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University Medical Center Groningen

Addendum to:

Sotorasib for previously treated KRAS G12C mutated, locally advanced or metastatic non-small-cell lung cancer [ID3780]

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Date completed	06/12/2021

Source of funding: This report was commissioned by the NIHR Evidence Synthesis Programme as project number 13/51/34.

Declared competing interests of the authors:

None.

Acknowledgements

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Addendum to ERG report

This addendum presents deterministic and probabilistic ICERs of additional company base-case and scenarios as well as additional ERG scenarios.

Table 1 and Table 2 contain the company scenarios for the docetaxel and docetaxel + nintedanib comparators, respectively. Table 3 and 4 present further ERG scenarios for the docetaxel and docetaxel + nintedanib comparators, respectively.

Table 1: Company base-case and scenarios (comparator: docetaxel)

Technologies	Total costs (£)	Total QALYs	Deterministic Incremental costs (£)	Deterministic Incremental QALYs	Deterministic ICER (£/QALY)	Probabilistic ICER (£/QALY)	Probability cost-effective at WTP £50,000
Company base-case with updated PAS (■■■)							
Docetaxel	■■■	■■■					
Sotorasib	■■■	■■■	22,996	0.59	38,715	38,642	75.9%
Updated company base-case with TTD and wastage assumptions adjusted (no TEW included)							
Docetaxel	■■■	■■■					
Sotorasib	■■■	■■■	24,870	0.59	41,871	41,120	70.1%
Updated company base-case PSWA (no TEW included)							
Docetaxel	■■■	■■■					
Sotorasib	■■■	■■■	27,363	0.82	33,570	32,950	89.4%
Updated company base-case ERG settings apart from TEW: starting at 3 yrs + 5 yrs gradual waning							
Docetaxel	■■■	■■■					
Sotorasib	■■■	■■■	25,278	0.51	50,052	49,275	50.3%
Updated company base-case with TEW at 3+5 yrs and absolute PFS utility difference of 0.025*							
Docetaxel	■■■	■■■					
Sotorasib	■■■	■■■	24,886	0.53	46,848	49,164	58.8%
Updated company base-case with TEW at 3+5 yrs and absolute PFS utility difference of 0.04[#]							
Docetaxel	■■■	■■■					
Sotorasib	■■■	■■■	24,886	0.54	46,372	45,701	60.3%
Updated company base-case with TEW at 3+5 yrs, RDI equalized, TTD utilities, no IV disutility							
Docetaxel	■■■	■■■					
Sotorasib	■■■	■■■	25,278	0.54	46,409	45,709	59.0%
Source: CS updated model							

Technologies	Total costs (£)	Total QALYs	Deterministic Incremental costs (£)	Deterministic Incremental QALYs	Deterministic ICER (£/QALY)	Probabilistic ICER (£/QALY)	Probability cost-effective at WTP £50,000
CS = company submission; ERG = Evidence Review Group; FV = fixing violation; ICER = incremental cost effectiveness ratio; IV = intravenous; MJ = matter of judgment; PSA = probabilistic sensitivity analysis; QALY = quality-adjusted life year, RDI = relative dose intensity; TTD = time to treatment discontinuation							
* For this scenario the ERG could not exactly reproduce the ICER the company reported (£48,405) and so the ERG ran the probabilistic sensitivity analysis according to the settings they believed to best fit the description of the scenario by the company.							
# For this scenario the ERG could not exactly reproduce the ICER the company reported (£48,650) and so the ERG ran the probabilistic sensitivity analysis according to the settings they believed to best fit the description of the scenario by the company.							

Table 2: Company base-case and scenarios (comparator: docetaxel + nintedanib)

Technologies	Total costs (£)	Total QALYs	Deterministic Incremental costs (£)	Deterministic Incremental QALYs	Deterministic ICER (£/QALY)	Probabilistic ICER (£/QALY)	Probability cost-effective at WTP £50,000
Company base-case with updated PAS (■■■)							
Docetaxel + nintedanib	■■■	■■■					
Sotorasib	■■■	■■■	12,762	0.47	27,337	27.117	80.9%
Updated company base-case with TTD and wastage assumptions adjusted (no TEW included)							
Docetaxel + nintedanib	■■■	■■■					
Sotorasib	■■■	■■■	13,504	0.47	28,927	27,975	80.2%
Updated company base-case PSWA (no TEW included)							
Docetaxel + nintedanib	■■■	■■■					
Sotorasib	■■■	■■■	10,833	0.70	15,512	15,205	94.6%
Updated company base-case with ERG preferences three period piecewise HR (with HR =1 in first period)							
Docetaxel + nintedanib	■■■	■■■					
Sotorasib	■■■	■■■	13,774	0.33	42,142	40,663	63.9%
Source: CS updated model							

