

**Supplementary Table 1: Likelihood ratios and post-test probabilities for EBV (Model 1 and Model 3)**

Model 1			Model 3		
Score	LR+	Post-test probability % * (95% CI)	Score	LR+	Post-test probability % * (95% CI)
>= 0	1.00	8.0 (4.6 to 11.4)	>= 0	1.00	8.0 (4.7 to 11.3)
>= 4	1.00	8.0 (4.6 to 11.5)	>= 3	1.00	8.0 (4.7 to 11.4)
>= 6	1.05	8.4 (4.8 to 12)	>= 5	1.01	8.1 (4.7 to 11.4)
>= 7	1.10	8.7 (5 to 12.4)	>= 6	1.08	8.5 (5.1 to 12.0)
>= 9	1.16	9.1 (5.2 to 13)	>= 7	1.13	8.9 (5.4 to 12.5)
>= 11	1.18	9.3 (5.3 to 13.3)	>= 8	1.17	9.3 (5.6 to 12.9)
>= 12	1.19	9.4 (5.4 to 13.4)	>= 12	1.20	9.4 (5.7 to 13.2)
>= 14	1.21	9.5 (5.4 to 13.6)	>= 13	1.21	9.5 (5.8 to 13.3)
>= 15	1.18	9.3 (5.2 to 13.3)	>= 14	1.22	9.6 (5.9 to 13.4)
>= 16	1.19	9.4 (5.3 to 13.5)	>= 15	1.24	9.8 (6.0 to 13.6)
>= 17	1.21	9.5 (5.3 to 13.7)	>= 16	1.22	9.6 (5.8 to 13.3)
>= 18	1.22	9.6 (5.4 to 13.8)	>= 17	1.24	9.7 (5.9 to 13.5)
>= 20	1.51	11.6 (6.3 to 16.9)	>= 18	1.48	11.4 (7.3 to 15.5)
>= 21	1.65	12.6 (6.9 to 18.3)	>= 19	1.78	13.4 (8.9 to 17.9)
>= 22	2.09	15.4 (8.3 to 22.4)	>= 20	1.89	14.1 (9.5 to 18.8)
>= 23	2.11	15.5 (8.4 to 22.6)	>= 21	2.07	15.2 (10.3 to 20.1)
>= 24	2.40	17.3 (9.3 to 25.3)	>= 22	2.15	15.7 (10.7 to 20.7)
>= 25	2.47	17.7 (9.5 to 25.9)	>= 23	2.09	15.4 (10.3 to 20.4)
>= 26	2.41	17.3 (9.1 to 25.6)	>= 24	2.17	15.9 (10.6 to 21.2)
>= 27	2.44	17.5 (9.2 to 25.9)	>= 25	2.20	16.1 (10.5 to 21.6)
>= 28	2.74	19.2 (10.2 to 28.3)	>= 26	2.54	18.1 (12.3 to 23.9)
>= 29	3.48	23.2 (12.2 to 34.2)	>= 27	2.70	19.0 (13.0 to 25.0)

Model 1			Model 3		
<b>&gt;= 31</b>	4.04	26.0 (14.0 to 38.1)	<b>&gt;= 28</b>	3.30	22.3 (15.9 to 28.7)
<b>&gt;= 32</b>	4.27	27.1 (14.6 to 39.5)	<b>&gt;= 29</b>	3.57	23.7 (17.1 to 30.3)
<b>&gt;= 33</b>	4.84	29.6 (15.8 to 43.4)	<b>&gt;= 31</b>	4.40	27.7 (20.5 to 34.9)
<b>&gt;= 34</b>	5.19	31.1 (16.8 to 45.4)	<b>&gt;= 33</b>	4.57	28.4 (20.9 to 36.0)
<b>&gt;= 35</b>	5.39	31.9 (17.4 to 46.5)	<b>&gt;= 34</b>	5.73	33.2 (24.3 to 42.1)
<b>&gt;= 37</b>	6.10	34.6 (19.2 to 50.1)	<b>&gt;= 35</b>	6.61	36.5 (23.7 to 49.2)
<b>&gt;= 38</b>	5.34	31.7 (15.5 to 47.9)	<b>&gt;= 36</b>	6.29	35.4 (22.3 to 48.4)
<b>&gt;= 40</b>	5.71	33.2 (15.7 to 50.7)	<b>&gt;= 38</b>	6.78	37.1 (23.3 to 50.9)
<b>&gt;= 41</b>	5.50	32.3 (14.3 to 50.4)	<b>&gt;= 39</b>	7.34	39.0 (24.6 to 53.3)
<b>&gt;= 42</b>	6.68	36.7 (17.1 to 56.4)	<b>&gt;= 40</b>	8.01	41.0 (26.2 to 55.9)
<b>&gt;= 44</b>	6.01	34.3 (14.5 to 54.1)	<b>&gt;= 41</b>	7.21	38.5 (23.3 to 53.7)
<b>&gt;= 45</b>	5.34	31.7 (11.9 to 51.6)	<b>&gt;= 43</b>	7.05	38.0 (21.8 to 54.2)
<b>&gt;= 46</b>	5.95	34.1 (11.7 to 56.4)	<b>&gt;= 44</b>	10.57	47.9 (28.7 to 67.1)
<b>&gt;= 49</b>	11.22	49.4 (19.2 to 79.5)	<b>&gt;= 45</b>	8.81	43.4 (18.6 to 68.2)
<b>&gt;= 51</b>	15.58	57.5 (22.6 to 92.5)	<b>&gt;= 53</b>	8.81	43.4 (0.01 to 99.9)
<b>&gt;= 53</b>	18.70	61.9 (22.3 to 99.9)			
<b>&gt;= 56</b>	14.02	54.9 (10.4 to 99.4)			
<b>&gt;= 57</b>	18.70	61.9 (5.8 to 99.9)			

