

## Supplemental Information

**SUPPLEMENTAL TABLE 5** Hospitalization Characteristics

	Cohort (n=124) Mean (SE) or n (%)
Mean Length of Stay	2.3 (0.3) nights
Admission from Outside Hospital	35 (28%)
Admitted to ICU or NICU	13 (11%)
Mean Diagnostic Tests Performed	2.7 (0.2)
Mean Test Contribution Rate	0.11 (0.03)
Acid Suppression at Discharge	15 (12%)
H2RA	11 (9%)
PPI	6 (5%)
Hypoallergenic Formula at Discharge	18 (15%)
Thickening at Discharge	7 (6%)

**SUPPLEMENTAL TABLE 6** Characteristic Comparison for Subjects with and without Parent-Reported Follow-up Symptom Data

	Subjects Without Follow-up Symptom Data (n=34)	Subjects With Follow-up Symptom Data (n=90)	P-value
Mean Age at Presentation	46.7 ± 10.8	53.5 ± 7	0.61
Length of Stay	1.8 ± 0.3	2.5 ± 0.3	0.22
Male Sex	13 (38%)	45 (50%)	0.31
Female Sex	21 (62%)	45 (50%)	0.31
History of Prematurity	9 (27%)	21 (23%)	0.82
Race			0.012
Caucasian	17 (50%)	57 (63%)	
Black	8 (24%)	7 (8%)	
Asian	1 (3%)	2 (2%)	
Other	8 (24%)	11 (12%)	
Not Reported	0 (0)	13 (14%)	
Ethnicity			0.55
Hispanic	5 (15%)	9 (10%)	
Non-Hispanic	26 (77%)	66 (73%)	
Feeding			0.22
Formula Fed	16 (47%)	28 (31%)	
Breastfed	7 (21%)	29 (32%)	
Combination Fed	11 (32%)	33 (37%)	
Prior Acid Suppression Medication	2 (6%)	14 (16%)	0.23
Prior Hypoallergenic Formula	3 (9%)	18 (20%)	0.19
Prior Thickening	0 (0)	7 (8%)	0.19
Subsequent Hospitalization or ED Visit	5 (15%)	13 (15%)	1.0
Subsequent Clinic Visit	14 (41%)	42 (47%)	0.69

**SUPPLEMENTAL TABLE 7** Comparison of Characteristics for Subjects Treated and not Treated with Acid Suppression

	Subjects Receiving Any Acid Suppression during Follow-up Period (n=27)	Subjects Not Receiving Any Acid Suppression during Follow-up Period (n=63)	P-value
Mean Age at Presentation	43 ± 7.4	58 ± 9.5	0.33
Length of Stay	2.5 ± 0.4	2.5 ± 0.5	0.92
Male Sex	14 (52%)	31 (49%)	1.0
Female Sex	13 (48%)	32 (51%)	1.0
History of Prematurity	7 (26%)	14 (22%)	0.79
Race			
Caucasian	20 (74%)	37 (59%)	0.63
Black	2 (7%)	5 (8%)	
Asian	0 (0%)	2 (3%)	
Other	2 (7%)	9 (14%)	
Not Reported	3 (11%)	10 (16%)	
Ethnicity			
Hispanic	2 (7%)	7 (11%)	0.09
Non-Hispanic	24 (89%)	43 (68%)	
Not Reported	1 (4%)	13 (21%)	
Feeding			
Formula Fed	12 (44%)	16 (25%)	0.17
Breastfed	6 (22%)	23 (37%)	
Combination Fed	9 (33%)	24 (38%)	

**SUPPLEMENTAL TABLE 8** Comparison of Characteristics for Subjects Treated and not Treated with Thickening

	Subjects Receiving Any Thickening during Follow-up Period (n=29)	Subjects Not Receiving Any Thickening during Follow-up Period (n=61)	P-value
Mean Age at Presentation	70.6 ± 12.9	45.3 ± 8.2	0.09
Length of Stay	2.6 ± 0.7	2.4 ± 0.4	0.78
Male Sex	17 (59%)	46% (28)	0.37
Female Sex	12 (41%)	33 (54%)	0.37
History of Prematurity	7 (24%)	14 (23%)	1.0
Race			
Caucasian	19 (66%)	38 (62%)	0.46
Black	4 (14%)	3 (5%)	
Asian	0 (0%)	2 (3%)	
Other	3 (10%)	8 (13%)	
Not Reported	3 (10%)	10 (16%)	
Ethnicity			
Hispanic	3 (10%)	6 (10%)	0.95
Non-Hispanic	22 (76%)	45 (74%)	
Not Reported	4 (14%)	10 (16%)	
Feeding			
Formula Fed	15 (52%)	13 (21%)	0.005
Breastfed	4 (14%)	25 (41%)	
Combination Fed	10 (35%)	23 (38%)	

