

Supplemental Table 1. ICD-9 codes of the outcomes (cardiovascular diseases)

Cardiovascular diseases	ICD-9 codes
Ischemic heart disease	410-413, 414.0, 414.8, 414.9, 429.7, V45.81, V45.82
Cardiomyopathy and heart failure	425, 402.01, 402.11, 402.91, 404.01, 404.03, 404.11, 404.13, 404.91, 404.93, 428, V42.1

Abbreviation: ICD-9, The International Classification of Diseases Ninth Revision

Supplemental Table 2. Characteristics of the excluded patients who did not receive chemotherapy (n = 1,138), Hong Kong, 2000–2018.

Characteristics	Excluded patients who did not receive chemotherapy (n = 1,138)
Patient's factors	
Age at lymphoma diagnosis, y	
Median (interquartile range)	69 (55 to 79)
Sex, n (%)	
Male	621 (54.6)
Female	517 (45.4)
Race, n (%)	
Chinese	1088 (95.6)
Non-Chinese	50 (4.4)
RCS Co-morbidity Scores, n (%)	
0	729 (64.1)
1	276 (24.2)
≥2	133 (11.7)
Follow-up time for alive patients, y	
Median (interquartile range)	1.5 (0.1 to 6.2)
Year of diagnosis, n (%)	
2000–2004	356 (31.3)
2005–2009	233 (20.5)
2010–2014	267 (23.4)
2015–2018	282 (24.8)
Fee waiver recipients (surrogate for lower SES), n (%)	151 (13.3)
COPD or smoker, n (%)	252 (22.1)
Alcohol-related diseases, n (%)	10 (0.9)
Diabetes mellitus, n (%)	258 (22.7)
Hypertension, n (%)	750 (65.9)
Dyslipidemia/hyperlipidemia, n (%)	192 (16.9)
Anxiety or depressive disorders, n (%)	142 (12.5)
Atrial fibrillation, n (%)	64 (5.6)
ACE inhibitor use, n (%)	250 (22.0)
Beta-blocker use, n (%)	316 (27.8)
Aspirin use, n (%)	257 (22.6)
Treatment factors	
Received radiation, n (%)	78 (6.9)

Rituximab, n (%)

293 (25.8)

Abbreviation: ACE, angiotensin-converting enzyme; RCS, Royal College of Surgeons; COPD, chronic obstructive pulmonary disease; SES, socioeconomic status.

Supplemental Table 3. ICD-9 codes and the associated medications of the medical conditions.

Medical conditions	ICD-9 codes	Medications
Hypertension	401.X, 402.X, 403.X, 404.X, 405.X	Amlodipine, Diltiazem, Felodipine, Nifedipine, Verapamil, Atenolol, Bisoprolol Carvedilol, Labetalol, Metoprolol, Propranolol, Clonidine, Hydralazine, Losartan, Telmisartan, Valsartan, Bumetanide, Frusemide, Amiloride, Eplerenone, Spironolactone, Hydrochlorothiazide, Indapamide, Moduretic, Dyazide, Methyldopa, Doxazosin, Prazosin, Terazosin, Captopril, Enalapril, Lisinopril, Perindopril
Dyslipidemia	272.0, 272.1, 272.2, 272.3, 272.4	Atorvastatin, Rosuvastatin, Simvastatin, Fenofibrate, Gemfibrozil, Ezetimibe
Diabetes	249, 250.xx, 357.2, 362.0, 366.41, or 648.0	Insulin Neutral, Insulin Lispro, Insulin Aspart, Insulin Human, Insulin Lispro Human, Insulin Aspart Human Analog, Insulin Detemir, Insulin Isophane Human, Insulin Degludec, Insulin Glargine, Gliclazide, Glimepiride, Glipizide, Metformin, Alogliptin, Linagliptin, Sitagliptin, Dulaglutide, Exenatide, Liraglutide, Lixisenatide, Pioglitazone, Dapagliflozin, Empagliflozin, Acarbose
Atrial fibrillation	427.31	-
Depression	296.2, 296.3, 300.4, 311	Citalopram, Escitalopram, Fluoxetine, Fluvoxamine, Paroxetine, Sertraline, Venlafaxine, Desvenlafaxine, Duloxetine, Amitriptyline, Doxepin, Imipramine, Vortioxetine, Milnacipran, Mirtazapine, Mianserin, Trazodone
Chronic obstructive pulmonary disease	491, 492, 496	Beclomethasone, Budesonide +/- Formoterol, Fluticasone, Flutiform or equivalent, Relvar or equivalent, Seretide or equivalent, Trelegy or equivalent, Anoro or equivalent, Ultibro or equivalent, Spiolto or equivalent, Combivent or equivalent, Tiotropium, Ipratropium, Glycopyrronium, Indacaterol, Salbutamol, Montelukast, Roflumilast, Theophylline, Terbutaline

