.frame(
```

```

analysis_id = if ("analysis_id" %in% colnames(df)) df$analysis_id else seq_len(nrow(df)),
na_count_string = rowSums(is.na(df[string_columns])),
na_count_pvalue = rowSums(is.na(df[pvalue_columns]))
)

# Filter rows where total NA count is greater than 1
filtered_na_counts <- na_counts[
  na_counts$na_count_string + na_counts$na_count_pvalue > 1,
]

# Output the filtered data frame
filtered_na_counts

```

##	analysis_id	na_count_string	na_count_pvalue
## 162	<NA>	5	1
## 386	<NA>	5	1
## 749	01dg3wp1kqyh88u	2	0
## 1481	0339irju94z69yi	5	0
## 1781	<NA>	6	1
## 2032	<NA>	7	1
## 2048	0450e5zqti717kx	2	1
## 2093	<NA>	4	1
## 2102	046w5ex01wk3435	2	0
## 2314	04nr7o2r03157k6	2	1
## 2620	057u3hr5133y483	2	0
## 2650	<NA>	7	0
## 2660	0598n0e0k110c0c	3	1
## 2819	<NA>	7	1
## 3374	<NA>	5	1
## 3582	077486ibkic00yw	4	1
## 3815	<NA>	6	0
## 4679	<NA>	7	1
## 4862	0a3bejn1o39w9fq	6	1
## 4972	0aprmq2453o5632	3	0
## 5070	0b656iqz6mr1fgy	2	0
## 5435	0dcu85pjua53u4q	2	0
## 6153	0hq384e58ns95m	2	0
## 6426	<NA>	6	1
## 6646	<NA>	7	1
## 6804	<NA>	4	1
## 6862	0ly270qa08g63c6	2	1
## 7135	0nj3c435nj2274	6	1
## 7290	0of607iae6vu8v7	1	1
## 7338	0ovqh09gz067u72	1	1
## 7396	<NA>	5	1
## 8023	0t3u429363sl61q	6	1
## 8068	<NA>	5	0
## 8124	<NA>	6	1
## 8414	0vk3ufx79a6412m	3	1
## 8871	0y81myh06he74uu	4	1
## 8966	0z07bj4ot3e53jh	3	1
## 9033	<NA>	5	0
## 9177	<NA>	6	1
## 10023	<NA>	5	1

## 10200	<NA>	3	0
## 10242	<NA>	7	1
## 10317	128ld81ip5v1921	4	0
## 10599	<NA>	7	1
## 10670	<NA>	7	0
## 11306	149e7j5653lxdkd	4	0
## 11658	155659cbf55dag7	2	1
## 11820	<NA>	6	1
## 11864	<NA>	5	1
## 12416	16ragi3fl24wt81	2	0
## 12500	1705f63q061d370	2	0
## 12623	<NA>	7	1
## 12700	<NA>	4	1
## 13060	<NA>	5	0
## 13137	<NA>	6	1
## 13143	<NA>	7	1
## 13503	<NA>	2	1
## 13925	1a04600jnvk5g92	2	0
## 13956	1a464185v96wr2	4	1
## 14299	1c3b5y2b4ru9x23	4	1
## 14582	1dzw7h2k90nxgt8	2	0
## 14880	<NA>	6	0
## 15032	<NA>	6	1
## 15113	1h331m5o5hk2147	3	0
## 15440	<NA>	7	1
## 15645	1kif3678q0nx9s7	3	1
## 15718	<NA>	7	1
## 15895	1m1nyw1550d64h5	6	0
## 16102	<NA>	6	1
## 16629	<NA>	7	0
## 16681	<NA>	7	1
## 16946	<NA>	5	0
## 17054	<NA>	5	1
## 17166	<NA>	7	1
## 17293	1ufj51391rsz9zh	3	0
## 18013	1z015u3n7mly5n8	4	0
## 18345	<NA>	7	1
## 18748	<NA>	6	1
## 18926	<NA>	5	1
## 19356	<NA>	6	1
## 19884	239t54ed8as8mpv	2	1
## 20065	<NA>	5	1
## 20137	2401t4174e505n6	3	1
## 20386	24ar2p70zfx3v3r	4	0
## 20615	<NA>	3	0
## 20776	<NA>	4	0
## 20850	259752w672mc9hz	3	1
## 21052	<NA>	3	0
## 21319	2683z2m397kt8kn	6	0
## 21578	<NA>	6	1
## 21652	2725br02075vq6r	2	1
## 21693	<NA>	6	0
## 21882	27e2h271a34t51r	3	0
## 22483	<NA>	5	1

## 22723	<NA>	3	0
## 22756	<NA>	6	1
## 23321	<NA>	5	1
## 23323	2bj373fchv1k0u1	5	1
## 23469	2cc783zc2k4434k	4	0
## 23744	<NA>	5	1
## 23778	<NA>	7	1
## 23893	<NA>	4	0
## 23954	2fg0ui3ygc4md25	2	1
## 24229	<NA>	4	1
## 24510	2iuy790rk472h51	1	1
## 24547	2j2991ni53qw5g8	5	1
## 24887	<NA>	7	1
## 25649	<NA>	4	0
## 25899	2r32ysk6mhr4dlz	4	0
## 26616	2v7iu9l1buc2741	5	1
## 26710	2vxq6m4g36oew44	6	1
## 27149	<NA>	7	1
## 27410	<NA>	5	1
## 27473	305a7kgz577x581	1	1
## 27628	<NA>	5	1
## 27707	<NA>	5	1
## 28492	<NA>	6	1
## 29072	<NA>	7	1
## 29266	33y9a1247959er0	2	0
## 29472	<NA>	2	1
## 29545	34dd0ptzmuoqzn5	2	1
## 29557	34f9f909noolleez	4	1
## 29715	34wz1nn42074vig	5	1
## 29992	359yp87d0t38ne2	3	1
## 30161	35uy9db44079945	5	0
## 30317	363wx8d7x48gplg	5	1
## 30378	<NA>	3	0
## 30578	36l81369h355871	2	0
## 30641	36sfiqwkbwoc9x5	3	0
## 30814	<NA>	7	1
## 31156	37u8m6doq67uxq0	6	0
## 31357	<NA>	3	0
## 31540	<NA>	4	1
## 31618	<NA>	3	0
## 31729	<NA>	7	1
## 31889	<NA>	7	1
## 32014	39f88650703987n	3	0
## 32224	3a21o2pwd7696x7	3	0
## 32292	3a9afuiw64li16n	3	1
## 32796	<NA>	5	1
## 33728	<NA>	5	0
## 34251	<NA>	7	1
## 35061	3r4np3wweu2l552	4	0
## 35307	3snbplzk89064wi	4	0
## 35607	<NA>	7	1
## 36132	<NA>	6	1
## 36447	3ztc9zbs27l60ck	4	0
## 36510	<NA>	7	1

## 36872	<NA>	6	1
## 37810	42p7m5qy5y7zn3y	4	1
## 37921	<NA>	6	1
## 38060	<NA>	6	1
## 38178	<NA>	7	1
## 38339	43y129o67187fut	1	1
## 38627	44a0u83z985p253	3	1
## 38707	<NA>	7	1
## 38709	44jvbcz6d1520cj	2	0
## 39172	<NA>	7	1
## 39291	45s5969601dwm3g	3	1
## 39340	<NA>	5	1
## 39360	<NA>	7	1
## 39392	<NA>	4	0
## 39409	<NA>	6	1
## 39591	<NA>	6	1
## 39659	<NA>	7	1
## 40421	4812ic98886wgil	1	1
## 40514	485573d23otihpj	4	1
## 40686	<NA>	5	1
## 41032	496i39i923l6x15	5	1
## 41251	<NA>	7	1
## 41263	49rnh8aq2162bz3	1	1
## 41363	<NA>	3	0
## 41441	4amko9746sh5341	3	1
## 41563	<NA>	5	1
## 41571	4ba0fjc608u6704	3	1
## 41672	<NA>	6	0
## 41709	<NA>	3	0
## 41919	4d9ue46r6t7kdr5	3	1
## 42023	<NA>	4	1
## 42171	<NA>	6	1
## 42253	<NA>	5	1
## 42595	<NA>	6	1
## 42959	<NA>	4	0
## 43040	<NA>	6	1
## 43058	<NA>	6	1
## 43554	<NA>	6	1
## 43555	<NA>	7	1
## 43556	<NA>	7	1
## 43779	<NA>	7	1
## 43917	<NA>	2	0
## 43931	<NA>	5	1
## 44067	<NA>	6	1
## 44294	4s5j7ouje70f437	3	1
## 44427	4t37y78u01uabee	3	0
## 44649	4u8s1a53346cs6q	3	0
## 44837	4vbe98d7odpgy38	1	1
## 44942	4w39254s9wv9m25	2	0
## 45059	<NA>	7	1
## 45350	<NA>	5	1
## 46492	<NA>	7	1
## 46859	52hil4u7178w18r	2	0
## 46888	52kv8y51sz0u6v1	4	0

## 46956	<NA>	7	1
## 47341	<NA>	5	1
## 47990	<NA>	5	1
## 48261	55es4io47u3d9ba	3	1
## 48542	<NA>	7	1
## 48580	566105rvh3snk13	3	1
## 48671	<NA>	7	1
## 48754	56gylb6gs3u30zc	3	0
## 49386	<NA>	6	1
## 49401	57zef0bv43i178r	5	1
## 49756	58k5zf15mgsi6wz	3	1
## 49989	<NA>	3	0
## 51414	5g3m9vy1f7oag5j	2	0
## 51646	<NA>	7	0
## 51733	<NA>	4	1
## 52164	<NA>	3	1
## 52246	<NA>	5	1
## 52895	<NA>	7	1
## 53364	<NA>	7	1
## 53546	5t43kdqa9dpv0il	2	1
## 53576	<NA>	7	1
## 53641	<NA>	6	1
## 53808	<NA>	4	1
## 54510	<NA>	6	1
## 54633	<NA>	7	0
## 54783	603j8c0wsi10vac	4	0
## 55074	60kk44292p58w14	5	1
## 55254	<NA>	5	1
## 55630	61u13o5r9e529tx	4	1
## 55645	<NA>	3	0
## 55778	<NA>	6	1
## 55953	62c1z463r2js6s5	4	1
## 55967	<NA>	6	1
## 56569	<NA>	7	0
## 57087	<NA>	4	1
## 57114	<NA>	4	1
## 57224	<NA>	7	1
## 57371	<NA>	3	0
## 57811	<NA>	5	0
## 58253	<NA>	5	0
## 58591	6802zer3h418nuu	5	1
## 58677	<NA>	3	1
## 58708	<NA>	7	1
## 58785	<NA>	4	1
## 58917	<NA>	2	0
## 59014	68mxs0z17k0ra8q	4	0
## 59376	<NA>	6	1
## 59931	<NA>	7	1
## 60186	6d813216155dbmq	4	1
## 60205	<NA>	5	1
## 60413	6et02g1358f931g	2	0
## 60549	<NA>	7	1
## 60805	6h50qp5m76g6667	1	1
## 61483	619r72agv3s5656	2	0

## 61685	6mux5t129cn5gtp	4	1
## 62923	6uk32uj524zb5zy	3	1
## 63022	<NA>	3	1
## 63292	6wz8sq2x1fi8902	2	0
## 63412	6xjy61qr5gs5v80	3	0
## 63442	6xvo0gvhi92ht9h	1	1
## 63718	<NA>	7	1
## 63751	<NA>	7	1
## 63976	707li4foxfevyq0	5	1
## 63992	<NA>	3	1
## 64032	<NA>	2	1
## 64069	70dr341j615665i	2	0
## 64449	<NA>	6	1
## 65657	73hxxg8g1g8v8f67	2	0
## 65766	<NA>	7	1
## 65825	7400301s22668z0	3	0
## 65893	742sn5105q0wad6	5	1
## 65946	744qm149hq56a30	4	0
## 66072	<NA>	6	1
## 66802	76016r2nswjbv6m	5	0
## 67322	<NA>	7	1
## 67425	<NA>	5	1
## 67480	775yvg59v71nf2u	2	0
## 67564	77992pkd907xf0w	1	1
## 67573	<NA>	6	0
## 67822	<NA>	6	1
## 67844	<NA>	2	1
## 67930	7832469n2n9yf23	2	0
## 67958	<NA>	7	1
## 67983	784uh8qa6961d28	3	1
## 68198	78h7368fvhxf6z0	5	1
## 68385	<NA>	4	0
## 68593	<NA>	7	1
## 68665	<NA>	2	1
## 68668	79gvxwm06pq2pg3	3	1
## 68760	79r1n3zacnhoz6r	6	0
## 68881	<NA>	6	0
## 69201	7c1zllqlx19113x	4	1
## 69715	<NA>	6	0
## 69774	7fhjrs7mv59l835	4	0
## 70064	<NA>	2	0
## 70187	<NA>	7	1
## 70341	7j26e206gi0yw59	4	1
## 70438	7jni076t96h5wv2	2	0
## 70615	<NA>	7	1
## 71204	<NA>	4	0
## 71292	<NA>	7	1
## 71381	7p5j44km8saddk6	3	0
## 71533	<NA>	3	1
## 71659	<NA>	5	1
## 72300	<NA>	4	1
## 72617	<NA>	7	1
## 72958	7z1qu10888fi516	4	0
## 73387	<NA>	4	0

## 74440	<NA>	4	1
## 75321	<NA>	7	1
## 75463	<NA>	3	1
## 75499	<NA>	5	1
## 75886	<NA>	7	1
## 75955	<NA>	5	1
## 76015	<NA>	7	1
## 76377	<NA>	7	0
## 76397	<NA>	7	1
## 76573	87408w2z62h2xy5	2	0
## 77200	<NA>	4	0
## 77507	<NA>	6	1
## 77511	<NA>	4	0
## 77614	<NA>	7	1
## 77713	<NA>	6	1
## 78059	<NA>	7	1
## 78443	<NA>	5	1
## 78520	<NA>	4	1
## 78550	8ddr319p259p38h	3	0
## 78589	8dt8w42zo78559n	4	0
## 78911	8fr76rmv1963h0f	1	1
## 79250	<NA>	3	1
## 79267	<NA>	5	1
## 79524	8j72oglu82qya71	5	1
## 79698	<NA>	7	1
## 79979	<NA>	7	1
## 80152	<NA>	3	0
## 80164	<NA>	3	0
## 80814	<NA>	4	1
## 80944	<NA>	3	0
## 81109	<NA>	5	1
## 81119	8sxx5v3eauu67a6	4	1
## 81173	<NA>	7	1
## 81366	<NA>	6	1
## 81482	8v52kvy83492172	2	0
## 81494	<NA>	7	0
## 81647	8w465lfr13w752c	4	1
## 82141	8z1139k82o5hxy1	3	1
## 82155	8z23u11j2ao144m	2	1
## 82357	903942s2n448e60	2	1
## 82571	<NA>	4	1
## 82672	<NA>	4	0
## 82686	<NA>	4	1
## 83041	91d864hgy2e223u	2	0
## 83099	<NA>	7	1
## 83223	<NA>	7	1
## 83237	<NA>	7	1
## 83299	9218p93w8376rzo	5	0
## 83494	<NA>	6	1
## 83571	<NA>	7	1
## 84101	<NA>	6	1
## 84141	93lw4asq20yzmd0	2	0
## 84324	<NA>	5	1
## 84328	9413154810h6mjj	1	1

## 84927	<NA>	6	0
## 84959	<NA>	4	1
## 85299	<NA>	5	1
## 85483	9680n33v6s15w97	2	1
## 85546	96do84j6979n167	6	1
## 85789	97245d8v3jm84zt	2	0
## 85963	<NA>	7	1
## 86240	<NA>	3	0
## 86559	<NA>	7	1
## 86638	98xln87h76ob45h	1	1
## 87008	99k3513487gxxg31	6	1
## 87017	<NA>	6	0
## 87196	<NA>	7	0
## 87434	9bk7a372f6c9tx2	5	1
## 87583	<NA>	5	0
## 87689	9d3zk7pp034dqni	3	1
## 88154	9g112k8zk8pg71d	2	1
## 88474	9hx3717ms2utg85	5	1
## 88734	<NA>	6	1
## 88822	9k1175k8c11f3lq	6	1
## 88823	<NA>	4	1
## 88924	9ki9s3x5m9uks3j	2	0
## 89087	<NA>	5	0
## 89099	<NA>	2	0
## 89288	<NA>	4	1
## 89534	9o7z1dg70e0okl8	3	1
## 89563	9odzyp86u9pp5e6	3	0
## 90110	<NA>	4	0
## 90208	<NA>	4	0
## 90284	<NA>	5	1
## 90586	9uph5059d4m6666	3	1
## 90699	9v8k8j15ji2i8vs	3	1
## 90724	9vcvnipg6ge30l0	3	1
## 91183	9y8gr2352yq0r7t	2	0
## 91271	<NA>	6	0
## 91620	a10m00319feu6qu	3	1
## 91754	a1lr841ww7negp3	3	0
## 91872	<NA>	3	1
## 92188	<NA>	5	1
## 92292	<NA>	7	1
## 92343	a54hp27c9ei3db5	1	1
## 92454	a5wf0cfr9e4i00d	4	1
## 93123	<NA>	7	1
## 93297	<NA>	2	1
## 93532	<NA>	7	1
## 93956	<NA>	4	1
## 94029	aqvq0648yh105wd	4	0
## 94379	ax3bzb3a48y548p	2	0
## 94687	b0t26ztpsu9336x	2	1
## 94755	b16144zj452ynrf	2	1
## 94802	<NA>	7	0
## 95137	<NA>	7	1
## 95305	<NA>	2	0
## 95583	<NA>	4	0

## 95844	<NA>	7	1
## 96007	b8ovve4tl92723b	2	1
## 96114	<NA>	3	0
## 96428	<NA>	6	1
## 96450	<NA>	2	0
## 96590	<NA>	2	0
## 96720	<NA>	7	1
## 96870	<NA>	4	1
## 96903	<NA>	7	1
## 97315	bu8e1yw2c731251	3	1
## 97580	<NA>	7	1
## 97897	c1at7108he0n2vr	3	1
## 97979	<NA>	7	1
## 98184	<NA>	4	1
## 98273	<NA>	6	1
## 98287	<NA>	7	0
## 98353	<NA>	6	1
## 98374	<NA>	5	1
## 98427	c479125hez2427n	2	0
## 98597	<NA>	4	1
## 98931	<NA>	6	1
## 99031	<NA>	7	1
## 99072	<NA>	3	0
## 99382	cbx0d533k61vc5i	2	1
## 99603	<NA>	5	1
## 100021	cnmh9410e4kb713	2	0
## 100023	<NA>	2	1
## 100129	<NA>	7	1
## 100156	<NA>	7	1
## 100227	cr8pjng2uao9em4	4	1
## 100444	cv51ed24z35c47a	4	1
## 100825	d0d3r87qr50032x	4	1
## 101166	<NA>	7	1
## 101233	<NA>	7	1
## 101255	<NA>	5	1
## 101683	d6066126u8kn876	1	1
## 102125	<NA>	5	1
## 102278	<NA>	3	1
## 102377	<NA>	7	1
## 102637	df0u852091848b7	4	1
## 102882	<NA>	3	0
## 102917	<NA>	7	1
## 103037	dmav644z05bchu4	2	0
## 103073	dn6m4h9ejj23750	4	1
## 103075	<NA>	5	1
## 103483	<NA>	4	0
## 103970	e17y2k74xb07665	3	0
## 103976	<NA>	3	0
## 104219	e2rs9pgg630f416	1	1
## 104296	e35q0wh20799ps7	5	0
## 104315	e38507549041v9d	4	1
## 104382	<NA>	5	0
## 104614	e55yu6y5375dvpv	6	1
## 105333	<NA>	5	1

## 105472 eb5x68na33zg180	4	1
## 105622 <NA>	6	1
## 105665 <NA>	7	1
## 106125 <NA>	2	0
## 106245 epwvphc2y7a9zw9	3	1
## 107435 <NA>	6	1
## 107767 f5rl7y8p4kl7o5l	4	0
## 107952 <NA>	3	1
## 108532 faxmr890l6r3s1l	4	1
## 108596 <NA>	5	1
## 108701 <NA>	7	1
## 108824 fh0a89n0178m40a	3	1
## 108879 fhrdjzw6k389xg3	4	0
## 109153 <NA>	5	1
## 109732 fy3a3k36915g322	2	1
## 109775 fz0pv5s6264z14j	2	1
## 110174 g20l08gl4nc6ik8	2	0
## 110205 g232c19a46saarj	3	0
## 110635 <NA>	2	0
## 110797 <NA>	7	1
## 111909 gh96na4103m1232	2	0
## 112192 <NA>	3	0
## 112338 <NA>	7	1
## 112453 <NA>	4	1
## 112717 <NA>	7	1
## 113015 <NA>	6	1
## 113093 <NA>	3	0
## 113170 <NA>	7	1
## 113363 <NA>	3	1
## 113370 h28t2w0eff5c7b3	1	1
## 113388 h2e8e05r69e2qi3	4	1
## 113466 <NA>	7	1
## 114105 <NA>	3	0
## 114225 h7catx3baamgpf2	3	0
## 114394 h89jhrto051a7vm	5	1
## 114699 han38mf65rbug64	2	0
## 114876 <NA>	5	1
## 114992 <NA>	5	1
## 115055 <NA>	7	1
## 115107 <NA>	7	1
## 115287 <NA>	3	1
## 115349 <NA>	4	1
## 115491 hps8g959d49e5x5	2	1
## 115539 hqvpm524fe7ijdu	3	1
## 115553 <NA>	5	0
## 115867 hx7fw413543dq44	4	1
## 116015 i0265073v1ms10i	4	1
## 116449 <NA>	7	1
## 116506 <NA>	7	0
## 116644 i3u0tj6kca1s638	1	1
## 117007 i65p30bhs6f056n	5	0
## 117545 <NA>	6	0
## 118052 <NA>	6	0
## 118614 <NA>	3	1

## 119221	<NA>	3	1
## 119346	<NA>	6	1
## 119576	<NA>	5	0
## 119755	<NA>	6	1
## 120009	j5i9n07x04qhk22	2	0
## 120061	j5x2s4mw71l15ko	2	0
## 120148	<NA>	4	1
## 120167	j6do2785w27oot0	4	1
## 120271	<NA>	5	1
## 120485	j864738gvqhu11x	3	0
## 120658	<NA>	4	1
## 120885	jbg95cf71bzx6c0	2	0
## 120994	<NA>	5	1
## 121188	<NA>	2	0
## 121507	jn45ky80gey5iwf	2	0
## 121523	jn93h32f826d56a	4	1
## 121567	jo59fexdc7xvn7q	2	1
## 121642	jpu513415s7981k	3	1
## 121913	<NA>	2	0
## 121969	<NA>	6	1
## 121982	<NA>	2	1
## 122025	<NA>	6	1
## 122580	k22gco11005tr76	5	1
## 122755	<NA>	6	1
## 123047	k4x98w1yl7b874m	4	0
## 123911	ka6m167117832un	4	1
## 124211	<NA>	6	0
## 124233	<NA>	4	0
## 124318	<NA>	7	0
## 124682	ko9yhrhj55267e4	3	0
## 125153	<NA>	7	1
## 125283	<NA>	6	1
## 125408	<NA>	4	0
## 125540	l13adqzyy8es589	4	1
## 125662	l1yagi73im2466d	1	1
## 125738	<NA>	5	1
## 125851	<NA>	6	1
## 125908	l37jp8ox40wrvs1	5	1
## 126187	l521pi8m11r24yi	5	1
## 126196	<NA>	7	0
## 126248	<NA>	5	0
## 126458	<NA>	6	0
## 126825	l8m10i1135a3ri2	5	1
## 127088	lb486931o1200o4	4	1
## 127153	lc89m20cmw39968	3	0
## 127238	<NA>	6	0
## 127678	lmj0t224z6r0036	3	0
## 128021	<NA>	3	0
## 128487	<NA>	7	1
## 128560	m0q0hp9ri998i74	3	0
## 128619	m13pmx13f35615m	1	1
## 129116	m40i2i3yec85jc6	1	1
## 129341	<NA>	3	0
## 129515	m68f45e6d3pa640	4	1

## 129670	<NA>	2	0
## 129758	m7ri5dmov14zl16	3	0
## 129853	<NA>	7	1
## 130248	<NA>	6	0
## 130495	<NA>	6	1
## 131606	<NA>	7	1
## 131942	<NA>	7	1
## 132031	n31nm818e4eyv4y	3	0
## 132662	<NA>	4	1
## 132910	n8d211lvuuy4xm0	5	0
## 133153	n9u1769557udxvh	5	1
## 133530	nh1dl098s33n1b4	2	0
## 133547	<NA>	4	0
## 134099	<NA>	6	1
## 134281	<NA>	5	0
## 134418	<NA>	7	1
## 134783	<NA>	7	0
## 135508	o60e9efki5f35xg	4	1
## 135686	o6z87bodw74728q	3	1
## 135827	<NA>	6	1
## 135867	<NA>	2	0
## 136243	<NA>	6	1
## 136399	<NA>	5	1
## 136451	<NA>	6	1
## 136480	<NA>	7	1
## 136580	<NA>	6	1
## 136651	<NA>	4	0
## 136720	<NA>	7	1
## 136985	<NA>	5	1
## 136991	<NA>	6	1
## 137820	p163749281jpl24	6	1
## 137945	<NA>	7	1
## 137956	<NA>	2	0
## 138027	p2dnlkik04r6w0o	4	1
## 138706	<NA>	6	1
## 139000	<NA>	7	1
## 139069	<NA>	5	1
## 139375	<NA>	6	1
## 139548	pf8up48p22y5487	2	0
## 139865	<NA>	4	1
## 140127	<NA>	3	0
## 140286	ps962059nz25xjh	3	1
## 140311	<NA>	7	1
## 140328	<NA>	5	1
## 140374	<NA>	6	0
## 140550	pxba0qe4t4miu52	6	1
## 140726	<NA>	4	1
## 141083	q2g2isgiq672tfh	3	0
## 141214	q379c7gy5f5h9um	3	1
## 141240	<NA>	5	1
## 141245	q3berzq696i44b0	2	0
## 141345	q435ee7td8s4t6t	2	1
## 141378	q46i2v353io8hq6	4	0
## 141452	q4rl5qnq77e0wky	1	1

## 141523	q5516d69q30y218	5	1
## 141635	<NA>	3	1
## 141660	q5z44nv0a3199i5	5	1
## 141722	<NA>	6	0
## 142030	q86er89q852vn67	3	0
## 142879	<NA>	5	1
## 143213	qq8d1gd90rf000i	6	1
## 143834	<NA>	4	0
## 144021	r1l3738e50358js	4	0
## 144023	r1lrz12g571py58	1	1
## 144192	<NA>	6	1
## 144502	r4fnhup51b91p0k	5	0
## 144818	<NA>	7	1
## 145020	<NA>	1	1
## 145103	<NA>	6	1
## 145160	<NA>	6	1
## 145174	r8991781w766qje	6	1
## 145383	<NA>	7	1
## 145615	<NA>	3	1
## 145832	rh7rq4bh693050i	4	0
## 146479	<NA>	4	0
## 146572	<NA>	4	0
## 147131	<NA>	2	1
## 147173	<NA>	6	1
## 147205	s248p7iy5a5qtc	3	0
## 147650	<NA>	5	1
## 147659	<NA>	3	1
## 147769	<NA>	4	0
## 148668	<NA>	5	1
## 148920	<NA>	7	1
## 148996	<NA>	2	0
## 149112	<NA>	3	0
## 149153	<NA>	6	0
## 149513	<NA>	6	1
## 150449	<NA>	3	0
## 150586	<NA>	5	1
## 150787	t533r670d44rmkz	2	1
## 151100	<NA>	4	0
## 151813	<NA>	7	1
## 151903	<NA>	4	1
## 152611	<NA>	7	1
## 153082	<NA>	6	1
## 153451	<NA>	2	0
## 153599	<NA>	7	1
## 153766	<NA>	5	1
## 153978	<NA>	2	0
## 154017	<NA>	5	1
## 154823	<NA>	5	0
## 155329	<NA>	6	0
## 155612	<NA>	3	1
## 155810	uu4z1753f0p52ht	4	0
## 155821	<NA>	7	1
## 155920	<NA>	3	0
## 156084	<NA>	7	0

## 156375	<NA>	6	1
## 157015	<NA>	7	1
## 157146	<NA>	7	1
## 157240	v6q454tt537mhqt	2	1
## 157441	<NA>	6	1
## 158763	vsxx2v890uy43ep	2	1
## 159127	<NA>	5	1
## 159159	<NA>	7	1
## 159408	<NA>	5	1
## 159462	<NA>	6	1
## 159592	w2j83i0l26lreu1	2	0
## 159745	w3g2uyhxfv77237	4	1
## 159766	<NA>	4	1
## 159799	<NA>	7	1
## 159912	<NA>	4	1
## 159961	<NA>	7	1
## 160134	<NA>	7	1
## 160312	w72f5naa2233fr5	6	0
## 160479	w828062fea25pi3	1	1
## 160625	<NA>	4	0
## 160658	<NA>	7	1
## 160810	wai11ky397n3by2	3	1
## 160876	wbj01q2yz64865e	1	1
## 160943	wcx0u90vd6viwmo	4	1
## 161082	<NA>	6	1
## 161633	<NA>	6	1
## 161648	<NA>	5	1
## 161763	<NA>	7	1
## 161771	<NA>	4	0
## 162064	<NA>	5	1
## 162154	<NA>	4	1
## 162645	<NA>	3	1
## 162707	x3467127de112mi	2	0
## 162820	<NA>	4	0
## 163024	x5406kp8o3e9iqe	5	1
## 163039	x557pqdownlg1280	1	1
## 163267	x6e0egl00l6jy1a	5	0
## 163625	<NA>	7	1
## 163743	<NA>	6	0
## 163793	x9lfi5d5125k17j	3	1
## 164105	xerb85pktl2h651	2	1
## 164214	<NA>	7	1
## 164762	xq4yr22ud126641	6	1
## 164895	xsw7zcj16m4ov47	2	0
## 165178	<NA>	7	1
## 165228	<NA>	4	1
## 165277	<NA>	7	1
## 165537	<NA>	2	1
## 165617	<NA>	5	0
## 165708	<NA>	7	1
## 165793	<NA>	7	1
## 165861	<NA>	5	1
## 165899	y3cofj28u48b4h6	2	1
## 165995	<NA>	2	1


