Supplemental material (SM) (Since this is a very extensive supplemental material, the format and content have not been edited by JRM)

Table SM1 – Parameters with no statistical distribution for base case and sensitivity analyses (one-way and probabilistic)

Parameter number	Parameter name	Spreadsheet (point estimate cell)	Parameter description	Point estimate	Lower limit range	Upper limit range	Source
Anagraphics, clinical classification and employment status							
1	Age	Parameters (L20)	Patient's age	66	40	79	Physiatrists' opinion
2	Pr_INHS_funded_Mobility_Aids_No_Orthesis_Leg_Foot	Parameters (L99)	Probability INHS-funded mobility aids different from leg/foot orthesis or walking cane	1.000	1.000	1.000	Physiatrists' opinion
3	Pr_OOP_funded_Cane	Parameters (L101)	Probability OOP-funded walking cane (single item)	1.000	1.000	1.000	Physiatrists' opinion
4	Pr_FU_Vis_Rehab_BoNT_A	Parameters (L105)	Probability follow-visit for patient on Rehab/aboBoNT-A	1.000	1.000	1.000	Physiatrists' opinion
5	Pr_Car_Transportation	Parameters (L137)	Probability patient transported by car	1.000	1.000	1.000	Physiatrists' opinion
Healthcare resources - Volumes							
6	U_adm_Mild_Rehab_BoNT_A	Parameters (L152)	Posology per administration patient with mild PSS on Rehab/aboBoNT-A	500.00	500.00	500.00	Physiatrists' opinion
7	U_adm_Moderate_Rehab_BoNT_A	Parameters (L154)	Posology per administration patient with moderate PSS on Rehab/aboBoNT-A	909.14	650	1000	Physiatrists' opinion
8	U_adm_Severe_Rehab_BoNT_A	Parameters (L156)	Posology per administration patient with severe PSS on Rehab/aboBoNT-A	1500	1500	1500	Physiatrists' opinion
9	U_adm_Very_Severe_Rehab_BoNT_A	Parameters (L158)	Posology per administration patient with very severe PSS on Rehab/aboBoNT-A	1634.41	1500	2000	Physiatrists' opinion
10	Adm_year_Mild_Rehab_BoNT_A	Parameters (L160)	Yearly volume administrations patient with mild PSS on Rehab/aboBoNT-A	2.34	2.00	3.25	Physiatrists' opinion
11	Adm_year_Moderate_Rehab_BoNT_A	Parameters (L162)	Yearly volume administrations patient with moderate PSS on Rehab/aboBoNT-A	2.34	2.00	3.25	Physiatrists' opinion
12	Adm_year_Severe_Rehab_BoNT_A	Parameters (L164)	Yearly volume administrations patient with severe PSS on Rehab/aboBoNT-A	2.96	2.50	3.25	Physiatrists' opinion
13	Adm_year_Very_Severe_Rehab_BoNT_A	Parameters (L166)	Yearly volume administrations patient with very severe PSS on Rehab/aboBoNT-A	3.07	3.00	3.25	Physiatrists' opinion

INHS=Italian National Health Service; U=potency unit; LYS=Life-year saved; OOP=out-of-pocket; PSS=post-stroke spasticity; QALYs=Quality-Adjusted Life Years; Rehab/aboBoNT-A=abobotulinumtoxinA + rehabilitation.

Table SM2 – Parameters with no statistical distribution for base case and sensitivity analyses (one-way and probabilistic) (Costs in € 2018)

Parameter number	Parameter name	Spreadsheet (point estimate cell)	Parameter description	Point estimate	Lower limit range	Upper limit range	Source
Healthcare resources - Volumes							
14	Posology_Baclofen_per_os_Rehab_only	Parameters (L168)	Posology_Baclofen *per os* (tablets) mg *per diem* patient on Rehab (all severity levels)	30.11	0	50	Physiatrists' opinion
15	Posology_Baclofen_per_os_Rehab_BoNT-A	Parameters (L170)	Posology_Baclofen *per os* (tablets) mg *per diem* patient on Rehab/aboBoNT-A (all severity levels)	39.25	0	50	Physiatrists' opinion
16	Posology_Baclofen_intratecal_Rehab_only	Parameters (L172)	Posology_Baclofen intratecal (infusion) mg *per diem* patient on Rehab (all severity levels)	0.08	0	0.08	Physiatrists' opinion; Eleopra, 2009
17	Posology_Gabapentin_per_os_Rehab_BoNT-A	Parameters (L174)	Posology Gabapentin *per os* (tablets) mg *per diem* patient on Rehab/aboBoNT-A (all severity levels)	450	0	450	Physiatrists' opinion;
18	Posology_per_os_AE_Chronic_urticaria_Rehab_BoNT-A	Parameters (L220)	Posology triamcinolone+chlorphenamine *per os* tablets *per diem* patient with AE chronic urticarial on Rehab/aboBoNT-A (all severity levels)	4.00	0	4	Physiatrists' opinion
19	Drug_therapy_duration_AE_Chronic_urticaria_Rehab_BoNT-A	Parameters (L222)	Days per year therapy triamcinolone+chlorphenamine *per os* tablets *per diem* patient with AE chronic urticarial on Rehab/aboBoNT-A (all severity levels)	243.50	0	243.50	Physiatrists' opinion
Healthcare resources - Unit and yearly costs							
20	uc_Ex-factory price per unit BoNT-A	Parameters (L293)	Unit cost INHS-funded ex-factory *per* IU aboBoNT-A patient on Rehab/aboBoNT-A (all severity levels)	€0.35	€0.35	€0.35	SM1
21	uc_Baclofen_per_os_Rehab_All	Parameters (L315)	Unit cost INHS-funded *per* mg Baclofen _per_os_ patient on Rehab/aboBoNT-A and on Rehab (all severity levels)	€0.03	€0.03	€0.03	SM2,SM3
22	uc_Baclofen_intratecal_Rehab_only	Parameters (L317)	Unit cost INHS-funded *per* mg Baclofen intratecal patient on Rehab (all severity levels)	€0.60	€0.60	€0.60	SM2,SM3
23	uc_Antiihistamine_per_os_Rehab_BoNT-A	Parameters (L324)	Unit cost OOP-funded triamcinolone+chlorphenamine *per* tablet patient on Rehab/aboBoNT-A (all severity levels)	€0.38	€0.38	€0.38	SM3
Discounting cost, LYS and QALYs							
24	disc_rate_costs	Parameters (L254)	Real social discount rate for costs	0.03	0.00	0.05	SM4-SM6
25	disc_rate_LYS_QALYs	Parameters (L255)	Real social discount rate for LYS and QALYs	0.03	0.00	0.05	SM4-SM6

AE=adverse event; INHS=Italian National Health Service; mg=milligram; LYS=Life-year saved; OOP=out-of-pocket; QALYs=Quality-Adjusted Life Years; Rehab/aboBoNT-A=abobotulinumtoxinA + rehabilitation.