Smoking	V15.82
Alcohol-related diseases	291, 303, 305.0, - 571.0, 571.1, 571.2, 571.3, 980.8, 980.9
Autoimmune diseases	340, 714, 135, 710, 710.1

Abbreviation: ICD-9, The International Classification of Diseases Ninth Revision

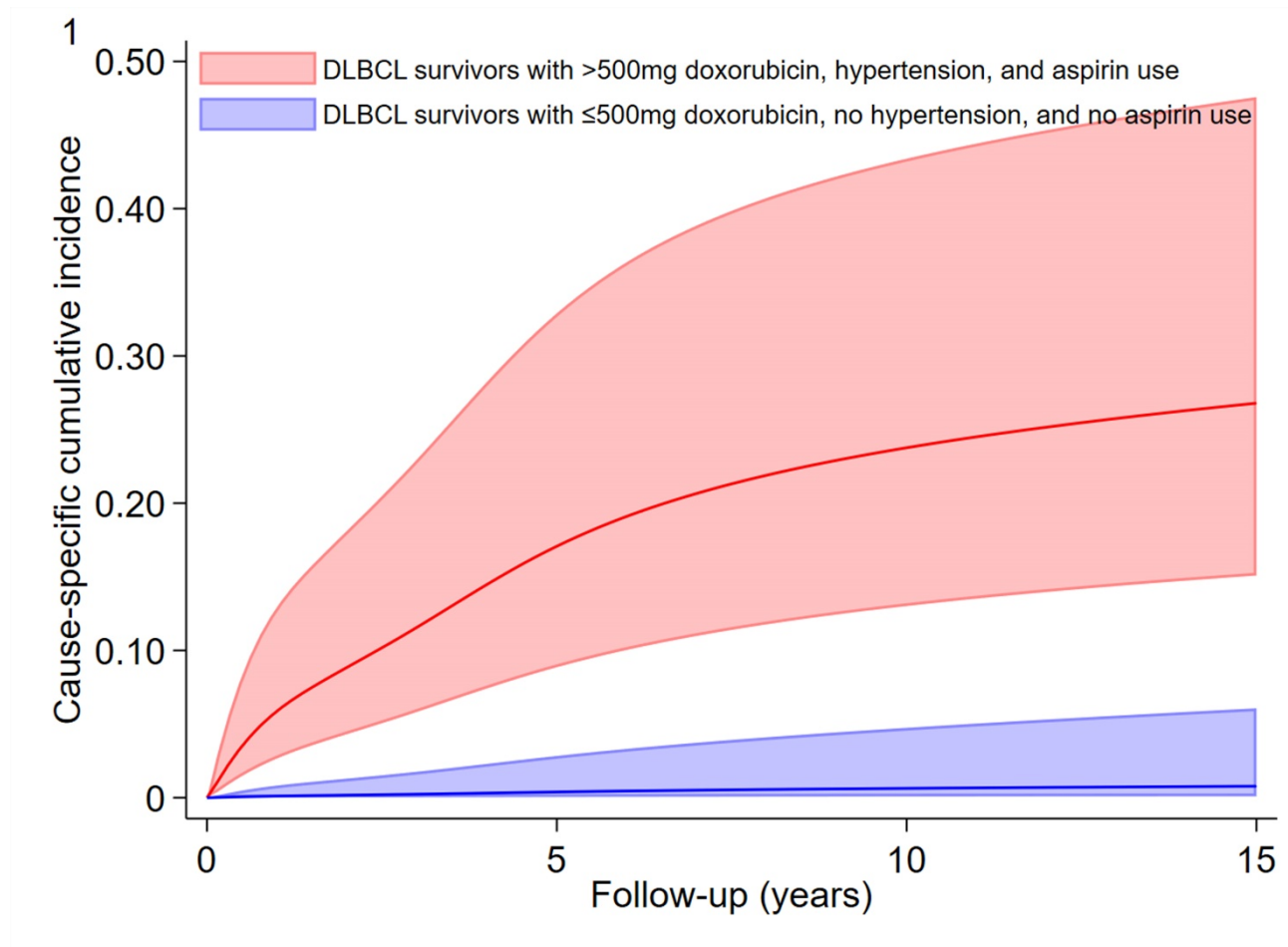
Supplemental Table 4. Characteristics of diffuse large B-cell lymphoma survivors who received different doses of doxorubicin (N = 2,600), Hong Kong, 2000–2018.

