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Corrigendum: Which headache disorders can be diagnosed concurrently? An analysis of ICHD3 criteria using prime encoding system

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KEYWORDS

headaches classification, International Classification of Headache Disorders, 3rd edition, headache diagnosis, number theory in medicine, automated diagnosis

A corrigendum on

Which headache disorders can be diagnosed concurrently? An analysis of ICHD3 criteria using prime encoding system

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In the published article, there was an error in the legend for Table 4 as published. The error is that Table 4 contains two titles that state “Non-intersecting characteristics”. The first one of the two should say “Intersecting characteristics”. The corrected legend appears below.

“Intersecting characteristics”

In the published article, there was an error in Table 2 as published. The encoding (number portion) for hypnic headache appears to be missing one value in Table 2. One more number, 17956508311, should be added to the existing list for hypnic headache. The corrected Table 2 and its caption appears below.

“Prime number encodings for selected primary headache disorders.”

The authors apologize for this error and state that this does not change the scientific conclusions of the article in any way. The original article has been updated.

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TABLE 2 Prime number encodings for selected primary headache disorders.

Migraine without aura:
7580756461,13242732241,16451185183,102951563551,127894697713,223417708453,3191498470081,3964735629103,4166259653173,6925948962043,7277988854713,9041302068919,53843667737173,5658049399543,70288832213209,122786715194029,1669153699852363,1753995313985833,2178953798609479,3806388171014899,29591598361760989,917339549214590659.
New Daily Persistent Headache:
1145520433.
Primary exercise headache:
2106413.
Primary thunderclap headache:
17411171.
Cold-stimulus headache
4026427.
External compression headache:
106911207.
External traction headache:
1183350401.
Cluster headache:
1577982193416431,1932584933510011,2251727399594233,3492836989921763,4237502744118281,4911247950296083,7428927404960501,7960831515100871,8173593159157019.
Paroxysmal Hemicrania:
699200435231955421,856324128542507201,997735452522003803,1547668379108935033,1877628135061093771,2176163152351142153,3291741374856059791,3527426914821887461,3621701130808218529.
Short lasting unilateral neuralgiform headaches:
444401003390335,544266397410635,634145252028905,983674131099955,1193391458542585,1383135707181155,2092180004725285,2301897332167915.
Hemicrania continua:
54659995058027,66943140014887,77997970476061,120988977825071,146783582234477,170121557652511,257331886846217,275756604281507,283126491255623.
Migraine with aura:
75121389451,179941932871,188719588133,209121705769,345049093919,581872457273,594604896163,635348700611,716836309507,826512945899,866830650577,889227610013,910191718697,932604566599,954591314731,960542072261,1033426681907,1057790375783,1393787513933,1424286146623,1461777148759,1493763519629,1521818771231,1596119906413,1619807110787,1655251467697,1717073020447,1768673409809,1800832679981,1995517294033,2233913264179,2286579195751,2475417400847,2533776946643,2596169469181,2657375822089,4084418344297,4180711114693,4283658263531,4384648242239,4746756454183,4858664268427,6887746063999,7038462608069,7050129075331,7204398858161,7223733676877,7381802247487,7394037810713,7520755549093,7555832