

Detection of COPD Exacerbations and Compliance With Patient-Reported Daily Symptom Diaries

Neil W. Johnston, MSc; Kim Lambert, RN, MSc; Patricia Hussack, RN; Maria Gerhardsson de Verdier, MD, PhD; Tim Higenbottam, MD, DSc; Jonathan Lewis, BSc; Paul Newbold, PhD; Martin Jenkins, MMath; Geoffrey R. Norman, PhD; Peter V. Coyle, MD; and R. Andrew McIvor, MD

e-Appendix 1. BlackBerry Daily Diary Questions

Study of Cycles of Respiratory Symptoms and their Relation to Respiratory Viral Infections and other Factors in Participants with Obstructive Lung Disease

- 1. Did you cough today?
 - □ No cough
 - □ Mild cough
 - □ Moderate cough
 - □ Severe cough
 - □ Very severe cough
- 2. Did you wheeze today?
 - □ No wheezing
 - □ Mild wheezing
 - □ Moderate wheezing
 - □ Severe wheezing
 - □ Very severe wheezing
- 3. Did you cough up phlegm today?
 - \square No
 - □ Yes
- 4. Did you have breathing problems today?
 - □ No breathing problems
 - □ Mild breathing problems
 - □ Moderate breathing problems
 - □ Severe breathing problems
 - □ Very severe breathing problems



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 5. Did breathing problems interfere with any of your regular activities* today? Did not interfere Mildly interfered Moderately interfered Severely interfered Prevented altogether *Such as working, walking, hobbies, meeting friends, shopping, or family visits
6. Have you had any of the symptoms of a cold or flu shown below today? □ No □ Yes Runny/stuffy nose, change in phlegm colour or stickiness, sore throat, fever, shivers, chest congestion
7. Did you see a Doctor or Nurse today for breathing problems or a cold? □ No □ Yes
8. Is there anything that you'd like the study team to contact you about? □ No □ Yes
Supplementary Questions Added to the Daily Diary When and Exacerbation was Confirmed 1. Did you take prednisone today? □ No □ Yes
2. Did you take an antibiotic today? □ No □ Yes
3. Do you think your breathing is back to normal today? □ No □ Yes □ Don't know
You've filled in the diary $x\%$ of the study days. Please keep up the good work. It is much appreciated.



e-Appendix 2. Recruitment of subjects and reasons for exclusion

December 2007 to November 2008

166 candidates referred by primary care and specialist physicians

Refused to participate*	65
Concomitant disease or insulin dependent	10
Reversibility	4
Ratio >70	17
Away for winter	4
<10 pack years	5
Visual impairment	2
In another study	2
Language barrier	2
Daily prednisone	2
Asthmatic	1
Moving afar	2
Recruited	50
Total	166

^{*}REB policies preclude soliciting further information from study candidates who refuse to participate

December 2007 to November 2008

141 candidates referred by primary care and specialist physicians

Refused*	66
Concomitant disease	11
Reversibility	2
Ratio >70	27
<10 pack years	4
Daily prednisone	1
Recruited	30
Total	141

^{*}REB policies preclude soliciting further information from study candidates who refuse to participate





e-Table 1.

Year	Week	COPD	-40PL-wkAvg
2001	1	.3	151
2001	1	4	170.8571429
2001	1	.5	165.4285714
2001	1	.6	173.8571429
2001	1	.7	165.7142857
2001	1	.8	167.7142857
2001	1	9	145.5714286
2001	2	.0	154.7142857
2001	2	1	151.4285714
2001	2	2	137.8571429
2001	2	.3	150.8571429
2001	2	4	153.2857143
2001	2	.5	134.7142857
2001	2	6	135.5714286
2001	2	7	136.5714286
2001	2	8	112.1428571
2001	2	.9	110.4285714
2001	3	0	104.7142857
2001	3	1	107.7142857
2001	3	2	123.4285714
2001	3	3	110.8571429
2001	3	4	95.85714286
2001	3	5	99.14285714
2001	3	6	116.5714286
2001	3	7	105.4285714
2001	3	8	123.7142857
2001	3	9	150.1428571
2001	4	0	171.7142857
2001	4	1	182.2857143
2001	4	2	162.8571429
2001	4	3	150.8571429
2001	4	4	136.2857143
2001	4	5	144.2857143
2001	4	6	147.1428571
2001	4	7	139
2001	4	8	130.5714286
2001	4	9	143.4285714
2001	5	0	149.8571429
2001	5	1	158.1428571
2001	5	2	235.125
2002		1	222.8571429