```
## 166099          <NA>          7          1
## 166150          <NA>          3          0
## 166191 y54469v15i1761x        4          0
## 166200 y559j9r4gkxue2p        3          1
## 166987          <NA>          3          0
## 167004 yan74b9c620417u        6          1
## 167153          <NA>          6          1
## 167414 yiquo2ickt4257z        4          0
## 167557          <NA>          2          0
## 168000          <NA>          4          1
## 168041          <NA>          6          1
## 168056          <NA>          7          1
## 168285 yy1221ujj5ta286        2          1
## 168493          <NA>          6          1
## 168631          <NA>          7          1
## 168717          <NA>          3          1
## 168977          <NA>          6          1
## 168998 z38r6vnce20j7i9        5          1
## 169156 z47f37p32ub495y        1          1
## 170468          <NA>          4          1
## 170903          <NA>          5          0
## 170947          <NA>          7          1
## 171025          <NA>          6          1
```

import the cleaned data which NA values and duplicates are removed

```
df = read.csv("/scratch_tmp/grp/msc_appbio/DCDM_group6/outputs/tables/merged_data_clean.csv")
df = df[, -1]
head(df)
```

```
##   gene_accession_id gene_symbol mouse_strain mouse_life_stage
## 1      MGI:2444120      Spag4      C57BL      Early adult
## 2      MGI:2385619      Klhl12      C57BL Middle aged adult
## 3      MGI:1098826       Coq4      C57BL      Early adult
## 4      MGI:1917237      Spaca9      C57BL      Early adult
## 5      MGI:2448580      Myo3b      C57BL      Early adult
## 6      MGI:2155705      P2ry14      C57BL      Late adult
##   parameter_id
## 1  ESLIM_005_001_702
## 2  KMPCLA_CSD_008_001
## 3  M-G-P_006_001_026
## 4  IMPC_IMM_033_002
## 5  M-G-P_016_001_004
## 6  IMPC_GEO_009_002
##
##           parameter_name      pvalue
## 1              Lean/Body weight 0.70844160
## 2      Coat - color pattern - back 0.42109680
## 3      Fusion of vertebrae 0.08293449
## 4 NaÃ\u0083Ã~ve CD8+ T cells - % of live leukocytes (Panel A) 0.30371250
## 5              Haematocrit 0.17170630
## 6              Hemorrhage 0.85469090
```

QC all data

```
# Load the progress bar library
library(progress)
```

```

# Initialize counters for overall QC failures
overall_string_failure_counter <- 0
overall_pvalue_failure_counter <- 0

# Initialize a column to count the number of QC failures per row
df$qc_failure_count <- 0
df$qc_pvalue_failure_count <- 0

# Loop through all fields in SOP
for (i in 1:length(allFields)) {
  # Get the current field name
  field_name <- as.character(allFields[i])

  # Create a progress bar for the rows in the merged dataframe
  pb <- progress_bar$new(total = nrow(df), format = paste0("Checking ", field_name, " [:bar] :percent :"),
    # Initialize counters for QC failures for this field
    string_failure_counter <- 0
    pvalue_failure_counter <- 0

    # Check if the field's data type is "String"
    if (sop$dataType[i] == "String") {
      # Loop through rows of the merged dataframe
      for (row in 1:nrow(df)) {
        # Extract the current row
        row_data <- df[row, ]

        # Fetch the analysis ID (assuming column name is `analysis_id`)
        analysis_id <- if ("analysis_id" %in% colnames(df)) as.character(row_data$analysis_id) else "Unknown"

        # Perform QC check for the current string field
        if (field_name %in% colnames(df)) {
          field_value <- as.character(row_data[[field_name]])
          field_length <- nchar(field_value)

          if (is.na(field_value) || field_length < allMins[i] || field_length > allMaxs[i]) {
            print(paste("Row", row, "with Analysis ID", analysis_id,
              "has", field_name, "value", field_value,
              "with", field_length, "characters and failed QC"))
            cat("\n")
            string_failure_counter <- string_failure_counter + 1
            df$qc_failure_count[row] <- df$qc_failure_count[row] + 1
          }
        }
        # Update the progress bar
        pb$tick()
      }

      # Print summary for this string field
      print(paste("Field:", field_name, "- Total String QC failures:", string_failure_counter))
      overall_string_failure_counter <- overall_string_failure_counter + string_failure_counter
    } else {
      # Loop through rows for non-string fields to check p-value
      for (row in 1:nrow(df)) {

```

```

# Extract the current row
row_data <- df[row, ]

# Fetch the analysis ID (assuming column name is `analysis_id`)
analysis_id <- if ("analysis_id" %in% colnames(df)) as.character(row_data$analysis_id) else "Unknown"

# Perform QC check for numeric p-value fields
if (field_name %in% colnames(df)) {
  field_value <- as.numeric(row_data[[field_name]])

  if (is.na(field_value) || (!is.na(field_value) && (field_value < allMins[i] || field_value > allMaxs[i]))) {
    print(paste("Row", row, "with Analysis ID", analysis_id,
               "has", field_name, field_value, "and failed QC for p-value range"))
    df$qc_pvalue_failure_count[row] <- 1

    pvalue_failure_counter <- pvalue_failure_counter + 1
  }
}

# Update the progress bar
pb$tick()
}

# Print summary for this numeric field
print(paste("Field:", field_name, "- Total p-value QC failures:", pvalue_failure_counter))
overall_pvalue_failure_counter <- overall_pvalue_failure_counter + pvalue_failure_counter
}
}

```

```

## [1] "Field: analysis_id - Total String QC failures: 0"
## [1] "Field: gene_accession_id - Total String QC failures: 0"
## [1] "Field: gene_symbol - Total String QC failures: 0"
## [1] "Field: mouse_strain - Total String QC failures: 0"
## [1] "Field: mouse_life_stage - Total String QC failures: 0"
## [1] "Field: parameter_id - Total String QC failures: 0"
## [1] "Field: parameter_name - Total String QC failures: 0"
## [1] "Row 16 with Analysis ID Unknown has pvalue 1.451129 and failed QC for p-value range"
## [1] "Row 29 with Analysis ID Unknown has pvalue 1.293499 and failed QC for p-value range"
## [1] "Row 62 with Analysis ID Unknown has pvalue 1.214774 and failed QC for p-value range"
## [1] "Row 81 with Analysis ID Unknown has pvalue 1.074841 and failed QC for p-value range"
## [1] "Row 131 with Analysis ID Unknown has pvalue 1.093216 and failed QC for p-value range"
## [1] "Row 139 with Analysis ID Unknown has pvalue 1.346702 and failed QC for p-value range"
## [1] "Row 219 with Analysis ID Unknown has pvalue 1.359652 and failed QC for p-value range"
## [1] "Row 250 with Analysis ID Unknown has pvalue 1.490694 and failed QC for p-value range"
## [1] "Row 305 with Analysis ID Unknown has pvalue 1.111102 and failed QC for p-value range"
## [1] "Row 404 with Analysis ID Unknown has pvalue 1.298528 and failed QC for p-value range"
## [1] "Row 565 with Analysis ID Unknown has pvalue 1.329235 and failed QC for p-value range"
## [1] "Row 587 with Analysis ID Unknown has pvalue 1.17578 and failed QC for p-value range"
## [1] "Row 769 with Analysis ID Unknown has pvalue 1.108165 and failed QC for p-value range"
## [1] "Row 826 with Analysis ID Unknown has pvalue 1.358577 and failed QC for p-value range"
## [1] "Row 871 with Analysis ID Unknown has pvalue 1.164652 and failed QC for p-value range"
## [1] "Row 1075 with Analysis ID Unknown has pvalue 1.192367 and failed QC for p-value range"
## [1] "Row 1108 with Analysis ID Unknown has pvalue 1.240906 and failed QC for p-value range"
## [1] "Row 1149 with Analysis ID Unknown has pvalue 1.186733 and failed QC for p-value range"
## [1] "Row 1214 with Analysis ID Unknown has pvalue 1.140356 and failed QC for p-value range"
## [1] "Row 1362 with Analysis ID Unknown has pvalue 1.193052 and failed QC for p-value range"

```

```

## [1] "Row 1471 with Analysis ID Unknown has pvalue 1.431071 and failed QC for p-value range"
## [1] "Row 1478 with Analysis ID Unknown has pvalue 1.340391 and failed QC for p-value range"
## [1] "Row 1574 with Analysis ID Unknown has pvalue 1.214786 and failed QC for p-value range"
## [1] "Row 1741 with Analysis ID Unknown has pvalue 1.374082 and failed QC for p-value range"
## [1] "Row 1884 with Analysis ID Unknown has pvalue 1.240096 and failed QC for p-value range"
## [1] "Row 1885 with Analysis ID Unknown has pvalue 1.423468 and failed QC for p-value range"
## [1] "Row 2107 with Analysis ID Unknown has pvalue 1.336091 and failed QC for p-value range"
## [1] "Row 2178 with Analysis ID Unknown has pvalue 1.238157 and failed QC for p-value range"
## [1] "Row 2196 with Analysis ID Unknown has pvalue 1.12732 and failed QC for p-value range"
## [1] "Row 2198 with Analysis ID Unknown has pvalue 1.482533 and failed QC for p-value range"
## [1] "Row 2297 with Analysis ID Unknown has pvalue 1.415328 and failed QC for p-value range"
## [1] "Row 2345 with Analysis ID Unknown has pvalue 1.398666 and failed QC for p-value range"
## [1] "Row 2485 with Analysis ID Unknown has pvalue 1.001214 and failed QC for p-value range"
## [1] "Row 2803 with Analysis ID Unknown has pvalue 1.135117 and failed QC for p-value range"
## [1] "Row 2815 with Analysis ID Unknown has pvalue 1.12806 and failed QC for p-value range"
## [1] "Row 2831 with Analysis ID Unknown has pvalue 1.045002 and failed QC for p-value range"
## [1] "Row 2927 with Analysis ID Unknown has pvalue 1.13772 and failed QC for p-value range"
## [1] "Row 2934 with Analysis ID Unknown has pvalue 1.177927 and failed QC for p-value range"
## [1] "Row 3023 with Analysis ID Unknown has pvalue 1.167896 and failed QC for p-value range"
## [1] "Row 3209 with Analysis ID Unknown has pvalue 1.389811 and failed QC for p-value range"
## [1] "Row 3257 with Analysis ID Unknown has pvalue 1.492178 and failed QC for p-value range"
## [1] "Row 3353 with Analysis ID Unknown has pvalue 1.094167 and failed QC for p-value range"
## [1] "Row 3518 with Analysis ID Unknown has pvalue 1.133471 and failed QC for p-value range"
## [1] "Row 3757 with Analysis ID Unknown has pvalue 1.138522 and failed QC for p-value range"
## [1] "Row 3803 with Analysis ID Unknown has pvalue 1.196726 and failed QC for p-value range"
## [1] "Row 3815 with Analysis ID Unknown has pvalue 1.464556 and failed QC for p-value range"
## [1] "Row 3819 with Analysis ID Unknown has pvalue 1.420399 and failed QC for p-value range"
## [1] "Row 4283 with Analysis ID Unknown has pvalue 1.364462 and failed QC for p-value range"
## [1] "Row 4378 with Analysis ID Unknown has pvalue 1.082559 and failed QC for p-value range"
## [1] "Row 4410 with Analysis ID Unknown has pvalue 1.166341 and failed QC for p-value range"
## [1] "Row 4453 with Analysis ID Unknown has pvalue 1.485734 and failed QC for p-value range"
## [1] "Row 4543 with Analysis ID Unknown has pvalue 1.170213 and failed QC for p-value range"
## [1] "Row 4671 with Analysis ID Unknown has pvalue 1.491949 and failed QC for p-value range"
## [1] "Row 4690 with Analysis ID Unknown has pvalue 1.455536 and failed QC for p-value range"
## [1] "Row 4698 with Analysis ID Unknown has pvalue 1.203479 and failed QC for p-value range"
## [1] "Row 5165 with Analysis ID Unknown has pvalue 1.104793 and failed QC for p-value range"
## [1] "Row 5212 with Analysis ID Unknown has pvalue 1.322175 and failed QC for p-value range"
## [1] "Row 5423 with Analysis ID Unknown has pvalue 1.330073 and failed QC for p-value range"
## [1] "Row 5639 with Analysis ID Unknown has pvalue 1.153129 and failed QC for p-value range"
## [1] "Row 5673 with Analysis ID Unknown has pvalue 1.330162 and failed QC for p-value range"
## [1] "Row 5758 with Analysis ID Unknown has pvalue 1.098957 and failed QC for p-value range"
## [1] "Row 5782 with Analysis ID Unknown has pvalue 1.091535 and failed QC for p-value range"
## [1] "Row 5820 with Analysis ID Unknown has pvalue 1.305188 and failed QC for p-value range"
## [1] "Row 5931 with Analysis ID Unknown has pvalue 1.437787 and failed QC for p-value range"
## [1] "Row 6241 with Analysis ID Unknown has pvalue 1.003022 and failed QC for p-value range"
## [1] "Row 6321 with Analysis ID Unknown has pvalue 1.155725 and failed QC for p-value range"
## [1] "Row 6432 with Analysis ID Unknown has pvalue 1.225501 and failed QC for p-value range"
## [1] "Row 6600 with Analysis ID Unknown has pvalue 1.276245 and failed QC for p-value range"
## [1] "Row 6874 with Analysis ID Unknown has pvalue 1.340462 and failed QC for p-value range"
## [1] "Row 6929 with Analysis ID Unknown has pvalue 1.062744 and failed QC for p-value range"
## [1] "Row 7028 with Analysis ID Unknown has pvalue 1.275835 and failed QC for p-value range"
## [1] "Row 7210 with Analysis ID Unknown has pvalue 1.072779 and failed QC for p-value range"
## [1] "Row 7321 with Analysis ID Unknown has pvalue 1.020143 and failed QC for p-value range"
## [1] "Row 7461 with Analysis ID Unknown has pvalue 1.085852 and failed QC for p-value range"

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## [1] "Row 7466 with Analysis ID Unknown has pvalue 1.139846 and failed QC for p-value range"
## [1] "Row 7468 with Analysis ID Unknown has pvalue 1.223504 and failed QC for p-value range"
## [1] "Row 8024 with Analysis ID Unknown has pvalue 1.307082 and failed QC for p-value range"
## [1] "Row 8043 with Analysis ID Unknown has pvalue 1.155608 and failed QC for p-value range"
## [1] "Row 8050 with Analysis ID Unknown has pvalue 1.232629 and failed QC for p-value range"
## [1] "Row 8223 with Analysis ID Unknown has pvalue 1.327197 and failed QC for p-value range"
## [1] "Row 8420 with Analysis ID Unknown has pvalue 1.045929 and failed QC for p-value range"
## [1] "Row 8474 with Analysis ID Unknown has pvalue 1.029725 and failed QC for p-value range"
## [1] "Row 8789 with Analysis ID Unknown has pvalue 1.448021 and failed QC for p-value range"
## [1] "Row 8872 with Analysis ID Unknown has pvalue 1.387249 and failed QC for p-value range"
## [1] "Row 8928 with Analysis ID Unknown has pvalue 1.368306 and failed QC for p-value range"
## [1] "Row 9036 with Analysis ID Unknown has pvalue 1.180153 and failed QC for p-value range"
## [1] "Row 9179 with Analysis ID Unknown has pvalue 1.094814 and failed QC for p-value range"
## [1] "Row 9503 with Analysis ID Unknown has pvalue 1.479427 and failed QC for p-value range"
## [1] "Row 9572 with Analysis ID Unknown has pvalue 1.222681 and failed QC for p-value range"
## [1] "Row 9593 with Analysis ID Unknown has pvalue 1.113701 and failed QC for p-value range"
## [1] "Row 9711 with Analysis ID Unknown has pvalue 1.250679 and failed QC for p-value range"
## [1] "Row 9834 with Analysis ID Unknown has pvalue 1.047885 and failed QC for p-value range"
## [1] "Row 9856 with Analysis ID Unknown has pvalue 1.443419 and failed QC for p-value range"
## [1] "Row 9866 with Analysis ID Unknown has pvalue 1.335821 and failed QC for p-value range"
## [1] "Row 9876 with Analysis ID Unknown has pvalue 1.190125 and failed QC for p-value range"
## [1] "Row 10073 with Analysis ID Unknown has pvalue 1.028226 and failed QC for p-value range"
## [1] "Row 10079 with Analysis ID Unknown has pvalue 1.297578 and failed QC for p-value range"
## [1] "Row 10148 with Analysis ID Unknown has pvalue 1.472782 and failed QC for p-value range"
## [1] "Row 10220 with Analysis ID Unknown has pvalue 1.327019 and failed QC for p-value range"
## [1] "Row 10469 with Analysis ID Unknown has pvalue 1.185493 and failed QC for p-value range"
## [1] "Row 10497 with Analysis ID Unknown has pvalue 1.354344 and failed QC for p-value range"
## [1] "Row 10602 with Analysis ID Unknown has pvalue 1.479892 and failed QC for p-value range"
## [1] "Row 10719 with Analysis ID Unknown has pvalue 1.017677 and failed QC for p-value range"
## [1] "Row 10740 with Analysis ID Unknown has pvalue 1.0694 and failed QC for p-value range"
## [1] "Row 10863 with Analysis ID Unknown has pvalue 1.06645 and failed QC for p-value range"
## [1] "Row 10878 with Analysis ID Unknown has pvalue 1.441765 and failed QC for p-value range"
## [1] "Row 10903 with Analysis ID Unknown has pvalue 1.333577 and failed QC for p-value range"
## [1] "Row 10958 with Analysis ID Unknown has pvalue 1.203046 and failed QC for p-value range"
## [1] "Row 11004 with Analysis ID Unknown has pvalue 1.312176 and failed QC for p-value range"
## [1] "Row 11122 with Analysis ID Unknown has pvalue 1.255197 and failed QC for p-value range"
## [1] "Row 11301 with Analysis ID Unknown has pvalue 1.02074 and failed QC for p-value range"
## [1] "Row 11433 with Analysis ID Unknown has pvalue 1.141531 and failed QC for p-value range"
## [1] "Row 11458 with Analysis ID Unknown has pvalue 1.369681 and failed QC for p-value range"
## [1] "Row 11480 with Analysis ID Unknown has pvalue 1.365757 and failed QC for p-value range"
## [1] "Row 11548 with Analysis ID Unknown has pvalue 1.455811 and failed QC for p-value range"
## [1] "Row 11818 with Analysis ID Unknown has pvalue 1.402913 and failed QC for p-value range"
## [1] "Row 12008 with Analysis ID Unknown has pvalue 1.140941 and failed QC for p-value range"
## [1] "Row 12070 with Analysis ID Unknown has pvalue 1.437251 and failed QC for p-value range"
## [1] "Row 12072 with Analysis ID Unknown has pvalue 1.338969 and failed QC for p-value range"
## [1] "Row 12220 with Analysis ID Unknown has pvalue 1.051335 and failed QC for p-value range"
## [1] "Row 12297 with Analysis ID Unknown has pvalue 1.293248 and failed QC for p-value range"
## [1] "Row 12616 with Analysis ID Unknown has pvalue 1.165515 and failed QC for p-value range"
## [1] "Row 12668 with Analysis ID Unknown has pvalue 1.460506 and failed QC for p-value range"
## [1] "Row 12708 with Analysis ID Unknown has pvalue 1.023608 and failed QC for p-value range"
## [1] "Row 12741 with Analysis ID Unknown has pvalue 1.032697 and failed QC for p-value range"
## [1] "Row 12756 with Analysis ID Unknown has pvalue 1.056691 and failed QC for p-value range"
## [1] "Row 12781 with Analysis ID Unknown has pvalue 1.351596 and failed QC for p-value range"
## [1] "Row 12877 with Analysis ID Unknown has pvalue 1.182906 and failed QC for p-value range"

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## [1] "Row 13012 with Analysis ID Unknown has pvalue 1.150706 and failed QC for p-value range"
## [1] "Row 13041 with Analysis ID Unknown has pvalue 1.09421 and failed QC for p-value range"
## [1] "Row 13158 with Analysis ID Unknown has pvalue 1.161146 and failed QC for p-value range"
## [1] "Row 13199 with Analysis ID Unknown has pvalue 1.283372 and failed QC for p-value range"
## [1] "Row 13204 with Analysis ID Unknown has pvalue 1.311275 and failed QC for p-value range"
## [1] "Row 13227 with Analysis ID Unknown has pvalue 1.060474 and failed QC for p-value range"
## [1] "Row 13315 with Analysis ID Unknown has pvalue 1.350005 and failed QC for p-value range"
## [1] "Row 13478 with Analysis ID Unknown has pvalue 1.460365 and failed QC for p-value range"
## [1] "Row 13539 with Analysis ID Unknown has pvalue 1.040109 and failed QC for p-value range"
## [1] "Row 13542 with Analysis ID Unknown has pvalue 1.155854 and failed QC for p-value range"
## [1] "Row 13548 with Analysis ID Unknown has pvalue 1.139257 and failed QC for p-value range"
## [1] "Row 13559 with Analysis ID Unknown has pvalue 1.474017 and failed QC for p-value range"
## [1] "Row 13936 with Analysis ID Unknown has pvalue 1.071954 and failed QC for p-value range"
## [1] "Row 14009 with Analysis ID Unknown has pvalue 1.269265 and failed QC for p-value range"
## [1] "Row 14119 with Analysis ID Unknown has pvalue 1.171811 and failed QC for p-value range"
## [1] "Row 14151 with Analysis ID Unknown has pvalue 1.095663 and failed QC for p-value range"
## [1] "Row 14188 with Analysis ID Unknown has pvalue 1.469883 and failed QC for p-value range"
## [1] "Row 14265 with Analysis ID Unknown has pvalue 1.364693 and failed QC for p-value range"
## [1] "Row 14421 with Analysis ID Unknown has pvalue 1.01455 and failed QC for p-value range"
## [1] "Row 14466 with Analysis ID Unknown has pvalue 1.086772 and failed QC for p-value range"
## [1] "Row 14522 with Analysis ID Unknown has pvalue 1.283722 and failed QC for p-value range"
## [1] "Row 14558 with Analysis ID Unknown has pvalue 1.084068 and failed QC for p-value range"
## [1] "Row 14559 with Analysis ID Unknown has pvalue 1.387496 and failed QC for p-value range"
## [1] "Row 14675 with Analysis ID Unknown has pvalue 1.080025 and failed QC for p-value range"
## [1] "Row 14790 with Analysis ID Unknown has pvalue 1.326568 and failed QC for p-value range"
## [1] "Row 14809 with Analysis ID Unknown has pvalue 1.086347 and failed QC for p-value range"
## [1] "Row 14988 with Analysis ID Unknown has pvalue 1.490893 and failed QC for p-value range"
## [1] "Row 15017 with Analysis ID Unknown has pvalue 1.184593 and failed QC for p-value range"
## [1] "Row 15113 with Analysis ID Unknown has pvalue 1.046938 and failed QC for p-value range"
## [1] "Row 15272 with Analysis ID Unknown has pvalue 1.424337 and failed QC for p-value range"
## [1] "Row 15333 with Analysis ID Unknown has pvalue 1.378592 and failed QC for p-value range"
## [1] "Row 15636 with Analysis ID Unknown has pvalue 1.054706 and failed QC for p-value range"
## [1] "Row 15647 with Analysis ID Unknown has pvalue 1.285116 and failed QC for p-value range"
## [1] "Row 15670 with Analysis ID Unknown has pvalue 1.343068 and failed QC for p-value range"
## [1] "Row 15802 with Analysis ID Unknown has pvalue 1.285307 and failed QC for p-value range"
## [1] "Row 16095 with Analysis ID Unknown has pvalue 1.484167 and failed QC for p-value range"
## [1] "Row 16410 with Analysis ID Unknown has pvalue 1.380123 and failed QC for p-value range"
## [1] "Row 16430 with Analysis ID Unknown has pvalue 1.489699 and failed QC for p-value range"
## [1] "Row 16647 with Analysis ID Unknown has pvalue 1.386868 and failed QC for p-value range"
## [1] "Row 16692 with Analysis ID Unknown has pvalue 1.358859 and failed QC for p-value range"
## [1] "Row 16705 with Analysis ID Unknown has pvalue 1.243655 and failed QC for p-value range"
## [1] "Row 16791 with Analysis ID Unknown has pvalue 1.067534 and failed QC for p-value range"
## [1] "Row 16830 with Analysis ID Unknown has pvalue 1.3385 and failed QC for p-value range"
## [1] "Row 16859 with Analysis ID Unknown has pvalue 1.353442 and failed QC for p-value range"
## [1] "Row 16942 with Analysis ID Unknown has pvalue 1.117733 and failed QC for p-value range"
## [1] "Row 17402 with Analysis ID Unknown has pvalue 1.102111 and failed QC for p-value range"
## [1] "Row 17511 with Analysis ID Unknown has pvalue 1.149233 and failed QC for p-value range"
## [1] "Row 17569 with Analysis ID Unknown has pvalue 1.22214 and failed QC for p-value range"
## [1] "Row 17722 with Analysis ID Unknown has pvalue 1.036777 and failed QC for p-value range"
## [1] "Row 17959 with Analysis ID Unknown has pvalue 1.427951 and failed QC for p-value range"
## [1] "Row 17986 with Analysis ID Unknown has pvalue 1.220403 and failed QC for p-value range"
## [1] "Row 18056 with Analysis ID Unknown has pvalue 1.061425 and failed QC for p-value range"
## [1] "Row 18103 with Analysis ID Unknown has pvalue 1.443069 and failed QC for p-value range"
## [1] "Row 18311 with Analysis ID Unknown has pvalue 1.00235 and failed QC for p-value range"

