

Supplementary Appendix

**Table S1.** Unit costs of drugs and out of hospital care (physician ambulatory visit, blood and urinary tests).

Cost Category	Cost subcategory	Description of drug/test	Cost (€)*
Drugs	Protocol treatment	Azathioprine (tablet of 50 mg)	0.23
		Rituximab (MABTHERA) (vial of 100 mg/10ml)	242.29
	Other immunosuppressants	Cyclophosphamide (tablet of 50 mg)	0.23
		Methotrexate (tablet of 2.5 mg)	0.21
		Mycophenolate mofetil (tablet of 500 mg)	1.10
	Erythropoietin	Darbepoetin alfa (injection of 40 µg/0.4 ml)	49.58
		Epoetin beta (injection of 4000 UI)	24.79
		Methoxy polyethylene glycol-epoetin beta (injection of 75 µg/0.3 ml)	132.10
		Darbepoetin alfa (injection of 50 µg/0.5 ml)	61.97
	Immunoglobulins	injection of 10 g/200 ml	425.76
		50 mg/ml inj fl 100 ml	212.88
		50 mg/ml inj fl 200 ml	459.45
		50 mg/ml inj fl 400 ml	851.51
Antimicrobial agents	Amphotericine B 50 mg infusion fl 15 ml	155.19	
Out of hospital	Physician ambulatory visit (statutory tariff)		28
	Blood tests	Complete blood count	7.83
		Transaminases (ALAT and ASAT)	2.70
		Gamma- glutamyl transferase (GGT)	1.89
		Alkaline phosphatases( ALP)	1.89
		Serum lytes (Na+ K+ Cl-)	3.24
		CRP (C-reactive protein)	2.43
		Creatinine	1.89
		Creatinine clearance (GFR)	8.10
		Serum protein electrophoresis	14.31
		Cryoglobulin	5.40
		IgA + IgG + IgM levels	17.82
		Platelets and coagulation tests (PT, APTT)	13.50
		Lymphocyte immunophenotyping (CD4, CD8, CD3)	21.60
		Antineutrophil cytoplasmic antibodies immunofluorescent assay (ANCA-IFA)	10.80
		Antineutrophil cytoplasmic antibodies ELISA assay	18.90
	Urine tests	Proteinuria	1.08
		Urine microscopy	17.55

\*Sources: Social Health Insurance's list of drugs and tariffs for reimbursement and Social Health Insurance's list of laboratory tests.

**Table S2.** Units costs used for hospital day admission and overnight inpatient care, per category.

Cost category	DRG code	DRG Tariff (€)*
Rituximab infusions	28Z17Z 23M091 <sup>y</sup>	[366.13–873.27] <sup>y</sup>
Dialysis sessions	28Z04Z 11C09J	342.71 1,692.04
Protocol visits	08M35Z 08M25T 23M06T 23M20T 08M14T	642.94 634.76 404.02 498.00 569.68
Follow-up	11M18Z 11M06T-1 <sup>y</sup> 11M16T-1 <sup>y</sup> 04M14T 05M20Z 03C15J	624.55 [588.37–1,714.20] <sup>y</sup> [592.58–1,205.43] <sup>y</sup> 571.40 755.20 578.65
Relapses	08M251-3 <sup>y</sup> 11M062-3 <sup>y</sup> 05M171-2 <sup>y</sup> 01M121 03M092	[2,858.10–6,376.21] <sup>y</sup> [3,702.76–5,612.66] <sup>y</sup> [1,694.15–3,195.35] <sup>y</sup> 1,805.15 3,316.66
Side-effects	02C05J-1 04M202-3 <sup>y</sup> 04M051-2 <sup>y</sup> 08C482	1,265.74 [3,479.13–5,046.19] <sup>y</sup> [1,896.39–3,257.36] <sup>y</sup> 5,358.6

\*DRG tariffs were drawn from the national hospital cost study (ENCC) conducted every year on a voluntary sample of public and private hospitals with a detailed accounting system. For each DRG, the median cost is taken as the reference cost.

<sup>y</sup>The tariff may vary according to the severity level.