Technologies	Total costs (£)	Total QALYs	Deterministic Incremental costs (£)	Deterministic Incremental QALYs	Deterministic ICER (£/QALY)	Probabilistic ICER (£/QALY)	Probability cost-effective at WTP £50,000
CS = company submission; ERG = Evidence Review Group; FV = fixing violation; ICER = incremental cost effectiveness ratio; IV = intravenous; MJ = matter of judgment; PSA = probabilistic sensitivity analysis; QALY = quality-adjusted life year, RDI = relative dose intensity; TTD = time to treatment discontinuation							

Table 3: ERG base-case and additional scenarios (comparator: docetaxel)

Technologies	Total costs (£)	Total QALYs	Deterministic Incremental costs (£)	Deterministic Incremental QALYs	Deterministic ICER (£/QALY)	Probabilistic ICER (£/QALY)	Probability cost-effective at WTP £50,000
ERG base-case with updated PAS (■■■■) TEW set to start at 2 years from start of treatment, plus 5 yrs gradual decrease for HR to return to 1							
Docetaxel	■■■■	■■■■					
Sotorasib	■■■■	■■■■	25,228	0.49	51,769	50,789	49.6%
ERG base-case 3 yrs TEW (TEW starts at 3 yrs from start of treatment, HR set to 1, no gradual decrease)							
Docetaxel	■■■■	■■■■					
Sotorasib	■■■■	■■■■	25,156	0.46	54,494	53,791	38.7%
ERG base-case 5 yrs TEW (TEW starts at 5 yrs from start of treatment, HR set to 1, no gradual decrease)							
Docetaxel	■■■■	■■■■					
Sotorasib	■■■■	■■■■	25,277	0.50	50,078	49,303	50.1%
ERG base-case 3 yrs TEW plus scenarios (gen gamma for PFS, treatment emergent AEs, disutility of 0.05 for AEs that had zero disutility in CS)							
Docetaxel	■■■■	■■■■					
Sotorasib	■■■■	■■■■	26,417	0.46	57,322	55,869	33.1%

Technologies	Total costs (£)	Total QALYs	Deterministic Incremental costs (£)	Deterministic Incremental QALYs	Deterministic ICER (£/QALY)	Probabilistic ICER (£/QALY)	Probability cost-effective at WTP £50,000
ERG base-case 5 yrs TEW plus scenarios (gen gamma for PFS, treatment emergent AEs, disutility of 0.05 for AEs that had zero disutility in CS)							
Docetaxel	■	■					
Sotorasib	■	■	26,538	0.50	52,658	51,192	45.3%
Source: CS updated model CS = company submission; ERG = Evidence Review Group; FV = fixing violation; ICER = incremental cost effectiveness ratio; IV = intravenous; MJ = matter of judgment; PSA = probabilistic sensitivity analysis; QALY = quality-adjusted life year, RDI = relative dose intensity; TTD = time to treatment discontinuation							

Table 4: ERG base-case and additional scenarios (comparator: docetaxel + nintedanib)

Technologies	Total costs (£)	Total QALYs	Deterministic Incremental costs (£)	Deterministic Incremental QALYs	Deterministic ICER (£/QALY)	Probabilistic ICER (£/QALY)	Probability cost-effective at WTP £50,000
ERG base-case with updated PAS (■) TEW set to start at 2 years from start of treatment, plus 5 yrs gradual decrease for HR to return to 1							
Docetaxel + nintedanib	■	■					
Sotorasib	■	■	13,774	0.33	42,142	40,663	63.9%
ERG base-case 3 yrs TEW (TEW starts at 3 yrs from start of treatment, HR set to 1, no gradual decrease)							
Docetaxel + nintedanib	■	■					
Sotorasib	■	■	13,771	0.33	42,266	40,970	64.0%

Technologies	Total costs (£)	Total QALYs	Deterministic Incremental costs (£)	Deterministic Incremental QALYs	Deterministic ICER (£/QALY)	Probabilistic ICER (£/QALY)	Probability cost-effective at WTP £50,000
ERG base-case 5 yrs TEW (TEW starts at 5 yrs from start of treatment, HR set to 1, no gradual decrease)							
Docetaxel + nintedanib	██████	██████					
Sotorasib	██████	██████	13,778	0.33	41,957	40,723	62.9%
ERG base-case 3 yrs TEW plus scenarios (gen gamma for PFS, treatment emergent AEs, disutility of 0.05 for AEs that had zero disutility in CS)							
Docetaxel + nintedanib	██████	██████					
Sotorasib	██████	██████	14,050	0.33	43,108	40,030	64.1%
ERG base-case 5 yrs TEW plus scenarios (gen gamma for PFS, treatment emergent AEs, disutility of 0.05 for AEs that had zero disutility in CS)							
Docetaxel + nintedanib	██████	██████					
Sotorasib	██████	██████	14,057	0.33	42,793	39,790	62.9%
Source: CS updated model CS = company submission; ERG = Evidence Review Group; FV = fixing violation; ICER = incremental cost effectiveness ratio; IV = intravenous; MJ = matter of judgment; PSA = probabilistic sensitivity analysis; QALY = quality-adjusted life year, RDI = relative dose intensity; TTD = time to treatment discontinuation							