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## [1] "Row 18534 with Analysis ID Unknown has pvalue 1.396776 and failed QC for p-value range"
## [1] "Row 18535 with Analysis ID Unknown has pvalue 1.251801 and failed QC for p-value range"
## [1] "Row 18542 with Analysis ID Unknown has pvalue 1.452703 and failed QC for p-value range"
## [1] "Row 18634 with Analysis ID Unknown has pvalue 1.286874 and failed QC for p-value range"
## [1] "Row 18646 with Analysis ID Unknown has pvalue 1.396686 and failed QC for p-value range"
## [1] "Row 19390 with Analysis ID Unknown has pvalue 1.355403 and failed QC for p-value range"
## [1] "Row 19442 with Analysis ID Unknown has pvalue 1.338816 and failed QC for p-value range"
## [1] "Row 19490 with Analysis ID Unknown has pvalue 1.132706 and failed QC for p-value range"
## [1] "Row 19509 with Analysis ID Unknown has pvalue 1.320223 and failed QC for p-value range"
## [1] "Row 19543 with Analysis ID Unknown has pvalue 1.407867 and failed QC for p-value range"
## [1] "Row 19555 with Analysis ID Unknown has pvalue 1.141809 and failed QC for p-value range"
## [1] "Row 19700 with Analysis ID Unknown has pvalue 1.440993 and failed QC for p-value range"
## [1] "Row 19730 with Analysis ID Unknown has pvalue 1.051024 and failed QC for p-value range"
## [1] "Row 19793 with Analysis ID Unknown has pvalue 1.46378 and failed QC for p-value range"
## [1] "Row 19803 with Analysis ID Unknown has pvalue 1.427395 and failed QC for p-value range"
## [1] "Row 19845 with Analysis ID Unknown has pvalue 1.496325 and failed QC for p-value range"
## [1] "Row 19999 with Analysis ID Unknown has pvalue 1.146822 and failed QC for p-value range"
## [1] "Row 20053 with Analysis ID Unknown has pvalue 1.137146 and failed QC for p-value range"
## [1] "Row 20132 with Analysis ID Unknown has pvalue 1.33346 and failed QC for p-value range"
## [1] "Row 20144 with Analysis ID Unknown has pvalue 1.081289 and failed QC for p-value range"
## [1] "Row 20341 with Analysis ID Unknown has pvalue 1.130612 and failed QC for p-value range"
## [1] "Row 20364 with Analysis ID Unknown has pvalue 1.048015 and failed QC for p-value range"
## [1] "Row 20396 with Analysis ID Unknown has pvalue 1.364938 and failed QC for p-value range"
## [1] "Row 20446 with Analysis ID Unknown has pvalue 1.482752 and failed QC for p-value range"
## [1] "Row 20457 with Analysis ID Unknown has pvalue 1.100101 and failed QC for p-value range"
## [1] "Row 20488 with Analysis ID Unknown has pvalue 1.410107 and failed QC for p-value range"
## [1] "Row 20536 with Analysis ID Unknown has pvalue 1.3632 and failed QC for p-value range"
## [1] "Row 20634 with Analysis ID Unknown has pvalue 1.046196 and failed QC for p-value range"
## [1] "Row 20658 with Analysis ID Unknown has pvalue 1.276578 and failed QC for p-value range"
## [1] "Row 20791 with Analysis ID Unknown has pvalue 1.245195 and failed QC for p-value range"
## [1] "Row 20982 with Analysis ID Unknown has pvalue 1.293876 and failed QC for p-value range"
## [1] "Row 20994 with Analysis ID Unknown has pvalue 1.135611 and failed QC for p-value range"
## [1] "Row 21138 with Analysis ID Unknown has pvalue 1.486705 and failed QC for p-value range"
## [1] "Row 21207 with Analysis ID Unknown has pvalue 1.021482 and failed QC for p-value range"
## [1] "Row 21269 with Analysis ID Unknown has pvalue 1.427309 and failed QC for p-value range"
## [1] "Row 21281 with Analysis ID Unknown has pvalue 1.422552 and failed QC for p-value range"
## [1] "Row 21351 with Analysis ID Unknown has pvalue 1.252716 and failed QC for p-value range"
## [1] "Row 21468 with Analysis ID Unknown has pvalue 1.157551 and failed QC for p-value range"
## [1] "Row 21490 with Analysis ID Unknown has pvalue 1.046171 and failed QC for p-value range"
## [1] "Row 21726 with Analysis ID Unknown has pvalue 1.435092 and failed QC for p-value range"
## [1] "Row 21727 with Analysis ID Unknown has pvalue 1.215748 and failed QC for p-value range"
## [1] "Row 21759 with Analysis ID Unknown has pvalue 1.223258 and failed QC for p-value range"
## [1] "Row 21903 with Analysis ID Unknown has pvalue 1.111021 and failed QC for p-value range"
## [1] "Row 21905 with Analysis ID Unknown has pvalue 1.371526 and failed QC for p-value range"
## [1] "Row 21963 with Analysis ID Unknown has pvalue 1.150951 and failed QC for p-value range"
## [1] "Row 22012 with Analysis ID Unknown has pvalue 1.206144 and failed QC for p-value range"
## [1] "Row 22115 with Analysis ID Unknown has pvalue 1.176912 and failed QC for p-value range"
## [1] "Row 22281 with Analysis ID Unknown has pvalue 1.364255 and failed QC for p-value range"
## [1] "Row 22380 with Analysis ID Unknown has pvalue 1.012353 and failed QC for p-value range"
## [1] "Row 22585 with Analysis ID Unknown has pvalue 1.199104 and failed QC for p-value range"
## [1] "Row 23046 with Analysis ID Unknown has pvalue 1.398601 and failed QC for p-value range"
## [1] "Row 23076 with Analysis ID Unknown has pvalue 1.016437 and failed QC for p-value range"
## [1] "Row 23431 with Analysis ID Unknown has pvalue 1.387341 and failed QC for p-value range"
## [1] "Row 23465 with Analysis ID Unknown has pvalue 1.455662 and failed QC for p-value range"

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## [1] "Row 23619 with Analysis ID Unknown has pvalue 1.379117 and failed QC for p-value range"
## [1] "Row 23646 with Analysis ID Unknown has pvalue 1.495075 and failed QC for p-value range"
## [1] "Row 23686 with Analysis ID Unknown has pvalue 1.23783 and failed QC for p-value range"
## [1] "Row 23790 with Analysis ID Unknown has pvalue 1.192735 and failed QC for p-value range"
## [1] "Row 23948 with Analysis ID Unknown has pvalue 1.375487 and failed QC for p-value range"
## [1] "Row 24118 with Analysis ID Unknown has pvalue 1.440284 and failed QC for p-value range"
## [1] "Row 24155 with Analysis ID Unknown has pvalue 1.158958 and failed QC for p-value range"
## [1] "Row 24277 with Analysis ID Unknown has pvalue 1.109803 and failed QC for p-value range"
## [1] "Row 24292 with Analysis ID Unknown has pvalue 1.130655 and failed QC for p-value range"
## [1] "Row 24306 with Analysis ID Unknown has pvalue 1.358353 and failed QC for p-value range"
## [1] "Row 24364 with Analysis ID Unknown has pvalue 1.404325 and failed QC for p-value range"
## [1] "Row 24498 with Analysis ID Unknown has pvalue 1.190307 and failed QC for p-value range"
## [1] "Row 24763 with Analysis ID Unknown has pvalue 1.237062 and failed QC for p-value range"
## [1] "Row 24896 with Analysis ID Unknown has pvalue 1.453551 and failed QC for p-value range"
## [1] "Row 24905 with Analysis ID Unknown has pvalue 1.479962 and failed QC for p-value range"
## [1] "Row 24928 with Analysis ID Unknown has pvalue 1.265518 and failed QC for p-value range"
## [1] "Row 25241 with Analysis ID Unknown has pvalue 1.393529 and failed QC for p-value range"
## [1] "Row 25280 with Analysis ID Unknown has pvalue 1.056647 and failed QC for p-value range"
## [1] "Row 25298 with Analysis ID Unknown has pvalue 1.381112 and failed QC for p-value range"
## [1] "Row 25479 with Analysis ID Unknown has pvalue 1.320443 and failed QC for p-value range"
## [1] "Row 25710 with Analysis ID Unknown has pvalue 1.11006 and failed QC for p-value range"
## [1] "Row 25720 with Analysis ID Unknown has pvalue 1.344664 and failed QC for p-value range"
## [1] "Row 25724 with Analysis ID Unknown has pvalue 1.480443 and failed QC for p-value range"
## [1] "Row 25827 with Analysis ID Unknown has pvalue 1.246519 and failed QC for p-value range"
## [1] "Row 25917 with Analysis ID Unknown has pvalue 1.471518 and failed QC for p-value range"
## [1] "Row 25979 with Analysis ID Unknown has pvalue 1.147755 and failed QC for p-value range"
## [1] "Row 26042 with Analysis ID Unknown has pvalue 1.01737 and failed QC for p-value range"
## [1] "Row 26050 with Analysis ID Unknown has pvalue 1.264375 and failed QC for p-value range"
## [1] "Row 26143 with Analysis ID Unknown has pvalue 1.370322 and failed QC for p-value range"
## [1] "Row 26168 with Analysis ID Unknown has pvalue 1.175641 and failed QC for p-value range"
## [1] "Row 26351 with Analysis ID Unknown has pvalue 1.129322 and failed QC for p-value range"
## [1] "Row 26374 with Analysis ID Unknown has pvalue 1.105456 and failed QC for p-value range"
## [1] "Row 26454 with Analysis ID Unknown has pvalue 1.207201 and failed QC for p-value range"
## [1] "Row 26583 with Analysis ID Unknown has pvalue 1.411571 and failed QC for p-value range"
## [1] "Row 26631 with Analysis ID Unknown has pvalue 1.450755 and failed QC for p-value range"
## [1] "Row 26953 with Analysis ID Unknown has pvalue 1.128025 and failed QC for p-value range"
## [1] "Row 26975 with Analysis ID Unknown has pvalue 1.410667 and failed QC for p-value range"
## [1] "Row 27022 with Analysis ID Unknown has pvalue 1.469386 and failed QC for p-value range"
## [1] "Row 27038 with Analysis ID Unknown has pvalue 1.193093 and failed QC for p-value range"
## [1] "Row 27355 with Analysis ID Unknown has pvalue 1.358962 and failed QC for p-value range"
## [1] "Row 27402 with Analysis ID Unknown has pvalue 1.224952 and failed QC for p-value range"
## [1] "Row 27541 with Analysis ID Unknown has pvalue 1.227466 and failed QC for p-value range"
## [1] "Row 27575 with Analysis ID Unknown has pvalue 1.386052 and failed QC for p-value range"
## [1] "Row 27682 with Analysis ID Unknown has pvalue 1.237811 and failed QC for p-value range"
## [1] "Row 27731 with Analysis ID Unknown has pvalue 1.443461 and failed QC for p-value range"
## [1] "Row 27738 with Analysis ID Unknown has pvalue 1.002362 and failed QC for p-value range"
## [1] "Row 27825 with Analysis ID Unknown has pvalue 1.392596 and failed QC for p-value range"
## [1] "Row 27895 with Analysis ID Unknown has pvalue 1.426019 and failed QC for p-value range"
## [1] "Row 28080 with Analysis ID Unknown has pvalue 1.125432 and failed QC for p-value range"
## [1] "Row 28165 with Analysis ID Unknown has pvalue 1.356464 and failed QC for p-value range"
## [1] "Row 28190 with Analysis ID Unknown has pvalue 1.166466 and failed QC for p-value range"
## [1] "Row 28331 with Analysis ID Unknown has pvalue 1.16403 and failed QC for p-value range"
## [1] "Row 28376 with Analysis ID Unknown has pvalue 1.058278 and failed QC for p-value range"
## [1] "Row 28380 with Analysis ID Unknown has pvalue 1.005852 and failed QC for p-value range"

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## [1] "Row 28439 with Analysis ID Unknown has pvalue 1.360003 and failed QC for p-value range"
## [1] "Row 28491 with Analysis ID Unknown has pvalue 1.130909 and failed QC for p-value range"
## [1] "Row 28500 with Analysis ID Unknown has pvalue 1.189785 and failed QC for p-value range"
## [1] "Row 28575 with Analysis ID Unknown has pvalue 1.353413 and failed QC for p-value range"
## [1] "Row 28888 with Analysis ID Unknown has pvalue 1.409235 and failed QC for p-value range"
## [1] "Row 28918 with Analysis ID Unknown has pvalue 1.34315 and failed QC for p-value range"
## [1] "Row 28927 with Analysis ID Unknown has pvalue 1.478962 and failed QC for p-value range"
## [1] "Row 29207 with Analysis ID Unknown has pvalue 1.106259 and failed QC for p-value range"
## [1] "Row 29337 with Analysis ID Unknown has pvalue 1.235517 and failed QC for p-value range"
## [1] "Row 29546 with Analysis ID Unknown has pvalue 1.363878 and failed QC for p-value range"
## [1] "Row 29695 with Analysis ID Unknown has pvalue 1.184675 and failed QC for p-value range"
## [1] "Row 29786 with Analysis ID Unknown has pvalue 1.337791 and failed QC for p-value range"
## [1] "Row 29838 with Analysis ID Unknown has pvalue 1.490828 and failed QC for p-value range"
## [1] "Row 30093 with Analysis ID Unknown has pvalue 1.459812 and failed QC for p-value range"
## [1] "Row 30133 with Analysis ID Unknown has pvalue 1.182778 and failed QC for p-value range"
## [1] "Row 30156 with Analysis ID Unknown has pvalue 1.30025 and failed QC for p-value range"
## [1] "Row 30187 with Analysis ID Unknown has pvalue 1.389478 and failed QC for p-value range"
## [1] "Row 30190 with Analysis ID Unknown has pvalue 1.052828 and failed QC for p-value range"
## [1] "Row 30194 with Analysis ID Unknown has pvalue 1.098455 and failed QC for p-value range"
## [1] "Row 30230 with Analysis ID Unknown has pvalue 1.425815 and failed QC for p-value range"
## [1] "Row 30439 with Analysis ID Unknown has pvalue 1.164961 and failed QC for p-value range"
## [1] "Row 30441 with Analysis ID Unknown has pvalue 1.261218 and failed QC for p-value range"
## [1] "Row 30500 with Analysis ID Unknown has pvalue 1.271777 and failed QC for p-value range"
## [1] "Row 30590 with Analysis ID Unknown has pvalue 1.036393 and failed QC for p-value range"
## [1] "Row 30720 with Analysis ID Unknown has pvalue 1.350475 and failed QC for p-value range"
## [1] "Row 30863 with Analysis ID Unknown has pvalue 1.256882 and failed QC for p-value range"
## [1] "Row 30899 with Analysis ID Unknown has pvalue 1.059689 and failed QC for p-value range"
## [1] "Row 31136 with Analysis ID Unknown has pvalue 1.293579 and failed QC for p-value range"
## [1] "Row 31339 with Analysis ID Unknown has pvalue 1.058932 and failed QC for p-value range"
## [1] "Row 31454 with Analysis ID Unknown has pvalue 1.043348 and failed QC for p-value range"
## [1] "Row 31495 with Analysis ID Unknown has pvalue 1.215496 and failed QC for p-value range"
## [1] "Row 31787 with Analysis ID Unknown has pvalue 1.056823 and failed QC for p-value range"
## [1] "Row 31790 with Analysis ID Unknown has pvalue 1.428476 and failed QC for p-value range"
## [1] "Row 31799 with Analysis ID Unknown has pvalue 1.444256 and failed QC for p-value range"
## [1] "Row 31910 with Analysis ID Unknown has pvalue 1.341208 and failed QC for p-value range"
## [1] "Row 31957 with Analysis ID Unknown has pvalue 1.137906 and failed QC for p-value range"
## [1] "Row 31996 with Analysis ID Unknown has pvalue 1.139942 and failed QC for p-value range"
## [1] "Row 31999 with Analysis ID Unknown has pvalue 1.48729 and failed QC for p-value range"
## [1] "Row 32062 with Analysis ID Unknown has pvalue 1.467327 and failed QC for p-value range"
## [1] "Row 32093 with Analysis ID Unknown has pvalue 1.012344 and failed QC for p-value range"
## [1] "Row 32193 with Analysis ID Unknown has pvalue 1.320811 and failed QC for p-value range"
## [1] "Row 32223 with Analysis ID Unknown has pvalue 1.146472 and failed QC for p-value range"
## [1] "Row 32276 with Analysis ID Unknown has pvalue 1.433525 and failed QC for p-value range"
## [1] "Row 32422 with Analysis ID Unknown has pvalue 1.293887 and failed QC for p-value range"
## [1] "Row 32434 with Analysis ID Unknown has pvalue 1.026895 and failed QC for p-value range"
## [1] "Row 32490 with Analysis ID Unknown has pvalue 1.393892 and failed QC for p-value range"
## [1] "Row 32504 with Analysis ID Unknown has pvalue 1.289731 and failed QC for p-value range"
## [1] "Row 32564 with Analysis ID Unknown has pvalue 1.17336 and failed QC for p-value range"
## [1] "Row 32600 with Analysis ID Unknown has pvalue 1.460036 and failed QC for p-value range"
## [1] "Row 32618 with Analysis ID Unknown has pvalue 1.389274 and failed QC for p-value range"
## [1] "Row 32782 with Analysis ID Unknown has pvalue 1.006335 and failed QC for p-value range"
## [1] "Row 32785 with Analysis ID Unknown has pvalue 1.226416 and failed QC for p-value range"
## [1] "Row 32964 with Analysis ID Unknown has pvalue 1.32243 and failed QC for p-value range"
## [1] "Row 32998 with Analysis ID Unknown has pvalue 1.342022 and failed QC for p-value range"

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## [1] "Row 32999 with Analysis ID Unknown has pvalue 1.312058 and failed QC for p-value range"
## [1] "Row 33002 with Analysis ID Unknown has pvalue 1.497077 and failed QC for p-value range"
## [1] "Row 33064 with Analysis ID Unknown has pvalue 1.317024 and failed QC for p-value range"
## [1] "Row 33124 with Analysis ID Unknown has pvalue 1.20288 and failed QC for p-value range"
## [1] "Row 33168 with Analysis ID Unknown has pvalue 1.417423 and failed QC for p-value range"
## [1] "Row 33292 with Analysis ID Unknown has pvalue 1.435514 and failed QC for p-value range"
## [1] "Row 33293 with Analysis ID Unknown has pvalue 1.211154 and failed QC for p-value range"
## [1] "Row 33346 with Analysis ID Unknown has pvalue 1.073395 and failed QC for p-value range"
## [1] "Row 33365 with Analysis ID Unknown has pvalue 1.296339 and failed QC for p-value range"
## [1] "Row 33421 with Analysis ID Unknown has pvalue 1.249151 and failed QC for p-value range"
## [1] "Row 33498 with Analysis ID Unknown has pvalue 1.023796 and failed QC for p-value range"
## [1] "Row 33613 with Analysis ID Unknown has pvalue 1.242563 and failed QC for p-value range"
## [1] "Row 33658 with Analysis ID Unknown has pvalue 1.13317 and failed QC for p-value range"
## [1] "Row 33719 with Analysis ID Unknown has pvalue 1.44608 and failed QC for p-value range"
## [1] "Row 33818 with Analysis ID Unknown has pvalue 1.192784 and failed QC for p-value range"
## [1] "Row 34035 with Analysis ID Unknown has pvalue 1.073371 and failed QC for p-value range"
## [1] "Row 34180 with Analysis ID Unknown has pvalue 1.193602 and failed QC for p-value range"
## [1] "Row 34269 with Analysis ID Unknown has pvalue 1.43992 and failed QC for p-value range"
## [1] "Row 34814 with Analysis ID Unknown has pvalue 1.242276 and failed QC for p-value range"
## [1] "Row 34873 with Analysis ID Unknown has pvalue 1.332411 and failed QC for p-value range"
## [1] "Row 34954 with Analysis ID Unknown has pvalue 1.486327 and failed QC for p-value range"
## [1] "Row 35097 with Analysis ID Unknown has pvalue 1.450554 and failed QC for p-value range"
## [1] "Row 35101 with Analysis ID Unknown has pvalue 1.432646 and failed QC for p-value range"
## [1] "Row 35202 with Analysis ID Unknown has pvalue 1.155564 and failed QC for p-value range"
## [1] "Row 35219 with Analysis ID Unknown has pvalue 1.352841 and failed QC for p-value range"
## [1] "Row 35396 with Analysis ID Unknown has pvalue 1.485749 and failed QC for p-value range"
## [1] "Row 35417 with Analysis ID Unknown has pvalue 1.088824 and failed QC for p-value range"
## [1] "Row 35552 with Analysis ID Unknown has pvalue 1.170104 and failed QC for p-value range"
## [1] "Row 35567 with Analysis ID Unknown has pvalue 1.31082 and failed QC for p-value range"
## [1] "Row 35580 with Analysis ID Unknown has pvalue 1.038862 and failed QC for p-value range"
## [1] "Row 35924 with Analysis ID Unknown has pvalue 1.130849 and failed QC for p-value range"
## [1] "Row 35945 with Analysis ID Unknown has pvalue 1.446616 and failed QC for p-value range"
## [1] "Row 35971 with Analysis ID Unknown has pvalue 1.107214 and failed QC for p-value range"
## [1] "Row 36024 with Analysis ID Unknown has pvalue 1.303508 and failed QC for p-value range"
## [1] "Row 36133 with Analysis ID Unknown has pvalue 1.037826 and failed QC for p-value range"
## [1] "Row 36211 with Analysis ID Unknown has pvalue 1.014876 and failed QC for p-value range"
## [1] "Row 36267 with Analysis ID Unknown has pvalue 1.113581 and failed QC for p-value range"
## [1] "Row 36340 with Analysis ID Unknown has pvalue 1.286719 and failed QC for p-value range"
## [1] "Row 36365 with Analysis ID Unknown has pvalue 1.028325 and failed QC for p-value range"
## [1] "Row 36473 with Analysis ID Unknown has pvalue 1.299868 and failed QC for p-value range"
## [1] "Row 36608 with Analysis ID Unknown has pvalue 1.268406 and failed QC for p-value range"
## [1] "Row 36760 with Analysis ID Unknown has pvalue 1.19372 and failed QC for p-value range"
## [1] "Row 37040 with Analysis ID Unknown has pvalue 1.338376 and failed QC for p-value range"
## [1] "Row 37292 with Analysis ID Unknown has pvalue 1.044666 and failed QC for p-value range"
## [1] "Row 37412 with Analysis ID Unknown has pvalue 1.044728 and failed QC for p-value range"
## [1] "Row 37447 with Analysis ID Unknown has pvalue 1.11286 and failed QC for p-value range"
## [1] "Row 37515 with Analysis ID Unknown has pvalue 1.006381 and failed QC for p-value range"
## [1] "Row 37549 with Analysis ID Unknown has pvalue 1.320407 and failed QC for p-value range"
## [1] "Row 37732 with Analysis ID Unknown has pvalue 1.147216 and failed QC for p-value range"
## [1] "Row 37800 with Analysis ID Unknown has pvalue 1.09754 and failed QC for p-value range"
## [1] "Row 37891 with Analysis ID Unknown has pvalue 1.42198 and failed QC for p-value range"
## [1] "Row 37916 with Analysis ID Unknown has pvalue 1.419156 and failed QC for p-value range"
## [1] "Row 37954 with Analysis ID Unknown has pvalue 1.078999 and failed QC for p-value range"
## [1] "Row 38152 with Analysis ID Unknown has pvalue 1.20797 and failed QC for p-value range"

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## [1] "Row 38164 with Analysis ID Unknown has pvalue 1.437257 and failed QC for p-value range"
## [1] "Row 38198 with Analysis ID Unknown has pvalue 1.396517 and failed QC for p-value range"
## [1] "Row 38247 with Analysis ID Unknown has pvalue 1.288663 and failed QC for p-value range"
## [1] "Row 38354 with Analysis ID Unknown has pvalue 1.068687 and failed QC for p-value range"
## [1] "Row 38359 with Analysis ID Unknown has pvalue 1.09194 and failed QC for p-value range"
## [1] "Row 38401 with Analysis ID Unknown has pvalue 1.182759 and failed QC for p-value range"
## [1] "Row 38630 with Analysis ID Unknown has pvalue 1.137715 and failed QC for p-value range"
## [1] "Row 38656 with Analysis ID Unknown has pvalue 1.330507 and failed QC for p-value range"
## [1] "Row 38724 with Analysis ID Unknown has pvalue 1.303221 and failed QC for p-value range"
## [1] "Row 38798 with Analysis ID Unknown has pvalue 1.221103 and failed QC for p-value range"
## [1] "Row 38946 with Analysis ID Unknown has pvalue 1.493176 and failed QC for p-value range"
## [1] "Row 38947 with Analysis ID Unknown has pvalue 1.383639 and failed QC for p-value range"
## [1] "Row 38959 with Analysis ID Unknown has pvalue 1.063184 and failed QC for p-value range"
## [1] "Row 38974 with Analysis ID Unknown has pvalue 1.350851 and failed QC for p-value range"
## [1] "Row 39104 with Analysis ID Unknown has pvalue 1.188979 and failed QC for p-value range"
## [1] "Row 39108 with Analysis ID Unknown has pvalue 1.1516 and failed QC for p-value range"
## [1] "Row 39139 with Analysis ID Unknown has pvalue 1.327107 and failed QC for p-value range"
## [1] "Row 39196 with Analysis ID Unknown has pvalue 1.140583 and failed QC for p-value range"
## [1] "Row 39262 with Analysis ID Unknown has pvalue 1.176746 and failed QC for p-value range"
## [1] "Row 39278 with Analysis ID Unknown has pvalue 1.095488 and failed QC for p-value range"
## [1] "Row 39311 with Analysis ID Unknown has pvalue 1.15338 and failed QC for p-value range"
## [1] "Row 39495 with Analysis ID Unknown has pvalue 1.00539 and failed QC for p-value range"
## [1] "Row 39518 with Analysis ID Unknown has pvalue 1.041852 and failed QC for p-value range"
## [1] "Row 39584 with Analysis ID Unknown has pvalue 1.118417 and failed QC for p-value range"
## [1] "Row 39696 with Analysis ID Unknown has pvalue 1.223786 and failed QC for p-value range"
## [1] "Row 39751 with Analysis ID Unknown has pvalue 1.029092 and failed QC for p-value range"
## [1] "Row 39880 with Analysis ID Unknown has pvalue 1.026117 and failed QC for p-value range"
## [1] "Row 39978 with Analysis ID Unknown has pvalue 1.102389 and failed QC for p-value range"
## [1] "Row 40007 with Analysis ID Unknown has pvalue 1.430029 and failed QC for p-value range"
## [1] "Row 40084 with Analysis ID Unknown has pvalue 1.429626 and failed QC for p-value range"
## [1] "Row 40107 with Analysis ID Unknown has pvalue 1.197584 and failed QC for p-value range"
## [1] "Row 40227 with Analysis ID Unknown has pvalue 1.199565 and failed QC for p-value range"
## [1] "Row 40249 with Analysis ID Unknown has pvalue 1.470999 and failed QC for p-value range"
## [1] "Row 40363 with Analysis ID Unknown has pvalue 1.464651 and failed QC for p-value range"
## [1] "Row 40622 with Analysis ID Unknown has pvalue 1.226515 and failed QC for p-value range"
## [1] "Row 40725 with Analysis ID Unknown has pvalue 1.253637 and failed QC for p-value range"
## [1] "Row 40788 with Analysis ID Unknown has pvalue 1.390128 and failed QC for p-value range"
## [1] "Row 40862 with Analysis ID Unknown has pvalue 1.082968 and failed QC for p-value range"
## [1] "Row 40899 with Analysis ID Unknown has pvalue 1.1006 and failed QC for p-value range"
## [1] "Row 40953 with Analysis ID Unknown has pvalue 1.492395 and failed QC for p-value range"
## [1] "Row 41062 with Analysis ID Unknown has pvalue 1.167165 and failed QC for p-value range"
## [1] "Row 41069 with Analysis ID Unknown has pvalue 1.426786 and failed QC for p-value range"
## [1] "Row 41186 with Analysis ID Unknown has pvalue 1.09292 and failed QC for p-value range"
## [1] "Row 41234 with Analysis ID Unknown has pvalue 1.426164 and failed QC for p-value range"
## [1] "Row 41386 with Analysis ID Unknown has pvalue 1.045316 and failed QC for p-value range"
## [1] "Row 41408 with Analysis ID Unknown has pvalue 1.398054 and failed QC for p-value range"
## [1] "Row 41414 with Analysis ID Unknown has pvalue 1.41966 and failed QC for p-value range"
## [1] "Row 41456 with Analysis ID Unknown has pvalue 1.408408 and failed QC for p-value range"
## [1] "Row 41553 with Analysis ID Unknown has pvalue 1.037671 and failed QC for p-value range"
## [1] "Row 41568 with Analysis ID Unknown has pvalue 1.131188 and failed QC for p-value range"
## [1] "Row 41629 with Analysis ID Unknown has pvalue 1.340789 and failed QC for p-value range"
## [1] "Row 41758 with Analysis ID Unknown has pvalue 1.336878 and failed QC for p-value range"
## [1] "Row 41799 with Analysis ID Unknown has pvalue 1.138143 and failed QC for p-value range"
## [1] "Row 41941 with Analysis ID Unknown has pvalue 1.330038 and failed QC for p-value range"