**Table S3:** Effectiveness and incremental effectiveness of each strategy (major relapses's rate and QALYs).

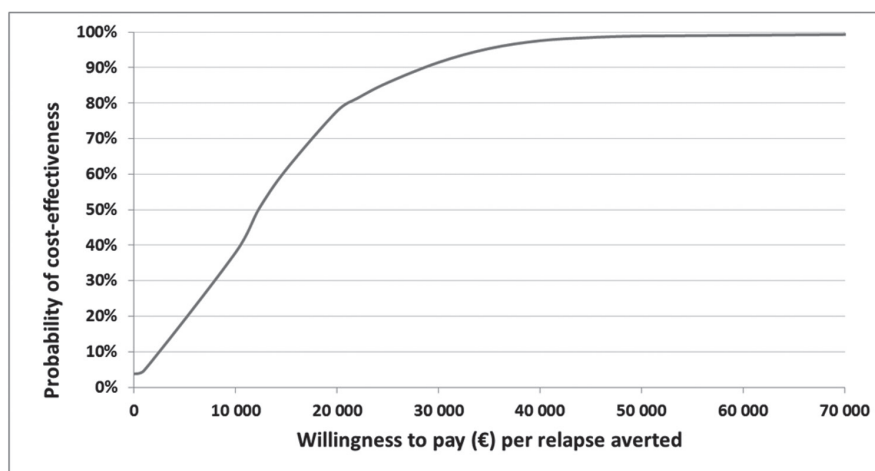
Outcome	AZA		RTX		Incremental effect	p-value
	Mean (SD)	Median [IQR]	Mean (SD)	Median [IQR]		
Major relapses' rate	0.301 (0.485)	0 (0–0.925)	0.054 (0.223)	0 (0–0)	0.247	0.001
QALYs	1.438 (0.209)	1.454 (1.356–1.551)	1.522 (0.104)	1.510 (1.457–1.587)	0.084	0.01

**Table S4:** Number of missing utility scores per patient in each group.

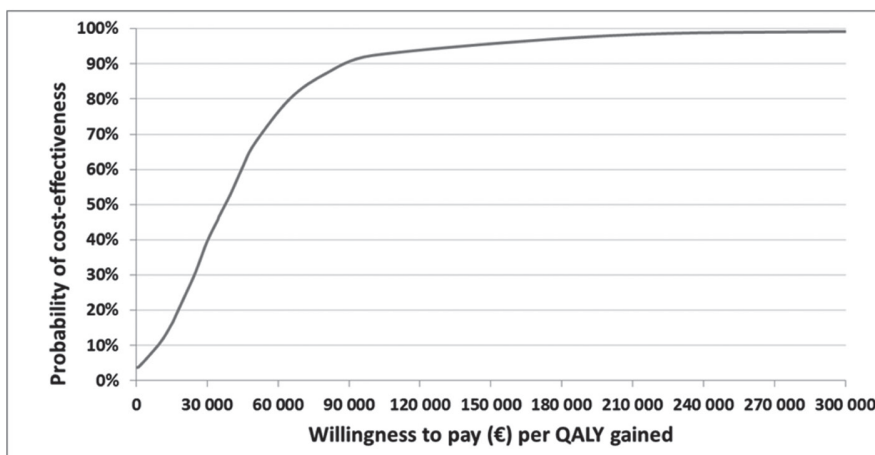
No. of missing data per patient	Azathioprine		Rituximab	
	N	%	N	%
0	10	17%	7	13%
1	7	12%	9	17%
2	10	17%	11	20%
3	5	9%	5	9%
4	3	5%	4	7%
5	6	10%	3	6%
6	3	5%	4	7%
7	1	2%	3	6%
8	5	9%	6	11%
9	5	9%	1	2%
10	3	5%	1	2%

**Table S5:** number of patients with available utility score in each group: evolution during the follow-up period.

Visit	Azathioprine		Rituximab		p-value
	N	%	N	%	
M1	46	79	40	74	0.51
M3	42	72	42	78	0.51
M6	37	64	41	76	0.16
M9	39	67	35	65	0.79
M12	36	62	38	70	0.35
M15	39	67	33	61	0.50
M18	37	64	35	65	0.91
M21	32	55	34	60	0.52
M24	24	41	33	61	0.04
M28	24	41	21	39	0.79



**Fig. S1.** Cost-effectiveness acceptability curve: the probability that RTX is cost-effective (in terms of relapses averted) compared to AZA.



**Fig. S2.** Cost-effectiveness acceptability curve: the probability that RTX is cost-effective (in terms of QALYs) compared to AZA.

**Table S6.** Results of the generalized linear model testing the association of patient characteristics and total per-patient expenditure.

Patients characteristics		Rate ratio	95% IC	<i>p</i> -value
Intercept		4,101	(3,022–5,672)	<0.001
Age, y	≤55	1	1	0.48
	>55	1.01	(0.84–1.44)	
Treatment group	AZA	1	1	<0.001
	RTX	2.06	(1.53–2.76)	
Sex	Man	1	1	0.95
	Woman	1.01	(0.76–1.34)	
Relapse	No	1	1	<0.001
	Yes	2.60	( 1.80–3.82)	
Severe adverse events	No	1	1	<0.001
	Yes	2.40	(1.80–3.22)	
Renal impairment	No or mild	1	1	0.09
	Severe	1.44	(0.95–2.24)	