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2002	2	175
2002	3	145.1428571
2002	4	147.1428571
2002	5	139.2857143
2002	6	161.4285714
2002	7	162.5714286
2002	8	183.8571429
2002	9	177.2857143
2002	10	180.2857143
2002	11	182.1428571
2002	12	169
2002	13	175.4285714
2002	14	169.4285714
2002	15	165.8571429
2002	16	163.7142857
2002	17	142.7142857
2002	18	146.2857143
2002	19	149.1428571
2002	20	158.8571429
2002	21	163.8571429
2002	22	148.1428571
2002	23	138.4285714
2002	24	128.7142857
2002	25	136.7142857
2002	26	146.8571429
2002	27	150.2857143
2002	28	139.8571429
2002	29	136
2002	30	126.8571429
2002	31	120
2002	32	125.2857143
2002	33	116.5714286
2002	34	103.7142857
2002	35	113.8571429
2002	36	115.1428571
2002	37	118.8571429
2002	38	129.5714286
2002	39	135.1428571
2002	40	147.7142857
2002	41	150.8571429
2002	42	164.1428571
2002	43	144.8571429

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2002	44	142.7142857
2002	45	147.2857143
2002	46	151
2002	47	141.5714286
2002	48	138.8571429
2002	49	148.5714286
2002	50	161.7142857
2002	51	176.2857143
2002	52	262.5
2003	1	228.8571429
2003	2	148.5714286
2003	3	132.2857143
2003	4	118.7142857
2003	5	132.7142857
2003	6	137.2857143
2003	7	140
2003	8	151.8571429
2003	9	168.4285714
2003	10	167.5714286
2003	11	194.1428571
2003	12	205.5714286
2003	13	157.7142857
2003	14	127.8571429
2003	15	135
2003	16	132.1428571
2003	17	128.7142857
2003	18	125.2857143
2003	19	119.5714286
2003	20	131.5714286
2003	21	123.2857143
2003	22	130.7142857
2003	23	130
2003	24	130.7142857
2003	25	123.7142857
2003	26	129.7142857
2003	27	124.8571429
2003	28	108
2003	29	102.2857143
2003	30	104.7142857
2003	31	115.1428571
2003	32	105.1428571
2003	33	119
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2003	34	103.4285714
2003	35	111
2003	36	106.8571429
2003	37	125.8571429
2003	38	130.2857143
2003	39	149.8571429
2003	40	157.1428571
2003	41	165.7142857
2003	42	157.1428571
2003	43	137.1428571
2003	44	145.5714286
2003	45	145.5714286
2003	46	151.7142857
2003	47	158.4285714
2003	48	157.8571429
2003	49	180.4285714
2003	50	210.1428571
2003	51	272.5714286
2003	52	380.125
2004	1	300.2857143
2004	2	171.1428571
2004	3	139.2857143
2004	4	117.4285714
2004	5	137
2004	6	147.5714286
2004	7	151.2857143
2004	8	160.2857143
2004	9	181
2004	10	194.2857143
2004	11	181
2004	12	182
2004	13	195.8571429
2004	14	209.7142857
2004	15	214
2004	16	221
2004	17	185.8571429
2004	18	183.2857143
2004	19	186
2004	20	167.8571429
2004	21	171.2857143
2004	22	160.1428571
2004	23	166.4285714

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2004	24	152.2857143
2004	25	126.8571429
2004	26	132.5714286
2004	27	140.7142857
2004	28	130.1428571
2004	29	123.2857143
2004	30	112.8571429
2004	31	126.1428571
2004	32	119.5714286
2004	33	117.5714286
2004	34	119.7142857
2004	35	134.7142857
2004	36	147.5714286
2004	37	134.2857143
2004	38	142.7142857
2004	39	161.7142857
2004	40	173.5714286
2004	41	191.4285714
2004	42	173.2857143
2004	43	158.5714286
2004	44	160.375
2004	45	162.7142857
2004	46	152.1428571
2004	47	169
2004	48	160.1666667
2004	49	160.4285714
2004	50	156.5714286
2004	51	184.7142857
2004	52	306.75