Supplementary data

Annex 1. Adjusted rate estimates effectiveness results from the NEPA study in patients receiving either HEC or MEC [15]

Patients' group	Phase	Effectiveness parameter	NEPA (%)	APR + PALO (%)	Δ NEPA - APR+PALO (%)	Confidence interval (95%)	P-value
HEC	Acute phase	Complete response	92.8	86.8	+ 6.0	-0.067 / 0.186	0.3522
		Complete protection	90.0	77.9	+ 12.1	-0.024 / 0.264	0.1002
	Overall phase	Complete response	83.6	72.1	+ 11.5	-0.053 / 0.285	0.1774
		Complete protection	78.0	63.3	+ 14.7	-0.027 / 0.322	0.0960
MEC	Acute phase	Complete response	95.7	95.9	- 0.2	-0.034 / 0.030	0.9125
		Complete protection	92.8	92.1	+ 0.7	-0.038 / 0.051	0.7672
	Overall phase	Complete response	88.1	85.6	- 2.5	-0.040 / 0.091	0.4483
		Complete protection	83.5	79.1	- 4.4	-0.031 / 0.119	0.2521

Annex 2: Annual cycles of chemotherapy considered in the model and market shares

			2016	2017	2018	2019	2020
HEC	Number of Cycles		96,354	96,354	96,354	96,354	96,354
	Scenario without NEPA	NEPA	0.00%	0.00%	0.00%	0.00%	0.00%
		APR + PALO	31.13%	32.00%	32.89%	33.76%	34.65%
		APR + ONDA	52.84%	51.97%	51.09%	50.21%	49.33%
		fAPR + PALO	1.81%	2.85%	3.93%	5.00%	6.06%
		fAPR + ONDA	2.28%	3.17%	4.03%	4.92%	5.77%
		PALO	11.94%	10.01%	8.06%	6.12%	4.19%
	Scenario with NEPA	NEPA	17.62%	39.64%	48.45%	57.26%	61.67%
		APR + PALO	17.03%	14.38%	12.63%	10.86%	9.08%
		APR + ONDA	51.96%	34.35%	29.07%	22.90%	20.26%
		fAPR + PALO	0.93%	1.97%	2.17%	2.35%	2.53%
		fAPR + ONDA	1.40%	2.29%	2.27%	2.27%	2.30%
		PALO	11.06%	7.36%	5.41%	4.36%	4.15%
MEC	Number of Cycles		111,970	124,855	137,629	153,458	167,760
	Scenario without NEPA	NEPA	0.00%	0.00%	0.00%	0.00%	0.00%
		APR + PALO	20.32%	23.77%	28.71%	32.93%	37.94%
		fAPR + PALO	3.30%	6.20%	8.56%	10.56%	12.02%
		PALO	76.38%	70.02%	62.73%	56.51%	50.04%
	Scenario with NEPA	NEPA	9.62%	21.56%	34.56%	43.96%	46.22%
		APR + PALO	11.12%	10.83%	11.18%	10.99%	12.82%
		fAPR + PALO	3.28%	2.94%	2.62%	2.31%	2.10%
		PALO	75.98%	64.66%	51.64%	42.74%	38.86%
	Totale		208,324	221,209	233,983	249,812	264,114

Annex 3. Budget impact analysis results

Target population	Scenario	Cost (Million €)					
		2016	**2017**	**2018**	**2019**	**2020**	**Total**
HEC	Without NEPA	66.8	67.4	68.0	68.6	69.2	340.1
	With NEPA	64.1	60.3	59.0	57.4	56.6	297.4
	Budget impact	- 2.7	- 7.1	- 9.0	- 11.2	- 12.7	- 42.7
MEC	Without NEPA	50.2	58.2	66.9	77.2	87.2	339.6
	With NEPA	48.8	55.7	63.2	71.6	79.3	318.7
	Budget impact	- 1.4	- 2.5	- 3.7	- 5.5	- 7.9	- 20.9
HEC + MEC	Without NEPA	117.0	125.6	134.9	145.8	156.4	679.7
	With NEPA	112.9	116.0	122.2	129.0	135.9	616.0
	Budget impact	- 4.1	- 9.6	- 12.7	- 16.7	- 20.5	- 63.7

Annex 4. Results of the budget impact sensitivity analysis

Target population	Scenario	Budget impact (Million €)					
		2016	2017	2018	2019	2020	Total
HEC	Base case	- 2.7	- 7.1	- 9.0	- 11.2	- 12.7	- 42.7
	NEPA effectiveness from the NEPA study in HEC [11]	- 2.6	- 6.9	- 8.8	- 11.0	- 12.4	- 41.8
	NEPA cost + 10%	-1.9	- 5.2	- 6.7	- 8.5	- 9.7	- 32.1
	NEPA cost - 10%	- 3.4	- 8.6	- 10.9	- 13.5	- 15.1	- 51.6
	No adverse events costs	- 2.2	- 6.0	- 7.6	- 9.5	- 10.6	- 35.9
	Increase of adverse events costs*	- 2.4	- 6.6	- 8.4	- 10.5	- 11.9	- 39.8
	CINV event cost + 20%	- 2.7	- 7.0	- 8.9	- 11.1	- 12.5	- 42.3
	CINV event cost – 20%	- 2.6	- 6.8	- 8.7	- 10.9	- 12.3	- 41.4
MEC	Base case	- 1.4	- 2.5	- 3.7	- 5.5	- 7.9	- 20.9
	NEPA effectiveness from the NEPA study in MEC [12]	- 1.4	- 2.6	- 3.9	- 5.8	- 8.1	- 21.8
	NEPA cost + 10%	- 0.9	- 1.4	- 1.8	- 2.7	- 4.6	- 11.4
	NEPA cost - 10%	- 1.9	- 3.8	- 6.1	- 8.8	- 11.6	- 32.2
	No adverse events costs	- 1.2	- 1.7	- 2.1	- 3.1	- 4.9	- 13.0
	Increase of adverse events costs*	- 1.2	- 2.3	- 3.4	- 5.1	- 7.3	- 19.3
	CINV event cost + 20%	- 1.4	- 2.7	- 4.0	- 5.9	- 8.3	- 22.2
	CINV event cost – 20%	- 1.4	- 2.6	- 3.8	- 5.6	- 8.0	- 21.4
HEC + MEC	Base case	- 4.1	- 9.6	- 12.7	- 16.7	- 20.5	- 63.7
	NEPA effectiveness from the NEPA studies in HEC or MEC [11,12]	- 4.0	- 9.5	- 12.7	- 16.8	- 20.6	- 63.7
	NEPA cost + 10%	- 2.8	- 6.6	- 8.5	- 11.2	- 14.4	- 43.5
	NEPA cost - 10%	- 5.3	- 12.5	- 17.0	- 22.3	- 26.8	- 83.9
	No adverse events costs	- 3.4	- 7.7	- 9.8	- 12.6	- 15.5	- 49.0
	Increase of adverse events costs*	- 3.7	- 8.9	- 11.8	- 15.6	- 19.2	- 59.1
	CINV event cost + 20%	- 4.1	- 9.7	- 12.9	- 17.0	- 20.8	- 64.5
	CINV event cost – 20%	- 4.0	- 9.4	- 12.6	- 16.6	- 20.3	- 62.8

*The cost of the adverse events equal to 0 € (due to a out-of-pocket management cost) is considered to be 62.5 € (equal to that of the less expensive adverse event considered)