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## [1] "Row 42044 with Analysis ID Unknown has pvalue 1.259546 and failed QC for p-value range"
## [1] "Row 42302 with Analysis ID Unknown has pvalue 1.095291 and failed QC for p-value range"
## [1] "Row 42350 with Analysis ID Unknown has pvalue 1.246203 and failed QC for p-value range"
## [1] "Row 42593 with Analysis ID Unknown has pvalue 1.062411 and failed QC for p-value range"
## [1] "Row 42799 with Analysis ID Unknown has pvalue 1.242028 and failed QC for p-value range"
## [1] "Row 42872 with Analysis ID Unknown has pvalue 1.085463 and failed QC for p-value range"
## [1] "Row 42925 with Analysis ID Unknown has pvalue 1.167061 and failed QC for p-value range"
## [1] "Row 42988 with Analysis ID Unknown has pvalue 1.188759 and failed QC for p-value range"
## [1] "Row 43135 with Analysis ID Unknown has pvalue 1.476347 and failed QC for p-value range"
## [1] "Row 43147 with Analysis ID Unknown has pvalue 1.201948 and failed QC for p-value range"
## [1] "Row 43176 with Analysis ID Unknown has pvalue 1.019601 and failed QC for p-value range"
## [1] "Row 43212 with Analysis ID Unknown has pvalue 1.313667 and failed QC for p-value range"
## [1] "Row 43291 with Analysis ID Unknown has pvalue 1.3055 and failed QC for p-value range"
## [1] "Row 43382 with Analysis ID Unknown has pvalue 1.07231 and failed QC for p-value range"
## [1] "Row 43386 with Analysis ID Unknown has pvalue 1.070426 and failed QC for p-value range"
## [1] "Row 43409 with Analysis ID Unknown has pvalue 1.393076 and failed QC for p-value range"
## [1] "Row 43439 with Analysis ID Unknown has pvalue 1.034726 and failed QC for p-value range"
## [1] "Row 43556 with Analysis ID Unknown has pvalue 1.149559 and failed QC for p-value range"
## [1] "Row 43672 with Analysis ID Unknown has pvalue 1.332365 and failed QC for p-value range"
## [1] "Row 43854 with Analysis ID Unknown has pvalue 1.370097 and failed QC for p-value range"
## [1] "Row 43962 with Analysis ID Unknown has pvalue 1.043175 and failed QC for p-value range"
## [1] "Row 43970 with Analysis ID Unknown has pvalue 1.490848 and failed QC for p-value range"
## [1] "Row 44133 with Analysis ID Unknown has pvalue 1.057135 and failed QC for p-value range"
## [1] "Row 44472 with Analysis ID Unknown has pvalue 1.00994 and failed QC for p-value range"
## [1] "Row 44614 with Analysis ID Unknown has pvalue 1.267146 and failed QC for p-value range"
## [1] "Row 44622 with Analysis ID Unknown has pvalue 1.088868 and failed QC for p-value range"
## [1] "Row 44626 with Analysis ID Unknown has pvalue 1.159404 and failed QC for p-value range"
## [1] "Row 44767 with Analysis ID Unknown has pvalue 1.115425 and failed QC for p-value range"
## [1] "Row 44805 with Analysis ID Unknown has pvalue 1.303375 and failed QC for p-value range"
## [1] "Row 44830 with Analysis ID Unknown has pvalue 1.480232 and failed QC for p-value range"
## [1] "Row 44847 with Analysis ID Unknown has pvalue 1.114453 and failed QC for p-value range"
## [1] "Row 45013 with Analysis ID Unknown has pvalue 1.34757 and failed QC for p-value range"
## [1] "Row 45095 with Analysis ID Unknown has pvalue 1.41735 and failed QC for p-value range"
## [1] "Row 45186 with Analysis ID Unknown has pvalue 1.186525 and failed QC for p-value range"
## [1] "Row 45322 with Analysis ID Unknown has pvalue 1.170841 and failed QC for p-value range"
## [1] "Row 45477 with Analysis ID Unknown has pvalue 1.313518 and failed QC for p-value range"
## [1] "Row 45707 with Analysis ID Unknown has pvalue 1.413275 and failed QC for p-value range"
## [1] "Row 45903 with Analysis ID Unknown has pvalue 1.019084 and failed QC for p-value range"
## [1] "Row 45921 with Analysis ID Unknown has pvalue 1.386656 and failed QC for p-value range"
## [1] "Row 46013 with Analysis ID Unknown has pvalue 1.161104 and failed QC for p-value range"
## [1] "Row 46105 with Analysis ID Unknown has pvalue 1.243241 and failed QC for p-value range"
## [1] "Row 46114 with Analysis ID Unknown has pvalue 1.170374 and failed QC for p-value range"
## [1] "Row 46152 with Analysis ID Unknown has pvalue 1.375769 and failed QC for p-value range"
## [1] "Row 46336 with Analysis ID Unknown has pvalue 1.126776 and failed QC for p-value range"
## [1] "Row 46487 with Analysis ID Unknown has pvalue 1.332058 and failed QC for p-value range"
## [1] "Row 46491 with Analysis ID Unknown has pvalue 1.294607 and failed QC for p-value range"
## [1] "Row 46623 with Analysis ID Unknown has pvalue 1.059412 and failed QC for p-value range"
## [1] "Row 46628 with Analysis ID Unknown has pvalue 1.03076 and failed QC for p-value range"
## [1] "Row 46743 with Analysis ID Unknown has pvalue 1.376952 and failed QC for p-value range"
## [1] "Row 46830 with Analysis ID Unknown has pvalue 1.137722 and failed QC for p-value range"
## [1] "Row 46990 with Analysis ID Unknown has pvalue 1.3251 and failed QC for p-value range"
## [1] "Row 47045 with Analysis ID Unknown has pvalue 1.254403 and failed QC for p-value range"
## [1] "Row 47122 with Analysis ID Unknown has pvalue 1.462415 and failed QC for p-value range"
## [1] "Row 47339 with Analysis ID Unknown has pvalue 1.268287 and failed QC for p-value range"

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## [1] "Row 47408 with Analysis ID Unknown has pvalue 1.234971 and failed QC for p-value range"
## [1] "Row 47674 with Analysis ID Unknown has pvalue 1.19973 and failed QC for p-value range"
## [1] "Row 47754 with Analysis ID Unknown has pvalue 1.006646 and failed QC for p-value range"
## [1] "Row 47876 with Analysis ID Unknown has pvalue 1.313484 and failed QC for p-value range"
## [1] "Row 47989 with Analysis ID Unknown has pvalue 1.319337 and failed QC for p-value range"
## [1] "Row 48135 with Analysis ID Unknown has pvalue 1.393961 and failed QC for p-value range"
## [1] "Row 48523 with Analysis ID Unknown has pvalue 1.356983 and failed QC for p-value range"
## [1] "Row 48575 with Analysis ID Unknown has pvalue 1.01645 and failed QC for p-value range"
## [1] "Row 48590 with Analysis ID Unknown has pvalue 1.118298 and failed QC for p-value range"
## [1] "Row 48647 with Analysis ID Unknown has pvalue 1.075046 and failed QC for p-value range"
## [1] "Row 48798 with Analysis ID Unknown has pvalue 1.021763 and failed QC for p-value range"
## [1] "Row 48873 with Analysis ID Unknown has pvalue 1.469565 and failed QC for p-value range"
## [1] "Row 48879 with Analysis ID Unknown has pvalue 1.229469 and failed QC for p-value range"
## [1] "Row 48951 with Analysis ID Unknown has pvalue 1.17021 and failed QC for p-value range"
## [1] "Row 49357 with Analysis ID Unknown has pvalue 1.097669 and failed QC for p-value range"
## [1] "Row 49440 with Analysis ID Unknown has pvalue 1.088155 and failed QC for p-value range"
## [1] "Row 49491 with Analysis ID Unknown has pvalue 1.450274 and failed QC for p-value range"
## [1] "Row 49773 with Analysis ID Unknown has pvalue 1.177235 and failed QC for p-value range"
## [1] "Row 49776 with Analysis ID Unknown has pvalue 1.207597 and failed QC for p-value range"
## [1] "Row 49907 with Analysis ID Unknown has pvalue 1.353878 and failed QC for p-value range"
## [1] "Row 49968 with Analysis ID Unknown has pvalue 1.177126 and failed QC for p-value range"
## [1] "Row 49979 with Analysis ID Unknown has pvalue 1.006002 and failed QC for p-value range"
## [1] "Row 50142 with Analysis ID Unknown has pvalue 1.044322 and failed QC for p-value range"
## [1] "Row 50239 with Analysis ID Unknown has pvalue 1.341378 and failed QC for p-value range"
## [1] "Row 50284 with Analysis ID Unknown has pvalue 1.160936 and failed QC for p-value range"
## [1] "Row 50387 with Analysis ID Unknown has pvalue 1.436049 and failed QC for p-value range"
## [1] "Row 50475 with Analysis ID Unknown has pvalue 1.410742 and failed QC for p-value range"
## [1] "Row 50616 with Analysis ID Unknown has pvalue 1.113468 and failed QC for p-value range"
## [1] "Row 50657 with Analysis ID Unknown has pvalue 1.046151 and failed QC for p-value range"
## [1] "Row 50663 with Analysis ID Unknown has pvalue 1.179339 and failed QC for p-value range"
## [1] "Row 50928 with Analysis ID Unknown has pvalue 1.256554 and failed QC for p-value range"
## [1] "Row 51086 with Analysis ID Unknown has pvalue 1.045183 and failed QC for p-value range"
## [1] "Row 51443 with Analysis ID Unknown has pvalue 1.169477 and failed QC for p-value range"
## [1] "Row 51489 with Analysis ID Unknown has pvalue 1.188598 and failed QC for p-value range"
## [1] "Row 51496 with Analysis ID Unknown has pvalue 1.434566 and failed QC for p-value range"
## [1] "Row 51498 with Analysis ID Unknown has pvalue 1.257144 and failed QC for p-value range"
## [1] "Row 51522 with Analysis ID Unknown has pvalue 1.083885 and failed QC for p-value range"
## [1] "Row 51684 with Analysis ID Unknown has pvalue 1.357987 and failed QC for p-value range"
## [1] "Row 51794 with Analysis ID Unknown has pvalue 1.485546 and failed QC for p-value range"
## [1] "Row 51886 with Analysis ID Unknown has pvalue 1.35162 and failed QC for p-value range"
## [1] "Row 52105 with Analysis ID Unknown has pvalue 1.12364 and failed QC for p-value range"
## [1] "Row 52274 with Analysis ID Unknown has pvalue 1.002138 and failed QC for p-value range"
## [1] "Row 52421 with Analysis ID Unknown has pvalue 1.490861 and failed QC for p-value range"
## [1] "Row 52423 with Analysis ID Unknown has pvalue 1.318242 and failed QC for p-value range"
## [1] "Row 52444 with Analysis ID Unknown has pvalue 1.29266 and failed QC for p-value range"
## [1] "Row 52692 with Analysis ID Unknown has pvalue 1.173805 and failed QC for p-value range"
## [1] "Row 52715 with Analysis ID Unknown has pvalue 1.458119 and failed QC for p-value range"
## [1] "Row 52767 with Analysis ID Unknown has pvalue 1.238276 and failed QC for p-value range"
## [1] "Row 52775 with Analysis ID Unknown has pvalue 1.194218 and failed QC for p-value range"
## [1] "Row 52969 with Analysis ID Unknown has pvalue 1.238963 and failed QC for p-value range"
## [1] "Row 53055 with Analysis ID Unknown has pvalue 1.039477 and failed QC for p-value range"
## [1] "Row 53279 with Analysis ID Unknown has pvalue 1.209251 and failed QC for p-value range"
## [1] "Row 53302 with Analysis ID Unknown has pvalue 1.449154 and failed QC for p-value range"
## [1] "Row 53305 with Analysis ID Unknown has pvalue 1.340892 and failed QC for p-value range"

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## [1] "Row 53323 with Analysis ID Unknown has pvalue 1.001203 and failed QC for p-value range"
## [1] "Row 53406 with Analysis ID Unknown has pvalue 1.323565 and failed QC for p-value range"
## [1] "Row 53428 with Analysis ID Unknown has pvalue 1.031763 and failed QC for p-value range"
## [1] "Row 53442 with Analysis ID Unknown has pvalue 1.368446 and failed QC for p-value range"
## [1] "Row 53681 with Analysis ID Unknown has pvalue 1.33646 and failed QC for p-value range"
## [1] "Row 53732 with Analysis ID Unknown has pvalue 1.232451 and failed QC for p-value range"
## [1] "Row 53751 with Analysis ID Unknown has pvalue 1.286539 and failed QC for p-value range"
## [1] "Row 53762 with Analysis ID Unknown has pvalue 1.253991 and failed QC for p-value range"
## [1] "Row 53900 with Analysis ID Unknown has pvalue 1.407412 and failed QC for p-value range"
## [1] "Row 53929 with Analysis ID Unknown has pvalue 1.491594 and failed QC for p-value range"
## [1] "Row 54076 with Analysis ID Unknown has pvalue 1.173113 and failed QC for p-value range"
## [1] "Row 54079 with Analysis ID Unknown has pvalue 1.063252 and failed QC for p-value range"
## [1] "Row 54246 with Analysis ID Unknown has pvalue 1.276382 and failed QC for p-value range"
## [1] "Row 54485 with Analysis ID Unknown has pvalue 1.0143 and failed QC for p-value range"
## [1] "Row 54609 with Analysis ID Unknown has pvalue 1.247265 and failed QC for p-value range"
## [1] "Row 54839 with Analysis ID Unknown has pvalue 1.189248 and failed QC for p-value range"
## [1] "Row 54931 with Analysis ID Unknown has pvalue 1.394955 and failed QC for p-value range"
## [1] "Row 55098 with Analysis ID Unknown has pvalue 1.037962 and failed QC for p-value range"
## [1] "Row 55127 with Analysis ID Unknown has pvalue 1.437335 and failed QC for p-value range"
## [1] "Row 55140 with Analysis ID Unknown has pvalue 1.279426 and failed QC for p-value range"
## [1] "Row 55207 with Analysis ID Unknown has pvalue 1.137897 and failed QC for p-value range"
## [1] "Row 55261 with Analysis ID Unknown has pvalue 1.241317 and failed QC for p-value range"
## [1] "Row 55270 with Analysis ID Unknown has pvalue 1.189925 and failed QC for p-value range"
## [1] "Row 55271 with Analysis ID Unknown has pvalue 1.064625 and failed QC for p-value range"
## [1] "Row 55451 with Analysis ID Unknown has pvalue 1.123269 and failed QC for p-value range"
## [1] "Row 55476 with Analysis ID Unknown has pvalue 1.455821 and failed QC for p-value range"
## [1] "Row 55479 with Analysis ID Unknown has pvalue 1.30209 and failed QC for p-value range"
## [1] "Row 55506 with Analysis ID Unknown has pvalue 1.454637 and failed QC for p-value range"
## [1] "Row 55587 with Analysis ID Unknown has pvalue 1.205644 and failed QC for p-value range"
## [1] "Row 55937 with Analysis ID Unknown has pvalue 1.25805 and failed QC for p-value range"
## [1] "Row 56051 with Analysis ID Unknown has pvalue 1.018371 and failed QC for p-value range"
## [1] "Row 56126 with Analysis ID Unknown has pvalue 1.461614 and failed QC for p-value range"
## [1] "Row 56184 with Analysis ID Unknown has pvalue 1.031419 and failed QC for p-value range"
## [1] "Row 56368 with Analysis ID Unknown has pvalue 1.034269 and failed QC for p-value range"
## [1] "Row 56402 with Analysis ID Unknown has pvalue 1.495174 and failed QC for p-value range"
## [1] "Row 56516 with Analysis ID Unknown has pvalue 1.477797 and failed QC for p-value range"
## [1] "Row 56601 with Analysis ID Unknown has pvalue 1.364619 and failed QC for p-value range"
## [1] "Row 56665 with Analysis ID Unknown has pvalue 1.251586 and failed QC for p-value range"
## [1] "Row 56938 with Analysis ID Unknown has pvalue 1.441924 and failed QC for p-value range"
## [1] "Row 56948 with Analysis ID Unknown has pvalue 1.079773 and failed QC for p-value range"
## [1] "Row 56971 with Analysis ID Unknown has pvalue 1.43794 and failed QC for p-value range"
## [1] "Row 57057 with Analysis ID Unknown has pvalue 1.313833 and failed QC for p-value range"
## [1] "Row 57064 with Analysis ID Unknown has pvalue 1.270061 and failed QC for p-value range"
## [1] "Row 57083 with Analysis ID Unknown has pvalue 1.189368 and failed QC for p-value range"
## [1] "Row 57175 with Analysis ID Unknown has pvalue 1.401949 and failed QC for p-value range"
## [1] "Row 57227 with Analysis ID Unknown has pvalue 1.166226 and failed QC for p-value range"
## [1] "Row 57274 with Analysis ID Unknown has pvalue 1.021899 and failed QC for p-value range"
## [1] "Row 57311 with Analysis ID Unknown has pvalue 1.209152 and failed QC for p-value range"
## [1] "Row 57396 with Analysis ID Unknown has pvalue 1.000353 and failed QC for p-value range"
## [1] "Row 57508 with Analysis ID Unknown has pvalue 1.203849 and failed QC for p-value range"
## [1] "Row 57528 with Analysis ID Unknown has pvalue 1.001038 and failed QC for p-value range"
## [1] "Row 57542 with Analysis ID Unknown has pvalue 1.07002 and failed QC for p-value range"
## [1] "Row 57592 with Analysis ID Unknown has pvalue 1.102794 and failed QC for p-value range"
## [1] "Row 57814 with Analysis ID Unknown has pvalue 1.420254 and failed QC for p-value range"

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## [1] "Row 58085 with Analysis ID Unknown has pvalue 1.429041 and failed QC for p-value range"
## [1] "Row 58139 with Analysis ID Unknown has pvalue 1.161303 and failed QC for p-value range"
## [1] "Row 58218 with Analysis ID Unknown has pvalue 1.13895 and failed QC for p-value range"
## [1] "Row 58227 with Analysis ID Unknown has pvalue 1.134635 and failed QC for p-value range"
## [1] "Row 58430 with Analysis ID Unknown has pvalue 1.387097 and failed QC for p-value range"
## [1] "Row 58493 with Analysis ID Unknown has pvalue 1.002479 and failed QC for p-value range"
## [1] "Row 58502 with Analysis ID Unknown has pvalue 1.257225 and failed QC for p-value range"
## [1] "Row 58503 with Analysis ID Unknown has pvalue 1.074846 and failed QC for p-value range"
## [1] "Row 58631 with Analysis ID Unknown has pvalue 1.348683 and failed QC for p-value range"
## [1] "Row 58760 with Analysis ID Unknown has pvalue 1.28937 and failed QC for p-value range"
## [1] "Row 58775 with Analysis ID Unknown has pvalue 1.436895 and failed QC for p-value range"
## [1] "Row 58802 with Analysis ID Unknown has pvalue 1.417417 and failed QC for p-value range"
## [1] "Row 58915 with Analysis ID Unknown has pvalue 1.439393 and failed QC for p-value range"
## [1] "Row 59122 with Analysis ID Unknown has pvalue 1.048621 and failed QC for p-value range"
## [1] "Row 59233 with Analysis ID Unknown has pvalue 1.151647 and failed QC for p-value range"
## [1] "Row 59265 with Analysis ID Unknown has pvalue 1.323666 and failed QC for p-value range"
## [1] "Row 59306 with Analysis ID Unknown has pvalue 1.152491 and failed QC for p-value range"
## [1] "Row 59479 with Analysis ID Unknown has pvalue 1.120109 and failed QC for p-value range"
## [1] "Row 59899 with Analysis ID Unknown has pvalue 1.019672 and failed QC for p-value range"
## [1] "Row 59954 with Analysis ID Unknown has pvalue 1.013113 and failed QC for p-value range"
## [1] "Row 60058 with Analysis ID Unknown has pvalue 1.280335 and failed QC for p-value range"
## [1] "Row 60180 with Analysis ID Unknown has pvalue 1.029801 and failed QC for p-value range"
## [1] "Row 60233 with Analysis ID Unknown has pvalue 1.083785 and failed QC for p-value range"
## [1] "Row 60329 with Analysis ID Unknown has pvalue 1.055761 and failed QC for p-value range"
## [1] "Row 60346 with Analysis ID Unknown has pvalue 1.144576 and failed QC for p-value range"
## [1] "Row 60351 with Analysis ID Unknown has pvalue 1.430714 and failed QC for p-value range"
## [1] "Row 60500 with Analysis ID Unknown has pvalue 1.099788 and failed QC for p-value range"
## [1] "Row 60624 with Analysis ID Unknown has pvalue 1.196653 and failed QC for p-value range"
## [1] "Row 60639 with Analysis ID Unknown has pvalue 1.31759 and failed QC for p-value range"
## [1] "Row 60838 with Analysis ID Unknown has pvalue 1.055467 and failed QC for p-value range"
## [1] "Row 60917 with Analysis ID Unknown has pvalue 1.000235 and failed QC for p-value range"
## [1] "Row 61148 with Analysis ID Unknown has pvalue 1.041455 and failed QC for p-value range"
## [1] "Row 61243 with Analysis ID Unknown has pvalue 1.45505 and failed QC for p-value range"
## [1] "Row 61391 with Analysis ID Unknown has pvalue 1.323536 and failed QC for p-value range"
## [1] "Row 61460 with Analysis ID Unknown has pvalue 1.185462 and failed QC for p-value range"
## [1] "Row 61492 with Analysis ID Unknown has pvalue 1.383915 and failed QC for p-value range"
## [1] "Row 62095 with Analysis ID Unknown has pvalue 1.29358 and failed QC for p-value range"
## [1] "Row 62389 with Analysis ID Unknown has pvalue 1.045015 and failed QC for p-value range"
## [1] "Row 62484 with Analysis ID Unknown has pvalue 1.11155 and failed QC for p-value range"
## [1] "Row 62721 with Analysis ID Unknown has pvalue 1.417471 and failed QC for p-value range"
## [1] "Row 62784 with Analysis ID Unknown has pvalue 1.332963 and failed QC for p-value range"
## [1] "Row 62788 with Analysis ID Unknown has pvalue 1.094477 and failed QC for p-value range"
## [1] "Row 62827 with Analysis ID Unknown has pvalue 1.264502 and failed QC for p-value range"
## [1] "Row 62893 with Analysis ID Unknown has pvalue 1.474422 and failed QC for p-value range"
## [1] "Row 63073 with Analysis ID Unknown has pvalue 1.156637 and failed QC for p-value range"
## [1] "Row 63100 with Analysis ID Unknown has pvalue 1.00978 and failed QC for p-value range"
## [1] "Row 63278 with Analysis ID Unknown has pvalue 1.477186 and failed QC for p-value range"
## [1] "Row 63288 with Analysis ID Unknown has pvalue 1.080464 and failed QC for p-value range"
## [1] "Row 63316 with Analysis ID Unknown has pvalue 1.487425 and failed QC for p-value range"
## [1] "Row 63320 with Analysis ID Unknown has pvalue 1.201261 and failed QC for p-value range"
## [1] "Row 63406 with Analysis ID Unknown has pvalue 1.133573 and failed QC for p-value range"
## [1] "Row 63437 with Analysis ID Unknown has pvalue 1.327285 and failed QC for p-value range"
## [1] "Row 63508 with Analysis ID Unknown has pvalue 1.325401 and failed QC for p-value range"
## [1] "Row 63568 with Analysis ID Unknown has pvalue 1.021521 and failed QC for p-value range"

