### Asthma-Mali Output

#### Rachel Laufer

#### 12/23/2021

#### RSV-LRTI cases through first 3 years

RSV-LRTI cases for no intervention (status quo)

	0-<6	6-<12	12-<18	18-<24	24-<30	30-<36	total
$\frac{5\%}{95\%}$		18037.00 30605.37	8639.695 14932.806				00-00-0

#### RSV-LRTI cases for llAb

	0-<6	6-<12	12-<18	18-<24	24-<30	30-<36	total
$\overline{5\%}$	9946.382	18037.00	8639.695	4716.307	2743.893	1176.928	46808.97
95%	17354.819	30605.37	14932.806	8409.143	4908.678	2235.411	76436.12

#### RSV-LRTI cases for llAb + pVax

	0-<6	6-<12	12-<18	18-<24	24-<30	30-<36	total
5%	6641.46	8315.057	5073.525	4716.307	2743.893	1176.928	29677.95
95%	11495.56	14109.076	8829.164	8409.143	4908.678	2235.411	48605.49

#### RSV-LRTI percent decrease compared to status quo through first 3 years

percent decrease for llAb

	0-<6	6-<12	12-<18	18-<24	24-<30	30-<36	total
5%	34.70522	0	0	0	0	0	10.40459
95%	41.05333	0	0	0	0	0	13.44687

#### percent decrease for llAb + pVax

	0-<6	6-<12	12-<18	18-<24	24 - < 30	30-<36	total
5%	57.09626	53.9	38.41440	0	0	0	42.49183
95%	60.62231	53.9	43.54862	0	0	0	45.52781

#### RSV-LRTI hospitalizations through first 3 years

RSV-LRTI hospitalizations for no intervention (status quo)

	0-<6	6-<12	12-<18	18-<24	24-<30	30-<36	total
5%	1794.006	925.2134	420.9773	231.1558	122.1459	53.76284	3598.351
95%	4636.494	2355.0941	1081.7480	606.1875	320.5662	145.92657	9057.268

#### RSV-LRTI hospitalizations for llAb

	0-<6	6-<12	12-<18	18-<24	24-<30	30-<36	total
5%	1112.407	925.2134	420.9773	231.1558	122.1459	53.76284	2916.057
95%	2883.168	2355.0941	1081.7480	606.1875	320.5662	145.92657	7309.347

RSV-LRTI hospitalizations for llAb + pVax

	0-<6	6-<12	12-<18	18-<24	24-<30	30-<36	total
5% 95%	740.8934 1912 7778	426.5234 1085.6984		231.1558 606.1875		53.76284 145.92657	

# RSV-LRTI hospitalizations percent decrease compared to status quo through first 3 years percent decrease for llAb

	0-<6	6-<12	12-<18	18-<24	24 - < 30	30-<36	total
5%	34.70522	0	0	0	0	0	17.15602
95%	41.05333	0	0	0	0	0	21.29356

percent decrease for llAb + pVax

	0-<6	6-<12	12-<18	18-<24	24-<30	30-<36	total
5%	57.09626	53.9	38.41440	0	0	0	47.11636
95%	60.62231	53.9	43.54862	0	0	0	50.06189

#### RSV-LRTI deaths through first 3 years

RSV-LRTI deaths for no intervention (status quo)

	0-<6	6-<12	12-<18	18-<24	24-<30	30-<36	total
5%	34.26379	13.95815	5.462066	2.675372	1.293868	0.5249888	60.02052
95%	125.70679	48.26087	19.694209	10.165356	5.171280	2.2508249	207.68561

RSV-LRTI deaths for llAb

	0-<6	6-<12	12-<18	18-<24	24-<30	30-<36	total
5%	20.87829	13.95815	5.462066	2.675372	1.293868	0.5249888	46.37325
95%	76.66914	48.26087	19.694209	10.165356	5.171280	2.2508249	158.41444

RSV-LRTI deaths for llAb + pVax

	0-<6	6-<12	12-<18	18-<24	24-<30	30-<36	total
5%	14.38354	6.434706	3.188756	2.675372	1.293868	0.5249888	29.73415
95%	53.87190	22.248259	11.518237	10.165356	5.171280	2.2508249	102.30006

#### RSV-LRTI deaths percent decrease compared to status quo through first 3 years

percent decrease for llAb

	0-<6	6-<12	12-<18	18-<24	24-<30	30-<36	total
5%	35.99504	0	0	0	0	0	19.14217
95%	41.99079	0	0	0	0	0	27.20249

percent decrease for llAb + pVax

	0-<6	6-<12	12-<18	18-<24	24-<30	30-<36	total
$\overline{5\%}$	55.59314	53.9	38.98232	0	0	0	48.47917
95%	59.77433	53.9	44.01362	0	0	0	52.37799

## $\operatorname{RSV}$ -attributable and total recurrent wheeze or asthma prevalence at 6 years of age by intervention

RSV-LRTI attributable wheeze/asthma at 6 years

	no intervention	llAb	llAb + pVax
5%	2494.59	2206.12	1396.715
95%	18754.98	16525.91	10504.279

RSV-LRTI attributable wheeze/asthma per 10,000 children at 6 years

	no intervention	llAb	llAb + pVax
5%	35.73896	31.60617	20.01015
95%	268.69481	236.75990	150.49046

RSV-LRTI attributable wheeze/asthma at 6 years, percent decrease from status quo

	llAb	llAb + pVax
5%	10.40459	42.49183

	llAb	llAb + pVax
95%	13.44687	45.52781

#### Total recurrent wheeze/asthma

	no intervention	llAb	llAb + pVax
5%	65486.21	64402.99	61218.58
95%	86604.02	85488.44	82539.73

Total recurrent wheeze/asthma per 10,000 children at 6 years

	no intervention	llAb	llAb + pVax
5%	938.1939	922.6749	877.0533
95%	1240.7400	1224.7575	1182.5126

Total recurrent wheeze/asthma, percent decrease from status quo

	llAb	llAb + pVax
5%	0.3859336	1.452969
95%	2.9381289	10.792279

Total recurrent wheeze/asthma "All RSV-LRTI prevented"

•	cases at 6 yrs	prevalence per $10,000$ at $6 \text{ yrs}$	percent decrease from status quo
5%	54000.21	773.6387	3.281495
95%	78758.88	1128.3458	24.564823