



Model Inputs and Uncertainty Analyses

Parameter	Value	Lower Level	Upper Level	Distribution	Comments/Source
Status Quo: Tamoxifen Persistence Rate					
Year 1 (%)	0.83	0.66	0.996	beta	van Herk-Sukel 2010 ² McCowan 2008 ⁷
Year 2 (%)	0.70	0.56	0.84	beta	
Year 3 (%)	0.55	0.44	0.66	beta	
Year 4 (%)	0.50	0.40	0.60	beta	
Year 5 (%)	0.40	0.32	0.48	beta	
Probability of tamoxifen-related major AEs (per cycle length of 3 months)					
Thromboembolism (TE)	0.063%	0.062%	0.064%	beta	Francis 2018 ⁸ , only applies to the persisting sub-state assuming no carrying over effect after dropping
Endometrial cancer (EC)	0.015%	0.014%	0.016%	beta	
Death from major AEs (per cycle length of 3 months)					
Death TE (%)	7.70%	6.52%	8.88%	beta	Luyendijk 2023 ⁹ , Cuzick 2015 ¹⁰
Death EC (%)	21.00%	16.88%	25.12%	beta	Luyendijk 2023 ⁹
Probability of BC recurrence					
Probability of BC recurrence in tamoxifen persisting individuals	0.01	0.008	0.012	beta	Addo 2021 ⁶ from EBCTG ⁴
Probability of BC recurrence in tamoxifen dropped individuals	0.02	0.016	0.024	beta	
Probability of BC death after recurrence	0.05	0.04	0.08	beta	Addo 2021 ⁶ from EBCTG ⁴
Utilities					
Year one after primary BC diagnosis, No recurrence	0.696	0.682	0.710	beta	Lidgren 2007 ¹¹
Subsequent years, No recurrence	0.865	0.740	0.980	beta	Addo 2021 ⁶
TE (applied for 1 cycle)	-0.056	-0.0678	-0.0442	beta	Luyendijk 2023 ⁹
EC (applied for 1 cycle)	-0.036	-0.0431	-0.0289	beta	Luyendijk 2023 ⁹
BC recurrence	0.670	0.530	0.870	beta	Addo 2021 ⁶
Costs					
No Recurrence State					
First year	64301	51441	77161	gamma	Wheeler 2021 ¹² , Direct medical costs from 2014 converted using CPI
Continuing care	27402	21922	32882		
BC Recurrence State	56955	45564	68346	gamma	Wheeler 2021 ¹² , Direct medical costs from 2014 converted using CPI
Tamoxifen per month (Average Retail Price)	55.16	44.13	66.19	gamma	Goodrx.com
Indirect costs of ET (total)	671	537	2449	gamma	Wheeler 2021 ¹² from 2014 converted using CPI
Cost of breast cancer-specific death	85926	68741	103111	gamma	Gupta 2021 ¹³ from 2018 converted using CPI
Average TE costs per event	24519	12216	36821	gamma	Saunders 2016 ¹⁴ converted using CPI
Average lifetime EC costs per month	4313	4045	4582	gamma	Shah 2021 ¹⁵ converted using CPI
Annual discount rate	3%	1.5%	6%	Triangular	-

CPI: Consumer Price Index for Medical Care, EBCTG: Early Breast Cancer Trialists Group

BC: Breast cancer, EC: Endometrial cancer, ET: Endocrine Therapy, TE: Thromboembolism

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