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## [1] "Row 63570 with Analysis ID Unknown has pvalue 1.050207 and failed QC for p-value range"
## [1] "Row 63750 with Analysis ID Unknown has pvalue 1.462858 and failed QC for p-value range"
## [1] "Row 63816 with Analysis ID Unknown has pvalue 1.311237 and failed QC for p-value range"
## [1] "Row 63836 with Analysis ID Unknown has pvalue 1.430162 and failed QC for p-value range"
## [1] "Row 63952 with Analysis ID Unknown has pvalue 1.405128 and failed QC for p-value range"
## [1] "Row 63972 with Analysis ID Unknown has pvalue 1.106041 and failed QC for p-value range"
## [1] "Row 64287 with Analysis ID Unknown has pvalue 1.242095 and failed QC for p-value range"
## [1] "Row 64318 with Analysis ID Unknown has pvalue 1.363353 and failed QC for p-value range"
## [1] "Row 64574 with Analysis ID Unknown has pvalue 1.422704 and failed QC for p-value range"
## [1] "Row 64686 with Analysis ID Unknown has pvalue 1.307302 and failed QC for p-value range"
## [1] "Row 64771 with Analysis ID Unknown has pvalue 1.195565 and failed QC for p-value range"
## [1] "Row 64821 with Analysis ID Unknown has pvalue 1.261585 and failed QC for p-value range"
## [1] "Row 64860 with Analysis ID Unknown has pvalue 1.118805 and failed QC for p-value range"
## [1] "Row 64882 with Analysis ID Unknown has pvalue 1.447148 and failed QC for p-value range"
## [1] "Row 65086 with Analysis ID Unknown has pvalue 1.182071 and failed QC for p-value range"
## [1] "Row 65090 with Analysis ID Unknown has pvalue 1.440216 and failed QC for p-value range"
## [1] "Row 65141 with Analysis ID Unknown has pvalue 1.28412 and failed QC for p-value range"
## [1] "Row 65264 with Analysis ID Unknown has pvalue 1.171564 and failed QC for p-value range"
## [1] "Row 65267 with Analysis ID Unknown has pvalue 1.186368 and failed QC for p-value range"
## [1] "Row 65292 with Analysis ID Unknown has pvalue 1.001438 and failed QC for p-value range"
## [1] "Row 65377 with Analysis ID Unknown has pvalue 1.482379 and failed QC for p-value range"
## [1] "Row 65453 with Analysis ID Unknown has pvalue 1.215818 and failed QC for p-value range"
## [1] "Row 65603 with Analysis ID Unknown has pvalue 1.092698 and failed QC for p-value range"
## [1] "Row 65809 with Analysis ID Unknown has pvalue 1.144353 and failed QC for p-value range"
## [1] "Row 65835 with Analysis ID Unknown has pvalue 1.438385 and failed QC for p-value range"
## [1] "Row 65973 with Analysis ID Unknown has pvalue 1.141245 and failed QC for p-value range"
## [1] "Row 66242 with Analysis ID Unknown has pvalue 1.21954 and failed QC for p-value range"
## [1] "Row 66625 with Analysis ID Unknown has pvalue 1.360265 and failed QC for p-value range"
## [1] "Row 66943 with Analysis ID Unknown has pvalue 1.303757 and failed QC for p-value range"
## [1] "Row 67123 with Analysis ID Unknown has pvalue 1.116884 and failed QC for p-value range"
## [1] "Row 67196 with Analysis ID Unknown has pvalue 1.393502 and failed QC for p-value range"
## [1] "Row 67246 with Analysis ID Unknown has pvalue 1.170475 and failed QC for p-value range"
## [1] "Row 67407 with Analysis ID Unknown has pvalue 1.214888 and failed QC for p-value range"
## [1] "Row 67574 with Analysis ID Unknown has pvalue 1.143426 and failed QC for p-value range"
## [1] "Row 67600 with Analysis ID Unknown has pvalue 1.454273 and failed QC for p-value range"
## [1] "Row 67608 with Analysis ID Unknown has pvalue 1.189523 and failed QC for p-value range"
## [1] "Row 67632 with Analysis ID Unknown has pvalue 1.476578 and failed QC for p-value range"
## [1] "Row 67730 with Analysis ID Unknown has pvalue 1.134666 and failed QC for p-value range"
## [1] "Row 67857 with Analysis ID Unknown has pvalue 1.125266 and failed QC for p-value range"
## [1] "Row 68021 with Analysis ID Unknown has pvalue 1.247741 and failed QC for p-value range"
## [1] "Row 68059 with Analysis ID Unknown has pvalue 1.319243 and failed QC for p-value range"
## [1] "Row 68068 with Analysis ID Unknown has pvalue 1.034951 and failed QC for p-value range"
## [1] "Row 68194 with Analysis ID Unknown has pvalue 1.2345 and failed QC for p-value range"
## [1] "Row 68226 with Analysis ID Unknown has pvalue 1.106551 and failed QC for p-value range"
## [1] "Row 68248 with Analysis ID Unknown has pvalue 1.377215 and failed QC for p-value range"
## [1] "Row 68255 with Analysis ID Unknown has pvalue 1.200952 and failed QC for p-value range"
## [1] "Row 68436 with Analysis ID Unknown has pvalue 1.363685 and failed QC for p-value range"
## [1] "Row 68446 with Analysis ID Unknown has pvalue 1.27765 and failed QC for p-value range"
## [1] "Row 68458 with Analysis ID Unknown has pvalue 1.014232 and failed QC for p-value range"
## [1] "Row 68582 with Analysis ID Unknown has pvalue 1.101324 and failed QC for p-value range"
## [1] "Row 68666 with Analysis ID Unknown has pvalue 1.411596 and failed QC for p-value range"
## [1] "Row 68696 with Analysis ID Unknown has pvalue 1.411761 and failed QC for p-value range"
## [1] "Row 68785 with Analysis ID Unknown has pvalue 1.171082 and failed QC for p-value range"
## [1] "Row 68835 with Analysis ID Unknown has pvalue 1.478812 and failed QC for p-value range"

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## [1] "Row 68843 with Analysis ID Unknown has pvalue 1.295867 and failed QC for p-value range"
## [1] "Row 69115 with Analysis ID Unknown has pvalue 1.282208 and failed QC for p-value range"
## [1] "Row 69117 with Analysis ID Unknown has pvalue 1.151921 and failed QC for p-value range"
## [1] "Row 69170 with Analysis ID Unknown has pvalue 1.025735 and failed QC for p-value range"
## [1] "Row 69252 with Analysis ID Unknown has pvalue 1.353493 and failed QC for p-value range"
## [1] "Row 69358 with Analysis ID Unknown has pvalue 1.051089 and failed QC for p-value range"
## [1] "Row 69476 with Analysis ID Unknown has pvalue 1.112812 and failed QC for p-value range"
## [1] "Row 69486 with Analysis ID Unknown has pvalue 1.47448 and failed QC for p-value range"
## [1] "Row 69490 with Analysis ID Unknown has pvalue 1.032123 and failed QC for p-value range"
## [1] "Row 69520 with Analysis ID Unknown has pvalue 1.274998 and failed QC for p-value range"
## [1] "Row 69525 with Analysis ID Unknown has pvalue 1.38199 and failed QC for p-value range"
## [1] "Row 69567 with Analysis ID Unknown has pvalue 1.410609 and failed QC for p-value range"
## [1] "Row 69569 with Analysis ID Unknown has pvalue 1.448404 and failed QC for p-value range"
## [1] "Row 69760 with Analysis ID Unknown has pvalue 1.157548 and failed QC for p-value range"
## [1] "Row 70018 with Analysis ID Unknown has pvalue 1.062109 and failed QC for p-value range"
## [1] "Row 70097 with Analysis ID Unknown has pvalue 1.240247 and failed QC for p-value range"
## [1] "Row 70117 with Analysis ID Unknown has pvalue 1.150133 and failed QC for p-value range"
## [1] "Row 70381 with Analysis ID Unknown has pvalue 1.192843 and failed QC for p-value range"
## [1] "Row 70434 with Analysis ID Unknown has pvalue 1.225041 and failed QC for p-value range"
## [1] "Row 70466 with Analysis ID Unknown has pvalue 1.450921 and failed QC for p-value range"
## [1] "Row 70518 with Analysis ID Unknown has pvalue 1.193188 and failed QC for p-value range"
## [1] "Row 70547 with Analysis ID Unknown has pvalue 1.172245 and failed QC for p-value range"
## [1] "Row 70723 with Analysis ID Unknown has pvalue 1.320028 and failed QC for p-value range"
## [1] "Row 70772 with Analysis ID Unknown has pvalue 1.115421 and failed QC for p-value range"
## [1] "Row 70996 with Analysis ID Unknown has pvalue 1.225474 and failed QC for p-value range"
## [1] "Row 71217 with Analysis ID Unknown has pvalue 1.027827 and failed QC for p-value range"
## [1] "Row 71477 with Analysis ID Unknown has pvalue 1.413782 and failed QC for p-value range"
## [1] "Row 71551 with Analysis ID Unknown has pvalue 1.099623 and failed QC for p-value range"
## [1] "Row 71609 with Analysis ID Unknown has pvalue 1.077499 and failed QC for p-value range"
## [1] "Row 71636 with Analysis ID Unknown has pvalue 1.161254 and failed QC for p-value range"
## [1] "Row 71734 with Analysis ID Unknown has pvalue 1.010267 and failed QC for p-value range"
## [1] "Row 71933 with Analysis ID Unknown has pvalue 1.419442 and failed QC for p-value range"
## [1] "Row 72084 with Analysis ID Unknown has pvalue 1.398083 and failed QC for p-value range"
## [1] "Row 72193 with Analysis ID Unknown has pvalue 1.052141 and failed QC for p-value range"
## [1] "Row 72218 with Analysis ID Unknown has pvalue 1.474095 and failed QC for p-value range"
## [1] "Row 72342 with Analysis ID Unknown has pvalue 1.405396 and failed QC for p-value range"
## [1] "Row 72433 with Analysis ID Unknown has pvalue 1.216619 and failed QC for p-value range"
## [1] "Row 72519 with Analysis ID Unknown has pvalue 1.051687 and failed QC for p-value range"
## [1] "Row 72590 with Analysis ID Unknown has pvalue 1.452481 and failed QC for p-value range"
## [1] "Row 72633 with Analysis ID Unknown has pvalue 1.156983 and failed QC for p-value range"
## [1] "Row 72971 with Analysis ID Unknown has pvalue 1.074748 and failed QC for p-value range"
## [1] "Row 73091 with Analysis ID Unknown has pvalue 1.164898 and failed QC for p-value range"
## [1] "Row 73179 with Analysis ID Unknown has pvalue 1.257898 and failed QC for p-value range"
## [1] "Row 73261 with Analysis ID Unknown has pvalue 1.136887 and failed QC for p-value range"
## [1] "Row 73324 with Analysis ID Unknown has pvalue 1.149542 and failed QC for p-value range"
## [1] "Row 73522 with Analysis ID Unknown has pvalue 1.21726 and failed QC for p-value range"
## [1] "Row 73541 with Analysis ID Unknown has pvalue 1.054762 and failed QC for p-value range"
## [1] "Row 73614 with Analysis ID Unknown has pvalue 1.469624 and failed QC for p-value range"
## [1] "Row 73634 with Analysis ID Unknown has pvalue 1.327935 and failed QC for p-value range"
## [1] "Row 74037 with Analysis ID Unknown has pvalue 1.44096 and failed QC for p-value range"
## [1] "Row 74144 with Analysis ID Unknown has pvalue 1.269844 and failed QC for p-value range"
## [1] "Row 74226 with Analysis ID Unknown has pvalue 1.239705 and failed QC for p-value range"
## [1] "Row 74502 with Analysis ID Unknown has pvalue 1.49343 and failed QC for p-value range"
## [1] "Row 74531 with Analysis ID Unknown has pvalue 1.079325 and failed QC for p-value range"

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## [1] "Row 74579 with Analysis ID Unknown has pvalue 1.234986 and failed QC for p-value range"
## [1] "Row 74693 with Analysis ID Unknown has pvalue 1.130904 and failed QC for p-value range"
## [1] "Row 74702 with Analysis ID Unknown has pvalue 1.328903 and failed QC for p-value range"
## [1] "Row 74755 with Analysis ID Unknown has pvalue 1.498853 and failed QC for p-value range"
## [1] "Row 74904 with Analysis ID Unknown has pvalue 1.493955 and failed QC for p-value range"
## [1] "Row 74911 with Analysis ID Unknown has pvalue 1.127769 and failed QC for p-value range"
## [1] "Row 74960 with Analysis ID Unknown has pvalue 1.031311 and failed QC for p-value range"
## [1] "Row 75011 with Analysis ID Unknown has pvalue 1.287874 and failed QC for p-value range"
## [1] "Row 75147 with Analysis ID Unknown has pvalue 1.247042 and failed QC for p-value range"
## [1] "Row 75222 with Analysis ID Unknown has pvalue 1.221715 and failed QC for p-value range"
## [1] "Row 75485 with Analysis ID Unknown has pvalue 1.049472 and failed QC for p-value range"
## [1] "Row 75507 with Analysis ID Unknown has pvalue 1.209748 and failed QC for p-value range"
## [1] "Row 75509 with Analysis ID Unknown has pvalue 1.136329 and failed QC for p-value range"
## [1] "Row 75512 with Analysis ID Unknown has pvalue 1.244156 and failed QC for p-value range"
## [1] "Row 75604 with Analysis ID Unknown has pvalue 1.126777 and failed QC for p-value range"
## [1] "Row 75630 with Analysis ID Unknown has pvalue 1.042994 and failed QC for p-value range"
## [1] "Row 75743 with Analysis ID Unknown has pvalue 1.185075 and failed QC for p-value range"
## [1] "Row 75758 with Analysis ID Unknown has pvalue 1.380807 and failed QC for p-value range"
## [1] "Row 75802 with Analysis ID Unknown has pvalue 1.111772 and failed QC for p-value range"
## [1] "Row 75806 with Analysis ID Unknown has pvalue 1.19064 and failed QC for p-value range"
## [1] "Row 75818 with Analysis ID Unknown has pvalue 1.211302 and failed QC for p-value range"
## [1] "Row 75835 with Analysis ID Unknown has pvalue 1.032151 and failed QC for p-value range"
## [1] "Row 75973 with Analysis ID Unknown has pvalue 1.104509 and failed QC for p-value range"
## [1] "Row 76005 with Analysis ID Unknown has pvalue 1.045274 and failed QC for p-value range"
## [1] "Row 76026 with Analysis ID Unknown has pvalue 1.318166 and failed QC for p-value range"
## [1] "Row 76102 with Analysis ID Unknown has pvalue 1.39057 and failed QC for p-value range"
## [1] "Row 76237 with Analysis ID Unknown has pvalue 1.108265 and failed QC for p-value range"
## [1] "Row 76246 with Analysis ID Unknown has pvalue 1.395267 and failed QC for p-value range"
## [1] "Row 76335 with Analysis ID Unknown has pvalue 1.437611 and failed QC for p-value range"
## [1] "Row 76439 with Analysis ID Unknown has pvalue 1.333593 and failed QC for p-value range"
## [1] "Row 76537 with Analysis ID Unknown has pvalue 1.176321 and failed QC for p-value range"
## [1] "Row 76560 with Analysis ID Unknown has pvalue 1.375356 and failed QC for p-value range"
## [1] "Row 76856 with Analysis ID Unknown has pvalue 1.251047 and failed QC for p-value range"
## [1] "Row 76867 with Analysis ID Unknown has pvalue 1.236871 and failed QC for p-value range"
## [1] "Row 76871 with Analysis ID Unknown has pvalue 1.327058 and failed QC for p-value range"
## [1] "Row 76956 with Analysis ID Unknown has pvalue 1.180006 and failed QC for p-value range"
## [1] "Row 76974 with Analysis ID Unknown has pvalue 1.241961 and failed QC for p-value range"
## [1] "Row 77131 with Analysis ID Unknown has pvalue 1.481087 and failed QC for p-value range"
## [1] "Row 77136 with Analysis ID Unknown has pvalue 1.27952 and failed QC for p-value range"
## [1] "Row 77501 with Analysis ID Unknown has pvalue 1.012825 and failed QC for p-value range"
## [1] "Row 77536 with Analysis ID Unknown has pvalue 1.021632 and failed QC for p-value range"
## [1] "Row 77545 with Analysis ID Unknown has pvalue 1.467879 and failed QC for p-value range"
## [1] "Row 77617 with Analysis ID Unknown has pvalue 1.377069 and failed QC for p-value range"
## [1] "Row 77622 with Analysis ID Unknown has pvalue 1.301431 and failed QC for p-value range"
## [1] "Row 77650 with Analysis ID Unknown has pvalue 1.195 and failed QC for p-value range"
## [1] "Row 77722 with Analysis ID Unknown has pvalue 1.241659 and failed QC for p-value range"
## [1] "Row 77748 with Analysis ID Unknown has pvalue 1.122239 and failed QC for p-value range"
## [1] "Row 77791 with Analysis ID Unknown has pvalue 1.107532 and failed QC for p-value range"
## [1] "Row 77792 with Analysis ID Unknown has pvalue 1.424916 and failed QC for p-value range"
## [1] "Row 77977 with Analysis ID Unknown has pvalue 1.112741 and failed QC for p-value range"
## [1] "Row 78167 with Analysis ID Unknown has pvalue 1.222625 and failed QC for p-value range"
## [1] "Row 78241 with Analysis ID Unknown has pvalue 1.340608 and failed QC for p-value range"
## [1] "Row 78461 with Analysis ID Unknown has pvalue 1.037886 and failed QC for p-value range"
## [1] "Row 78654 with Analysis ID Unknown has pvalue 1.302061 and failed QC for p-value range"

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## [1] "Row 78690 with Analysis ID Unknown has pvalue 1.354109 and failed QC for p-value range"
## [1] "Row 78914 with Analysis ID Unknown has pvalue 1.477668 and failed QC for p-value range"
## [1] "Row 79013 with Analysis ID Unknown has pvalue 1.157866 and failed QC for p-value range"
## [1] "Row 79035 with Analysis ID Unknown has pvalue 1.265442 and failed QC for p-value range"
## [1] "Row 79086 with Analysis ID Unknown has pvalue 1.478929 and failed QC for p-value range"
## [1] "Row 79113 with Analysis ID Unknown has pvalue 1.22983 and failed QC for p-value range"
## [1] "Row 79120 with Analysis ID Unknown has pvalue 1.169216 and failed QC for p-value range"
## [1] "Row 79257 with Analysis ID Unknown has pvalue 1.318809 and failed QC for p-value range"
## [1] "Row 79294 with Analysis ID Unknown has pvalue 1.030266 and failed QC for p-value range"
## [1] "Row 79500 with Analysis ID Unknown has pvalue 1.419501 and failed QC for p-value range"
## [1] "Row 79521 with Analysis ID Unknown has pvalue 1.238795 and failed QC for p-value range"
## [1] "Row 79633 with Analysis ID Unknown has pvalue 1.375241 and failed QC for p-value range"
## [1] "Row 79788 with Analysis ID Unknown has pvalue 1.298597 and failed QC for p-value range"
## [1] "Row 79864 with Analysis ID Unknown has pvalue 1.477382 and failed QC for p-value range"
## [1] "Row 79947 with Analysis ID Unknown has pvalue 1.444711 and failed QC for p-value range"
## [1] "Row 79985 with Analysis ID Unknown has pvalue 1.20639 and failed QC for p-value range"
## [1] "Row 80243 with Analysis ID Unknown has pvalue 1.396226 and failed QC for p-value range"
## [1] "Row 80260 with Analysis ID Unknown has pvalue 1.10426 and failed QC for p-value range"
## [1] "Row 80305 with Analysis ID Unknown has pvalue 1.143073 and failed QC for p-value range"
## [1] "Row 80369 with Analysis ID Unknown has pvalue 1.088935 and failed QC for p-value range"
## [1] "Row 80443 with Analysis ID Unknown has pvalue 1.470874 and failed QC for p-value range"
## [1] "Row 80502 with Analysis ID Unknown has pvalue 1.346198 and failed QC for p-value range"
## [1] "Row 80556 with Analysis ID Unknown has pvalue 1.196092 and failed QC for p-value range"
## [1] "Row 80579 with Analysis ID Unknown has pvalue 1.226201 and failed QC for p-value range"
## [1] "Row 80606 with Analysis ID Unknown has pvalue 1.012308 and failed QC for p-value range"
## [1] "Row 80642 with Analysis ID Unknown has pvalue 1.442497 and failed QC for p-value range"
## [1] "Row 80830 with Analysis ID Unknown has pvalue 1.443646 and failed QC for p-value range"
## [1] "Row 80880 with Analysis ID Unknown has pvalue 1.245246 and failed QC for p-value range"
## [1] "Row 81097 with Analysis ID Unknown has pvalue 1.337514 and failed QC for p-value range"
## [1] "Row 81132 with Analysis ID Unknown has pvalue 1.301608 and failed QC for p-value range"
## [1] "Row 81172 with Analysis ID Unknown has pvalue 1.356501 and failed QC for p-value range"
## [1] "Row 81481 with Analysis ID Unknown has pvalue 1.177954 and failed QC for p-value range"
## [1] "Row 81520 with Analysis ID Unknown has pvalue 1.203776 and failed QC for p-value range"
## [1] "Row 81902 with Analysis ID Unknown has pvalue 1.445115 and failed QC for p-value range"
## [1] "Row 82014 with Analysis ID Unknown has pvalue 1.140045 and failed QC for p-value range"
## [1] "Row 82136 with Analysis ID Unknown has pvalue 1.001824 and failed QC for p-value range"
## [1] "Row 82376 with Analysis ID Unknown has pvalue 1.005765 and failed QC for p-value range"
## [1] "Row 82492 with Analysis ID Unknown has pvalue 1.420102 and failed QC for p-value range"
## [1] "Row 82537 with Analysis ID Unknown has pvalue 1.231184 and failed QC for p-value range"
## [1] "Row 82557 with Analysis ID Unknown has pvalue 1.493149 and failed QC for p-value range"
## [1] "Row 82669 with Analysis ID Unknown has pvalue 1.044748 and failed QC for p-value range"
## [1] "Row 82950 with Analysis ID Unknown has pvalue 1.307766 and failed QC for p-value range"
## [1] "Row 83116 with Analysis ID Unknown has pvalue 1.29874 and failed QC for p-value range"
## [1] "Row 83154 with Analysis ID Unknown has pvalue 1.14997 and failed QC for p-value range"
## [1] "Row 83190 with Analysis ID Unknown has pvalue 1.306318 and failed QC for p-value range"
## [1] "Row 83442 with Analysis ID Unknown has pvalue 1.088973 and failed QC for p-value range"
## [1] "Row 83552 with Analysis ID Unknown has pvalue 1.428217 and failed QC for p-value range"
## [1] "Row 83649 with Analysis ID Unknown has pvalue 1.006532 and failed QC for p-value range"
## [1] "Row 83656 with Analysis ID Unknown has pvalue 1.182772 and failed QC for p-value range"
## [1] "Row 83846 with Analysis ID Unknown has pvalue 1.492056 and failed QC for p-value range"
## [1] "Row 83933 with Analysis ID Unknown has pvalue 1.337421 and failed QC for p-value range"
## [1] "Row 83970 with Analysis ID Unknown has pvalue 1.275475 and failed QC for p-value range"
## [1] "Row 84344 with Analysis ID Unknown has pvalue 1.299823 and failed QC for p-value range"
## [1] "Row 84631 with Analysis ID Unknown has pvalue 1.083844 and failed QC for p-value range"

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## [1] "Row 84741 with Analysis ID Unknown has pvalue 1.216294 and failed QC for p-value range"
## [1] "Row 84768 with Analysis ID Unknown has pvalue 1.440987 and failed QC for p-value range"
## [1] "Row 84779 with Analysis ID Unknown has pvalue 1.457864 and failed QC for p-value range"
## [1] "Row 84931 with Analysis ID Unknown has pvalue 1.087931 and failed QC for p-value range"
## [1] "Row 84987 with Analysis ID Unknown has pvalue 1.329632 and failed QC for p-value range"
## [1] "Row 85121 with Analysis ID Unknown has pvalue 1.141545 and failed QC for p-value range"
## [1] "Row 85126 with Analysis ID Unknown has pvalue 1.034983 and failed QC for p-value range"
## [1] "Row 85570 with Analysis ID Unknown has pvalue 1.491239 and failed QC for p-value range"
## [1] "Row 85792 with Analysis ID Unknown has pvalue 1.010159 and failed QC for p-value range"
## [1] "Row 85999 with Analysis ID Unknown has pvalue 1.335046 and failed QC for p-value range"
## [1] "Row 86024 with Analysis ID Unknown has pvalue 1.218249 and failed QC for p-value range"
## [1] "Row 86049 with Analysis ID Unknown has pvalue 1.385572 and failed QC for p-value range"
## [1] "Row 86078 with Analysis ID Unknown has pvalue 1.002207 and failed QC for p-value range"
## [1] "Row 86135 with Analysis ID Unknown has pvalue 1.383769 and failed QC for p-value range"
## [1] "Row 86246 with Analysis ID Unknown has pvalue 1.244913 and failed QC for p-value range"
## [1] "Row 86328 with Analysis ID Unknown has pvalue 1.210981 and failed QC for p-value range"
## [1] "Row 86391 with Analysis ID Unknown has pvalue 1.289777 and failed QC for p-value range"
## [1] "Row 86522 with Analysis ID Unknown has pvalue 1.193106 and failed QC for p-value range"
## [1] "Row 86625 with Analysis ID Unknown has pvalue 1.259084 and failed QC for p-value range"
## [1] "Row 86750 with Analysis ID Unknown has pvalue 1.471705 and failed QC for p-value range"
## [1] "Row 86841 with Analysis ID Unknown has pvalue 1.213336 and failed QC for p-value range"
## [1] "Row 86846 with Analysis ID Unknown has pvalue 1.104681 and failed QC for p-value range"
## [1] "Row 86854 with Analysis ID Unknown has pvalue 1.167673 and failed QC for p-value range"
## [1] "Row 86893 with Analysis ID Unknown has pvalue 1.345203 and failed QC for p-value range"
## [1] "Row 87196 with Analysis ID Unknown has pvalue 1.487033 and failed QC for p-value range"
## [1] "Row 87253 with Analysis ID Unknown has pvalue 1.007242 and failed QC for p-value range"
## [1] "Row 87372 with Analysis ID Unknown has pvalue 1.074189 and failed QC for p-value range"
## [1] "Row 87524 with Analysis ID Unknown has pvalue 1.182475 and failed QC for p-value range"
## [1] "Row 87549 with Analysis ID Unknown has pvalue 1.080902 and failed QC for p-value range"
## [1] "Row 87615 with Analysis ID Unknown has pvalue 1.434946 and failed QC for p-value range"
## [1] "Row 87729 with Analysis ID Unknown has pvalue 1.43516 and failed QC for p-value range"
## [1] "Row 87930 with Analysis ID Unknown has pvalue 1.003126 and failed QC for p-value range"
## [1] "Row 87967 with Analysis ID Unknown has pvalue 1.190315 and failed QC for p-value range"
## [1] "Row 87983 with Analysis ID Unknown has pvalue 1.279343 and failed QC for p-value range"
## [1] "Row 88062 with Analysis ID Unknown has pvalue 1.405523 and failed QC for p-value range"
## [1] "Row 88112 with Analysis ID Unknown has pvalue 1.098571 and failed QC for p-value range"
## [1] "Row 88125 with Analysis ID Unknown has pvalue 1.202725 and failed QC for p-value range"
## [1] "Row 88169 with Analysis ID Unknown has pvalue 1.083537 and failed QC for p-value range"
## [1] "Row 88235 with Analysis ID Unknown has pvalue 1.468753 and failed QC for p-value range"
## [1] "Row 88273 with Analysis ID Unknown has pvalue 1.022501 and failed QC for p-value range"
## [1] "Row 88445 with Analysis ID Unknown has pvalue 1.32262 and failed QC for p-value range"
## [1] "Row 88458 with Analysis ID Unknown has pvalue 1.327359 and failed QC for p-value range"
## [1] "Row 88598 with Analysis ID Unknown has pvalue 1.383579 and failed QC for p-value range"
## [1] "Row 88689 with Analysis ID Unknown has pvalue 1.088624 and failed QC for p-value range"
## [1] "Row 88930 with Analysis ID Unknown has pvalue 1.279435 and failed QC for p-value range"
## [1] "Row 89033 with Analysis ID Unknown has pvalue 1.359379 and failed QC for p-value range"
## [1] "Row 89161 with Analysis ID Unknown has pvalue 1.13169 and failed QC for p-value range"
## [1] "Row 89393 with Analysis ID Unknown has pvalue 1.198862 and failed QC for p-value range"
## [1] "Row 89485 with Analysis ID Unknown has pvalue 1.295547 and failed QC for p-value range"
## [1] "Row 90021 with Analysis ID Unknown has pvalue 1.067698 and failed QC for p-value range"
## [1] "Row 90182 with Analysis ID Unknown has pvalue 1.431988 and failed QC for p-value range"
## [1] "Row 90260 with Analysis ID Unknown has pvalue 1.352164 and failed QC for p-value range"
## [1] "Row 90317 with Analysis ID Unknown has pvalue 1.311383 and failed QC for p-value range"
## [1] "Row 90334 with Analysis ID Unknown has pvalue 1.476406 and failed QC for p-value range"