Characteristics	No doxorubicin (N = 1,735)	≤500 mg doxorubicin (N = 699)	>500 mg doxorubicin (N = 166)
Patient's factors			
Age at lymphoma diagnosis, y			
Median (interquartile range)	66 (56 to 75)	58 (46 to 68)	54 (46 to 62)
Sex, n (%)			
Male	964 (55.6)	375 (53.6)	117 (70.5)
Female	771 (44.4)	324 (46.4)	49 (29.5)
Race, n (%)			
Chinese	1,660 (95.7)	668 (95.6)	156 (94.0)
Non-Chinese	75 (4.3)	31 (4.4)	10 (6.0)
RCS Co-morbidity Scores, n (%)			
0	1143 (65.9)	460 (65.8)	107 (64.5)
1	428 (24.7)	189 (27.0)	47 (28.3)
≥2	164 (9.4)	50 (7.2)	12 (7.2)
Follow-up time for alive patients, y			
Median (interquartile range)	6.4 (3.4 to 9.8)	8.0 (3.6 to 13.0)	6.6 (3.9 to 9.6)
Year of diagnosis, n (%)			
2000–2004	266 (15.3)	119 (17.0)	13 (7.8)
2005–2009	417 (24.0)	231 (33.0)	49 (29.5)
2010–2014	614 (35.4)	194 (27.8)	62 (37.4)
2015–2018	438 (25.2)	155 (22.2)	42 (25.3)
Fee waiver recipients (surrogate for lower SES), n (%)	152 (8.8)	40 (5.7)	8 (4.8)
COPD or smoker, n (%)	439 (25.3)	170 (24.3)	36 (21.7)
Alcoholic liver disease, n (%)	12 (0.7)	4 (0.6)	2 (1.2)
Diabetes mellitus, n (%)	434 (25.0)	137 (19.6)	27 (16.3)
Hypertension, n (%)	1,238 (71.4)	464 (66.4)	95 (57.2)
Dyslipidemia/hyperlipidemia, n (%)	427 (24.6)	133 (19.0)	26 (15.7)
Anxiety or depressive disorders, n (%)	294 (17.0)	122 (17.4)	20 (12.0)

Atrial fibrillation, n (%)	26 (1.5)	5 (0.7)	0 (0.0)
ACE inhibitor use, n (%)	411 (23.7)	127 (18.2)	36 (21.7)
Beta-blocker use, n (%)	549 (31.6)	211 (30.2)	32 (19.3)
Aspirin use, n (%)	419 (24.2)	154 (22.0)	29 (17.5)
<hr/>			
Treatment factors			
Received radiation, n (%)	204 (11.8)	84 (12.0)	20 (12.0)
Rituximab, n (%)	1,337 (77.1)	509 (72.8)	134 (80.7)
<hr/>			

Abbreviation: ACE, angiotensin-converting enzyme; RCS, Royal College of Surgeons; COPD, chronic obstructive pulmonary disease; SES, socioeconomic status.

Supplemental Figure 1. Cause-specific cumulative incidence of cardiovascular diseases in DLBCL survivors who had received >500 mg of doxorubicin, pre-existing hypertension, and with aspirin use (surrogate for pre-existing cardiovascular risk factors) versus those who received, ≤500 mg of doxorubicin, with no pre-existing hypertension and aspirin use, Hong Kong, 2000–2018.



Supplemental Figure 2. Cause-specific cumulative incidence of cardiovascular diseases in DLBCL survivors by levels of exposure to doxorubicin (n = 2,600) and in normal comparison group (n = 13,000) with non-cardiac death as competing risk, using no landmark period for left truncation, Hong Kong, 2000–2018.