Table SM3 – Parameters with statistical distribution for base case and sensitivity analyses (one-way and probabilistic)

Parameter number	Parameter name	Spreadsheet (point estimate cell)	Parameter description	Observations[a]	Mean	SE	LL 95% CI	UL 95% CI	Parameters Beta distribution for PSA		Source
									Alfa	Beta	
Anagraphics, clinical classification and employment status											
26	Pr_female	Parameters (L18)	Probability female patient	930	0.475	0.016	0.443	0.507	442	488	Physiatrists' opinion
27	Rehab_only	Parameters (L25)	Probability patient on Rehab	930	0.072	0.008	0.056	0.089	67	864	Physiatrists' opinion
28	Rehab_plus_BoNT_A	Parameters (L 27)	Probability patient on Rehab/aboBoNT-A	930	0.928	0.008	0.911	0.944	864	67	Physiatrists' opinion
29	Pr_Empl_No_hour_red_All	Parameters (L47)	Probability employed patient without working hours reduction	930	0.700	0.015	0.670	0.729	651	279	Physiatrists' opinion
30	Pr_Empl_Mild_Rehab_only	Parameters (L49)	Conditional probability employed patients with mild PSS given Rehab	41	0.415	0.077	0.272	0.566	17	24	Physiatrists' opinion
31	Pr_Empl_Moderate_Rehab_only	Parameters (L51)	Conditional probability employed patients with moderate PSS given Rehab	24	0.260	0.090	0.108	0.450	6	17	Physiatrists' opinion
32	Pr_Empl_Severe_Rehab_only	Parameters (L53)	Conditional probability employed patients with severe PSS given Rehab	1	0.000	0.000	0.000	0.000	0	1	Physiatrists' opinion
33	Pr_Empl_Very_Severe_Rehab_only	Parameters (L55)	Conditional probability employed patients with very severe PSS given Rehab	1	0.000	0.000	0.000	0.000	0	1	Physiatrists' opinion
34	Pr_Empl_Mild_ Rehab_BoNT_A	Parameters (L57)	Conditional probability employed patients with mild PSS given Rehab/aboBoNT-A	128	0.388	0.043	0.306	0.474	50	78	Physiatrists' opinion
35	Pr_Empl_Moderate_ Rehab_BoNT_A	Parameters (L59)	Conditional probability employed patients with moderate PSS given Rehab/aboBoNT-A	287	0.233	0.025	0.186	0.284	67	220	Physiatrists' opinion
36	Pr_Empl_Severe_ Rehab_BoNT_A	Parameters (L61)	Conditional probability employed patients with severe PSS given Rehab/aboBoNT-A	247	0.052	0.014	0.028	0.082	13	235	Physiatrists' opinion
37	Pr_Empl_Very_Severe_ Rehab_BoNT_A	Parameters (L63)	Conditional probability employed patients with very severe PSS given Rehab/aboBoNT-A	201	0.052	0.016	0.026	0.086	10	191	Physiatrists' opinion

LL 95% CI=lower limit 95% confidence interval; PSA=Probabilistic Sensitivity Analysis; PSS=post-stroke spasticity; Rehab=rehabilitation; Rehab/aboBoNT-A=abobotulinumtoxinA + rehabilitation; SE=standard error; UL 95% CI= upper limit 95% confidence interval.

[a] Number of patients considered for parameter calculation out of 930 patients followed by physiatrists who coauthored this research.

Table SM4 – Parameters with statistical distribution for base case and sensitivity analyses (one-way and probabilistic)

Parameter number	Parameter name	Spreadsheet (point estimate cell)	Parameter description	Observations[a]	Mean	SE	LL 95% CI	UL 95% CI	Parameters Beta distribution for PSA		Source
									Alfa	Beta	
Anagraphics, clinical classification and employment status											
38	Pr_Empl_Hour_red_All	Parameters (L65)	Probability employed patient with working hour reduction (from 8 to 4)	279	0.300	0.027	0.248	0.355	84	195	Physiatrists' opinion
39	Pr_Housekeepers_Rehab_only	Parameters (L67)	Conditional probability patient being housekeeper given Rehab	32	0.439	0.088	0.273	0.611	14	18	Physiatrists' opinion
40	Pr_Housekeepers_Rehab_BoNT_A	Parameters (L69)	Conditional probability patient being housekeeper given Rehab/aboBoNT-A	410	0.417	0.024	0.370	0.465	171	239	Physiatrists' opinion
41	Pr_Housekeepers_Hour_red_All	Parameters (L71)	Probability patient with working hour reduction given housekeeper	442	0.652	0.023	0.607	0.695	288	154	Physiatrists' opinion
42	Pr_Mild_Rehab_care_giving_Rehab_only	Parameters (L73)	Probability patient with mild PSS on Rehab needing informal care	67	0.246	0.053	0.151	0.356	16	50	Physiatrists' opinion
43	Pr_Moderate_Rehab_care_giving_Rehab_only	Parameters (L75)	Probability patient with moderate PSS on Rehab needing informal care	25	0.349	0.095	0.180	0.542	9	16	Physiatrists' opinion
44	Pr_Severe_Rehab_care_giving_Rehab_only	Parameters (L77)	Probability patient with severe PSS on Rehab needing informal care	16	0.608	0.122	0.367	0.822	10	6	Physiatrists' opinion
45	Pr_Very_Severe_Rehab_care_giving_Rehab_only	Parameters (L79)	Probability patient with very severe PSS on Rehab needing informal care	16	0.608	0.122	0.366	0.823	10	6	Physiatrists' opinion

LL 95% CI=lower limit 95% confidence interval; PSA=Probabilistic Sensitivity Analysis; PSS=post-stroke spasticity; Rehab=rehabilitation; Rehab/aboBoNT-A=abobotulinumtoxinA + rehabilitation; SE=standard error; UL 95% CI=upper limit 95% confidence interval.

[a] Number of patients considered for parameter calculation out of 930 patients followed by physiatrists who coauthored this research.

Table SM5 – Parameters with statistical distribution for base case and sensitivity analyses (one-way and probabilistic)

Parameter number	Parameter name	Spreadsheet (point estimate cell)	Parameter description	Observations	Mean	SE	LL 95% CI	UL 95% CI	Alfa	Beta	Source
									Parameters Beta distribution for PSA		
Anagraphics, clinical classification and employment status											
46	Pr_Mild_Rehab_care_giving_Rehab_BoNT_A	Parameters (L81)	Probability patient with mild PSS on Rehab/aboBoNT-A needing informal care	864	0.327	0.016	0.296	0.359	282	581	Physiatrists' opinion
47	Pr_Moderate_Rehab_care_giving_ Rehab_BoNT_A	Parameters (L83)	Probability patient with moderate PSS on Rehab/aboBoNT-A needing informal care	735	0.538	0.018	0.502	0.574	395	340	Physiatrists' opinion
48	Pr_Severe_Rehab_care_giving_Rehab_BoNT_A	Parameters (L85)	Probability patient with severe PSS on Rehab/aboBoNT-A needing informal care	247	0.796	0.026	0.743	0.843	197	51	Physiatrists' opinion
49	Pr_Very_Severe_Rehab_care_giving_ Rehab_BoNT_A	Parameters (L87)	Probability patient with very severe PSS on Rehab/aboBoNT-A needing informal care	201	0.796	0.028	0.737	0.848	160	41	Physiatrists' opinion
50	Pr_home_help_Rehab_only	Parameters (L89)	Probability patient on Rehab needing home help	67	0.384	0.060	0.272	0.503	26	41	Physiatrists' opinion
51	Pr_home_help_Rehab_BoNT_A	Parameters (L91)	Probability patient on Rehab/aboBoNT-A needing home help	864	0.411	0.017	0.379	0.444	355	508	Physiatrists' opinion
52	Pr_INHS_funded_DH_BoNT_A_adm	Parameters (L93)	Probability INHS-funded day.hospital administration of aboBoNT-A	864	0.925	0.009	0.906	0.941	799	65	Physiatrists' opinion
53	Pr_INHS_funded_amb_BoNT_A_adm	Parameters (L95)	Probability INHS-funded outpatient administration of aboBoNT-A	864	0.075	0.009	0.059	0.094	65	799	Physiatrists' opinion
54	Pr_INHS_funded_Orthesis_Leg_Foot	Parameters (L97)	Probability INHS-funded for leg/foot orthesis	930	0.978	0.005	0.968	0.987	910	20	Physiatrists' opinion

INHS=Italian National Health Service; LL 95% CI=lower limit 95% confidence interval; PSA=Probabilistic Sensitivity Analysis; PSS=post-stroke spasticity; Rehab=rehabilitation; Rehab/aboBoNT-A=abobotulinumtoxinA + rehabilitation; SE=standard error; UL 95% CI= upper limit 95% confidence interval.
[a] Number of patients considered for parameter calculation out of 930 patients followed by physiatrists who coauthored this research.

