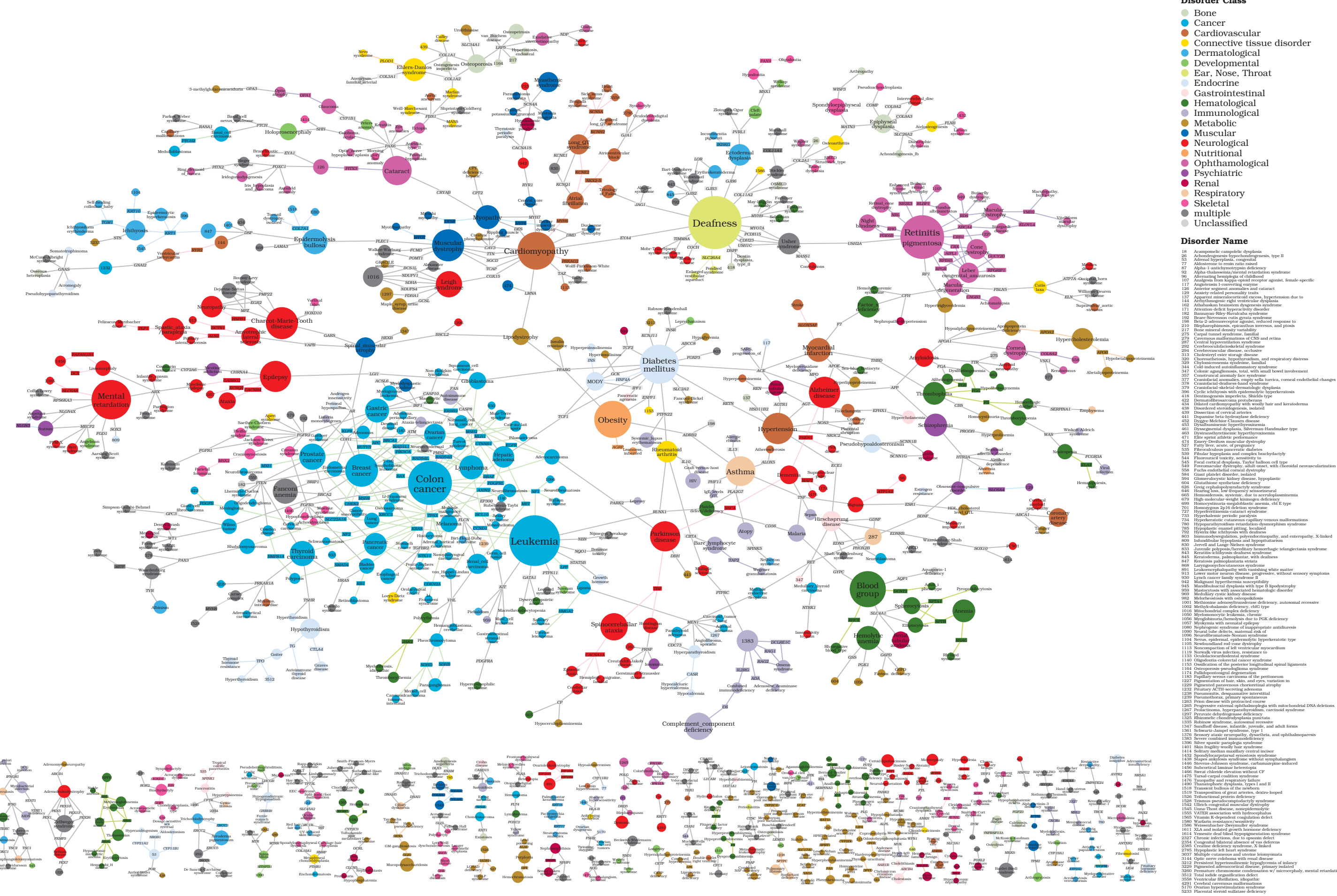


The human disease network

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- ### Disorder Class
- Bone
 - Cancer
 - Cardiovascular
 - Connective tissue disorder
 - Dermatological
 - Developmental
 - Ear, Nose, Throat
 - Endocrine
 - Gastrointestinal
 - Hematological
 - Immunological
 - Metabolic
 - Muscular
 - Neurological
 - Nutritional
 - Ophthalmological
 - Psychiatric
 - Renal
 - Respiratory
 - Skeletal
 - multiple
 - Unclassified
- ### Disorder Name
- 18 Adonipomelic campidolic dysplasia
 - 26 Achromatopsia
 - 53 Adrenal hypoplasia congenita
 - 77 Aldosterone to renin ratio raised
 - 87 Alpha 1 antitrypsin deficiency
 - 92 Alpha-thalassemia/mental retardation syndrome
 - 96 Alternating hemiparesis of childhood
 - 107 Analgesia from kappa-opioid receptor agonist, female-specific
 - 117 Angiotensin I-converting enzyme
 - 129 Anterior segment anomalies and cataract
 - 137 Anxiety-related personality traits
 - 144 Arrhythmogenic right ventricular dysplasia
 - 162 Atibaaskan brainstem dysgenesis syndrome
 - 171 Attention-deficit hyperactivity disorder
 - 182 Bannayan-Riley-Rivkin syndrome
 - 192 Beare-Stevenson cleft palate syndrome
 - 198 Beta-2-adrenergic agonist, reduced response to
 - 210 Biepharophimos, epistaxis inversa, and ptosis
 - 217 Bone mineral density variability
 - 279 Carpal tunnel syndrome, familial
 - 279 Cavernous malformations of CNS and retina
 - 287 Central hypothyroidism syndrome
 - 292 Cerebrocystic degeneration
 - 294 Cerebrovascular disease, occlusive
 - 313 Cholesteryl ester storage disease
 - 320 Chorea/stiffness, hypohidrosis, and respiratory distress
 - 329 Chylomicronemia syndrome, familial
 - 344 Cold-induced autoinflammatory syndrome
 - 347 Colonic aganglionosis, with small bowel involvement
 - 357 Congenital anomaly face syndrome
 - 377 Craniofacial dysplasia, Taylor ballsoo cell type
 - 378 Craniofacial-deafness-hand syndrome
 - 379 Craniofacial-abetal-dysmaturin dysplasia
 - 396 Cyclic ichthyosis with epidermolytic hyperkeratosis
 - 418 Deafness-impaired hearing with white hair type-2
 - 422 Dermatofibrosarcoma protuberans
 - 438 Dilated cardiomyopathy with wavy hair and keratoderma
 - 438 Disordered steroidogenesis, isolated
 - 439 Dissection of cervical arteries
 - 441 Dopamine beta-hydroxylase deficiency
 - 452 Dwyg-Melcher-Chausse disease
 - 453 Dysmaturin dysplasia-hypothyroidism
 - 461 Dyssegmental dysplasia, Silverman-Handmaker type
 - 463 Dysmaturin dysplasia-hypothyroidism
 - 471 Elite sprint athletic performance
 - 475 Emery-Dreifuss muscular dystrophy
 - 527 Fatty liver, acute, of pregnancy
 - 535 Fibroelastosis, pancreatic diabetes
 - 539 Fibular hypoplasia and complex brachydactyly