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## [1] "Row 90396 with Analysis ID Unknown has pvalue 1.002667 and failed QC for p-value range"
## [1] "Row 90455 with Analysis ID Unknown has pvalue 1.095909 and failed QC for p-value range"
## [1] "Row 90473 with Analysis ID Unknown has pvalue 1.142497 and failed QC for p-value range"
## [1] "Row 90930 with Analysis ID Unknown has pvalue 1.371736 and failed QC for p-value range"
## [1] "Row 91202 with Analysis ID Unknown has pvalue 1.205238 and failed QC for p-value range"
## [1] "Row 91212 with Analysis ID Unknown has pvalue 1.379256 and failed QC for p-value range"
## [1] "Row 91224 with Analysis ID Unknown has pvalue 1.282779 and failed QC for p-value range"
## [1] "Row 91240 with Analysis ID Unknown has pvalue 1.130524 and failed QC for p-value range"
## [1] "Row 91286 with Analysis ID Unknown has pvalue 1.243161 and failed QC for p-value range"
## [1] "Row 91514 with Analysis ID Unknown has pvalue 1.170516 and failed QC for p-value range"
## [1] "Row 91540 with Analysis ID Unknown has pvalue 1.373853 and failed QC for p-value range"
## [1] "Row 91776 with Analysis ID Unknown has pvalue 1.092954 and failed QC for p-value range"
## [1] "Row 91892 with Analysis ID Unknown has pvalue 1.1218 and failed QC for p-value range"
## [1] "Row 91936 with Analysis ID Unknown has pvalue 1.084678 and failed QC for p-value range"
## [1] "Row 92281 with Analysis ID Unknown has pvalue 1.034358 and failed QC for p-value range"
## [1] "Row 92309 with Analysis ID Unknown has pvalue 1.344218 and failed QC for p-value range"
## [1] "Row 92643 with Analysis ID Unknown has pvalue 1.286609 and failed QC for p-value range"
## [1] "Row 92662 with Analysis ID Unknown has pvalue 1.40777 and failed QC for p-value range"
## [1] "Row 92696 with Analysis ID Unknown has pvalue 1.121823 and failed QC for p-value range"
## [1] "Row 92715 with Analysis ID Unknown has pvalue 1.45946 and failed QC for p-value range"
## [1] "Row 92781 with Analysis ID Unknown has pvalue 1.318859 and failed QC for p-value range"
## [1] "Row 92852 with Analysis ID Unknown has pvalue 1.279727 and failed QC for p-value range"
## [1] "Row 92964 with Analysis ID Unknown has pvalue 1.127306 and failed QC for p-value range"
## [1] "Row 93196 with Analysis ID Unknown has pvalue 1.35186 and failed QC for p-value range"
## [1] "Row 93320 with Analysis ID Unknown has pvalue 1.285341 and failed QC for p-value range"
## [1] "Row 93427 with Analysis ID Unknown has pvalue 1.427931 and failed QC for p-value range"
## [1] "Row 93608 with Analysis ID Unknown has pvalue 1.053472 and failed QC for p-value range"
## [1] "Row 93622 with Analysis ID Unknown has pvalue 1.41162 and failed QC for p-value range"
## [1] "Row 93634 with Analysis ID Unknown has pvalue 1.267647 and failed QC for p-value range"
## [1] "Row 93652 with Analysis ID Unknown has pvalue 1.097444 and failed QC for p-value range"
## [1] "Row 93726 with Analysis ID Unknown has pvalue 1.022169 and failed QC for p-value range"
## [1] "Row 93836 with Analysis ID Unknown has pvalue 1.122042 and failed QC for p-value range"
## [1] "Row 93960 with Analysis ID Unknown has pvalue 1.310291 and failed QC for p-value range"
## [1] "Row 94185 with Analysis ID Unknown has pvalue 1.16408 and failed QC for p-value range"
## [1] "Row 94492 with Analysis ID Unknown has pvalue 1.190758 and failed QC for p-value range"
## [1] "Row 94857 with Analysis ID Unknown has pvalue 1.293021 and failed QC for p-value range"
## [1] "Row 95119 with Analysis ID Unknown has pvalue 1.058094 and failed QC for p-value range"
## [1] "Row 95120 with Analysis ID Unknown has pvalue 1.119698 and failed QC for p-value range"
## [1] "Row 95329 with Analysis ID Unknown has pvalue 1.411205 and failed QC for p-value range"
## [1] "Row 95342 with Analysis ID Unknown has pvalue 1.489661 and failed QC for p-value range"
## [1] "Row 95543 with Analysis ID Unknown has pvalue 1.210023 and failed QC for p-value range"
## [1] "Row 95567 with Analysis ID Unknown has pvalue 1.358834 and failed QC for p-value range"
## [1] "Row 95608 with Analysis ID Unknown has pvalue 1.171364 and failed QC for p-value range"
## [1] "Row 96181 with Analysis ID Unknown has pvalue 1.294995 and failed QC for p-value range"
## [1] "Row 96203 with Analysis ID Unknown has pvalue 1.476128 and failed QC for p-value range"
## [1] "Row 96246 with Analysis ID Unknown has pvalue 1.333565 and failed QC for p-value range"
## [1] "Row 96414 with Analysis ID Unknown has pvalue 1.417148 and failed QC for p-value range"
## [1] "Row 96415 with Analysis ID Unknown has pvalue 1.491427 and failed QC for p-value range"
## [1] "Row 96432 with Analysis ID Unknown has pvalue 1.158455 and failed QC for p-value range"
## [1] "Row 96530 with Analysis ID Unknown has pvalue 1.398795 and failed QC for p-value range"
## [1] "Row 96572 with Analysis ID Unknown has pvalue 1.332566 and failed QC for p-value range"
## [1] "Row 96713 with Analysis ID Unknown has pvalue 1.262375 and failed QC for p-value range"
## [1] "Row 96756 with Analysis ID Unknown has pvalue 1.10729 and failed QC for p-value range"
## [1] "Row 96787 with Analysis ID Unknown has pvalue 1.096164 and failed QC for p-value range"

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## [1] "Row 96796 with Analysis ID Unknown has pvalue 1.139363 and failed QC for p-value range"
## [1] "Row 96979 with Analysis ID Unknown has pvalue 1.334746 and failed QC for p-value range"
## [1] "Row 97120 with Analysis ID Unknown has pvalue 1.378971 and failed QC for p-value range"
## [1] "Row 97785 with Analysis ID Unknown has pvalue 1.191958 and failed QC for p-value range"
## [1] "Row 97913 with Analysis ID Unknown has pvalue 1.454426 and failed QC for p-value range"
## [1] "Row 97922 with Analysis ID Unknown has pvalue 1.315312 and failed QC for p-value range"
## [1] "Row 98018 with Analysis ID Unknown has pvalue 1.471586 and failed QC for p-value range"
## [1] "Row 98162 with Analysis ID Unknown has pvalue 1.37252 and failed QC for p-value range"
## [1] "Row 98316 with Analysis ID Unknown has pvalue 1.405304 and failed QC for p-value range"
## [1] "Row 98370 with Analysis ID Unknown has pvalue 1.468328 and failed QC for p-value range"
## [1] "Row 98557 with Analysis ID Unknown has pvalue 1.273038 and failed QC for p-value range"
## [1] "Row 98652 with Analysis ID Unknown has pvalue 1.037803 and failed QC for p-value range"
## [1] "Row 98781 with Analysis ID Unknown has pvalue 1.091414 and failed QC for p-value range"
## [1] "Row 98796 with Analysis ID Unknown has pvalue 1.414539 and failed QC for p-value range"
## [1] "Row 98839 with Analysis ID Unknown has pvalue 1.168367 and failed QC for p-value range"
## [1] "Row 98846 with Analysis ID Unknown has pvalue 1.284406 and failed QC for p-value range"
## [1] "Row 98886 with Analysis ID Unknown has pvalue 1.496806 and failed QC for p-value range"
## [1] "Row 98955 with Analysis ID Unknown has pvalue 1.264725 and failed QC for p-value range"
## [1] "Row 99068 with Analysis ID Unknown has pvalue 1.383983 and failed QC for p-value range"
## [1] "Row 99275 with Analysis ID Unknown has pvalue 1.250009 and failed QC for p-value range"
## [1] "Row 99573 with Analysis ID Unknown has pvalue 1.260202 and failed QC for p-value range"
## [1] "Row 99947 with Analysis ID Unknown has pvalue 1.165326 and failed QC for p-value range"
## [1] "Row 100437 with Analysis ID Unknown has pvalue 1.137386 and failed QC for p-value range"
## [1] "Row 100480 with Analysis ID Unknown has pvalue 1.215805 and failed QC for p-value range"
## [1] "Row 100561 with Analysis ID Unknown has pvalue 1.445133 and failed QC for p-value range"
## [1] "Row 100587 with Analysis ID Unknown has pvalue 1.015884 and failed QC for p-value range"
## [1] "Row 100597 with Analysis ID Unknown has pvalue 1.220442 and failed QC for p-value range"
## [1] "Row 100682 with Analysis ID Unknown has pvalue 1.351921 and failed QC for p-value range"
## [1] "Row 100933 with Analysis ID Unknown has pvalue 1.390542 and failed QC for p-value range"
## [1] "Row 100985 with Analysis ID Unknown has pvalue 1.353585 and failed QC for p-value range"
## [1] "Row 101055 with Analysis ID Unknown has pvalue 1.240736 and failed QC for p-value range"
## [1] "Row 101082 with Analysis ID Unknown has pvalue 1.136339 and failed QC for p-value range"
## [1] "Row 101255 with Analysis ID Unknown has pvalue 1.083716 and failed QC for p-value range"
## [1] "Row 101368 with Analysis ID Unknown has pvalue 1.163872 and failed QC for p-value range"
## [1] "Row 101428 with Analysis ID Unknown has pvalue 1.18937 and failed QC for p-value range"
## [1] "Row 101545 with Analysis ID Unknown has pvalue 1.146503 and failed QC for p-value range"
## [1] "Row 101580 with Analysis ID Unknown has pvalue 1.491854 and failed QC for p-value range"
## [1] "Row 101593 with Analysis ID Unknown has pvalue 1.439642 and failed QC for p-value range"
## [1] "Row 101621 with Analysis ID Unknown has pvalue 1.095229 and failed QC for p-value range"
## [1] "Row 101687 with Analysis ID Unknown has pvalue 1.296839 and failed QC for p-value range"
## [1] "Row 101691 with Analysis ID Unknown has pvalue 1.178354 and failed QC for p-value range"
## [1] "Row 101770 with Analysis ID Unknown has pvalue 1.383117 and failed QC for p-value range"
## [1] "Row 101792 with Analysis ID Unknown has pvalue 1.484173 and failed QC for p-value range"
## [1] "Row 101995 with Analysis ID Unknown has pvalue 1.257858 and failed QC for p-value range"
## [1] "Row 102091 with Analysis ID Unknown has pvalue 1.008141 and failed QC for p-value range"
## [1] "Row 102101 with Analysis ID Unknown has pvalue 1.000508 and failed QC for p-value range"
## [1] "Row 102131 with Analysis ID Unknown has pvalue 1.421243 and failed QC for p-value range"
## [1] "Row 102145 with Analysis ID Unknown has pvalue 1.240931 and failed QC for p-value range"
## [1] "Row 102178 with Analysis ID Unknown has pvalue 1.416756 and failed QC for p-value range"
## [1] "Row 102214 with Analysis ID Unknown has pvalue 1.006213 and failed QC for p-value range"
## [1] "Row 102216 with Analysis ID Unknown has pvalue 1.149355 and failed QC for p-value range"
## [1] "Row 102223 with Analysis ID Unknown has pvalue 1.285482 and failed QC for p-value range"
## [1] "Row 102287 with Analysis ID Unknown has pvalue 1.36858 and failed QC for p-value range"
## [1] "Row 102506 with Analysis ID Unknown has pvalue 1.47199 and failed QC for p-value range"

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## [1] "Row 102547 with Analysis ID Unknown has pvalue 1.380802 and failed QC for p-value range"
## [1] "Row 102573 with Analysis ID Unknown has pvalue 1.198971 and failed QC for p-value range"
## [1] "Row 102795 with Analysis ID Unknown has pvalue 1.081144 and failed QC for p-value range"
## [1] "Row 102799 with Analysis ID Unknown has pvalue 1.476512 and failed QC for p-value range"
## [1] "Row 102930 with Analysis ID Unknown has pvalue 1.004693 and failed QC for p-value range"
## [1] "Row 103001 with Analysis ID Unknown has pvalue 1.428715 and failed QC for p-value range"
## [1] "Row 103056 with Analysis ID Unknown has pvalue 1.337467 and failed QC for p-value range"
## [1] "Row 103082 with Analysis ID Unknown has pvalue 1.0106 and failed QC for p-value range"
## [1] "Row 103112 with Analysis ID Unknown has pvalue 1.447752 and failed QC for p-value range"
## [1] "Row 103339 with Analysis ID Unknown has pvalue 1.340236 and failed QC for p-value range"
## [1] "Row 103425 with Analysis ID Unknown has pvalue 1.224704 and failed QC for p-value range"
## [1] "Row 103467 with Analysis ID Unknown has pvalue 1.338043 and failed QC for p-value range"
## [1] "Row 103517 with Analysis ID Unknown has pvalue 1.218171 and failed QC for p-value range"
## [1] "Row 103573 with Analysis ID Unknown has pvalue 1.047127 and failed QC for p-value range"
## [1] "Row 103690 with Analysis ID Unknown has pvalue 1.4946 and failed QC for p-value range"
## [1] "Row 103702 with Analysis ID Unknown has pvalue 1.375261 and failed QC for p-value range"
## [1] "Row 103796 with Analysis ID Unknown has pvalue 1.348254 and failed QC for p-value range"
## [1] "Row 103874 with Analysis ID Unknown has pvalue 1.424372 and failed QC for p-value range"
## [1] "Row 103976 with Analysis ID Unknown has pvalue 1.481479 and failed QC for p-value range"
## [1] "Row 103998 with Analysis ID Unknown has pvalue 1.368131 and failed QC for p-value range"
## [1] "Row 104009 with Analysis ID Unknown has pvalue 1.449322 and failed QC for p-value range"
## [1] "Row 104064 with Analysis ID Unknown has pvalue 1.12418 and failed QC for p-value range"
## [1] "Row 104074 with Analysis ID Unknown has pvalue 1.270134 and failed QC for p-value range"
## [1] "Row 104091 with Analysis ID Unknown has pvalue 1.280458 and failed QC for p-value range"
## [1] "Row 104115 with Analysis ID Unknown has pvalue 1.368414 and failed QC for p-value range"
## [1] "Row 104247 with Analysis ID Unknown has pvalue 1.369434 and failed QC for p-value range"
## [1] "Row 104285 with Analysis ID Unknown has pvalue 1.380799 and failed QC for p-value range"
## [1] "Row 104525 with Analysis ID Unknown has pvalue 1.423035 and failed QC for p-value range"
## [1] "Row 104588 with Analysis ID Unknown has pvalue 1.075566 and failed QC for p-value range"
## [1] "Row 104664 with Analysis ID Unknown has pvalue 1.175925 and failed QC for p-value range"
## [1] "Row 104802 with Analysis ID Unknown has pvalue 1.220134 and failed QC for p-value range"
## [1] "Row 104829 with Analysis ID Unknown has pvalue 1.204605 and failed QC for p-value range"
## [1] "Row 104917 with Analysis ID Unknown has pvalue 1.305254 and failed QC for p-value range"
## [1] "Row 105145 with Analysis ID Unknown has pvalue 1.176581 and failed QC for p-value range"
## [1] "Row 105173 with Analysis ID Unknown has pvalue 1.432595 and failed QC for p-value range"
## [1] "Row 105176 with Analysis ID Unknown has pvalue 1.461933 and failed QC for p-value range"
## [1] "Row 105277 with Analysis ID Unknown has pvalue 1.204306 and failed QC for p-value range"
## [1] "Row 105378 with Analysis ID Unknown has pvalue 1.087374 and failed QC for p-value range"
## [1] "Row 105398 with Analysis ID Unknown has pvalue 1.207025 and failed QC for p-value range"
## [1] "Row 105402 with Analysis ID Unknown has pvalue 1.153182 and failed QC for p-value range"
## [1] "Row 105437 with Analysis ID Unknown has pvalue 1.049404 and failed QC for p-value range"
## [1] "Row 105550 with Analysis ID Unknown has pvalue 1.003022 and failed QC for p-value range"
## [1] "Row 105728 with Analysis ID Unknown has pvalue 1.220767 and failed QC for p-value range"
## [1] "Row 105748 with Analysis ID Unknown has pvalue 1.345078 and failed QC for p-value range"
## [1] "Row 105780 with Analysis ID Unknown has pvalue 1.391789 and failed QC for p-value range"
## [1] "Row 105902 with Analysis ID Unknown has pvalue 1.056784 and failed QC for p-value range"
## [1] "Row 106257 with Analysis ID Unknown has pvalue 1.112794 and failed QC for p-value range"
## [1] "Row 106335 with Analysis ID Unknown has pvalue 1.023931 and failed QC for p-value range"
## [1] "Row 106503 with Analysis ID Unknown has pvalue 1.04243 and failed QC for p-value range"
## [1] "Row 106540 with Analysis ID Unknown has pvalue 1.484034 and failed QC for p-value range"
## [1] "Row 106648 with Analysis ID Unknown has pvalue 1.378801 and failed QC for p-value range"
## [1] "Row 107041 with Analysis ID Unknown has pvalue 1.033918 and failed QC for p-value range"
## [1] "Row 107181 with Analysis ID Unknown has pvalue 1.057947 and failed QC for p-value range"
## [1] "Row 107266 with Analysis ID Unknown has pvalue 1.15705 and failed QC for p-value range"

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## [1] "Row 107387 with Analysis ID Unknown has pvalue 1.46308 and failed QC for p-value range"
## [1] "Row 107441 with Analysis ID Unknown has pvalue 1.20041 and failed QC for p-value range"
## [1] "Row 107548 with Analysis ID Unknown has pvalue 1.180483 and failed QC for p-value range"
## [1] "Row 107693 with Analysis ID Unknown has pvalue 1.313533 and failed QC for p-value range"
## [1] "Row 107796 with Analysis ID Unknown has pvalue 1.10158 and failed QC for p-value range"
## [1] "Row 107816 with Analysis ID Unknown has pvalue 1.391387 and failed QC for p-value range"
## [1] "Row 108104 with Analysis ID Unknown has pvalue 1.30121 and failed QC for p-value range"
## [1] "Row 108267 with Analysis ID Unknown has pvalue 1.034838 and failed QC for p-value range"
## [1] "Row 108269 with Analysis ID Unknown has pvalue 1.479254 and failed QC for p-value range"
## [1] "Row 108341 with Analysis ID Unknown has pvalue 1.365358 and failed QC for p-value range"
## [1] "Row 108402 with Analysis ID Unknown has pvalue 1.115092 and failed QC for p-value range"
## [1] "Row 108867 with Analysis ID Unknown has pvalue 1.250635 and failed QC for p-value range"
## [1] "Row 108922 with Analysis ID Unknown has pvalue 1.397273 and failed QC for p-value range"
## [1] "Row 108970 with Analysis ID Unknown has pvalue 1.460629 and failed QC for p-value range"
## [1] "Row 109041 with Analysis ID Unknown has pvalue 1.21166 and failed QC for p-value range"
## [1] "Row 109257 with Analysis ID Unknown has pvalue 1.329118 and failed QC for p-value range"
## [1] "Row 109332 with Analysis ID Unknown has pvalue 1.308369 and failed QC for p-value range"
## [1] "Row 109397 with Analysis ID Unknown has pvalue 1.392612 and failed QC for p-value range"
## [1] "Row 109413 with Analysis ID Unknown has pvalue 1.386137 and failed QC for p-value range"
## [1] "Row 109466 with Analysis ID Unknown has pvalue 1.149804 and failed QC for p-value range"
## [1] "Row 109701 with Analysis ID Unknown has pvalue 1.313985 and failed QC for p-value range"
## [1] "Row 109841 with Analysis ID Unknown has pvalue 1.120679 and failed QC for p-value range"
## [1] "Row 109952 with Analysis ID Unknown has pvalue 1.099247 and failed QC for p-value range"
## [1] "Row 110023 with Analysis ID Unknown has pvalue 1.260759 and failed QC for p-value range"
## [1] "Row 110116 with Analysis ID Unknown has pvalue 1.20927 and failed QC for p-value range"
## [1] "Row 110144 with Analysis ID Unknown has pvalue 1.427953 and failed QC for p-value range"
## [1] "Row 110449 with Analysis ID Unknown has pvalue 1.192056 and failed QC for p-value range"
## [1] "Row 110487 with Analysis ID Unknown has pvalue 1.380336 and failed QC for p-value range"
## [1] "Row 110516 with Analysis ID Unknown has pvalue 1.487137 and failed QC for p-value range"
## [1] "Row 110703 with Analysis ID Unknown has pvalue 1.433679 and failed QC for p-value range"
## [1] "Row 110728 with Analysis ID Unknown has pvalue 1.372261 and failed QC for p-value range"
## [1] "Row 110746 with Analysis ID Unknown has pvalue 1.170584 and failed QC for p-value range"
## [1] "Row 110805 with Analysis ID Unknown has pvalue 1.386921 and failed QC for p-value range"
## [1] "Row 111062 with Analysis ID Unknown has pvalue 1.06426 and failed QC for p-value range"
## [1] "Row 111167 with Analysis ID Unknown has pvalue 1.209318 and failed QC for p-value range"
## [1] "Row 111242 with Analysis ID Unknown has pvalue 1.255526 and failed QC for p-value range"
## [1] "Row 111264 with Analysis ID Unknown has pvalue 1.316085 and failed QC for p-value range"
## [1] "Row 111289 with Analysis ID Unknown has pvalue 1.227769 and failed QC for p-value range"
## [1] "Row 111506 with Analysis ID Unknown has pvalue 1.126539 and failed QC for p-value range"
## [1] "Row 111660 with Analysis ID Unknown has pvalue 1.339693 and failed QC for p-value range"
## [1] "Row 111765 with Analysis ID Unknown has pvalue 1.06912 and failed QC for p-value range"
## [1] "Row 111792 with Analysis ID Unknown has pvalue 1.295133 and failed QC for p-value range"
## [1] "Row 112394 with Analysis ID Unknown has pvalue 1.256801 and failed QC for p-value range"
## [1] "Row 112409 with Analysis ID Unknown has pvalue 1.260565 and failed QC for p-value range"
## [1] "Row 112519 with Analysis ID Unknown has pvalue 1.281105 and failed QC for p-value range"
## [1] "Row 112552 with Analysis ID Unknown has pvalue 1.231284 and failed QC for p-value range"
## [1] "Row 112731 with Analysis ID Unknown has pvalue 1.059886 and failed QC for p-value range"
## [1] "Row 112735 with Analysis ID Unknown has pvalue 1.085785 and failed QC for p-value range"
## [1] "Row 112789 with Analysis ID Unknown has pvalue 1.07482 and failed QC for p-value range"
## [1] "Row 112853 with Analysis ID Unknown has pvalue 1.371729 and failed QC for p-value range"
## [1] "Row 113030 with Analysis ID Unknown has pvalue 1.241833 and failed QC for p-value range"
## [1] "Row 113275 with Analysis ID Unknown has pvalue 1.133778 and failed QC for p-value range"
## [1] "Row 113314 with Analysis ID Unknown has pvalue 1.228579 and failed QC for p-value range"
## [1] "Row 113368 with Analysis ID Unknown has pvalue 1.409171 and failed QC for p-value range"

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## [1] "Row 113480 with Analysis ID Unknown has pvalue 1.432559 and failed QC for p-value range"
## [1] "Row 113488 with Analysis ID Unknown has pvalue 1.119551 and failed QC for p-value range"
## [1] "Row 113720 with Analysis ID Unknown has pvalue 1.387927 and failed QC for p-value range"
## [1] "Row 113846 with Analysis ID Unknown has pvalue 1.185823 and failed QC for p-value range"
## [1] "Row 114276 with Analysis ID Unknown has pvalue 1.483477 and failed QC for p-value range"
## [1] "Row 114381 with Analysis ID Unknown has pvalue 1.348808 and failed QC for p-value range"
## [1] "Row 114517 with Analysis ID Unknown has pvalue 1.460117 and failed QC for p-value range"
## [1] "Row 114703 with Analysis ID Unknown has pvalue 1.348454 and failed QC for p-value range"
## [1] "Row 114978 with Analysis ID Unknown has pvalue 1.398313 and failed QC for p-value range"
## [1] "Row 115067 with Analysis ID Unknown has pvalue 1.300022 and failed QC for p-value range"
## [1] "Row 115084 with Analysis ID Unknown has pvalue 1.332433 and failed QC for p-value range"
## [1] "Row 115121 with Analysis ID Unknown has pvalue 1.001912 and failed QC for p-value range"
## [1] "Row 115231 with Analysis ID Unknown has pvalue 1.199608 and failed QC for p-value range"
## [1] "Row 115301 with Analysis ID Unknown has pvalue 1.183713 and failed QC for p-value range"
## [1] "Row 115556 with Analysis ID Unknown has pvalue 1.007827 and failed QC for p-value range"
## [1] "Row 115644 with Analysis ID Unknown has pvalue 1.23448 and failed QC for p-value range"
## [1] "Row 115693 with Analysis ID Unknown has pvalue 1.474638 and failed QC for p-value range"
## [1] "Row 116205 with Analysis ID Unknown has pvalue 1.078337 and failed QC for p-value range"
## [1] "Row 116246 with Analysis ID Unknown has pvalue 1.012915 and failed QC for p-value range"
## [1] "Row 116300 with Analysis ID Unknown has pvalue 1.460031 and failed QC for p-value range"
## [1] "Row 116418 with Analysis ID Unknown has pvalue 1.010291 and failed QC for p-value range"
## [1] "Row 116425 with Analysis ID Unknown has pvalue 1.282137 and failed QC for p-value range"
## [1] "Row 116700 with Analysis ID Unknown has pvalue 1.418942 and failed QC for p-value range"
## [1] "Row 116719 with Analysis ID Unknown has pvalue 1.301052 and failed QC for p-value range"
## [1] "Row 116733 with Analysis ID Unknown has pvalue 1.069694 and failed QC for p-value range"
## [1] "Row 117043 with Analysis ID Unknown has pvalue 1.222669 and failed QC for p-value range"
## [1] "Row 117178 with Analysis ID Unknown has pvalue 1.198782 and failed QC for p-value range"
## [1] "Row 117300 with Analysis ID Unknown has pvalue 1.071865 and failed QC for p-value range"
## [1] "Row 117307 with Analysis ID Unknown has pvalue 1.101017 and failed QC for p-value range"
## [1] "Row 117309 with Analysis ID Unknown has pvalue 1.295544 and failed QC for p-value range"
## [1] "Row 117455 with Analysis ID Unknown has pvalue 1.229887 and failed QC for p-value range"
## [1] "Row 117735 with Analysis ID Unknown has pvalue 1.181373 and failed QC for p-value range"
## [1] "Row 117833 with Analysis ID Unknown has pvalue 1.220073 and failed QC for p-value range"
## [1] "Row 117894 with Analysis ID Unknown has pvalue 1.469347 and failed QC for p-value range"
## [1] "Row 117957 with Analysis ID Unknown has pvalue 1.445379 and failed QC for p-value range"
## [1] "Row 118032 with Analysis ID Unknown has pvalue 1.317961 and failed QC for p-value range"
## [1] "Row 118114 with Analysis ID Unknown has pvalue 1.390386 and failed QC for p-value range"
## [1] "Row 118395 with Analysis ID Unknown has pvalue 1.028904 and failed QC for p-value range"
## [1] "Row 118401 with Analysis ID Unknown has pvalue 1.452618 and failed QC for p-value range"
## [1] "Row 118423 with Analysis ID Unknown has pvalue 1.407478 and failed QC for p-value range"
## [1] "Row 118448 with Analysis ID Unknown has pvalue 1.449022 and failed QC for p-value range"
## [1] "Row 118496 with Analysis ID Unknown has pvalue 1.006985 and failed QC for p-value range"
## [1] "Row 118573 with Analysis ID Unknown has pvalue 1.437808 and failed QC for p-value range"
## [1] "Row 118574 with Analysis ID Unknown has pvalue 1.062818 and failed QC for p-value range"
## [1] "Row 118758 with Analysis ID Unknown has pvalue 1.445223 and failed QC for p-value range"
## [1] "Row 118992 with Analysis ID Unknown has pvalue 1.222882 and failed QC for p-value range"
## [1] "Row 119243 with Analysis ID Unknown has pvalue 1.15599 and failed QC for p-value range"
## [1] "Row 119343 with Analysis ID Unknown has pvalue 1.030665 and failed QC for p-value range"
## [1] "Row 119392 with Analysis ID Unknown has pvalue 1.045695 and failed QC for p-value range"
## [1] "Row 119563 with Analysis ID Unknown has pvalue 1.00999 and failed QC for p-value range"
## [1] "Row 119571 with Analysis ID Unknown has pvalue 1.124686 and failed QC for p-value range"
## [1] "Row 119790 with Analysis ID Unknown has pvalue 1.125653 and failed QC for p-value range"
## [1] "Row 119794 with Analysis ID Unknown has pvalue 1.380887 and failed QC for p-value range"
## [1] "Row 119813 with Analysis ID Unknown has pvalue 1.372148 and failed QC for p-value range"

