

PHAT-PGRN
DATA SET DESCRIPTION

7/6/2011

CLINICAL AND PHENOTYPE DATA

Over four years of longitudinal clinical data from the Childhood Asthma Management Program (CAMP) clinical trial for 1,041 multi-ethnic subjects age 5-12 with a confirmed diagnosis of mild to moderate asthma. CAMP subjects were randomized to receive budesonide, nedocromil, or placebo. The following variables are provided:

1. Individual ID, Family ID, Father ID, Mother ID
2. Age
3. Race
4. Gender
5. Clinic
6. Age of first symptoms
7. History of hospitalizations in year prior to enrollment
8. History of ER visits in year prior to enrollment
9. Maternal asthma
10. Paternal asthma
11. Number of positive skin tests at baseline (s3) and F48
12. Raw and Log10 Eosinophil count (cell/ml³) at baseline (s3) and F48
13. Raw and Log10 IgE (IU/ml) at baseline (s3) and F48
14. Height at RZ, F2, F8, F12, F16, F20, F24, F28, F32, F36, F40, F44, F48
15. Treatment group: divide to steroid (budesonide) vs nonsteroid (nedocromil, placebo)
16. Pre FEV1 at RZ, F2, F4, F8, F12, F16, F20, F24, F28, F32, F36, F40, F44, F48
17. Post FEV1 at RZ, F2, F4, F12, F16, F24, F28, F36, F40, F48
18. log PC20 at S3, F8, F20, F32, and F44
19. Vitamin D levels, Vitamin D \leq 20 & Vitamin D \leq 20 at S3 and F48
20. Persistent high/low Vitamin D level (F48?)
21. Number of hospitalizations & emergency department visits from asthma at F12, F48

22. Number of oral steroid bursts at F12, F48
23. Symptoms for each of first 9 weeks after baseline, mean and dichotomized
24. Mother smoked while pregnant (N=150) & by trimester (4 variables)
25. Mother, dad, or other smoked before or after child turned 2 (N=540) (6 variables)
26. Environmental tobacco smoke (derived variable): Mother or father smoked prior to enrolment (ETS, N=439), during 1st 2 years of life (ETS24, N=413), after 1st 2 years (ETS60, N=385)
27. Child smoked in past, currently smokes at RZ, F2, F4, F8, F12, F16, F20, F24, F28, F32, F36, F40, F44, F48 & cigarettes per day at RZ (16 variables) (N=22)
28. Caretaker currently smokes at F2, F4, F8, F12, F16, F20, F24, F28, F32, F36, F40, F44, F48 (N=270)

Nomenclature:

s1, s2, s3, & s4 are screening visits used to qualify subjects for entry into the study.

RZ is the visit at which subjects were assigned to an arm of the study (randomized)

Follow up visits are coded Fxx, where xx is the number of months after RZ, range from F2 to F48.

Baseline values are taken from RZ, if the value was measured at RZ, or at the nearest screening visit at which the value was measured.

Derived values (e.g. ETS60) don't have F but do have a suffix indicating month after RZ.

Data is provided in a .CSV file. Variable descriptions and study protocol are provided in 2 PDF documents.

GENOTYPE DATA

581 Caucasian CAMP subjects were genotyped in two phases using Illumina 550K and 610K chips. The resulting merged dataset contains 473680 markers for 347 males and 234 females after filtering to Channing Laboratory QC standards.

Data is provided in PLINK format. A description of the Channing Laboratory QC process is provided in .PDF format.

GENE EXPRESSION DATA

Immortalized B-cells were derived from 132 Caucasian CAMP subjects chosen at random from the budesonide group. Cells for each subject were treated with 10⁻⁶ M Dexamethasone or sham in a paired fashion (i.e. arrays were performed for each subject both on and off corticosteroids) for 6 hours, then RNA isolated for subsequent Illumina HumanRef8 microarray analysis.

The source of these cells was a blood draw during CAMP-CS2, which occurred about 6 years following the completion of the primary clinical trial (the CAMP participants were/are followed as a “natural history of asthma” cohort).

Data is provided in Illumina BeadScan bead intensity, expression, and metadata files.