Table SM6 – Parameters with statistical distribution for base case and sensitivity analyses (one-way and probabilistic)

Parameter number	Parameter name	Spreadsheet (point estimate cell)	Parameter description	Observations	Mean	SE	LL 95% CI	UL 95% CI	Parameters Beta distribution for PSA Alfa	Beta	Source
Anagraphics, clinical classification and employment status											
55	Pr_FU_Vis_Rehab_only	Parameters (L103)	Probability follow-up visits patient on Rehab	67	0.919	0.033	0.844	0.972	61	5	Physiatrists' opinion
56	Pr_FU_US_Rehab_BoNT_A	Parameters (L107)	Probability follow-up visits patient on Rehab/aboBoNT-A	864	0.785	0.014	0.757	0.812	678	186	Physiatrists' opinion
57	Pr_OOP_funded_Home_rehab Rehab_only	Parameters (L115)	Probability OOP-funded home rehabilitation sessions patient on Rehab	930	0.043	0.007	0.031	0.057	40	890	Physiatrists' opinion
58	Pr_OOP_funded_home_rehab_Rehab_BoNT_A_No_Moderate	Parameters (L117)	Probability OOP-funded home rehabilitation sessions patient with non-moderate PSS on Rehab/aboBoNT-A	577	0.043	0.008	0.028	0.061	25	252	Physiatrists' opinion
59	Pr_OOP_funded_home_rehab_Rehab_BoNT_A_Moderate	Parameters (L119)	Probability OOP-funded home rehabilitation sessions patient with moderate PSS on Rehab/aboBoNT-A	287	0.301	0.027	0.249	0.355	86	201	Physiatrists' opinion
60	Pr_OOP_funded_shockwave_sessions	Parameters (L121)	Probability OOP-funded schockwave sessions	930	0.170	0.012	0.147	0.195	158	772	Physiatrists' opinion
61	Pr_Baclofen_per_os_Rehab_onlu	Parameters (L123)	Conditional probability Baclofen *per os* patient on Rehab	67	0.230	0.052	0.138	0.338	15	51	Physiatrists' opinion
62	Pr_Baclofen_intratecal_Rehab_only	Parameters (L125)	Conditional probability intratecal Baclofen patient on Rehab	67	0.011	0.013	0.000	0.011	1	66	Physiatrists' opinion

INHS=Italian National Health Service; LL 95% CI=lower limit 95% confidence interval; OOP=out-of-pocket; PSA=Probabilistic Sensitivity Analysis; PSS=post-stroke spasticity; Rehab=rehabilitation; Rehab/aboBoNT-A=abobotulinumtoxinA + rehabilitation; SE=standard error; UL 95% CI= upper limit 95% confidence interval.
[a] Number of patients considered for parameter calculation out of 930 patients followed by physiatrists who coauthored this research.

Table SM7 – Parameters with statistical distribution for base case and sensitivity analyses (one-way and probabilistic)

Parameter number	Parameter name	Spreadsheet (point estimate cell)	Parameter description	Observations	Mean	SE	LL 95% CI	UL 95% CI	Parameters Beta distribution for PSA		Source
									Alfa	Beta	
Anagraphics, clinical classification and employment status											
63	Pr_Baclofen_per_os_Mild_Rehab_BoNT_A	Parameters (L127)	Conditional probability Baclofen *per os* patient with mild post-stroke spastcity onRehab/aboBoNT-A	128	0.155	0.032	0.098	0.222	20	108	Physiatrists' opinion
64	Pr_Baclofen_per_os_Moderate_Rehab_BoNT_A	Parameters (L129)	Conditional probability Baclofen *per os* patient with moderate post-stroke spastcity onRehab/aboBoNT-A	287	0.235	0.025	0. 188	0.286	68	219	Physiatrists' opinion
65	Pr_Baclofen_per_os_Severe_Rehab_BoNT_A	Parameters (L131)	Conditional probability Baclofen *per os* patient with severe post-stroke spastcity onRehab/aboBoNT-A	247	0.330	0.030	0.272	0.389	82	166	Physiatrists' opinion
66	Pr_Baclofen_per_os_Very_Severe_Rehab_BoNT_A	Parameters (L133)	Conditional probability Baclofen *per os* patient with very severe post-stroke spastcity onRehab/aboBoNT-A	268	0.155	0.022	0.114	0.200	41	226	Physiatrists' opinion
67	Pr_Gabapentin_per_os_Severe_Rehab_BoNT_A	Parameters (L135)	Conditional probability Gabapentin *per os* patient with very severe post-stroke spastcity onRehab/aboBoNT-A	247	0.054	0.014	0.029	0.085	13	234	Physiatrists' opinion

LL 95% CI=lower limit 95% confidence interval; PSA=Probabilistic Sensitivity Analysis; Rehab=rehabilitation; Rehab/aboBoNT-A=abobotulinumtoxinA + rehabilitation; SE=standard error; UL 95% CI= upper limit 95% confidence interval.
[a] Number of patients considered for parameter calculation out of 930 patients followed by physiatrists who coauthored this research.

Table SM8 – Parameters with statistical distribution for base case and sensitivity analyses (one-way and probabilistic)

Parameter number	Parameter name	Spreadsheet (point estimate cell)	Parameter description	Observations	Mean	SE	LL 95% CI	UL 95% CI	Parameters Beta distribution for PSA		Source
									Alfa	Beta	
Anagraphics, clinical classification and employment status											
68	First_year_age_related_bckg_death	Parameters (L139)	Death probability general population aged 66	930	0.009	0.003	0.004	0.017	9	921	SM7
69	Second_year_age_related_bckg_death	Parameters (L141)	Death probability general population aged 67	921	0.010	0.003	0.005	0.018	10	912	SM7
70	Pr_Botulism_BoNT_A	Parameters (L265)	Probability botilism patient on Rehab/aboBoNT-A	864	0.0003	0.001	0.000	0.002	0	863	Physiatrists' opinion
71	Pr_Chronic_urticaria_BoNT_A	Parameters (L266)	Probability chronic urticaria patient on Rehab/aboBoNT-A	864	0.0002	0.001	0.000	0.002	0	501	Physiatrists' opinion
72	Pr_Orthesis_Leg_Foot_Rehab_only	Parameters (L270)	Probability leg/foot orthesis (1 item) patient on Rehab	67	0.474	0.061	0.356	0.594	32	35	Physiatrists' opinion
73	Pr_Wheelchair_Rehab_only	Parameters (L271)	Probability wheelchair patient on Rehab	67	0.075	0.032	0.025	0.149	5	61	Physiatrists' opinion
74	Pr_Crutches_Rehab_only	Parameters (L272)	Probability crutches (1 pair) patient on Rehab	67	0.129	0.041	0.060	0.219	9	58	Physiatrists' opinion
75	Pr_Orthesis_Hand_Wrist_Rehab_only	Parameters (L273)	Probability hand/wrist orthesis (1 item) patient on Rehab	67	0.258	0.054	0.161	0.369	17	49	Physiatrists' opinion
76	Pr_Walker_Rehab_only	Parameters (L274)	Probability walker (1 item) patient on Rehab	67	0.129	0.041	0.060	0.219	9	58	Physiatrists' opinion
77	Pr_Cane_Rehab_only	Parameters (L275)	Probability walking cane (1 item) patient on Rehab	67	0.387	0.060	0.275	0.506	26	41	Physiatrists' opinion
78	Pr_Wheelchair_Rehab_ BoNT-A	Parameters (L276)	Probability wheelchair patient on Rehab/aboBoNT-A	864	0.065	0.008	0.049	0.082	56	808	Physiatrists' opinion
79	Pr_Crutches_Rehab_ BoNT-A	Parameters (L277)	Probability crutches (1 pair) patient on Rehab/aboBoNT-A	864	0.108	0.011	0.088	0.129	93	771	Physiatrists' opinion
80	Pr_Orthesis_Hand_Wrist_ Rehab_BoNT_A	Parameters (L278)	Probability hand/wrist orthesis (1 item) patient on Rehab/aboBoNT-A	864	0.258	0.015	0.229	0.288	223	641	Physiatrists' opinion
81	Pr_Walker_ Rehab_BoNT_A	Parameters (L279)	Probability walker (1 item) patient on Rehab/aboBoNT-A	864	0.129	0.011	0.108	0.152	111	752	Physiatrists' opinion
82	Pr_Cane_ Rehab_BoNT_A	Parameters (L280)	Probability walking cane (1 item) patient on Rehab/aboBoNT-A	864	0.387	0.017	0.355	0.420	334	529	Physiatrists' opinion
83	Pr_Orthesis_Leg_Foot_ Rehab_BoNT_A	Parameters (L281)	Probability leg/foot orthesis (1 item) patient on Rehab/aboBoNT-A	864	0.528	0.017	0.495	0.561	456	408	Physiatrists' opinion

LL 95% CI=lower limit 95% confidence interval; PSA=Probabilistic Sensitivity Analysis; Rehab=rehabilitation; Rehab/aboBoNT-A=abobotulinumtoxinA + rehabilitation; SE=standard error; UL 95% CI= upper limit 95% confidence interval.
[a] Number of patients considered for parameter calculation out of 930 patients followed by physiatrists who coauthored this research.