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## [1] "Row 119834 with Analysis ID Unknown has pvalue 1.067251 and failed QC for p-value range"
## [1] "Row 120017 with Analysis ID Unknown has pvalue 1.034859 and failed QC for p-value range"
## [1] "Row 120218 with Analysis ID Unknown has pvalue 1.112086 and failed QC for p-value range"
## [1] "Row 120228 with Analysis ID Unknown has pvalue 1.443947 and failed QC for p-value range"
## [1] "Row 120297 with Analysis ID Unknown has pvalue 1.151978 and failed QC for p-value range"
## [1] "Row 120480 with Analysis ID Unknown has pvalue 1.12907 and failed QC for p-value range"
## [1] "Row 120547 with Analysis ID Unknown has pvalue 1.00643 and failed QC for p-value range"
## [1] "Row 120976 with Analysis ID Unknown has pvalue 1.163507 and failed QC for p-value range"
## [1] "Row 121017 with Analysis ID Unknown has pvalue 1.198857 and failed QC for p-value range"
## [1] "Row 121050 with Analysis ID Unknown has pvalue 1.136241 and failed QC for p-value range"
## [1] "Row 121204 with Analysis ID Unknown has pvalue 1.216069 and failed QC for p-value range"
## [1] "Row 121283 with Analysis ID Unknown has pvalue 1.431505 and failed QC for p-value range"
## [1] "Row 121615 with Analysis ID Unknown has pvalue 1.487514 and failed QC for p-value range"
## [1] "Row 121756 with Analysis ID Unknown has pvalue 1.02693 and failed QC for p-value range"
## [1] "Row 121828 with Analysis ID Unknown has pvalue 1.281134 and failed QC for p-value range"
## [1] "Row 122111 with Analysis ID Unknown has pvalue 1.110123 and failed QC for p-value range"
## [1] "Row 122112 with Analysis ID Unknown has pvalue 1.472013 and failed QC for p-value range"
## [1] "Row 122122 with Analysis ID Unknown has pvalue 1.162744 and failed QC for p-value range"
## [1] "Row 122182 with Analysis ID Unknown has pvalue 1.010011 and failed QC for p-value range"
## [1] "Row 122184 with Analysis ID Unknown has pvalue 1.384271 and failed QC for p-value range"
## [1] "Row 122309 with Analysis ID Unknown has pvalue 1.354885 and failed QC for p-value range"
## [1] "Row 122441 with Analysis ID Unknown has pvalue 1.324721 and failed QC for p-value range"
## [1] "Row 122659 with Analysis ID Unknown has pvalue 1.416603 and failed QC for p-value range"
## [1] "Row 122698 with Analysis ID Unknown has pvalue 1.460002 and failed QC for p-value range"
## [1] "Row 122852 with Analysis ID Unknown has pvalue 1.350463 and failed QC for p-value range"
## [1] "Row 122951 with Analysis ID Unknown has pvalue 1.483752 and failed QC for p-value range"
## [1] "Row 123024 with Analysis ID Unknown has pvalue 1.236666 and failed QC for p-value range"
## [1] "Row 123031 with Analysis ID Unknown has pvalue 1.17119 and failed QC for p-value range"
## [1] "Row 123170 with Analysis ID Unknown has pvalue 1.074236 and failed QC for p-value range"
## [1] "Row 123203 with Analysis ID Unknown has pvalue 1.082794 and failed QC for p-value range"
## [1] "Row 123287 with Analysis ID Unknown has pvalue 1.261602 and failed QC for p-value range"
## [1] "Row 123298 with Analysis ID Unknown has pvalue 1.248589 and failed QC for p-value range"
## [1] "Row 123391 with Analysis ID Unknown has pvalue 1.140105 and failed QC for p-value range"
## [1] "Row 123548 with Analysis ID Unknown has pvalue 1.058812 and failed QC for p-value range"
## [1] "Row 123615 with Analysis ID Unknown has pvalue 1.341925 and failed QC for p-value range"
## [1] "Row 123646 with Analysis ID Unknown has pvalue 1.379984 and failed QC for p-value range"
## [1] "Row 124046 with Analysis ID Unknown has pvalue 1.054397 and failed QC for p-value range"
## [1] "Row 124082 with Analysis ID Unknown has pvalue 1.393206 and failed QC for p-value range"
## [1] "Row 124152 with Analysis ID Unknown has pvalue 1.280401 and failed QC for p-value range"
## [1] "Row 124167 with Analysis ID Unknown has pvalue 1.143126 and failed QC for p-value range"
## [1] "Row 124219 with Analysis ID Unknown has pvalue 1.072809 and failed QC for p-value range"
## [1] "Row 124230 with Analysis ID Unknown has pvalue 1.218352 and failed QC for p-value range"
## [1] "Row 124245 with Analysis ID Unknown has pvalue 1.252968 and failed QC for p-value range"
## [1] "Row 124271 with Analysis ID Unknown has pvalue 1.160751 and failed QC for p-value range"
## [1] "Row 124316 with Analysis ID Unknown has pvalue 1.253796 and failed QC for p-value range"
## [1] "Row 124468 with Analysis ID Unknown has pvalue 1.382622 and failed QC for p-value range"
## [1] "Row 124523 with Analysis ID Unknown has pvalue 1.340863 and failed QC for p-value range"
## [1] "Row 124565 with Analysis ID Unknown has pvalue 1.373315 and failed QC for p-value range"
## [1] "Row 124612 with Analysis ID Unknown has pvalue 1.24319 and failed QC for p-value range"
## [1] "Row 124631 with Analysis ID Unknown has pvalue 1.466583 and failed QC for p-value range"
## [1] "Row 124737 with Analysis ID Unknown has pvalue 1.09658 and failed QC for p-value range"
## [1] "Row 124812 with Analysis ID Unknown has pvalue 1.190933 and failed QC for p-value range"
## [1] "Row 125110 with Analysis ID Unknown has pvalue 1.139871 and failed QC for p-value range"
## [1] "Row 125117 with Analysis ID Unknown has pvalue 1.10057 and failed QC for p-value range"

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## [1] "Row 125161 with Analysis ID Unknown has pvalue 1.421975 and failed QC for p-value range"
## [1] "Row 125263 with Analysis ID Unknown has pvalue 1.043226 and failed QC for p-value range"
## [1] "Row 125315 with Analysis ID Unknown has pvalue 1.166275 and failed QC for p-value range"
## [1] "Row 125350 with Analysis ID Unknown has pvalue 1.299919 and failed QC for p-value range"
## [1] "Row 125365 with Analysis ID Unknown has pvalue 1.154581 and failed QC for p-value range"
## [1] "Row 125479 with Analysis ID Unknown has pvalue 1.311279 and failed QC for p-value range"
## [1] "Row 125528 with Analysis ID Unknown has pvalue 1.27759 and failed QC for p-value range"
## [1] "Row 125805 with Analysis ID Unknown has pvalue 1.41884 and failed QC for p-value range"
## [1] "Row 126329 with Analysis ID Unknown has pvalue 1.246181 and failed QC for p-value range"
## [1] "Row 126374 with Analysis ID Unknown has pvalue 1.48376 and failed QC for p-value range"
## [1] "Row 126380 with Analysis ID Unknown has pvalue 1.383406 and failed QC for p-value range"
## [1] "Row 126434 with Analysis ID Unknown has pvalue 1.436224 and failed QC for p-value range"
## [1] "Row 126446 with Analysis ID Unknown has pvalue 1.315151 and failed QC for p-value range"
## [1] "Row 126733 with Analysis ID Unknown has pvalue 1.368019 and failed QC for p-value range"
## [1] "Row 126830 with Analysis ID Unknown has pvalue 1.121238 and failed QC for p-value range"
## [1] "Row 126881 with Analysis ID Unknown has pvalue 1.473792 and failed QC for p-value range"
## [1] "Row 126936 with Analysis ID Unknown has pvalue 1.051251 and failed QC for p-value range"
## [1] "Row 127044 with Analysis ID Unknown has pvalue 1.141775 and failed QC for p-value range"
## [1] "Row 127357 with Analysis ID Unknown has pvalue 1.267148 and failed QC for p-value range"
## [1] "Row 127887 with Analysis ID Unknown has pvalue 1.121398 and failed QC for p-value range"
## [1] "Row 127949 with Analysis ID Unknown has pvalue 1.462976 and failed QC for p-value range"
## [1] "Row 127995 with Analysis ID Unknown has pvalue 1.159086 and failed QC for p-value range"
## [1] "Row 128022 with Analysis ID Unknown has pvalue 1.473743 and failed QC for p-value range"
## [1] "Row 128064 with Analysis ID Unknown has pvalue 1.313773 and failed QC for p-value range"
## [1] "Row 128065 with Analysis ID Unknown has pvalue 1.283238 and failed QC for p-value range"
## [1] "Row 128112 with Analysis ID Unknown has pvalue 1.250894 and failed QC for p-value range"
## [1] "Row 128171 with Analysis ID Unknown has pvalue 1.167238 and failed QC for p-value range"
## [1] "Row 128256 with Analysis ID Unknown has pvalue 1.198539 and failed QC for p-value range"
## [1] "Row 128523 with Analysis ID Unknown has pvalue 1.368516 and failed QC for p-value range"
## [1] "Row 128577 with Analysis ID Unknown has pvalue 1.21701 and failed QC for p-value range"
## [1] "Row 128592 with Analysis ID Unknown has pvalue 1.269311 and failed QC for p-value range"
## [1] "Row 128626 with Analysis ID Unknown has pvalue 1.195217 and failed QC for p-value range"
## [1] "Row 128733 with Analysis ID Unknown has pvalue 1.465983 and failed QC for p-value range"
## [1] "Row 128860 with Analysis ID Unknown has pvalue 1.167083 and failed QC for p-value range"
## [1] "Row 128981 with Analysis ID Unknown has pvalue 1.317692 and failed QC for p-value range"
## [1] "Row 129168 with Analysis ID Unknown has pvalue 1.46785 and failed QC for p-value range"
## [1] "Row 129187 with Analysis ID Unknown has pvalue 1.256562 and failed QC for p-value range"
## [1] "Row 129417 with Analysis ID Unknown has pvalue 1.021541 and failed QC for p-value range"
## [1] "Row 129458 with Analysis ID Unknown has pvalue 1.056348 and failed QC for p-value range"
## [1] "Row 129484 with Analysis ID Unknown has pvalue 1.096223 and failed QC for p-value range"
## [1] "Row 129669 with Analysis ID Unknown has pvalue 1.058925 and failed QC for p-value range"
## [1] "Row 129684 with Analysis ID Unknown has pvalue 1.210576 and failed QC for p-value range"
## [1] "Row 129715 with Analysis ID Unknown has pvalue 1.198024 and failed QC for p-value range"
## [1] "Row 129727 with Analysis ID Unknown has pvalue 1.048815 and failed QC for p-value range"
## [1] "Row 129832 with Analysis ID Unknown has pvalue 1.052267 and failed QC for p-value range"
## [1] "Row 129978 with Analysis ID Unknown has pvalue 1.375017 and failed QC for p-value range"
## [1] "Row 129993 with Analysis ID Unknown has pvalue 1.066795 and failed QC for p-value range"
## [1] "Row 130055 with Analysis ID Unknown has pvalue 1.123095 and failed QC for p-value range"
## [1] "Row 130096 with Analysis ID Unknown has pvalue 1.457672 and failed QC for p-value range"
## [1] "Row 130183 with Analysis ID Unknown has pvalue 1.283988 and failed QC for p-value range"
## [1] "Row 130262 with Analysis ID Unknown has pvalue 1.109943 and failed QC for p-value range"
## [1] "Row 130308 with Analysis ID Unknown has pvalue 1.473156 and failed QC for p-value range"
## [1] "Row 130338 with Analysis ID Unknown has pvalue 1.018395 and failed QC for p-value range"
## [1] "Row 130609 with Analysis ID Unknown has pvalue 1.28196 and failed QC for p-value range"

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## [1] "Row 130625 with Analysis ID Unknown has pvalue 1.305597 and failed QC for p-value range"
## [1] "Row 130731 with Analysis ID Unknown has pvalue 1.25183 and failed QC for p-value range"
## [1] "Row 130744 with Analysis ID Unknown has pvalue 1.066708 and failed QC for p-value range"
## [1] "Row 130845 with Analysis ID Unknown has pvalue 1.464328 and failed QC for p-value range"
## [1] "Row 130871 with Analysis ID Unknown has pvalue 1.09976 and failed QC for p-value range"
## [1] "Row 130940 with Analysis ID Unknown has pvalue 1.420933 and failed QC for p-value range"
## [1] "Row 130970 with Analysis ID Unknown has pvalue 1.164687 and failed QC for p-value range"
## [1] "Row 131014 with Analysis ID Unknown has pvalue 1.007069 and failed QC for p-value range"
## [1] "Row 131146 with Analysis ID Unknown has pvalue 1.239941 and failed QC for p-value range"
## [1] "Row 131204 with Analysis ID Unknown has pvalue 1.497562 and failed QC for p-value range"
## [1] "Row 131372 with Analysis ID Unknown has pvalue 1.444511 and failed QC for p-value range"
## [1] "Row 131617 with Analysis ID Unknown has pvalue 1.050545 and failed QC for p-value range"
## [1] "Row 131659 with Analysis ID Unknown has pvalue 1.223194 and failed QC for p-value range"
## [1] "Row 131921 with Analysis ID Unknown has pvalue 1.367149 and failed QC for p-value range"
## [1] "Row 131973 with Analysis ID Unknown has pvalue 1.184083 and failed QC for p-value range"
## [1] "Row 132022 with Analysis ID Unknown has pvalue 1.277962 and failed QC for p-value range"
## [1] "Row 132094 with Analysis ID Unknown has pvalue 1.355799 and failed QC for p-value range"
## [1] "Row 132154 with Analysis ID Unknown has pvalue 1.271606 and failed QC for p-value range"
## [1] "Row 132298 with Analysis ID Unknown has pvalue 1.112726 and failed QC for p-value range"
## [1] "Row 132386 with Analysis ID Unknown has pvalue 1.155099 and failed QC for p-value range"
## [1] "Row 132554 with Analysis ID Unknown has pvalue 1.019858 and failed QC for p-value range"
## [1] "Row 132556 with Analysis ID Unknown has pvalue 1.47096 and failed QC for p-value range"
## [1] "Row 132667 with Analysis ID Unknown has pvalue 1.149694 and failed QC for p-value range"
## [1] "Row 132763 with Analysis ID Unknown has pvalue 1.355948 and failed QC for p-value range"
## [1] "Row 132766 with Analysis ID Unknown has pvalue 1.453466 and failed QC for p-value range"
## [1] "Row 132855 with Analysis ID Unknown has pvalue 1.266972 and failed QC for p-value range"
## [1] "Row 132878 with Analysis ID Unknown has pvalue 1.116425 and failed QC for p-value range"
## [1] "Row 133144 with Analysis ID Unknown has pvalue 1.485809 and failed QC for p-value range"
## [1] "Row 133223 with Analysis ID Unknown has pvalue 1.240967 and failed QC for p-value range"
## [1] "Row 133297 with Analysis ID Unknown has pvalue 1.39156 and failed QC for p-value range"
## [1] "Row 133374 with Analysis ID Unknown has pvalue 1.346722 and failed QC for p-value range"
## [1] "Row 133561 with Analysis ID Unknown has pvalue 1.001364 and failed QC for p-value range"
## [1] "Row 133752 with Analysis ID Unknown has pvalue 1.030855 and failed QC for p-value range"
## [1] "Row 133924 with Analysis ID Unknown has pvalue 1.113014 and failed QC for p-value range"
## [1] "Row 134090 with Analysis ID Unknown has pvalue 1.10814 and failed QC for p-value range"
## [1] "Row 134165 with Analysis ID Unknown has pvalue 1.369151 and failed QC for p-value range"
## [1] "Row 134183 with Analysis ID Unknown has pvalue 1.032135 and failed QC for p-value range"
## [1] "Row 134196 with Analysis ID Unknown has pvalue 1.150511 and failed QC for p-value range"
## [1] "Row 134222 with Analysis ID Unknown has pvalue 1.112607 and failed QC for p-value range"
## [1] "Row 134377 with Analysis ID Unknown has pvalue 1.478061 and failed QC for p-value range"
## [1] "Row 134445 with Analysis ID Unknown has pvalue 1.01828 and failed QC for p-value range"
## [1] "Row 134489 with Analysis ID Unknown has pvalue 1.16099 and failed QC for p-value range"
## [1] "Row 134548 with Analysis ID Unknown has pvalue 1.034279 and failed QC for p-value range"
## [1] "Row 134869 with Analysis ID Unknown has pvalue 1.029408 and failed QC for p-value range"
## [1] "Row 134870 with Analysis ID Unknown has pvalue 1.417231 and failed QC for p-value range"
## [1] "Row 135043 with Analysis ID Unknown has pvalue 1.224129 and failed QC for p-value range"
## [1] "Row 135046 with Analysis ID Unknown has pvalue 1.186866 and failed QC for p-value range"
## [1] "Row 135056 with Analysis ID Unknown has pvalue 1.485048 and failed QC for p-value range"
## [1] "Row 135118 with Analysis ID Unknown has pvalue 1.001265 and failed QC for p-value range"
## [1] "Row 135262 with Analysis ID Unknown has pvalue 1.230017 and failed QC for p-value range"
## [1] "Row 135534 with Analysis ID Unknown has pvalue 1.000586 and failed QC for p-value range"
## [1] "Row 135540 with Analysis ID Unknown has pvalue 1.271107 and failed QC for p-value range"
## [1] "Row 135629 with Analysis ID Unknown has pvalue 1.265717 and failed QC for p-value range"
## [1] "Row 135800 with Analysis ID Unknown has pvalue 1.450116 and failed QC for p-value range"

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## [1] "Row 135816 with Analysis ID Unknown has pvalue 1.437538 and failed QC for p-value range"
## [1] "Row 135854 with Analysis ID Unknown has pvalue 1.205925 and failed QC for p-value range"
## [1] "Row 135916 with Analysis ID Unknown has pvalue 1.189494 and failed QC for p-value range"
## [1] "Row 135964 with Analysis ID Unknown has pvalue 1.27699 and failed QC for p-value range"
## [1] "Row 135982 with Analysis ID Unknown has pvalue 1.093971 and failed QC for p-value range"
## [1] "Row 135983 with Analysis ID Unknown has pvalue 1.148612 and failed QC for p-value range"
## [1] "Row 136049 with Analysis ID Unknown has pvalue 1.20627 and failed QC for p-value range"
## [1] "Row 136052 with Analysis ID Unknown has pvalue 1.045837 and failed QC for p-value range"
## [1] "Row 136254 with Analysis ID Unknown has pvalue 1.076975 and failed QC for p-value range"
## [1] "Row 136698 with Analysis ID Unknown has pvalue 1.241523 and failed QC for p-value range"
## [1] "Row 136725 with Analysis ID Unknown has pvalue 1.109197 and failed QC for p-value range"
## [1] "Row 136811 with Analysis ID Unknown has pvalue 1.052133 and failed QC for p-value range"
## [1] "Row 136886 with Analysis ID Unknown has pvalue 1.429236 and failed QC for p-value range"
## [1] "Row 136910 with Analysis ID Unknown has pvalue 1.392683 and failed QC for p-value range"
## [1] "Row 136935 with Analysis ID Unknown has pvalue 1.116819 and failed QC for p-value range"
## [1] "Row 136944 with Analysis ID Unknown has pvalue 1.060725 and failed QC for p-value range"
## [1] "Row 137049 with Analysis ID Unknown has pvalue 1.35463 and failed QC for p-value range"
## [1] "Row 137089 with Analysis ID Unknown has pvalue 1.201684 and failed QC for p-value range"
## [1] "Row 137350 with Analysis ID Unknown has pvalue 1.215778 and failed QC for p-value range"
## [1] "Row 137414 with Analysis ID Unknown has pvalue 1.2099 and failed QC for p-value range"
## [1] "Row 137446 with Analysis ID Unknown has pvalue 1.065305 and failed QC for p-value range"
## [1] "Row 137447 with Analysis ID Unknown has pvalue 1.098952 and failed QC for p-value range"
## [1] "Row 137511 with Analysis ID Unknown has pvalue 1.443431 and failed QC for p-value range"
## [1] "Row 137592 with Analysis ID Unknown has pvalue 1.167947 and failed QC for p-value range"
## [1] "Row 137612 with Analysis ID Unknown has pvalue 1.175878 and failed QC for p-value range"
## [1] "Row 137772 with Analysis ID Unknown has pvalue 1.14758 and failed QC for p-value range"
## [1] "Row 137812 with Analysis ID Unknown has pvalue 1.375925 and failed QC for p-value range"
## [1] "Row 137840 with Analysis ID Unknown has pvalue 1.428 and failed QC for p-value range"
## [1] "Row 137847 with Analysis ID Unknown has pvalue 1.447854 and failed QC for p-value range"
## [1] "Row 137903 with Analysis ID Unknown has pvalue 1.14265 and failed QC for p-value range"
## [1] "Row 137951 with Analysis ID Unknown has pvalue 1.188556 and failed QC for p-value range"
## [1] "Row 137966 with Analysis ID Unknown has pvalue 1.140682 and failed QC for p-value range"
## [1] "Row 138186 with Analysis ID Unknown has pvalue 1.356383 and failed QC for p-value range"
## [1] "Row 138235 with Analysis ID Unknown has pvalue 1.096353 and failed QC for p-value range"
## [1] "Row 138403 with Analysis ID Unknown has pvalue 1.397377 and failed QC for p-value range"
## [1] "Row 138422 with Analysis ID Unknown has pvalue 1.200402 and failed QC for p-value range"
## [1] "Row 138653 with Analysis ID Unknown has pvalue 1.397873 and failed QC for p-value range"
## [1] "Row 138888 with Analysis ID Unknown has pvalue 1.35331 and failed QC for p-value range"
## [1] "Row 138977 with Analysis ID Unknown has pvalue 1.31306 and failed QC for p-value range"
## [1] "Row 139009 with Analysis ID Unknown has pvalue 1.387425 and failed QC for p-value range"
## [1] "Row 139081 with Analysis ID Unknown has pvalue 1.071019 and failed QC for p-value range"
## [1] "Row 139126 with Analysis ID Unknown has pvalue 1.058809 and failed QC for p-value range"
## [1] "Row 139170 with Analysis ID Unknown has pvalue 1.458442 and failed QC for p-value range"
## [1] "Row 139213 with Analysis ID Unknown has pvalue 1.239392 and failed QC for p-value range"
## [1] "Row 139443 with Analysis ID Unknown has pvalue 1.374041 and failed QC for p-value range"
## [1] "Row 139586 with Analysis ID Unknown has pvalue 1.139673 and failed QC for p-value range"
## [1] "Row 139640 with Analysis ID Unknown has pvalue 1.15168 and failed QC for p-value range"
## [1] "Row 139741 with Analysis ID Unknown has pvalue 1.490553 and failed QC for p-value range"
## [1] "Row 139770 with Analysis ID Unknown has pvalue 1.121548 and failed QC for p-value range"
## [1] "Row 139815 with Analysis ID Unknown has pvalue 1.360609 and failed QC for p-value range"
## [1] "Row 139831 with Analysis ID Unknown has pvalue 1.250462 and failed QC for p-value range"
## [1] "Row 139927 with Analysis ID Unknown has pvalue 1.369942 and failed QC for p-value range"
## [1] "Row 139954 with Analysis ID Unknown has pvalue 1.148617 and failed QC for p-value range"
## [1] "Row 140020 with Analysis ID Unknown has pvalue 1.111804 and failed QC for p-value range"

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## [1] "Row 140043 with Analysis ID Unknown has pvalue 1.138696 and failed QC for p-value range"
## [1] "Row 140045 with Analysis ID Unknown has pvalue 1.289383 and failed QC for p-value range"
## [1] "Row 140131 with Analysis ID Unknown has pvalue 1.325213 and failed QC for p-value range"
## [1] "Row 140274 with Analysis ID Unknown has pvalue 1.390872 and failed QC for p-value range"
## [1] "Row 140297 with Analysis ID Unknown has pvalue 1.471018 and failed QC for p-value range"
## [1] "Row 140352 with Analysis ID Unknown has pvalue 1.209205 and failed QC for p-value range"
## [1] "Row 140622 with Analysis ID Unknown has pvalue 1.371379 and failed QC for p-value range"
## [1] "Row 140702 with Analysis ID Unknown has pvalue 1.052364 and failed QC for p-value range"
## [1] "Row 140708 with Analysis ID Unknown has pvalue 1.088558 and failed QC for p-value range"
## [1] "Row 141086 with Analysis ID Unknown has pvalue 1.149549 and failed QC for p-value range"
## [1] "Row 141211 with Analysis ID Unknown has pvalue 1.056883 and failed QC for p-value range"
## [1] "Row 141380 with Analysis ID Unknown has pvalue 1.386671 and failed QC for p-value range"
## [1] "Row 141444 with Analysis ID Unknown has pvalue 1.133333 and failed QC for p-value range"
## [1] "Row 141447 with Analysis ID Unknown has pvalue 1.154612 and failed QC for p-value range"
## [1] "Row 141452 with Analysis ID Unknown has pvalue 1.261113 and failed QC for p-value range"
## [1] "Row 141495 with Analysis ID Unknown has pvalue 1.1344 and failed QC for p-value range"
## [1] "Row 141537 with Analysis ID Unknown has pvalue 1.132981 and failed QC for p-value range"
## [1] "Row 141702 with Analysis ID Unknown has pvalue 1.186498 and failed QC for p-value range"
## [1] "Row 141726 with Analysis ID Unknown has pvalue 1.408326 and failed QC for p-value range"
## [1] "Row 141792 with Analysis ID Unknown has pvalue 1.124883 and failed QC for p-value range"
## [1] "Row 141847 with Analysis ID Unknown has pvalue 1.300031 and failed QC for p-value range"
## [1] "Row 141881 with Analysis ID Unknown has pvalue 1.436792 and failed QC for p-value range"
## [1] "Row 142447 with Analysis ID Unknown has pvalue 1.407244 and failed QC for p-value range"
## [1] "Row 142556 with Analysis ID Unknown has pvalue 1.287328 and failed QC for p-value range"
## [1] "Row 142603 with Analysis ID Unknown has pvalue 1.06051 and failed QC for p-value range"
## [1] "Row 142690 with Analysis ID Unknown has pvalue 1.007553 and failed QC for p-value range"
## [1] "Row 142734 with Analysis ID Unknown has pvalue 1.374264 and failed QC for p-value range"
## [1] "Row 142872 with Analysis ID Unknown has pvalue 1.292445 and failed QC for p-value range"
## [1] "Row 143045 with Analysis ID Unknown has pvalue 1.111126 and failed QC for p-value range"
## [1] "Row 143065 with Analysis ID Unknown has pvalue 1.277076 and failed QC for p-value range"
## [1] "Row 143160 with Analysis ID Unknown has pvalue 1.287023 and failed QC for p-value range"
## [1] "Row 143254 with Analysis ID Unknown has pvalue 1.399166 and failed QC for p-value range"
## [1] "Row 143547 with Analysis ID Unknown has pvalue 1.192221 and failed QC for p-value range"
## [1] "Row 143690 with Analysis ID Unknown has pvalue 1.000803 and failed QC for p-value range"
## [1] "Row 143694 with Analysis ID Unknown has pvalue 1.214687 and failed QC for p-value range"
## [1] "Row 143790 with Analysis ID Unknown has pvalue 1.215008 and failed QC for p-value range"
## [1] "Row 143814 with Analysis ID Unknown has pvalue 1.4297 and failed QC for p-value range"
## [1] "Row 143881 with Analysis ID Unknown has pvalue 1.188053 and failed QC for p-value range"
## [1] "Row 143941 with Analysis ID Unknown has pvalue 1.389375 and failed QC for p-value range"
## [1] "Row 143969 with Analysis ID Unknown has pvalue 1.358891 and failed QC for p-value range"
## [1] "Row 144018 with Analysis ID Unknown has pvalue 1.324729 and failed QC for p-value range"
## [1] "Row 144064 with Analysis ID Unknown has pvalue 1.278432 and failed QC for p-value range"
## [1] "Row 144105 with Analysis ID Unknown has pvalue 1.478124 and failed QC for p-value range"
## [1] "Row 144197 with Analysis ID Unknown has pvalue 1.262275 and failed QC for p-value range"
## [1] "Row 144598 with Analysis ID Unknown has pvalue 1.313497 and failed QC for p-value range"
## [1] "Row 144748 with Analysis ID Unknown has pvalue 1.389815 and failed QC for p-value range"
## [1] "Row 145157 with Analysis ID Unknown has pvalue 1.312111 and failed QC for p-value range"
## [1] "Row 145238 with Analysis ID Unknown has pvalue 1.001571 and failed QC for p-value range"
## [1] "Row 145287 with Analysis ID Unknown has pvalue 1.028622 and failed QC for p-value range"
## [1] "Row 145351 with Analysis ID Unknown has pvalue 1.029479 and failed QC for p-value range"
## [1] "Row 145406 with Analysis ID Unknown has pvalue 1.243206 and failed QC for p-value range"
## [1] "Row 145606 with Analysis ID Unknown has pvalue 1.002596 and failed QC for p-value range"
## [1] "Row 145631 with Analysis ID Unknown has pvalue 1.041947 and failed QC for p-value range"
## [1] "Row 145673 with Analysis ID Unknown has pvalue 1.194618 and failed QC for p-value range"