\* Based on pre-test probability of 8%

**Supplementary Table 2: Likelihood ratios and post-test probabilities for EBV (Model 2 and Model 4)**

Model 2			Model 4		
Score	LR+	Post-test probability % * (95% CI)	Score	LR+	Post-test probability % * (95% CI)
≥0	1	8.0 (4.8 to 11.2)	≥0	1	8.0 (4.8- to 11.2)
≥2	3.27	22.1 (12.1 to 32.2)	≥1	2.14	15.7 (9.2 to 22.2)
≥5	3.49	23.3 (11.6 to 35.0)	≥2	2.70	19.0 (10.0 to 28.0)
≥7	12.56	52.2 ( 24.5 to 79.9)	≥3	3.48	23.2 (8.5 to 37.9)

\*Based on pre-test probability of 8%

**Supplementary Table 3: Likelihood ratios and post-test probabilities for positive EBV in validation cohort**

Score	Positive Likelihood Ratio (LR+)	Post-test Prob (95% CI) 8% prior	Post-test Prob (95% CI) 12% prior	Post-test Prob (95% CI) 16% prior
≥0	1	8.0 (4.8 to 11.2)	12.0 (10.7 to 13.3)	16.0 (14.5 to 17.5)
≥1	2.14	15.7 (9.2 to 22.2)	22.6 (15.1 to 30.1)	28.9 (20.8 to 37.1)
≥2	2.70	19.0 (10.0 to 28.0)	26.9 (16.8 to 37.1)	34.0 (23.1 to 44.9)
≥3	3.48	23.2 (8.5 to 37.9)	32.2 (15.9 to 48.4)	39.8 (22.8 to 56.9)

**Supplementary Table 4: Post-test probabilities incorporating atypical lymphocytosis as a diagnostic test in series (Model 1 and Model 3)**