Table SM9 – Parameters with statistical distribution for base case and sensitivity analyses (one-way and probabilistic)

Parameter number	Parameter name	Spreadsheet (point estimate cell)	Parameter description	Observations	Mean	SE	LL 95% CI	UL 95% CI	Parameters Beta distribution for PSA		Source
									Alfa	Beta	
Anagraphics, clinical classification and employment status											
84	Pr_Wrist_Splint_Rehab_BoNT_A	Parameters (L282)	Probability wrist splint (1 item) patient on Rehab/aboBoNT-A	864	0.054	0.008	0.040	0.070	46	817	Physiatrists' opinion
85	Pr_Orthosis_Ankle_Rehab_BoNT_A	Parameters (L283)	Probability ankle orthosis (1 item) patient on Rehab/aboBoNT-A	864	0.081	0.009	0.063	0.100	70	794	Physiatrists' opinion
86	Pr_Orthosis_Knee_Rehab_BoNT_A	Parameters (L284)	Probability knee orthosis (1 item) patient on Rehab/aboBoNT-A	864	0.081	0.009	0.063	0.100	70	794	Physiatrists' opinion
87	Pr_Shoulder_Bracing_Rehab_BoNT-A	Parameters (L285)	Probability shoulder brace (1 item) patient on Rehab/aboBoNT-A	864	0.013	0.004	0.007	0.022	12	852	Physiatrists' opinion
88	Pr_Tripod_Quadruped_Stick_Rehab_BoNT_A	Parameters (L286)	Probability tripod/quadruped stick (1 item) patient on Rehab/aboBoNT-A	864	0.202	0.176	0.229	0.022	174	689	Physiatrists' opinion

LL 95% CI=lower limit 95% confidence interval; PSA=Probabilistic Sensitivity Analysis; Rehab=rehabilitation; Rehab/aboBoNT-A=abobotulinumtoxinA + rehabilitation; SE=standard error; UL 95% CI= upper limit 95% confidence interval.
ª Number of patients considered for parameter calculation out of 930 patients followed by physiatrists who coauthored this research.

Table SM10 – Parameters with statistical distribution for base case and sensitivity analyses (one-way and probabilistic)

Parameter number	Parameter name	Spreadsheet (point estimate cell)	Parameter description	Observations	Mean	SE	LL 95% CI	UL 95% CI	Parameters Log-normal distribution for PSA		Source
									Mean	SE	
Anagraphics, clinical classification and employment status											
89	Death_prob_multiplier_1_year_after_ictus	Parameters (L143)	Post-stroke SMR vs death probability general population aged 66	930	5.720	0.495	4.810	6.750	5.720	0.086	SM8
90	Death_prob_multiplier_2_year_after_ictus	Parameters (L145)	Post-stroke SMR vs death probability general population aged 67	921	3.140	0.179	2.800	3.500	3.140	0.179	SM8

LL 95% CI=lower limit 95% confidence interval; PSA=Probabilistic Sensitivity Analysis; Rehab=rehabilitation; Rehab/aboBoNT-A=abobotulinumtoxinA + rehabilitation; SE=standard error; SMR=Standardized Mortality Ratio; UL 95% CI= upper limit 95% confidence interval.

[a] Number of patients considered for parameter calculation out of 930 patients followed by physiatrists who coauthored this research.

Table SM11 – Parameters with statistical distribution for base case and sensitivity analyses (one-way and probabilistic)

Parameter number	Parameter name	Spreadsheet (point estimate cell)	Parameter description	Observations[a]	Mean	SE	LI 95% CI	UL 95% CI	Parameter Dirichlet distribution for PSA Alfa	Source
Anagraphics, clinical classification and employment status										
91	Pr_Mild_Rehab_only	Parameters (L31)	Probability patient with mild PSS on Rehab	67	0.624	0.059	0.505	0.735	41	Physiatrists' opinion
92	Pr_Moderate_Rehab_only	Parameters (L33)	Probability patient with moderate PSS on Rehab	25	0.355	0.096[b]	0.184	0.548	9	Physiatrists' opinion
93	Pr_Severe_Rehab_only	Parameters (L35)	Probability patient with severe PSS on Rehab	16	0.011	0.026[c]	0.000	0.085	0	Physiatrists' opinion
94	Pr_Very_Severe_Rehab_only	Parameters (L37)	Probability patient with very severe PSS on Rehab	16	0.011	0.026[d]	0.000	0.086	0	Physiatrists' opinion
95	Pr_Mild_Rehab_BoNT_A	Parameters (L39)	Probability patient with mild PSS on Rehab/aboBoNT-A	864	0.148	0.012	0.125	0.173	128	Physiatrists' opinion
96	Pr_Moderate_Rehab_BoNT_A	Parameters (L41)	Probability patient with moderate PSS on Rehab/aboBoNT-A	735	0.332	0.017[e]	0.299	0.367	244	Physiatrists' opinion
97	Pr_Severe_Rehab_BoNT_A	Parameters (L43)	Probability patient with severe PSS on Rehab/aboBoNT-A	491	0.287	0.020[f]	0.247	0.327	141	Physiatrists' opinion
98	Pr_Very_Severe_Rehab_BoNT_A	Parameters (L45)	Probability patient with very severe PSS on Rehab/aboBoNT-A	350	0.233	0.02[fg]	0.190	0.278	82	Physiatrists' opinion

LL 95% CI=lower limit 95% confidence interval; PSA=Probabilistic Sensitivity Analysis; PSS=post-stroke spasticity; Rehab=rehabilitation; Rehab/aboBoNT-A=abobotulinumtoxinA + rehabilitation; SE=standard error; UL 95% CI= upper limit 95% confidence interval;.

[a] Number of patients considered for parameter calculation out of 930 patients followed by physiatrists who coauthored this research.

[b] SE calculated assuming a sample of 25 patients (67 patients -41 patients; parameter Alfa Pr_Mild_Rehab_only=25).

[c] SE calculated assuming a sample of 16 patients (67 patients -41 patients -9 patients; parameter Alfa Pr_Mild_Rehab_only=41; parameter Alfa Pr_Moderate_Rehab_only=9).

[d] patients (67 patients -41 patients -9 patients -0 patients; parameter Alfa Pr_Mild_Rehab_only=41; parameter Alfa Pr_Moderate_Rehab_only=9; parameter Alfa Pr_Severe_Rehab_only=0).

[e] SE calculated assuming a sample of 735 patients (864 patients -128 patients; parameter Alfa Pr_Mild_Rehab_BoNT_A=128).

[f] SE calculated assuming a sample of 491 patients (864 patients -128 patients -244 patients; parameter Alfa Pr_Mild_Rehab_BoNT_A=128; parameter Alfa Pr_Moderate_Rehab_BoNT_A=244).

[g] SE calculated assuming a sample of 350 patients (864 patient-128 patient-244 patient-141 patient; parameter Alfa Pr_Mild_Rehab_BoNT_A=128; parameter Alfa Pr_Moderate_Rehab_BoNT_A=244; parameter Alfa Pr_Severe_Rehab_BoNT_A=141).

