Diabetes Genetics Replication and Meta-Analysis (DIAGRAM) Consortium

Research Areas

- Biomarker Research
  Diagnostic
- Basic Research
- Data-Sharing Enabler

At a Glance

- Status: Active Consortium
- Year Launched: 2007
- Initiating Organization: DIAGRAM

Abstract

The DIAGRAM (DIAbetes Genetics Replication And Meta-analysis) consortium is a group of researchers with shared interests in performing large-scale studies to characterize the genetic basis of Type 2 diabetes (T2D), with a principal focus on samples of European descent.

Mission

DIAGRAM now represents the efforts of almost 40 groups working on the genetics of T2D, largely but not exclusively in samples of European descent. The consortium published the first T2D genome-wide association (GWA) meta-analysis involving three datasets in 2008 (Zeggini et al., Nature Genetics), extending to eight GWA study datasets in 2010 (Voight et al., Nature Genetics). The consortium has recently completed (manuscript submitted) an expanded meta-analysis of around 150,000 individuals, which combines GWA data from 12 samples, with metabochip data from a further 25 or so datasets. The consortium is also undertaking additional studies looking at stratified analyses, fine-mapping, and imputation from diverse reference panels.
DIAGRAM has strong links and substantial overlap of membership with the GoT2D and T2D-GENES consortia that are leading sequence-based discovery efforts for T2D. GWA, metabochip, and exome chip data from existing and new DIAGRAM partners will provide valuable extension, replication, and validation of findings arising from those studies. There are also strong links with equivalent efforts in other major ancestral groups (e.g., AGEN, MEDIA) that will enable further rounds of GWA integration that support locus discovery and causal variant fine mapping.

Data Sharing

Summary statistics from the DIABRAMv3 GWAS meta-analysis, Stage 1 GWAS and Stage 2 Metabochip, and Trans-ethnic T2D GWAS meta-analysis are available for download on the website.

Homepage http://diagram-consortium.org/index.html

Sponsors & Partners

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