Model 1	Pre-test	Post-test probability	Model 3	Pre-test probability	Post-test probability %
Score	probability %	%	Score	%	(95% CI)
	(95% CI)	(95% CI)		(95% CI)	
<b>&gt;= 0</b>	8.0 (4.6 to 11.4)	83.9 (79.3 to 88.6)	<b>&gt;= 0</b>	8.0 (4.7 to 11.3)	83.9 (79.4 to 88.4)
<b>&gt;= 4</b>	8.0 (4.6 to 11.5)	84.0 (79.3 to 88.7)	<b>&gt;= 3</b>	8.0 (4.7 to 11.4)	84.0 (79.5 to 88.5)
<b>&gt;= 6</b>	8.4 (4.8 to 12)	84.6 (79.9 to 89.3)	<b>&gt;= 5</b>	8.1 (4.7 to 11.4)	84.0 (79.6 to 88.5)
<b>&gt;= 7</b>	8.7 (5 to 12.4)	85.1 (80.4 to 89.8)	<b>&gt;= 6</b>	8.5 (5.1 to 12.0)	84.9 (80.4 to 89.3)
<b>&gt;= 9</b>	9.1 (5.2 to 13)	85.8 (81.0 to 90.5)	<b>&gt;= 7</b>	8.9 (5.4 to 12.5)	85.5 (81.1 to 89.9)
<b>&gt;= 11</b>	9.3 (5.3 to 13.3)	86.0 (81.3 to 90.8)	<b>&gt;= 8</b>	9.3 (5.6 to 12.9)	86.0 (81.6 to 90.4)
<b>&gt;= 12</b>	9.4 (5.4 to 13.4)	86.2 (81.4 to 90.9)	<b>&gt;= 12</b>	9.4 (5.7 to 13.2)	86.2 (81.8 to 90.6)
<b>&gt;= 14</b>	9.5 (5.4 to 13.6)	86.3 (81.5 to 91.1)	<b>&gt;= 13</b>	9.5 (5.8 to 13.3)	86.3 (82.0 to 90.7)
<b>&gt;= 15</b>	9.3 (5.2 to 13.3)	86.0 (81.1 to 90.9)	<b>&gt;= 14</b>	9.6 (5.9 to 13.4)	86.5 (82.1 to 90.8)
<b>&gt;= 16</b>	9.4 (5.3 to 13.5)	86.1 (81.2 to 91.0)	<b>&gt;= 15</b>	9.8 (6.0 to 13.6)	86.7 (82.3 to 91.0)
<b>&gt;= 17</b>	9.5 (5.3 to 13.7)	86.3 (81.4 to 91.2)	<b>&gt;= 16</b>	9.6 (5.8 to 13.3)	86.4 (82.0 to 90.8)
<b>&gt;= 18</b>	9.6 (5.4 to 13.8)	86.4 (81.5 to 91.3)	<b>&gt;= 17</b>	9.7 (5.9 to 13.5)	86.6 (82.2 to 91.0)
<b>&gt;= 20</b>	11.6 (6.3 to 16.9)	88.7 (83.5 to 93.9)	<b>&gt;= 18</b>	11.4 (7.3 to 15.5)	88.5 (84.4 to 92.7)
<b>&gt;= 21</b>	12.6 (6.9 to 18.3)	89.6 (84.4 to 94.9)	<b>&gt;= 19</b>	13.4 (8.9 to 17.9)	90.3 (86.3 to 94.2)
<b>&gt;= 22</b>	15.4 (8.3 to 22.4)	91.6 (86.2 to 97.0)	<b>&gt;= 20</b>	14.1 (9.5 to 18.8)	90.8 (87.0 to 94.7)
<b>&gt;= 23</b>	15.5 (8.4 to 22.6)	91.7 (86.3 to 97.1)	<b>&gt;= 21</b>	15.2 (10.3 to 20.1)	91.5 (87.7 to 95.3)
<b>&gt;= 24</b>	17.3 (9.3 to 25.3)	92.6 (87.1 to 98.2)	<b>&gt;= 22</b>	15.7 (10.7 to 20.7)	91.8 (88.0 to 95.6)
<b>&gt;= 25</b>	17.7 (9.5 to 25.9)	92.8 (87.3 to 98.4)	<b>&gt;= 23</b>	15.4 (10.3 to 20.4)	91.6 (87.7 to 95.5)
<b>&gt;= 26</b>	17.3 (9.1 to 25.6)	92.6 (86.9 to 98.3)	<b>&gt;= 24</b>	15.9 (10.6 to 21.2)	91.9 (88.0 to 95.8)
<b>&gt;= 27</b>	17.5 (9.2 to 25.9)	92.7 (87.0 to 98.4)	<b>&gt;= 25</b>	16.1 (10.5 to 21.6)	92.0 (87.9 to 96.1)
<b>&gt;= 28</b>	19.2 (10.2 to 28.3)	93.5 (87.8 to 99.1)	<b>&gt;= 26</b>	18.1 (12.3 to 23.9)	93.0 (89.1 to 96.8)
<b>&gt;= 29</b>	23.2 (12.2 to 34.2)	94.8 (89.0 to 100)	<b>&gt;= 27</b>	19.0 (13.0 to 25.0)	93.4 (89.6 to 97.2)

