

MMR/Autism Agenda

Date: January 9, 2002

- 1) Data Privacy Issues
- 2) Update on Data Checks / Final Database
  - a. Original controls are in database
  - b. Missing immunization forms/data
    - i. Tanya will be following up on missing forms
    - ii. Will be getting both MMR data as well as other vaccine data
  - c. Will review exclusionary criteria once new data is available
  - d. Check why Isolated Autism cases without Delay < 1 all appear to be vaccinated < 36 months
  - e. New Variables Added
    - i. Developmental Delay < 1
    - ii. Plateau/Regression – will not be very useful for analyses
    - iii. Pre-existing Condition – was previously subset of DD < 1
    - iv. Age of 1<sup>st</sup> Concern – uncorrelated with age of vaccination
- 3) Discussion of Preliminary Descriptive Statistics
  - a. Total Sample
  - b. Birth Certificate Sample
- 4) Additional Analyses
  - a. Run analyses examining influence of each school system
  - b. Delay < 1
  - c. Age of 1<sup>st</sup> Concern

check  
association

larger  
group  
now

Descriptive Data

New variables

before vaccination

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 -- Descriptive MMR Vaccination - All Subjects  
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## The MEANS Procedure

MMR/AUTISM CASE	delay1	ISAUTISM	N Obs	Variable	Label	N	Mean
0	0	0	1780	MMR1MON		1780	19.80
				MMR1CAT3	MMR VAC < 36 MONTHS	1780	0.90
1	0	0	263	MMR1MON		263	18.79
				MMR1CAT3	MMR VAC < 36 MONTHS	263	0.93
		1	164	MMR1MON		164	17.87
				MMR1CAT3	MMR VAC < 36 MONTHS	164	0.96
1	124	0	124	MMR1MON		124	19.94
				MMR1CAT3	MMR VAC < 36 MONTHS	124	0.90
1	57	1	57	MMR1MON		57	17.37
				MMR1CAT3	MMR VAC < 36 MONTHS	57	0.96