 - 544 Fluorouracil toxicity, sensitivity to
 - 545 Focal cortical dysplasia, Taylor ballsoo cell type
 - 549 Foveomacular dystrophy, adult-onset, with choroidal neovascularization
 - 548 Fuchs endothelial corneal dystrophy
 - 584 Giant platelet disorder, isolated
 - 594 Glomerulocystic kidney disease, hypoplastic
 - 604 Glatunase deficiency
 - 624 Greig cephalopolysyndactyly syndrome
 - 646 Hearing loss, low-frequency sensorineural
 - 665 Hemostasis, systemic, due to acropolysplasia
 - 679 High molecular weight kininogen deficiency
 - 699 Homocystinuria megaloblastic anemia, chl E type
 - 701 Homocystinuria 2016 deletion syndrome
 - 727 Hyperferritinemia-ectodermal dysplasia
 - 733 Hyperkeratinic periodic paralysis
 - 734 Hyperkeratotic cutaneous capillary-venous malformations
 - 750 Hypoparathyroidism-related-dysmaturin syndrome
 - 785 Hypoplastic enamel pitting, localized
 - 792 Hydrice-like ichthyosis with deafness
 - 803 Immunodysregulation, polyendocrinopathy, and enteropathy, X-linked
 - 809 Intubular hypoplasia and hypoparathyroidism
 - 830 Jervell and Lange-Nielsen syndrome
 - 833 Juvenile polyposis/hereditary hemorrhagic telangiectasia syndrome
 - 843 Keratitis-ichthyosis-deafness syndrome
 - 845 Keratoderma, palmoplantar, with deafness
 - 847 Keratosis palmoplantaris striata
 - 868 Laryngochonchocutaneous syndrome
 - 891 Leukoencephalopathy with vanishing white matter
 - 913 Lower motor neuron disease, progressive, without sensory symptoms
 - 942 Lymph cancer family syndrome II
 - 945 Mandibuloacral dysplasia with type B lipodystrophy
 - 959 Mastocytosis with associated lymphatic disorder
 - 969 Medullary cystic kidney disease
 - 982 Metabolism with osteopetrosis
 - 1001 Methionine adenosyltransferase deficiency, autosomal recessive
 - 1022 Methylcobalamin deficiency, cblG type
 - 1016 Mitochondrial complex deficiency
 - 1050 Myelomucopolysaccharidosis, chronic
 - 1056 Myoglobinuria/hemolysis due to PGK deficiency
 - 1057 Myokymia with neonatal epilepsy
 - 1080 Nephrotic syndrome of inappropriate antidiuresis
 - 1090 Neural tube defects, maternal risk of
 - 1090 Neurofibromatosis-Neuman syndrome
 - 1104 Nevus, epidermal, epidermolytic hyperkeratotic type
 - 1105 Newfoundland red-core dystrophy
 - 1113 Noncompaction of left ventricular myocardium
 - 1119 Norwalk virus infection, resistance to
 - 1133 Oculocardiodental syndrome
 - 1140 Oligodontia-colorectal cancer syndrome
 - 1153 Ossification of the posterior longitudinal spinal ligaments
 - 1164 Osteopetrosis-pseudoglioma syndrome
 - 1174 Polidipontological degeneration
 - 1183 Papillary serous carcinoma of the peritoneum
 - 1227 Pigmentation of hair, skin, and eyes, variation in
 - 1229 Pigmented paronychia-choroidal atrophy