<b>&gt;= 31</b>	26.0 (14.0 to 38.1)	95.5 (89.8 to 100)	<b>&gt;= 28</b>	22.3 (15.9 to 28.7)	94.5 (91.0 to 98.0)
<b>&gt;= 32</b>	27.1 (14.6 to 39.5)	95.7 (90.0 to 100)	<b>&gt;= 29</b>	23.7 (17.1 to 30.3)	94.9 (91.5 to 98.3)
<b>&gt;= 33</b>	29.6 (15.8 to 43.4)	96.2 (90.4 to 100)	<b>&gt;= 31</b>	27.7 (20.5 to 34.9)	95.8 (92.6 to 99.1)
<b>&gt;= 34</b>	31.1 (16.8 to 45.4)	96.4 (90.7 to 100)	<b>&gt;= 33</b>	28.4 (20.9 to 36.0)	96.0 (92.7 to 99.3)
<b>&gt;= 35</b>	31.9 (17.4 to 46.5)	96.6 (90.9 to 100)	<b>&gt;= 34</b>	33.2 (24.3 to 42.1)	96.8 (93.4 to 100)
<b>&gt;= 37</b>	34.6 (19.2 to 50.1)	97.0 (91.4 to 100)	<b>&gt;= 35</b>	36.5 (23.7 to 49.2)	97.2 (92.8 to 100)
<b>&gt;= 38</b>	31.7 (15.5 to 47.9)	96.5 (90.2 to 100)	<b>&gt;= 36</b>	35.4 (22.3 to 48.4)	97.0 (92.4 to 100)
<b>&gt;= 40</b>	33.2 (15.7 to 50.7)	96.8 (90.2 to 100)	<b>&gt;= 38</b>	37.1 (23.3 to 50.9)	97.3 (92.6 to 100)
<b>&gt;= 41</b>	32.3 (14.3 to 50.4)	96.6 (89.7 to 100)	<b>&gt;= 39</b>	39.0 (24.6 to 53.3)	97.5 (92.8 to 100)
<b>&gt;= 42</b>	36.7 (17.1 to 56.4)	97.2 (90.5 to 100)	<b>&gt;= 40</b>	41.0 (26.2 to 55.9)	97.7 (93.1 to 100)
<b>&gt;= 44</b>	34.3 (14.5 to 54.1)	96.9 (89.7 to 100)	<b>&gt;= 41</b>	38.5 (23.3 to 53.7)	97.4 (92.4 to 100)
<b>&gt;= 45</b>	31.7 (11.9 to 51.6)	96.5 (88.7 to 100)	<b>&gt;= 43</b>	38.0 (21.8 to 54.2)	97.4 (92.0 to 100)
<b>&gt;= 46</b>	34.1 (11.7 to 56.4)	96.9 (88.7 to 100)	<b>&gt;= 44</b>	47.9 (28.7 to 67.1)	98.2 (93.1 to 100)
<b>&gt;= 49</b>	49.4 (19.2 to 79.5)	98.3 (90.6 to 100)	<b>&gt;= 45</b>	43.4 (18.6 to 68.2)	97.9 (90.7 to 100)
<b>&gt;= 51</b>	57.5 (22.6 to 92.5)	98.8 (91.0 to 100)	<b>&gt;= 53</b>	43.4 (0.01 to 99.9)	97.9 (77.5 to 100)
<b>&gt;= 53</b>	61.9 (22.3 to 99.9)	99.0 (90.8 to 100)			
<b>&gt;= 56</b>	54.9 (10.4 to 99.4)	98.7 (88.3 to 100)			
<b>&gt;= 57</b>	61.9 (5.8 to 99.9)	99.0 (87.4 to 100)			

Pre-test probability is based on the results of application of the CPR

Post-test probability is calculated using the pre-test probability and a LR+ of 60.03 for atypical lymphocytosis

**Supplementary Table 5: Post-test probabilities incorporating atypical lymphocytosis for positive EBV (Model 2 and Model 4)**

Model 2			Model 4		
Score	Pre-test probability % (95% CI)	Post-test probability % (95% CI)	Score	Pre-test probability % (95% CI)	Post-test probability % (95% CI)
≥0	8.0 (4.8 to 11.2)	83.9 (79.6 to 88.2)	≥0	8.0 (4.8 to 11.2)	83.9 (80.0 to 87.9)
≥2	22.1 (12.1 to 32.2)	94.5 (88.9 to 100)	≥1	15.7 (9.2 to 22.2)	91.8 (86.8 to 96.7)
≥5	23.3 (11.6 to 35.0)	94.8 (88.6 to 100)	≥2	19.0 (10.0 to 28.0)	93.4 (87.7 to 99.1)
≥7	52.2 ( 24.5 to 79.9)	98.5 (91.7 to 100)	≥3	23.2 (8.5 to 37.9)	94.8 (87.0 to 100)

Pre-test probability is based on the results of application of the CPR

Post-test probability is calculated using the pre-test probability and a LR+ of 60.03 for atypical lymphocytosis