Table SM12 – Parameters with statistical distribution for base case and sensitivity analyses (one-way and probabilistic)

Parameter number	Parameter name	Spreadsheet (point estimate cell)	Parameter description	Observations[a]	Mean	SE	LI 95% CI	UL 95% CI	Parameter Dirichlet distribution for PSA		Source
									Alfa		
Anagraphics, clinical classification and employment status											
99	Pr_INHS_funded_amb_rehab	Parameters (L111)	Probability INHS-funded rehabilitation session in outpatient setting	930	0.806	0.013	0.780	0.831	750		Physiatrists' opinion
100	Pr_INHS_funded_DH_rehab	Parameters (L112)	Probability INHS-funded rehabilitation session in day-hospital setting	180	0.183	0.029[ab]	0.130	0.242	33		Physiatrists' opinion
101	Pr_INHS_funded_Home_Rehab	Parameters (L113)	Probability INHS-funded rehabilitation session in home setting	147	0.011	0.009[c]	0.001	0.033	2		Physiatrists' opinion

INHS=Italian National Health Service; LL 95% CI=lower limit 95% confidence interval; PSA=Probabilistic Sensitivity Analysis; Rehab=rehabilitation; Rehab/aboBoNT-A=abobotulinumtoxinA + rehabilitation; SE=standard error; UL 95% CI=upper limit 95% confidence interval.

[a] Number of patients considered for parameter calculation out of 930 patients followed by physiatrists who coauthored this research.

[b] SE calculated assuming a sample of 180 patients (930 patients-750 patients; parameter Alfa Pr_INHS_funded_amb_rehab=750).

[c] SE calculated assuming a sample of 147 patients (930 patients -750 patients -33 patients; parameter Alfa Pr_Mild_Rehab_only=750; parameter Alfa Pr_Moderate_Rehab_only=33).

Table SM13 – Parameters with statistical distribution for base case and sensitivity analyses (one-way and probabilistic)

Parameter number	Parameter name	Spreadsheet (point estimate cell)	Parameter description	Mean	SE	LL 95% CI	UL 95% CI	Parameters Gamma distribution per PSA Alfa	Beta	Source
Healthcare resources - Volumes										
102	Vol_INHS_funded_Ultrasounds_year_BoNT_A	Parameters (L180)	Volume INHS-funded follow-up muscle/tendon ultrasounds performed in outpatient setting per year in patient on Rehab/aboBoNT-A	11.18	4.47[a]	4.209	21.505	6	2	Physiatrists' opinion
103	Vol_INHS_funded_FU_vis_year_Rehab_only	Parameters (L176)	Volume INHS-funded follow-up visits per year patient on Rehab	2.28	0.91[a]	0.860	4.394	6	0	Physiatrists' opinion
104	Vol_INHS_funded_FU_vis_year_BoNT_A	Parameters (L178)	Volume INHS-funded follow-up visits per year patient on Rehab/aboBoNT-A	4.46	1.78[a]	1.679	8.581	6	1	Physiatrists' opinion
105	Vol_INHS_funded_yearly_rehab_sess_Mild_Rehab_only	Parameters (L181)	Volume INHS-funded follow-up visits per year patient with mild PSS on Rehab	15.38	6.15[a]	5.787	29.570	6	2	Physiatrists' opinion
106	Vol_INHS_funded_yearly_rehab_sess_Mild_Rehab_BoNT_A	Parameters (L186)	Volume INHS-funded follow-up visits per year patient with mild PSS on Rehab/aboBoNT-A	38.82	15.53[a]	14.609	74.648	6	6	Physiatrists' opinion
107	Vol_INHS_funded_yearly_rehab_sess_Moderate_Rehab_only	Parameters (L184)	Volume INHS-funded follow-up visits per year patient with moderate PSS on Rehab	15.91	6.37[a]	5.989	30. 603	6	3	Physiatrists' opinion
108	Vol_INHS_funded_yearly_rehab_sess_Moderate _Rehab_BoNT_A	Parameters (L188)	Volume INHS-funded follow-up visits per year patient with moderate PSS on Rehab/aboBoNT-A	38.82	15.53[a]	14.609	74.648	6	6	Physiatrists' opinion
109	Vol_INHS_funded_yearly_rehab_sess_Severe _Rehab_BoNT_A	Parameters (L190)	Volume INHS-funded follow-up visits per year patient with severe PSS on Rehab/aboBoNT-A	43.98	17.59[a]	16.551	84.573	6	7	Physiatrists' opinion
110	Vol_INHS_funded_yearly_rehab_sess_Very_Severe _Rehab_BoNT_A	Parameters (L192)	Volume INHS-funded follow-up visits per year patient with very severe PSS on Rehab/aboBoNT-A	41.83	16.73[a]	15.742	80.438	6	7	Physiatrists' opinion

LL 95% CI=lower limit 95% confidence interval; PSA=Probabilistic Sensitivity Analysis; Rehab=rehabilitation; PSS=post-stroke spasticity; Rehab/aboBoNT-A=abobotulinumtoxinA + rehabilitation; SE=standard error; UL 95% CI=upper limit 95% confidence interval.
[a] Due to the lack of an analitically calculated SE, a CV=40% of the sample mean has been imposed (SM9, SM10).

Table SM14 – Parameters with statistical distribution for base case and sensitivity analyses (one-way and probabilistic)

Parameter number	Parameter name	Spreadsheet (point estimate cell)	Parameter parametro	Mean	SE	LL 95% CI	UL 95% CI	Parameters Gamma distribution per PSA Alfa	Beta	Source
Healthcare resources - Volumes										
111	Vol_OOP_funded_yearly_shockwave_sessions	Parameters (L194)	Yearly volume of OOP-funded scockwave sessions	12.00	4.80[a]	4.516	23.077	6	2	Physiatrists' opinion
112	Vol_INHS_funded_yearly_EMG_AE_Botulism_Rehab_BoNT_A	Parameters (L196)	Yearly volume of INHS-funded botulism-related electromyographies in outpatient setting patient on Rehab/aboBoNT-A	1.00	0.04[a]	0.376	1.923	6	0	Physiatrists' opinion
113	Vol_INHS_funded_yearly_Phis_Visits_AE_Botulism_Rehab_BoNT_A	Parameters (L198)	Yearly volume of INHS-funded botulism-related physiatrist visits in outpatient setting patient on Rehab/aboBoNT-A	6.00	2.40[a]	2.258	11.538	6	1	Physiatrists' opinion
114	Vol_INHS_funded_yearly_Neurologist_Visits_AE_Botulism_Rehab_BoNT_A	Parameters (L200)	Yearly volume of INHS-funded botulism-related neurologist visits in outpatient setting patient on Rehab/aboBoNT-A	1.00	0.04[a]	0.376	1.923	6	0	Physiatrists' opinion
115	Vol_INHS_funded_yearly_Amb_Rehab_session_AE_Botulism_Rehab_BoNT_A	Parameters (L202)	Yearly volume of INHS-funded botulism-related rehabilitation sessions in outpatient setting patient on Rehab/aboBoNT-A	20.00	8.00[a]	7.527	38.461	6	3	Physiatrists' opinion
116	Vol_OOP_funded_yearly_home_rehab_Rehab_only_Mild	Parameters (L204)	Yearly volume of OOP-funded rehabilitation sessions in home setting patient with mild PSS on Rehab	10.00	4.00[a]	3.763	19.231	6	2	Physiatrists' opinion
117	Vol_OOP_funded_yearly_home_rehab_Rehab_only_Moderate	Parameters (L206)	Yearly volume of OOP-funded rehabilitation sessions in home setting patient with moderate PSS on Rehab	10.00	4.00[a]	3.763	19.231	6	2	Physiatrists' opinion
118	Vol_OOP_funded_yearly_home_rehab_Rehab_only_Severe	Parameters (L208)	Yearly volume of OOP-funded rehabilitation sessions in home setting patient with severe PSS on Rehab	20.00	8.00[a]	7.527	38.461	6	3	Physiatrists' opinion

AE=*Adverse Events*; LL 95% CI=lower limit 95% confidence interval; OOP=out-of-pocket; PSA=Probabilistic Sensitivity Analysis; PSS=post-stroke spasticity; Rehab=rehabilitation; Rehab/aboBoNT-A=abobotulinumtoxinA; SE=standard error; UL 95% CI=upper limit 95% confidence interval.
[a] Due to the lack of an analytically calculated SE, a CV=40% of the sample mean has been imposed (SM9, SM10).