948803,7698062163217,7887621673439,8004677858161,8073577390691,8179834922891,8193393249709,8372679754079,8485341431141,8685388773329,8740337530027,8899260525343,8946396568063,9109066274467,9861342744299,10093830196031,10260855840551,10502762068619,11299697190653,11370137553043,11638195805767,11924778409289,12205912674341,12521286076129,13132080518867,17303362063217,17681991430027,17711299872173,18098855668063,18893605403819,19173995799781,19339034214911,19593558071111,19626034993489,20055488713259,20109312668063,20549341391653,20583402554147,20936157339367,21033805235857,21316833351403,21429740616523,21819391308607,21957433307141,22475093817329,23621355875879,24178244423051,24773617138117,25357670980273,31455913801007,51901998960457,57513025875101,60318539332423,87524773154719,89439976068389,95568625392133,96986910793067,99109162670377,101717979612241,103943755971371,105900368677769,107825924039621,11066240320587,119482780692553,125311209019019,144483943052083,243650044187461,248981555001191,266042389605127,300164058812999.
Chronic migraine:
47943440512446421,83751819318423001,104043233975143063,651102853410965911,808852238322886393,1412974242049523533,20184188455739943241,20663622860864407451,25074419388009478183,26348930066400847453,36097034126240313431,43802201503535229523,44842633843286660153,46028628871181563393,57180458193890635759,74589881356425382327,178668785574693357667,187384336090532058041,207642102154373361613,280625329820126307641,340526792333935171453,342607760128665739163,348615314717164035383,357835469611443767023,444531949184762684449,577755521692989825821,590397874465265314351,608991898323344642723,630853403336546877647,711764461079110004239,776547512891224440469,820665099843083049623,860697543737867588629,882936037451639990801,903751818295293585869,92600688059037063523,947837272846283516887,953745926844664084697,1026114854335689719039,1050306167208043897091,1383926017078557024641,1414208862091216915771,11451434603277511025843,1483194660242007984833,1511113966131728567387,1584826842528398253601,1608346452280485190799,1643540028916819658869,1704924174212751870619,1756159474153089956693,1788091207101178791137,1981398364625630552341,2218107606280949245183,2270400909375981447427,2457903023176187001419,2515849656335547009311,2577800731623805879537,2638574029815329790253,4055519765243973517069,415113233186856979161,4253349997694899054487,4353625439683776831803,4713171619067320573891,4824287649379320273079,6839013035854228403323,6988663211693489418713,7000247134931341843087,7153425409218679738997,7172623427847117593729,7329573612263903536699,7341722604927992664701,7467543774379124667961,7502372990156176311631,7643595886938161005909,7831814202397618554203,7948042176803562738997,8016454222886363981807,8121959948724866081207,8135422346001289168993,8313440340443330507483,8425304899750395166457,8623936842377123539733,8678496818873036776279,8699385224423915536871,8836295382665048589211,8883097922657862790651,9044616688346739322159,9791570559169378166423,10022413087086927356987,10188256971222665177027,10428451634591372411063,10556330562351990315043,10807074756232085096873,1109289955795475677713,11219748183226937444081,11289690157300791142111,11356388858618765252243,11555851811303953212259,11840406750339854124653,12119551899660243612857,12432693932764984735333,13039166807534008380959,13780490424727643217919,17180935187633793305909,17556885629376327076279,17585986704827517313121,17970800418281073490651,18759927042952435141463,18878748848023683924413,19038333586296906095737,19202204301332453258747,19454927