--- Descriptive MMR Vaccination - Birth Certificate Sample

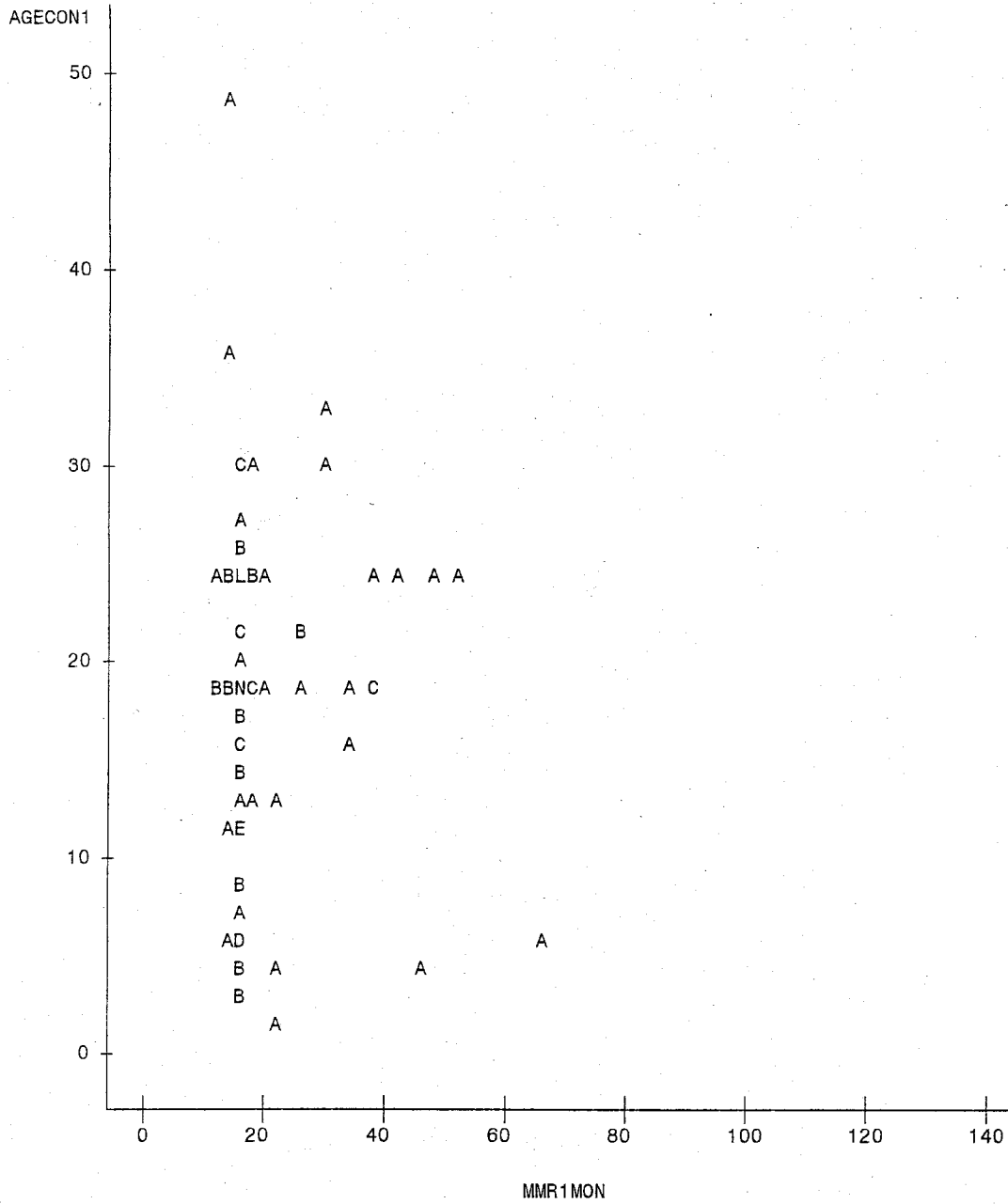
The MEANS Procedure

MMR/AUTISM CASE	delay1	ISAUTISM	N Obs	Variable	Label	N	Mean
0	0	0	1048	MMR1MON		1048	19.10
				MMR1CAT3	MMR VAC < 36 MONTHS	1048	0.93
1	0	0	146	MMR1MON		146	19.20
				MMR1CAT3	MMR VAC < 36 MONTHS	146	0.94
		1	103	MMR1MON		103	16.76
				MMR1CAT3	MMR VAC < 36 MONTHS	103	0.99
	1	0	74	MMR1MON		74	20.77
				MMR1CAT3	MMR VAC < 36 MONTHS	74	0.89
		1	36	MMR1MON		36	18.44
				MMR1CAT3	MMR VAC < 36 MONTHS	36	0.94

} 36 mo  
18 mo

--- General Descriptives

Plot of AGECON1\*MMR1MON. Legend: A = 1 obs, B = 2 obs, etc.



NOTE: 2289 obs had missing values.

--- General Descriptives

The MEANS Procedure

MMR/AUTISM CASE	N Obs	Variable	Label	N	Mean	Sum		
0	1780	CASECON2	MMR/AUTISM CASE	1780	0.000	0.000		
		bcsamp		1780	0.589	1048.000		
		IMMFMIS		1780	0.000	0.000		
		MMR1MISS		1780	0.004	8.000		
		MMR1CAT1	MMR DAYS	1780	3.012	5361.000		
		MMR1CAT2	MMR VAC < 18 MONTHS	1780	0.692	1232.000		
		MMR1CAT3	MMR VAC < 36 MONTHS	1780	0.903	1607.000		
		mmr1cat4		1780	0.911	1621.000		
		MMRC1		1780	0.020	36.000		
		MMRC2		1780	0.472	841.000		
		MMRC3		1780	0.244	435.000		
		MMRC4		1780	0.098	175.000		
		MMRC5		1780	0.067	120.000		
		AGE1996		1780	6.331	11269.000		
		SEXMALE		1780	0.801	1425.000		
		BLACK		1780	0.379	675.000		
		WHITE		1780	0.522	930.000		
		OTHER		1780	0.098	175.000		
		1	628	CASECON2	MMR/AUTISM CASE	628	1.000	628.000
				bcsamp		628	0.572	359.000
IMMFMIS				628	0.002	1.000		
MMR1MISS				628	0.003	2.000		
MMR1CAT1	MMR DAYS			628	2.874	1805.000		
MMR1CAT2	MMR VAC < 18 MONTHS			628	0.717	450.000		
MMR1CAT3	MMR VAC < 36 MONTHS			628	0.935	587.000		
mmr1cat4				628	0.941	591.000		
MMRC1				628	0.013	8.000		
MMRC2				628	0.530	333.000		
MMRC3				628	0.229	144.000		
MMRC4				628	0.091	57.000		
MMRC5				628	0.072	45.000		
AGE1996				628	6.408	4024.000		
SEXMALE				628	0.803	504.000		
BLACK				628	0.385	242.000		
WHITE				628	0.551	346.000		
OTHER				628	0.064	40.000		

Precon - 1 - yes  
 2 - no  
 3 - suspect  
Dev 1 - delay  
 2 - Regression/Abstin  
 2849  
Age of concern  
Agecon - months

Orth date

382	127
552	182
114	50