Table SM15 – Parameters with statistical distribution for base case and sensitivity analyses (one-way and probabilistic)

Parameter number	Parameter name	Spreadsheet (point estimate cell)	Parameter description	Mean	SE	LL 95% CI	UL 95% CI	Parameters Gamma distribution per PSA Alfa	Beta	Source
Healthcare resources - Volumes										
119	Vol_OOP_funded_yearly_home_rehab_Rehab_only_ Very_Severe	Parameters (L210)	Yearly volume of OOP-funded rehabilitation sessions in home setting patient very severe PSS on Rehab	20.00	8.00[a]	7.527	38.461	6	3	Physiatrists' opinion
120	Vol_OOP_funded_Home_Rehab_BoNT_A_ Mild	Parameters (L212)	Yearly volume of OOP-funded rehabilitation sessions in home setting patient mild PSS on Rehab/aboBoNT-A	10.00	4.00[a]	3.763	19.231	6	2	Physiatrists' opinion
121	Vol_OOP_funded_Home_Rehab_BoNT_A_ Moderate	Parameters (L214)	Yearly volume of OOP-funded rehabilitation sessions in home setting patient moderate PSS on Rehab/aboBoNT-A	7.31	2.93[a]	2.752	14.061	6	1	Physiatrists' opinion
122	Vol_OOP_funded_Home_Rehab_BoNT_A_ Severe	Parameters (L216)	Yearly volume of OOP-funded rehabilitation sessions in home setting patient severe PSS on Rehab/aboBoNT-A	20.00	8.00[a]	7.527	38.461	6	3	Physiatrists' opinion
123	Vol_OOP_funded_Home_Rehab_BoNT_A_ Very_Severe	Parameters (L218)	Yearly volume of OOP-funded rehabilitation sessions in home setting patient very severe PSS on Rehab/aboBoNT-A	20.00	8.00[a]	7.527	38.461	6	3	Physiatrists' opinion

LL 95% CI=lower limit 95% confidence interval; OOP=out-of-pocket; PSA=Probabilistic Sensitivity Analysis; PSS=post-stroke spasticity; Rehab=rehabilitation; Rehab/aboBoNT-A=abobotulinumtoxinA; SE=standard error; UL 95% CI=upper limit 95% confidence interval.
[a] Due to the lack of an analytically calculated SE, a CV=40% of the sample mean has been imposed (SM9, SM10).

Table SM16 – Parameters with statistical distribution for base case and sensitivity analyses (one-way and probabilistic)

Parameter number	Parameter name	Spreadsheet (point estimate cell)	Parameter description	Mean	SE	LL 95% CI	UL 95% CI	Parameters Gamma distribution per PSA Alfa	Beta	Source
Non-healthcare resources – Caregiving, transportation and parking										
124	Vol_caregivers	Parameters (L225)	Volume *caregivers* patient needing informal care	1.054	0.42	0.40	2.03	6	0	Physiatrists' opinion
125	Km_from_home_to_go_Rehab_only	Parameters (L226)	Kilometers from patient's home to healthcare facility patient on Rehab (one-way trip)	25.91	10.37[a]	9.75	49.83	6	4	Physiatrists' opinion
126	Km_from_home_to_go_Rehab_BoNT_A	Parameters (L227)	Kilometers from patient's home to healthcare facility patient on Rehab/aboBoNT-A (one-way trip)	32.37	12.95[a]	12.18	62.24	6	5	Physiatrists' opinion
127	Home_paid_help_minutes	Parameters (L230)	Daily time home help (minutes)	240.00	96.00[a]	90.32	461.53	6	38	Rersearch assumption
128	Pkg_minutes	Parameters (L231)	Parking time (minutes)	90.00	36.00[a]	33.87	173.08	6	14	Rersearch assumption

Km=kilometers; LL 95% CI=lower limit 95% confidence interval; PSA=Probabilistic Sensitivity Analysis; Rehab=rehabilitation; Rehab/aboBoNT-A=abobotulinumtoxinA; SE=standard error; UL 95% CI=upper limit 95% confidence interval.
[a] Due to the lack of an analytically calculated SE, a CV=40% of the sample mean has been imposed (SM9, SM10).

Table SM17 – Parameters with statistical distribution for base case and sensitivity analyses (one-way and probabilistic)

Parameter number	Parameter name	Spreadsheet (point estimate cell)	Parameter description	Mean	SE	LL 95% CI	UL 95% CI	Parameters Gamma distribution per PSA Alfa	Beta	Source
Non-healthcare resources - Patient and caregiver's time										
129	Minutes_Transportation_Rehab_only	Parameters (L228)	Minutes from patient's home to healthcare facility patient on Rehab (one-way trip)	28.60	11.44[a]	10.76	55.00	6	5	Rersearch assumption
130	Minutes_Transportation_Rehab_ BoNT_A	Parameters (L229)	Minutes from patient's home to healthcare facility patient on Rehab/aboBoNT-A (one-way trip)	32.90	13.16[a]	12.38	63.27	6	5	Rersearch assumption
131	INHS_funded_ Adm_BoNT_A_min	Parameters (L235)	Minutes aboBoNT-A administration[b]	43.71	17.48[a]	16.45	84.06	6	7	Physiatrists' opinion
132	INHS_funded_amb_Mild_Rehab_only_rehabilitation_session_min	Parameters (L236)	Minutes INHS-funded rehabilitation session in outpatient setting patient with mild PSS on Rehab	41.61	16.25[a]	15.66	80.02	6	7	Physiatrists' opinion
133	INHS_funded_amb_Moderate_Rehab_only_rehabilitation_session_min	Parameters (L237)	Minutes INHS-funded rehabilitation session in outpatient setting patient with moderate PSS on Rehab	31.40	12.56[a]	60.38	31.40	6	5	Physiatrists' opinion
134	INHS_funded_DH_Mild_Rehab_only_rehabilitation_session_min	Parameters (L238)	Minutes INHS-funded rehabilitation session in day-hospital setting patient with mild PSS on Rehab	60.00	24.00[a]	22.58	115.38	6	10	Physiatrists' opinion
135	INHS_funded_home_Mild_Rehab_only_rehabilitation_session_min	Parameters (L239)	Minutes INHS-funded rehabilitation session in home setting patient with mild PSS on Rehab	60.00	24.00[a]	22.58	115.38	6	10	Physiatrists' opinion
136	INHS_funded_Rehab_amb_BoNT_A_All_rehab_sess_min	Parameters (L240)	Minutes INHS-funded rehabilitation session in outpatient setting patient on Rehab/aboBoNT-A	51.94	20.77[a]	99.87	51.94	6	8	Physiatrists' opinion
137	INHS_funded_Rehab_DH_BoNT_A_All_rehab_sess_min	Parameters (L241)	Minutes INHS-funded rehabilitation session in day-hospital setting patient on Rehab/aboBoNT-A	120.00	48.00[a]	45.16	230.77	6	19	Physiatrists' opinion
138	INHS_funded_home_rehabilitation_sessions_Rehab_BoNT_A_min	Parameters (L242)	Minutes INHS-funded rehabilitation session in home setting patient on Rehab/aboBoNT-A	60.00	24.00[a]	22.58	115.38	6	10	Physiatrists' opinion

LL 95% CI=lower limit 95% confidence interval; PSA=Probabilistic Sensitivity Analysis; PSS=post-stroke spasticity; Rehab=rehabilitation; Rehab/aboBoNT-A=abobotulinumtoxinA + rehabilitation; SE=standard error; UL 95% CI= upper limit 95% confidence interval.
[a] Due to the lack of an analytically calculated SE, a CV=40% of the sample mean has been imposed (SM9, SM10).
[b] The same duration has been assumed for an outpatient follow-up visit.