(Continued)

TABLE 2 (Continued)

319038632706147,19487174456700762428053,19838339043479253822383,19913589652689838192343,19967032785628462490651,20403948163869785521081,204377683326 37384985519,20788027263812157859459,20884984269894220543189,21166009870104651271831,21278118279854880638071,21665012067435212794939,2180207737424201 9218457,22316075269116094327733,23454227153359208166083,24007175534184965529527,24072972899627957654539,24598335794986486613209,24644777481566864012 129,25178257267559841896821,31233353050604717749739,32148238864619339782937,5153477553466102497389,57106102640327302767377,59891766183757902902371, 77006246582692837154477,80762648855019317015671,86905507114147634100763,88807159348592877735353,89493746028534918855203,94892446498817657366041,9630 0697072433864814359,98407933332224540193229,100998292051576980171157,103208320324040371422167,105151089363554701405613,107063020799267216627417,1102 80410795923223425399,118637401426215023830381,124424591739688927431863,143461672486675906952191,146767047495926058896243,147663944615454933579253,15 4227087402532263586913,187147950606785090153029,191593270098632716997519,241926141425870440875097,247219930078515308290307,249012629849678614928851, 254461483894529350485281,264160053766978884018979,271897816838051704265857,298040301143906035476323,306770482725096411827009,3346919780561177338421 39,353706658032368794378513,370960641351020930699099,380545432141656836035231,389517033685271535509539,399108623953444974378413,40851786459674819577 8297,411064494470050220504407,442255502218682268905809,45268195806666919646221,596472113360858077620271,609524019561314490697301,625568314012607252 138333,639256898564305441463023,651290119402775012543797,683060369129739647302031,693197320932889117234369,708365752463149272972539,7348223190856960 56236789,756904733359981771334683,770667310260608058980047,853982695153646768058971,956004378307089124673873,978542791941048003841037,10593562029889 36597611589,1084331201880620761013041,1111032115329860334080447,1137225406850407139599043,1747929018820152585856739,178913756150353538018391,183319 3849060501492483897,1876412564503707814507093,2031376967818015167347021,2079267976882487037697049,2947614618453172441832213,30121138442398939394653 03,3017106515155408334370497,3083126351373250967507707,3091400697402107682897199,3159046226885742424317269,316428244272396483846131,321851136675740 2731891191,3233522758757311990312961,3294389827270347393546779,3375511921233373596861493,3425606178202335540507707,3455091770064022876158817,3500564 737900417281000217,3506367031126555631835983,3583092786731075448725173,3631306411792420316742967,3716916779064540245624923,374043212893427885057624 9,3808443309928635941949941,3828615204665538862770581,389822972677444647850529,4220166911002001989728313,4319660040534465690861397,4391138754596968 691298637,4494662654508881509168153,4549778472373707825783533,4781039709478500171194303,4835711466970810038398911,4865856457796640982249841,49805721 30672003834483629,5103215309396477127725443,5223526868753564997141367,5358491085021708420928523,5619880894047157612193329,5801586468810337794743899, 5939391373057614226923089,7404983065870164914846779,7567017706261196969876249,7579560269780659961955151,7745414980279142674470581,8085528555124995 45970553,8205521775693966527262647,8276150053874287354519957,838507367450560696349357,8398972190838028606490843,8582757140309320260899833,860579113 0605867333470581,8794101658627877559585911,8808678151366712928758689,8959639750703040037426829,9001428220324409054114459,9122550254015104698159161, 9170868978617453555008601,9337620201064576714618709,9396695348298310283154967,9618228440989036655252923,10108771903097818719581773,1034709265523372 0143226137,10375451319739649749106309,10601882727639175730293079,10851828882318291857510851828882318291857529851,13461575164810633350137509,2221148 8263543890176374659,24612730237981067492739487,25813351225199656150921901,37456273566197630297428853,38275885679243530303937143,4089864444099041032 4763671,41505600438218995734988729,42413819266188776823281699,43530263874229678453768667,44482786059661400082953977,45320119515692076305819203,461441 61964484170366416727,47530857053042909296346969,51132720014698675270894211,5362699039805927723132953,61831980841757315896394321,8066076671152437385 9555499,104270166954550160017166807,106551789863840097873122317,113852983173567899012179949,128455369793023501290295213,2500483768057255589534620469.
Primary headache associated with sexual activity:
613582,3829598,167814677,1047395053.
Primary stabbing:
14937586453,15465416363,16204378237,16415510201,16521076183,16732208147,18632395823,19371357697.
Nummular:
331231589.
Hypnic headache:
14155130507,14655311797,15355565603,15555638119,15655674377,15855746893,17656399537,18356653343,17956508311.
Primary cough:
1412526109,1440706181.
Infrequent tension type headache:
1378253359942681,1386197183342927,2206388426002661,2219105362175587,2241879928833803,2254801426982701,9699783080351321,9755689611073807,985581176260 8983,9912617594093761,15777758744434123,15868696835180141,514088503258620013,517051549386911771,522358023418276099,525368732486969333,8362121345500 8519,841040932264547473,3676217787453150659,3697406362596972853,194839542735016984927,195962537217639561209.
Frequent tension type headache:
21262771073163,21385323067821,34038685022703,34234873409001,34586224191969,34785568423623,149641766231883,150504254798061,152048872391109,1529252347 68003,243408709879329,244811641924743,7931013610289799,7976725504297233,8058590236728777,8105037442704159,12900661623604437,12975017022011379,567142 29401883657,57041112568465119,3005854158299833821,3023178966128651307.
Chronic tension type headache:
5029577936481697,5058566858305799,8051641932650957,8098049090764219,8181158961058211,8228312615012437,9281386088971379,9334881109657093,148581845973 66199,14943822548936033,15097190247725977,15184205753476559,35396840949201377,35600857323548359,35966227130689871,36173525269771657,5757683570707005 1,57908690667917717,65319943607289139,65696427432115013,66370666560757597,66753206425661099,106250037026448857,106862429170693519,187603257030767298 1,1886845438148063027,1906210037926563163,1917196839297897821,3051572292474712703,3069160605399639001,3461957011186324367,3481910653902095689,351764 5327720152641,3537919940560038247,5631251962401789421,5663708740646756507,13415402719747321883,13492724925624828061,24756258627162583681,24898945996 771589927,711016344146608059799,715114421058115887233,1312081707239616935093,1319644137828894266131.