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## [1] "Row 145894 with Analysis ID Unknown has pvalue 1.119696 and failed QC for p-value range"
## [1] "Row 145994 with Analysis ID Unknown has pvalue 1.082553 and failed QC for p-value range"
## [1] "Row 146263 with Analysis ID Unknown has pvalue 1.472707 and failed QC for p-value range"
## [1] "Row 146319 with Analysis ID Unknown has pvalue 1.208223 and failed QC for p-value range"
## [1] "Row 146373 with Analysis ID Unknown has pvalue 1.267589 and failed QC for p-value range"
## [1] "Row 146481 with Analysis ID Unknown has pvalue 1.239875 and failed QC for p-value range"
## [1] "Row 146539 with Analysis ID Unknown has pvalue 1.404621 and failed QC for p-value range"
## [1] "Row 146583 with Analysis ID Unknown has pvalue 1.003127 and failed QC for p-value range"
## [1] "Row 146791 with Analysis ID Unknown has pvalue 1.332395 and failed QC for p-value range"
## [1] "Row 146943 with Analysis ID Unknown has pvalue 1.380934 and failed QC for p-value range"
## [1] "Row 146996 with Analysis ID Unknown has pvalue 1.027381 and failed QC for p-value range"
## [1] "Row 147065 with Analysis ID Unknown has pvalue 1.456857 and failed QC for p-value range"
## [1] "Row 147078 with Analysis ID Unknown has pvalue 1.18787 and failed QC for p-value range"
## [1] "Row 147160 with Analysis ID Unknown has pvalue 1.416333 and failed QC for p-value range"
## [1] "Row 147200 with Analysis ID Unknown has pvalue 1.119161 and failed QC for p-value range"
## [1] "Row 147202 with Analysis ID Unknown has pvalue 1.3857 and failed QC for p-value range"
## [1] "Row 147225 with Analysis ID Unknown has pvalue 1.418567 and failed QC for p-value range"
## [1] "Row 147318 with Analysis ID Unknown has pvalue 1.338085 and failed QC for p-value range"
## [1] "Row 147473 with Analysis ID Unknown has pvalue 1.331203 and failed QC for p-value range"
## [1] "Row 147660 with Analysis ID Unknown has pvalue 1.45937 and failed QC for p-value range"
## [1] "Row 147677 with Analysis ID Unknown has pvalue 1.076924 and failed QC for p-value range"
## [1] "Row 147689 with Analysis ID Unknown has pvalue 1.109907 and failed QC for p-value range"
## [1] "Row 147725 with Analysis ID Unknown has pvalue 1.149696 and failed QC for p-value range"
## [1] "Row 147820 with Analysis ID Unknown has pvalue 1.089804 and failed QC for p-value range"
## [1] "Row 148094 with Analysis ID Unknown has pvalue 1.344823 and failed QC for p-value range"
## [1] "Row 148193 with Analysis ID Unknown has pvalue 1.194128 and failed QC for p-value range"
## [1] "Row 148229 with Analysis ID Unknown has pvalue 1.455536 and failed QC for p-value range"
## [1] "Row 148284 with Analysis ID Unknown has pvalue 1.396449 and failed QC for p-value range"
## [1] "Row 148451 with Analysis ID Unknown has pvalue 1.072548 and failed QC for p-value range"
## [1] "Row 148496 with Analysis ID Unknown has pvalue 1.245315 and failed QC for p-value range"
## [1] "Row 148609 with Analysis ID Unknown has pvalue 1.072922 and failed QC for p-value range"
## [1] "Row 148913 with Analysis ID Unknown has pvalue 1.194648 and failed QC for p-value range"
## [1] "Row 149186 with Analysis ID Unknown has pvalue 1.180428 and failed QC for p-value range"
## [1] "Row 149296 with Analysis ID Unknown has pvalue 1.114867 and failed QC for p-value range"
## [1] "Row 149437 with Analysis ID Unknown has pvalue 1.333097 and failed QC for p-value range"
## [1] "Row 149631 with Analysis ID Unknown has pvalue 1.203147 and failed QC for p-value range"
## [1] "Row 149682 with Analysis ID Unknown has pvalue 1.005091 and failed QC for p-value range"
## [1] "Row 149697 with Analysis ID Unknown has pvalue 1.127129 and failed QC for p-value range"
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## [1] "Row 149999 with Analysis ID Unknown has pvalue 1.032343 and failed QC for p-value range"
## [1] "Row 150060 with Analysis ID Unknown has pvalue 1.182676 and failed QC for p-value range"
## [1] "Row 150185 with Analysis ID Unknown has pvalue 1.396228 and failed QC for p-value range"
## [1] "Row 150196 with Analysis ID Unknown has pvalue 1.108956 and failed QC for p-value range"
## [1] "Row 150211 with Analysis ID Unknown has pvalue 1.187497 and failed QC for p-value range"
## [1] "Row 150503 with Analysis ID Unknown has pvalue 1.018144 and failed QC for p-value range"
## [1] "Row 150583 with Analysis ID Unknown has pvalue 1.106311 and failed QC for p-value range"
## [1] "Row 151037 with Analysis ID Unknown has pvalue 1.080294 and failed QC for p-value range"
## [1] "Row 151121 with Analysis ID Unknown has pvalue 1.031218 and failed QC for p-value range"
## [1] "Row 151135 with Analysis ID Unknown has pvalue 1.034361 and failed QC for p-value range"
## [1] "Row 151174 with Analysis ID Unknown has pvalue 1.318433 and failed QC for p-value range"
## [1] "Row 151194 with Analysis ID Unknown has pvalue 1.385897 and failed QC for p-value range"
## [1] "Row 151389 with Analysis ID Unknown has pvalue 1.181343 and failed QC for p-value range"
## [1] "Row 151420 with Analysis ID Unknown has pvalue 1.383863 and failed QC for p-value range"
## [1] "Row 151436 with Analysis ID Unknown has pvalue 1.446757 and failed QC for p-value range"

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## [1] "Row 151538 with Analysis ID Unknown has pvalue 1.16498 and failed QC for p-value range"
## [1] "Row 151606 with Analysis ID Unknown has pvalue 1.498036 and failed QC for p-value range"
## [1] "Row 152008 with Analysis ID Unknown has pvalue 1.007766 and failed QC for p-value range"
## [1] "Row 152068 with Analysis ID Unknown has pvalue 1.210904 and failed QC for p-value range"
## [1] "Row 152115 with Analysis ID Unknown has pvalue 1.393314 and failed QC for p-value range"
## [1] "Row 152157 with Analysis ID Unknown has pvalue 1.32291 and failed QC for p-value range"
## [1] "Row 152283 with Analysis ID Unknown has pvalue 1.370757 and failed QC for p-value range"
## [1] "Row 152312 with Analysis ID Unknown has pvalue 1.122566 and failed QC for p-value range"
## [1] "Row 152395 with Analysis ID Unknown has pvalue 1.199336 and failed QC for p-value range"
## [1] "Row 152412 with Analysis ID Unknown has pvalue 1.20905 and failed QC for p-value range"
## [1] "Row 152568 with Analysis ID Unknown has pvalue 1.170711 and failed QC for p-value range"
## [1] "Row 152587 with Analysis ID Unknown has pvalue 1.389362 and failed QC for p-value range"
## [1] "Row 152686 with Analysis ID Unknown has pvalue 1.404397 and failed QC for p-value range"
## [1] "Row 152714 with Analysis ID Unknown has pvalue 1.199791 and failed QC for p-value range"
## [1] "Row 152775 with Analysis ID Unknown has pvalue 1.269773 and failed QC for p-value range"
## [1] "Row 152885 with Analysis ID Unknown has pvalue 1.488759 and failed QC for p-value range"
## [1] "Row 153046 with Analysis ID Unknown has pvalue 1.129912 and failed QC for p-value range"
## [1] "Row 153155 with Analysis ID Unknown has pvalue 1.302812 and failed QC for p-value range"
## [1] "Row 153228 with Analysis ID Unknown has pvalue 1.204923 and failed QC for p-value range"
## [1] "Row 153471 with Analysis ID Unknown has pvalue 1.478252 and failed QC for p-value range"
## [1] "Row 153532 with Analysis ID Unknown has pvalue 1.155621 and failed QC for p-value range"
## [1] "Row 153594 with Analysis ID Unknown has pvalue 1.225326 and failed QC for p-value range"
## [1] "Row 153715 with Analysis ID Unknown has pvalue 1.204308 and failed QC for p-value range"
## [1] "Row 153717 with Analysis ID Unknown has pvalue 1.26063 and failed QC for p-value range"
## [1] "Row 153751 with Analysis ID Unknown has pvalue 1.308523 and failed QC for p-value range"
## [1] "Row 153994 with Analysis ID Unknown has pvalue 1.063691 and failed QC for p-value range"
## [1] "Row 154599 with Analysis ID Unknown has pvalue 1.478602 and failed QC for p-value range"
## [1] "Row 154976 with Analysis ID Unknown has pvalue 1.4873 and failed QC for p-value range"
## [1] "Row 154986 with Analysis ID Unknown has pvalue 1.471677 and failed QC for p-value range"
## [1] "Row 155027 with Analysis ID Unknown has pvalue 1.180475 and failed QC for p-value range"
## [1] "Row 155184 with Analysis ID Unknown has pvalue 1.253405 and failed QC for p-value range"
## [1] "Row 155361 with Analysis ID Unknown has pvalue 1.397629 and failed QC for p-value range"
## [1] "Row 155522 with Analysis ID Unknown has pvalue 1.45663 and failed QC for p-value range"
## [1] "Row 155597 with Analysis ID Unknown has pvalue 1.16743 and failed QC for p-value range"
## [1] "Row 155611 with Analysis ID Unknown has pvalue 1.196283 and failed QC for p-value range"
## [1] "Row 155634 with Analysis ID Unknown has pvalue 1.364091 and failed QC for p-value range"
## [1] "Row 156254 with Analysis ID Unknown has pvalue 1.337043 and failed QC for p-value range"
## [1] "Row 156260 with Analysis ID Unknown has pvalue 1.387903 and failed QC for p-value range"
## [1] "Row 156328 with Analysis ID Unknown has pvalue 1.212271 and failed QC for p-value range"
## [1] "Row 156540 with Analysis ID Unknown has pvalue 1.408136 and failed QC for p-value range"
## [1] "Row 156789 with Analysis ID Unknown has pvalue 1.082284 and failed QC for p-value range"
## [1] "Row 156836 with Analysis ID Unknown has pvalue 1.2729 and failed QC for p-value range"
## [1] "Row 156938 with Analysis ID Unknown has pvalue 1.451895 and failed QC for p-value range"
## [1] "Row 156988 with Analysis ID Unknown has pvalue 1.498432 and failed QC for p-value range"
## [1] "Row 157071 with Analysis ID Unknown has pvalue 1.045704 and failed QC for p-value range"
## [1] "Row 157127 with Analysis ID Unknown has pvalue 1.267688 and failed QC for p-value range"
## [1] "Row 157234 with Analysis ID Unknown has pvalue 1.017802 and failed QC for p-value range"
## [1] "Row 157279 with Analysis ID Unknown has pvalue 1.171265 and failed QC for p-value range"
## [1] "Row 157301 with Analysis ID Unknown has pvalue 1.245329 and failed QC for p-value range"
## [1] "Row 157349 with Analysis ID Unknown has pvalue 1.370252 and failed QC for p-value range"
## [1] "Row 157413 with Analysis ID Unknown has pvalue 1.243503 and failed QC for p-value range"
## [1] "Row 157477 with Analysis ID Unknown has pvalue 1.092657 and failed QC for p-value range"
## [1] "Row 157665 with Analysis ID Unknown has pvalue 1.293269 and failed QC for p-value range"
## [1] "Row 157740 with Analysis ID Unknown has pvalue 1.197043 and failed QC for p-value range"

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## [1] "Row 158211 with Analysis ID Unknown has pvalue 1.252475 and failed QC for p-value range"
## [1] "Row 158221 with Analysis ID Unknown has pvalue 1.282857 and failed QC for p-value range"
## [1] "Row 158422 with Analysis ID Unknown has pvalue 1.471293 and failed QC for p-value range"
## [1] "Row 158440 with Analysis ID Unknown has pvalue 1.131999 and failed QC for p-value range"
## [1] "Row 158491 with Analysis ID Unknown has pvalue 1.338971 and failed QC for p-value range"
## [1] "Row 158621 with Analysis ID Unknown has pvalue 1.494896 and failed QC for p-value range"
## [1] "Row 158651 with Analysis ID Unknown has pvalue 1.493003 and failed QC for p-value range"
## [1] "Row 158694 with Analysis ID Unknown has pvalue 1.312387 and failed QC for p-value range"
## [1] "Row 158725 with Analysis ID Unknown has pvalue 1.113386 and failed QC for p-value range"
## [1] "Row 158754 with Analysis ID Unknown has pvalue 1.338024 and failed QC for p-value range"
## [1] "Row 158805 with Analysis ID Unknown has pvalue 1.349139 and failed QC for p-value range"
## [1] "Row 158835 with Analysis ID Unknown has pvalue 1.259463 and failed QC for p-value range"
## [1] "Row 158896 with Analysis ID Unknown has pvalue 1.303463 and failed QC for p-value range"
## [1] "Row 159002 with Analysis ID Unknown has pvalue 1.163048 and failed QC for p-value range"
## [1] "Row 159047 with Analysis ID Unknown has pvalue 1.383128 and failed QC for p-value range"
## [1] "Row 159085 with Analysis ID Unknown has pvalue 1.014636 and failed QC for p-value range"
## [1] "Row 159096 with Analysis ID Unknown has pvalue 1.093587 and failed QC for p-value range"
## [1] "Row 159174 with Analysis ID Unknown has pvalue 1.457126 and failed QC for p-value range"
## [1] "Row 159283 with Analysis ID Unknown has pvalue 1.290016 and failed QC for p-value range"
## [1] "Row 159435 with Analysis ID Unknown has pvalue 1.09146 and failed QC for p-value range"
## [1] "Row 159579 with Analysis ID Unknown has pvalue 1.194852 and failed QC for p-value range"
## [1] "Row 159602 with Analysis ID Unknown has pvalue 1.054145 and failed QC for p-value range"
## [1] "Row 159732 with Analysis ID Unknown has pvalue 1.102452 and failed QC for p-value range"
## [1] "Row 159873 with Analysis ID Unknown has pvalue 1.37338 and failed QC for p-value range"
## [1] "Row 159879 with Analysis ID Unknown has pvalue 1.485397 and failed QC for p-value range"
## [1] "Row 159943 with Analysis ID Unknown has pvalue 1.487954 and failed QC for p-value range"
## [1] "Row 160133 with Analysis ID Unknown has pvalue 1.014204 and failed QC for p-value range"
## [1] "Row 160456 with Analysis ID Unknown has pvalue 1.349928 and failed QC for p-value range"
## [1] "Row 160546 with Analysis ID Unknown has pvalue 1.345973 and failed QC for p-value range"
## [1] "Row 160635 with Analysis ID Unknown has pvalue 1.172718 and failed QC for p-value range"
## [1] "Row 160760 with Analysis ID Unknown has pvalue 1.063373 and failed QC for p-value range"
## [1] "Row 160792 with Analysis ID Unknown has pvalue 1.019039 and failed QC for p-value range"
## [1] "Row 160803 with Analysis ID Unknown has pvalue 1.413526 and failed QC for p-value range"
## [1] "Row 161139 with Analysis ID Unknown has pvalue 1.203758 and failed QC for p-value range"
## [1] "Row 161191 with Analysis ID Unknown has pvalue 1.218199 and failed QC for p-value range"
## [1] "Row 161245 with Analysis ID Unknown has pvalue 1.171258 and failed QC for p-value range"
## [1] "Row 161257 with Analysis ID Unknown has pvalue 1.023157 and failed QC for p-value range"
## [1] "Row 161496 with Analysis ID Unknown has pvalue 1.021244 and failed QC for p-value range"
## [1] "Row 161550 with Analysis ID Unknown has pvalue 1.488418 and failed QC for p-value range"
## [1] "Row 161695 with Analysis ID Unknown has pvalue 1.170082 and failed QC for p-value range"
## [1] "Row 161873 with Analysis ID Unknown has pvalue 1.224161 and failed QC for p-value range"
## [1] "Row 161917 with Analysis ID Unknown has pvalue 1.473702 and failed QC for p-value range"
## [1] "Row 162010 with Analysis ID Unknown has pvalue 1.492075 and failed QC for p-value range"
## [1] "Row 162046 with Analysis ID Unknown has pvalue 1.36654 and failed QC for p-value range"
## [1] "Row 162327 with Analysis ID Unknown has pvalue 1.330761 and failed QC for p-value range"
## [1] "Row 162342 with Analysis ID Unknown has pvalue 1.092716 and failed QC for p-value range"
## [1] "Row 162388 with Analysis ID Unknown has pvalue 1.438397 and failed QC for p-value range"
## [1] "Row 162513 with Analysis ID Unknown has pvalue 1.177844 and failed QC for p-value range"
## [1] "Row 162582 with Analysis ID Unknown has pvalue 1.299922 and failed QC for p-value range"
## [1] "Row 162696 with Analysis ID Unknown has pvalue 1.360751 and failed QC for p-value range"
## [1] "Row 162772 with Analysis ID Unknown has pvalue 1.255119 and failed QC for p-value range"
## [1] "Row 162835 with Analysis ID Unknown has pvalue 1.079316 and failed QC for p-value range"
## [1] "Row 162945 with Analysis ID Unknown has pvalue 1.074468 and failed QC for p-value range"
## [1] "Row 163105 with Analysis ID Unknown has pvalue 1.311405 and failed QC for p-value range"

```

```

## [1] "Row 163121 with Analysis ID Unknown has pvalue 1.010828 and failed QC for p-value range"
## [1] "Row 163174 with Analysis ID Unknown has pvalue 1.010297 and failed QC for p-value range"
## [1] "Row 163186 with Analysis ID Unknown has pvalue 1.455484 and failed QC for p-value range"
## [1] "Row 164326 with Analysis ID Unknown has pvalue 1.328429 and failed QC for p-value range"
## [1] "Row 164448 with Analysis ID Unknown has pvalue 1.318635 and failed QC for p-value range"
## [1] "Row 164550 with Analysis ID Unknown has pvalue 1.438665 and failed QC for p-value range"
## [1] "Row 164815 with Analysis ID Unknown has pvalue 1.071324 and failed QC for p-value range"
## [1] "Row 164825 with Analysis ID Unknown has pvalue 1.080307 and failed QC for p-value range"
## [1] "Row 164858 with Analysis ID Unknown has pvalue 1.186966 and failed QC for p-value range"
## [1] "Row 164875 with Analysis ID Unknown has pvalue 1.429832 and failed QC for p-value range"
## [1] "Row 164953 with Analysis ID Unknown has pvalue 1.296577 and failed QC for p-value range"
## [1] "Row 165031 with Analysis ID Unknown has pvalue 1.045664 and failed QC for p-value range"
## [1] "Row 165165 with Analysis ID Unknown has pvalue 1.15132 and failed QC for p-value range"
## [1] "Row 165168 with Analysis ID Unknown has pvalue 1.364639 and failed QC for p-value range"
## [1] "Row 165329 with Analysis ID Unknown has pvalue 1.107809 and failed QC for p-value range"
## [1] "Row 165353 with Analysis ID Unknown has pvalue 1.319231 and failed QC for p-value range"
## [1] "Row 165534 with Analysis ID Unknown has pvalue 1.325362 and failed QC for p-value range"
## [1] "Row 165547 with Analysis ID Unknown has pvalue 1.153132 and failed QC for p-value range"
## [1] "Row 165642 with Analysis ID Unknown has pvalue 1.012201 and failed QC for p-value range"
## [1] "Row 165660 with Analysis ID Unknown has pvalue 1.389794 and failed QC for p-value range"
## [1] "Row 165768 with Analysis ID Unknown has pvalue 1.054731 and failed QC for p-value range"
## [1] "Row 165801 with Analysis ID Unknown has pvalue 1.112732 and failed QC for p-value range"
## [1] "Row 166002 with Analysis ID Unknown has pvalue 1.446959 and failed QC for p-value range"
## [1] "Row 166249 with Analysis ID Unknown has pvalue 1.405045 and failed QC for p-value range"
## [1] "Row 166268 with Analysis ID Unknown has pvalue 1.451325 and failed QC for p-value range"
## [1] "Row 166672 with Analysis ID Unknown has pvalue 1.198978 and failed QC for p-value range"
## [1] "Row 166817 with Analysis ID Unknown has pvalue 1.190045 and failed QC for p-value range"
## [1] "Row 166886 with Analysis ID Unknown has pvalue 1.320461 and failed QC for p-value range"
## [1] "Row 167000 with Analysis ID Unknown has pvalue 1.266445 and failed QC for p-value range"
## [1] "Row 167010 with Analysis ID Unknown has pvalue 1.340783 and failed QC for p-value range"
## [1] "Row 167103 with Analysis ID Unknown has pvalue 1.443696 and failed QC for p-value range"
## [1] "Row 167139 with Analysis ID Unknown has pvalue 1.081307 and failed QC for p-value range"
## [1] "Row 167155 with Analysis ID Unknown has pvalue 1.299738 and failed QC for p-value range"
## [1] "Row 167172 with Analysis ID Unknown has pvalue 1.434077 and failed QC for p-value range"
## [1] "Row 167405 with Analysis ID Unknown has pvalue 1.256297 and failed QC for p-value range"
## [1] "Row 167477 with Analysis ID Unknown has pvalue 1.240668 and failed QC for p-value range"
## [1] "Row 167478 with Analysis ID Unknown has pvalue 1.255546 and failed QC for p-value range"
## [1] "Row 167539 with Analysis ID Unknown has pvalue 1.417488 and failed QC for p-value range"
## [1] "Row 167615 with Analysis ID Unknown has pvalue 1.190965 and failed QC for p-value range"
## [1] "Row 167620 with Analysis ID Unknown has pvalue 1.003123 and failed QC for p-value range"
## [1] "Row 167622 with Analysis ID Unknown has pvalue 1.437881 and failed QC for p-value range"
## [1] "Row 167747 with Analysis ID Unknown has pvalue 1.138013 and failed QC for p-value range"
## [1] "Row 167760 with Analysis ID Unknown has pvalue 1.332516 and failed QC for p-value range"
## [1] "Row 167792 with Analysis ID Unknown has pvalue 1.365292 and failed QC for p-value range"
## [1] "Row 167814 with Analysis ID Unknown has pvalue 1.156961 and failed QC for p-value range"
## [1] "Row 168060 with Analysis ID Unknown has pvalue 1.390578 and failed QC for p-value range"
## [1] "Row 168253 with Analysis ID Unknown has pvalue 1.228627 and failed QC for p-value range"
## [1] "Row 168369 with Analysis ID Unknown has pvalue 1.066499 and failed QC for p-value range"
## [1] "Row 168379 with Analysis ID Unknown has pvalue 1.38636 and failed QC for p-value range"
## [1] "Row 168401 with Analysis ID Unknown has pvalue 1.385353 and failed QC for p-value range"
## [1] "Row 168417 with Analysis ID Unknown has pvalue 1.450492 and failed QC for p-value range"
## [1] "Row 168435 with Analysis ID Unknown has pvalue 1.463681 and failed QC for p-value range"
## [1] "Row 168437 with Analysis ID Unknown has pvalue 1.251924 and failed QC for p-value range"
## [1] "Row 168490 with Analysis ID Unknown has pvalue 1.277463 and failed QC for p-value range"

```

```
## [1] "Row 168605 with Analysis ID Unknown has pvalue 1.402138 and failed QC for p-value range"
## [1] "Row 168698 with Analysis ID Unknown has pvalue 1.184092 and failed QC for p-value range"
## [1] "Row 168813 with Analysis ID Unknown has pvalue 1.069248 and failed QC for p-value range"
## [1] "Row 168899 with Analysis ID Unknown has pvalue 1.180261 and failed QC for p-value range"
## [1] "Row 169243 with Analysis ID Unknown has pvalue 1.051435 and failed QC for p-value range"
## [1] "Row 169281 with Analysis ID Unknown has pvalue 1.384526 and failed QC for p-value range"
## [1] "Row 169327 with Analysis ID Unknown has pvalue 1.067818 and failed QC for p-value range"
## [1] "Row 169705 with Analysis ID Unknown has pvalue 1.071385 and failed QC for p-value range"
## [1] "Row 169841 with Analysis ID Unknown has pvalue 1.164641 and failed QC for p-value range"
## [1] "Row 170023 with Analysis ID Unknown has pvalue 1.063625 and failed QC for p-value range"
## [1] "Row 170188 with Analysis ID Unknown has pvalue 1.384326 and failed QC for p-value range"
## [1] "Row 170461 with Analysis ID Unknown has pvalue 1.143711 and failed QC for p-value range"
## [1] "Row 170609 with Analysis ID Unknown has pvalue 1.282836 and failed QC for p-value range"
## [1] "Field: pvalue - Total p-value QC failures: 1707"
```

```
# Print overall summary of QC results
```

```
cat("\n") # Adds a blank line
```

```
print(paste("Total String QC failures across all fields:", overall_string_failure_counter))
```

```
## [1] "Total String QC failures across all fields: 0"
```

```
print(paste("Total p-value QC failures across all fields:", overall_pvalue_failure_counter))
```

```
## [1] "Total p-value QC failures across all fields: 1707"
```

```
print(paste("Total rows processed:", nrow(df)))
```

```
## [1] "Total rows processed: 170617"
```

```
cat("\n")
```

Export data that failed QC and passed QC

```
df_failQC = df[df$qc_pvalue_failure_count==1,]
```

```
write.csv(df_failQC, "/scratch_tmp/grp/msc_appbio/DCDM_group6/outputs/tables/failQC.csv", row.names = F)
```

```
df_passQC = df[df$qc_pvalue_failure_count==0,]
```

```
write.csv(df_passQC, "/scratch_tmp/grp/msc_appbio/DCDM_group6/outputs/tables/passQC.csv", row.names = F)
```