Table SM18 – Parameters with statistical distribution for base case and sensitivity analyses (one-way and probabilistic)

Parameter number	Parameter name	Spreadsheet (point estimate cell)	Parameter description	Mean	SE	LL 95% CI	UL 95% CI	Parameters Gamma distribution for PSA		Source
								Alfa	Beta	
Non-healthcare resources - Patient and caregiver's time										
139	OOP_funded_Mild_Rehab_home_Rehab_only_session_min	Parameters (L243)	Minutes OOP-funded rehabilitation session in outpatient setting patient with mild PSS on Rehab	30.00	12.00[a]	11.29	57.69	6	5	Physiatrists' opinion
140	OOP_funded_Moderate_Rehab_home_Rehab_only_session_min	Parameters (L244)	Minutes OOP-funded rehabilitation session in outpatient setting patient with moderate PSS on Rehab	30.00	12.00[a]	11.29	57.69	6	5	Physiatrists' opinion
141	OOP_funded_Severe_Rehab_home_Rehab_only_session_min	Parameters (L245)	Minutes OOP-funded rehabilitation session in outpatient setting patient with severe PSS on Rehab	30.00	12.00[a]	11.29	57.69	6	5	Physiatrists' opinion
142	OOP_funded_Very_Severe_Rehab_home_Rehab_only_session_min	Parameters (L246)	Minutes OOP-funded rehabilitation session in outpatient setting patient with very severe PSS on Rehab	30.00	12.00[a]	11.29	57.69	6	5	Physiatrists' opinion
143	OOP_funded_Mild_Rehab_home_Rehab_BoNT_A_sess_min	Parameters (L247)	Minutes OOP-funded rehabilitation session in outpatient setting patient with mild PSS on Rehab/aboBoNT-A	30.00	12.00[a]	11.29	57.69	6	5	Physiatrists' opinion
144	OOP_funded_Moderate_Rehab_home_Rehab_BoNT_A_sess_min	Parameters (L248)	Minutes OOP-funded rehabilitation session in outpatient setting patient with moderate PSS on Rehab/aboBoNT-A	37.42	14.97[a]	14.08	71.96	6	6	Physiatrists' opinion
145	OOP_funded_Severe_Rehab_home_Rehab_BoNT_A_sess_min	Parameters (L249)	Minutes OOP-funded rehabilitation session in outpatient setting patient with severe PSS on Rehab/aboBoNT-A	30.00	12.00[a]	11.29	57.69	6	5	Physiatrists' opinion
146	OOP_funded_Very_Severe_Rehab_home_Rehab_BoNT_A_sess_min	Parameters (L250)	Minutes OOP-funded rehabilitation session in outpatient setting patient with very severe PSS on Rehab/aboBoNT-A	30.00	12.00[a]	11.29	57.69	6	5	Physiatrists' opinion
147	Add_time_for_health_care_serv	Parameters (L251)	Additional minutes for dealing with admission procedure before healthcare service delivery	30.00	12.00[a]	11.29	57.69	6	5	Rersearch assumption
148	Patient_hosp_min_intratecal_pump_Rehab_only_min	Parameters (L252)	Minutes inward hospitalization for Baclofen intratecal pump implant patient on Rehab (2 days)	576.00	230.40[a]	216.77	1107.68	6	92	Rersearch assumption

LL 95% CI=lower limit 95% confidence interval; OOP=out-of-pocket; PSA=Probabilistic Sensitivity Analysis; PSS=post-stroke spasticity; Rehab=rehabilitation; Rehab/aboBoNT-A=abobotulinumtoxinA + rehabilitation; SE=standard error; UL 95% CI= upper limit 95% confidence interval.
[a] Due to the lack of an analytically calculated SE, a CV=40% of the sample mean has been imposed (SM9, SM10).

Table SM19 – Parameters with statistical distribution for base case and sensitivity analyses (one-way and probabilistic) (Costs in € 2018)

Parameter number	Parameter name	Spreadsheet (point estimate cell)	Parameter description	Mean	SE	LL 95% CI	UL 95% CI	Parameters Normal distribution per PSA		Source
								Mean	SE	
Healthcare resources - Unit and yearly costs										
149	uc_INHS_funded_physiatrist_visit	Parameters (L290)	Unit cost INHS-funded physiatrist visit in outpatient setting	€12.91	€1.29[a]	€10.38	€15.44	€12.91	€1.29	SM11
150	uc_Muscles_Ultrasounds_Rehab_BoNT-A	Parameters (L291)	Unit cost INHS-funded muscle/tendon ultrasound in outpatient setting	€28.41	€2.84[a]	€22.84	€33.98	€28.41	€2.84	SM11
151	uc_INHS_funded_Adm_amb	Parameters (L294)	Unit cost INHS-funded Rehab/aboBoNT-A administration in outpatient setting	€9.71	€0.97[a]	€7.81	€11.61	€9.71	€0.97	SM11
152	uc_INHS_funded_Adm_DH	Parameters (L295)	Unit cost INHS-funded Rehab/aboBoNT-A administration in day-hospital setting	€218.16	€21.82[a]	€175.40	€260.92	€218.16	€21.82	SM11
153	uc_INHS_funded_Rehab_Outpatient_setting	Parameters (L297)	Unit cost INHS-funded rehabilitation session in outpatient setting	€11.36	€1.14[a]	€9.13	€13.59	€11.36	€1.14	SM11
154	uc_INHS_funded_Rehab_DH_setting	Parameters (L298)	Unit cost INHS-funded rehabilitation session in day-hospital setting	€218.16	€21.82[a]	€175.40	€260.92	€218.16	€21.82	SM11
155	uc_INHS_funded_Rehab_Home_setting	Parameters (L299)	Unit cost INHS-funded rehabilitation session in home setting	€14.43	€1.44[a]	€11.60	€17.26	€14.43	€1.44	SM12
156	uc_OOP_funded_Rehab_Home_setting	Parameters (L300)	Unit cost OOP-funded rehabilitation session in home setting	€64.00	€6.40[a]	€51.46	€76.54	€64.00	€6.40	SM13
157	uc_neurologist_visit	Parameters (L321)	Unit cost INHS-funded neurologist visit in outpatient setting	€20.66	€2.07[a]	€16.61	€ 24.71	€20.66	€2.07	SM1
158	uc_EMG	Parameters (L322)	Unit cost INHS-funded electromyography in outpatient setting	€14.43	€1.44[a]	€11.60	€17.26	€14.43	€1.44	SM12

EMG=electromyography; INHS=Italian National Health Service; LL 95% CI=lower limit 95% confidence interval; OOP=out-of-pocket; PSA=Probabilistic Sensitivity Analysis; Rehab=rehabilitation; Rehab/aboBoNT-A=abobotulinumtoxinA + rehabilitation; SE=standard error; UL 95% CI= upper limit 95% confidence interval..
[a] Due to the lack of an analytically calculated SE, a CV=10% of the sample mean has been imposed (SM9, SM10).

Table SM20 – Parameters with statistical distribution for base case and sensitivity analyses (one-way and probabilistic) (Costs in € 2018)