 - 1239 Pseudotumor cerebri
 - 1238 Pneumothorax, primary spontaneous
 - 1239 Pseudotumor cerebri
 - 1263 Prion disease with protracted course
 - 1265 Progressive external ophthalmoplegia with mitochondrial DNA deletions
 - 1268 Prolactinoma, hyperparathyroidism, carcinoid syndrome
 - 1297 Pyruvate dehydrogenase deficiency
 - 1325 Rhizomele chondrodysplasia punctata
 - 1335 Robinow syndrome, autosomal recessive
 - 1347 Santhof disease, infantile, juvenile, and adult forms
 - 1361 Schwartz-Jampel syndrome, type I
 - 1376 Sensory ataxic neuropathy, dysarthria, and ophthalmoparesis
 - 1396 Silver spastic paraplegia syndrome
 - 1383 Severe combined immunodeficiency
 - 1401 Skin fragility-woolly hair syndrome
 - 1414 Solitary median maxillary central incisor
 - 1438 Spontaneous periorbital synostosis syndrome
 - 1446 Stevens-Johnson syndrome, carbamazepine-induced
 - 1456 Subcuticular lamellar heterotopia
 - 1466 Sweat chloride deficiency syndrome, CF
 - 1475 Tarsal-carpal coalition syndrome
 - 1480 Tarsal-carpal coalition syndrome
 - 1490 Thanatophoric dysplasia, types I and II
 - 1518 Transient bullous of the newborn
 - 1519 Transposition of great arteries, dextro-looped
 - 1526 Trifunctional protein deficiency
 - 1528 Truncus arteriosus, congenital
 - 1542 Ulrich congenital muscular dystrophy
 - 1545 Urticaria-Thomson syndrome, carbamazepine-induced
 - 1555 VATER association with hydrocephalus
 - 1556 Vitamin K-dependent coagulation factor deficiency
 - 1580 Warfarin resistance/sensitivity
 - 1586 Weissenhof-Zenker syndrome
 - 1611 XLA and isolated growth hormone deficiency
 - 1614 X-linked adrenoleukodystrophy
 - 1627 X-linked adrenoleukodystrophy
 - 2354 Congenital bilateral absence of vas deferens
 - 2358 Cretinism deficiency
 - 2785 Hypoglycemia-like heart syndrome
 - 3057 Multiple cutaneous milaria, X-linked
 - 3144 Optic nerve coloboma with renal disease
 - 3122 Persistent hyperplastic primary vitreous of infancy
 - 3229 Pigmented onychodysplasia, primary isolated
 - 3257 Premature chromosome condensation w/ microcephaly, mental retardation
 - 3512 Total iodide organification defect
 - 3558 Ventricular fibrillation, idiopathic
 - 4291 Cerebral cavernous malformations
 - 5170 Ovarian hyperstimulation syndrome
 - 5233 Paternal steroid sulfatase deficiency

Supporting Information Figure 13 | Bipartite-graph representation of the disease-gene network. A disorder (circle) and a gene (rectangle) are connected if the gene is implicated in the disorder. The size of the circle represents the number of distinct genes associated with the disorder. Isolated disorders (disorders having no links to other disorders) are not shown. Also, only genes connecting disorders are shown.