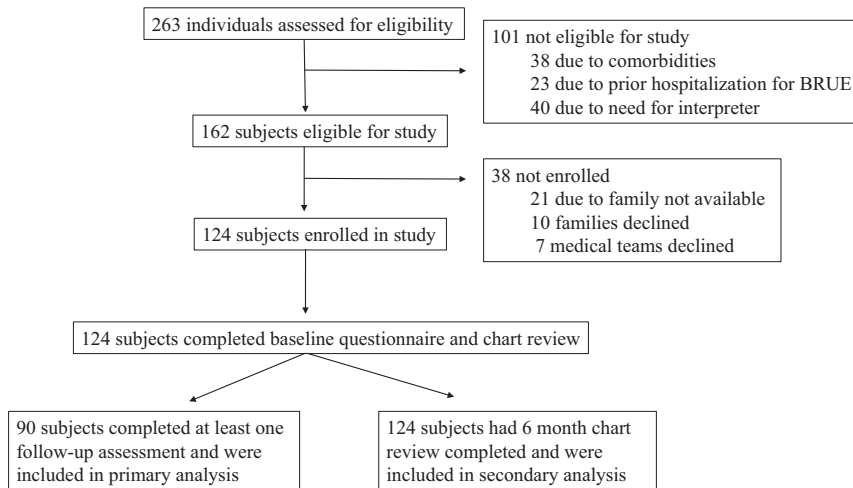
**SUPPLEMENTAL TABLE 9** Comparison of Characteristics for Subjects Treated and not Treated with Hypoallergenic Formula

	Subjects Receiving Any Hypoallergenic Formula during Follow-up Period (n=27)	Subjects Not Receiving Any Hypoallergenic Formula during Follow-up Period (n=63)	P-value
Mean Age at Presentation	54.8 ± 10.3	52.9 ± 9.1	0.90
Length of Stay	2.9 ± 0.7	2.3 ± 0.4	0.47
Male Sex	13 (48%)	32 (51%)	1.0
Female Sex	14 (52%)	31 (49%)	1.0
History of Prematurity	11 (41%)	10 (16%)	0.02
Race			
Caucasian	21 (78%)	36 (57%)	0.13
Black	1 (4%)	6 (10%)	
Asian	1 (4%)	1 (2%)	
Other	0 (0%)	18% (11)	
Not Reported	4 (15%)	9 (14%)	
Ethnicity			
Hispanic	2 (7%)	7 (11%)	0.29
Non-Hispanic	23 (85%)	44 (70%)	
Not Reported	2 (7%)	12 (19%)	
Feeding			
Formula Fed	11 (41%)	17 (27%)	0.07
Breastfed	4 (15%)	25 (40%)	
Combination Fed	12 (44%)	21 (33%)	

**SUPPLEMENTAL TABLE 10** Risk Factors for Persistent Symptoms using Inverse Probability Weighting to Account for Missing Data

	Univariable		Multivariable <sup>a</sup>	
	Relative Risk	P value	Relative Risk	P value
Sex (Male vs Female)	1.00 (0.91, 1.09)	0.94	1.08 (0.92, 1.27)	0.37
Age	1.00 (1.00, 1.00)	0.16	1.00 (1.00, 1.00)	0.37
History of Prematurity	1.15 (1.06, 1.25)	0.001	1.06 (0.91, 1.22)	0.46
Exclusive Breastfeeding	1.03 (0.93, 1.13)	0.62	1.19 (0.93, 1.52)	0.17
Acid Suppression	1.18 (1.05, 1.33)	0.007	1.06 (0.91, 1.25)	0.46
Hypoallergenic Formula	1.18 (1.04, 1.33)	0.007	1.21 (1.00, 1.46)	0.06
Thickening	0.96 (0.80, 1.14)	0.62	0.76 (0.60, 0.95)	0.02
Aspiration Status				
Known to Aspirate	0.86 (0.77, 0.96)	0.01	0.95 (0.75, 1.22)	0.69
Known to Not Aspirate	1.00		1.00	
Status Unknown	0.76 (0.67, 0.86)	<0.001	0.79 (0.64, 0.97)	0.03

<sup>a</sup> Adjusted for acid suppression, hypoallergenic formula, thickening, aspiration status, age at hospital admission, history of prematurity, sex, breastfeeding status.



**SUPPLEMENTAL FIGURE 2** Flow Diagram of Study Population. This flow diagram of the study population shows the number of potential subjects that were screened, eligible, and enrolled along with the number of subjects that completed follow-up assessments.

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