Parameter number	Parameter name	Spreadsheet (point estimate cell)	Parameter description	Mean	SE	LL 95% CI	UL 95% CI	Parameters Normal distribution per PSA		Source
								Mean	SE	
Healthcare resources - Unit and yearly costs										
159	uc_OOP_funded_shockwave_session	Parameters (L319)	Unit cost OOP-funded ultrasound session	€60.00	€6.00[a]	€48.24	€71.76	€60.00	€6.00	Physiatrists' opinion
160	Yearly_cost_INHS_funded_Orthesis_Leg_Foot	Parameters (L302)	Yearly cost share 5-year cost INHS-funded leg/foot orthesis (1 item)[b]	€49.37	€4.94[a]	€198.48	€39.70	€59.05	€4.94	SM14
161	Yearly_cost_OOP_funded_Orthesis	Parameters (L303)	Yearly cost share 5-year cost OOP-funded orthesis (1 item)[b]	€33.02	€3.30	€26.55	€39.49	€33.02	€3.30	SM15
162	Yearly_cost_INHS_funded_Wheelchair	Parameters (L304)	Yearly cost share 5-year cost INHS-funded wheelchair (1 item)[b]	€85.34	€8.53[a]	€68.61	€102.07	€85.34	€8.53	SM14
163	uc_INHS_funded_Crutches	Parameters (L305)	Unit cost INHS-funded crutches(1 pair)	€10.54	€1.05	€8.47	€12.61	€10.54	€1.05	SM16
164	uc_OOP_funded_Cane	Parameters (L306)	Unit cost OOP-funded walking cane (1 item)	€20.80	€2.08[a]	€16.72	€24.88	€20.80	€2.08	SM17
165	Yearly_cost_INHS_Orthesis_Hand_Wrist	Parameters (L307)	Yearly cost share 5-year cost INHS-funded hand/wrist orthesis (1 item)[b]	€29.84	€2.98[a]	€23.99	€35.69	€29.84	€2.98	SM14
167	Yearly_cost_INHS_funded_Walker	Parameters (L308)	Yearly cost share 5-year cost INHS-funded walker (1 item)[b]	€311.40	€31.14[a]	€250.37	€372.44	€311.40	€31.14	SM14
168	Yearly_cost_INHS_funded_Wrist_Splint	Parameters (L309)	Yearly cost share 5-year cost INHS-funded wrist splint (1 item)[b]	€21.39	€2.14[a]	€17.20	€25.58	€21.39	€2.14	SM14
169	Yearly_cost_INHS_funded_Orthosis_Ankle	Parameters (L310)	Yearly cost share 5-year cost INHS-funded ankle orthosis (1 item)[b]	€20.95	€2.09[a]	€16.84	€25.05	€20.95	€2.09	SM14
170	Yearly_cost_INHS_funded_Orthosis_Knee	Parameters (L311)	Yearly cost share 5-year cost INHS-funded knee orthosis (1 item)[b]	€48.93	€4.89[a]	€39.34	€58.52	€48.93	€4.89	SM14

INHS=Italian National Health Service; LL 95% CI=lower limit 95% confidence interval; OOP=out-of-pocket; PSA=Probabilistic Sensitivity Analysis; Rehab=rehabilitation; Rehab/aboBoNT-A=abobotulinumtoxinA + rehabilitation; SE=standard error; UL 95% CI= upper limit 95% confidence interval.

[a] Due to the lack of an analytically calculated SE, a CV=10% of the sample mean has been imposed (SM9, SM10).

[b] Assumed useful life: 5 years.

Table SM21 – Parameters with statistical distribution for base case and sensitivity analyses (one-way and probabilistic) (Costs in € 2018)

Parameter number	Parameter name	Spreadsheet (point estimate cell)	Parameter description	Mean	SE	LL 95% CI	UL 95% CI	Parameters Normal distribution per PSA		Source
								Mean	SE	
Healthcare resources - Unit and yearly costs										
171	Yearly_cost_INHS_funded_Shoulder_Bracing	Parameters (L312)	Yearly cost share 5-year cost INHS-funded shoulder brace (1 item)[b]	€81.93	€8.19[a]	€65.87	€97.99	€81.93	€8.19	SM14
172	uc_cost_INHS_funded_Tripod_Quadruped_Stick	Parameters (L313)	Unit cost INHS-funded tripod/quadruped stick (1 item) (1 item)[b]	€7.76	€0.78[a]	€6.24	€9.27	€7.76	€0.78	SM16
173	Yealy_cost_Intratecal_pump_implant_Rehab_only	Parameters (L318)	Yearly cost share 5-year cost INHS-funded intratecal pump implant Baclofen patient on Rehab[b]	€1391.25	€139.12[a]	€1118.57	€1663.93	€ 1391.25	€139.12	SM18,SM19

INHS=Italian National Health Service; LL 95% CI=lower limit 95% confidence interval; PSA=Probabilistic Sensitivity Analysis; Rehab=rehabilitation; Rehab/aboBoNT-A=abobotulinumtoxinA + rehabilitation; SE=standard error; UL 95% CI= upper limit 95% confidence interval.
[a] Due to the lack of an analyitically calculated SE, a CV=10% of the sample mean has been imposed (SM9, SM10).
[b] Assumed useful life: 5 years.

Table SM22 – Parameters with statistical distribution for base case and sensitivity analyses (one-way and probabilistic) (Costs in € 2018)

Parameter number	Parameter name	Spreadsheet (point estimate cell)	Parameter description	Mean	SE	LL 95% CI	UL 95% CI	Parameters Normal distribution per PSA		Source
								Mean	SE	
Non-healthcare resources - Unit costs										
174	uc_Pkg_per_minute	Parameters (L238)	Unit cost per minute car parking	€0.05	€0.01[a]	€10.38	€15.44	€0.05	€0.01	SM20
175	uc_Car_per_km	Parameters (L239)	Unit cost per kilometer car [b]	€0.42	€0.04[a]	€0.33	€0.50	€0.42	€0.04	SM21
176	uc_Home_paid_help_ minute	Parameters (L240)	Unit cost per minute home helper/housekeeper	€0.17	€0.02[a]	€0.14	€0.21	€0.17	€0.02	SM22-SM24
177	uc_minute_Patient_tim e	Parameters (L241)	Unit cost per minute patient's time	€0.45	€0.04[a]	€0.36	€0.54	€0.45	€0.04	SM22,SM25-SM27
178	uc_minute_Caregiver_ time	Parameters (L242)	Unit cost per minute caregiver's time	€0.45	€0.04[a]	€0.36	€0.54	€0.45	€0.04	SM22,SM25-SM27

km=kilometer; LL 95% CI=lower limit 95% confidence interval; PSA=Probabilistic Sensitivity Analysis; Rehab=rehabilitation; Rehab/aboBoNT-A=abobotulinumtoxinA + rehabilitation; SE=standard error; UL 95% CI= upper limit 95% confidence interval.
[a] Due to the lack of an analytically calculated SE, a CV=10% of the sample mean has been imposed (SM9., SM10.).
[b] Patient has been assumed to be transported with the following car: Fiat Punto 1.2 69 CV (SM21).

Table SM23 – Parameters with statistical distribution for base case and sensitivity analyses (one-way and probabilistic)

Parameter number	Parameter name	Spreadsheet (point estimate cell)	Parameter description	Observations	Mean	SE	LL 95% CI	UL 95% CI	Parameters Beta distribution for PSA		Source
									Alfa	Beta	
Utility											
179	First_year_utility_Rehab_only	Parameters (L193)	Utility patient on Rehab (year 1)	67	0.600	0.060	0.481	0.714	40	27	SM28
180	Second_year_utility_Rehab_only	Parameters (L194)	Utility patient on Rehab (year 2)	66	0.640	0.088	0.521	0.751	42	24	SM28

LL 95% CI=lower limit 95% confidence interval; PSA=Probabilistic Sensitivity Analysis; Rehab=rehabilitation; Rehab/aboBoNT-A=abobotulinumtoxinA + rehabilitation; SE=standard error; SMR=Standardized Mortality Ratio; UL 95% CI= upper limit 95% confidence interval.

[a] Number of patients on rehab only out of 930 patients followed by physiatrists who coauthored this research. In the second year, the number of observations is adjusted for the SMR.

Table SM24 – Parameters with statistical distribution for base case and sensitivity analyses (one-way and probabilistic)

| Parameter number | Parameter name | Spreadsheet (point estimate cell) | Parameter description | Observations[a] | Mean | SE | LL 95% CI | UL 95% CI | Parameters Normal distribution per PSA | | Source |
									Mean	SE	
Utility											
181	Utility_multiplier_ BoNT_A	Parameters (L261)	Utility multiplier (years 1 and 2) patient on Rehab/aboBoNT-A	864	1.41	0.141[b]	1.133	1.685	1.41	0.141	Physiatrists' opinion

LL 95% CI=lower limit 95% confidence interval; PSA=Probabilistic Sensitivity Analysis; CV=coefficient of variation; Rehab=rehabilitation; Rehab/aboBoNT-A=abobotulinumtoxinA + rehabilitation; SE=standard error; UL 95% CI= upper limit 95% confidence interval.

[a] Number of patients considered for parameter calculation out of 930 patients followed by physiatrists who coauthored this research.

[b] Due to the lack of an analytically calculated SE, a CV=10% of the sample mean has been imposed (SM9, SM10).

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