**Supplementary Table 6: The number of patients with and without EBV at each level of each point score**

	Model 1		Model 2		Model 3		Model 4 (derivation)		Model 4 (validation)	
Total Score/ Points	EBV n (%)	No EBV n (%)	EBV n (%)	No EBV n (%)	EBV n (%)	No EBV n (%)	EBV n (%)	No EBV n (%)	EBV n (%)	No EBV n (%)
0	0	1 (100)	13 (5.8)	211 (94.2)		1 (100)	13 (6.28)	194 (93.72)	147 (9.44)	1410 (90.56)
1	0	0	0	0	0	0	7 (15.91)	37 (84.09)	42 (15.22)	234 (84.78)
2	0	0	4 (25)	12 (75)	0	0	10 (23.81)	32 (76.19)	106 (30.46)	242 (69.54)
3	0	0	0	0	0	1 (100)	11 (33.33)	22 (66.67)	84 (52.17)	77 (47.83)
4	0	10 (100)	0	0	0	0	0	0	0	0
5	0	0	8 (20.51)	31 (79.49)	0	14 (100)	0	0	0	0
6	0	8 (100)	0	0	0	10 (100)	0	0	0	0
7	0	10 (100)	8 (61.54)	5 (38.46)	0	8	0	0	0	0
8	0	0	0	0	0	4 (100)	0	0	0	0
9	0	4 (100)	0	0	0	0	0	0	0	0
11	0	2 (100)	0	0	0	0	0	0	0	0
12	0	1 (100)	0	0	0	2 (100)	0	0	0	0
13	0	0	0	0	0	2 (100)	0	0	0	0
14	0	1 (100)	0	0	0	3 (100)	0	0	0	0
15	0	2 (100)	0	0	1 (25)	3 (75)	0	0	0	0
16	0	1 (100)	0	0	0	3 (100)	0	0	0	0
17	0	1 (100)	0	0	3 (6)	47 (94)	0	0	0	0
18	2 (4.26)	45 (95.74)	0	0	1 (3.57)	27 (96.43)	0	0	0	0
19	0	0	0	0	1 (8.33)	11 (91.67)	0	0	0	0
20	0	11 (100)	0	0	1 (7.69)	12 (92.31)	0	0	0	0
21	1 (3.33)	29 (96.67)	0	0	0	3 (100)	0	0	0	0

22	0	1 (100)	0	0	1 (33.33)	2 (66.67)	0	0	0	0
23	1 (6.67)	14 (93.33)	0	0	0	3 (100)	0	0	0	0
24	0	1 (100)	0	0	0	1 (100)	0	0	0	0
25	1 (25)	3 (75)	0	0	1 (7.14)	13 (92.86)	0	0	0	0
26	1 (25)	3 (75)	0	0	2 (16.67)	10 (83.33)	0	0	0	0
27	1 (100)	0	0	0	0	9 (100)	0	0	0	0
28	0	4 (100)	0	0	0	3 (100)	0	0	0	0
29	1 (6.67)	14 (93.33)	0	0	1 (10)	9 (90)	0	0	0	0
31	1 (33.33)	2 (66.67)	0	0	0	1 (100)	0	0	0	0
32	1 (14.29)	6 (85.71)	0	0	0	0	0	0	0	0
33	0	1 (100)	0	0	1 (12.5)	7 (87.5)	0	0	0	0
34	0	2 (100)	0	0	1 (20)	4 (80)	0	0	0	0
35	0	3 (100)	0	0	2 (50)	2 (50)	0	0	0	0
36	0	0	0	0	0	1 (100)	0	0	0	0
37	3 (50)	3 (50)	0	0	0	0	0	0	0	0
38	1 (25)	3 (75)	0	0	0	1 (100)	0	0	0	0
39	0	0	0	0	0	1 (100)	0	0	0	0
40	0	8 (100)	0	0	1 (100)	0	0	0	0	0
41	0	1 (100)	0	0	1 (50)	1 (50)	0	0	0	0
42	1 (12.5)	7 (87.5)	0	0	0	0	0	0	0	0
43	0	0	0	0	2 (28.57)	5 (71.43)	0	0	0	0
44	0	2 (100)	0	0	2 (66.67)	1 (33.33)	0	0	0	0
45	0	1 (100)	0	0	3 (50)	3 (50)	0	0	0	0
46	1 (33.33)	2 (66.67)	0	0	0	0	0	0	0	0
49	1 (50)	1 (50)	0	0	0	0	0	0	0	0
51	1 (50)	1 (50)	0	0	0	0	0	0	0	0
53	1 (100)	0	0	0	0	1 (100)	0	0	0	0
56	1 (50)	1 (50)	0	0	0	0	0	0	0	0
57	1 (16.67)	5 (83.33)	0	0	0	0	0	0	0	0
64	1 (100)	0	0	0	0	0	0	0	0	0



71	0	0	0	0	1 (2.38)	0	0	0	0	0
74	1 (100)	0	0	0	0	0	0	0	0	0