East Surrey CCG, Guildford & Waverley CCG, North West Surrey CCG, Surrey Downs CCG, Surrey Heath CCG, Crawley CCG, Horsham & Mid-Sussex CCG

Briefing Paper for Prescribing Clinical Network on NICE Technology Appraisals: Local implementation

NICE TA Guidance	Roflumilast For Treating Chronic Obstructive Pulmonary Disease TA461[1]		
Available at	https://www.nice.org.uk/guidance/ta461		
Date of issue	26 July 2017		3 months from publication

Medicine details	
Name, brand name	Roflumilast Daxas ®[2]
Manufacturer	Astra Zeneca
Licensed indication	Roflumilast is indicated for maintenance treatment of severe chronic obstructive pulmonary disease (COPD) (FEV_1 post-bronchodilator less than 50% predicted) associated with chronic bronchitis in adult patients with a history of frequent exacerbations as add on to bronchodilator treatment.
Formulation	Film-coated tablet
Usual dosage	The recommended dose is 500 micrograms (one tablet) roflumilast once daily.

Disease and potential patient group	
Brief description of disease	COPD is a chronic and progressive disease characterised by obstruction of the airways, breathlessness and cough. Airflow limitation becomes worse over time, with periodic acute exacerbations. Exacerbations worsen a patient's health status, reduce their quality of life, accelerate decline in lung function, lead to hospitalisation and increase mortality. It is estimated that about three million people in the UK have COPD. However, in many of these people, the condition has not been formally diagnosed (normally these would be mild cases). This is because in the early stages, many people put up with a cough or mild breathlessness without seeing their doctor. They may only see their doctor when symptoms get worse. COPD mainly affects people over the age of 40 and becomes more common with increasing age. The average age when it is formally diagnosed is around 67 years. It is more common in men than in women. A flare-up (exacerbation) of COPD is one of the most common reasons for admission to hospital. 1 in 8 hospital admissions are due to COPD. This makes COPD the second largest cause of emergency admissions, and one of the most expensive inpatient conditions treated by the NHS.

Potential patient numbers per 100,000	Approximately 20 per 100,000 (£9,100 per 100,000 population)

SUMMARY

NICE recommendation

1 Recommendations

1.1 Roflumilast, as an add-on to bronchodilator therapy, is recommended as an option for treating severe chronic obstructive pulmonary disease in adults with chronic bronchitis, only if:

- the disease is severe, defined as a forced expiratory volume in 1 second (FEV1) after a bronchodilator of less than 50% of predicted normal, and
- the person has had 2 or more exacerbations in the previous 12 months despite triple inhaled therapy with a long-acting muscarinic antagonist, a long-acting beta-2 agonist and an inhaled corticosteroid.

1.2 Treatment with roflumilast should be started by a specialist in respiratory medicine.

1.3 These recommendations are not intended to affect treatment with roflumilast that was started in the NHS before this guidance was published. People having treatment outside these recommendations may continue without change to the funding arrangements in place for them before this guidance was published, until they and their NHS clinician consider it appropriate to stop.

Roflumilast for treating chronic obstructive pulmonary disease (TA461)

The committee concluded that there is sufficient evidence of the clinical efficacy of roflumilast compared with placebo in the subgroup of patients with severe COPD having exacerbations despite triple inhaled therapy. The committee concluded that the company's revised base-case incremental cost-effectiveness ratio (ICER) of £24,976 per quality-adjusted life year (QALY) gained is a plausible estimate of the cost effectiveness of roflumilast as an add-on treatment to triple inhaled therapy, and is within the range normally considered a cost-effective use of NHS resources (that is, between £20,000 and £30,000 per QALY gained).

Cost implications*

Cost of product:
£37.71 for 30 tablets

Annual cost per patient:
£452.52 for 12 months

Costing information/100,000 population and per CCG: No significant resource impact is anticipated NICE July 2017 [1]

We do not expect this guidance to have a significant impact on resources; that is, it will be less than £5m per year in England (or £9,100 per 100,000 population). This is because the expected uptake of the technology is small because the therapy should only be started by specialists in secondary care, and the unit cost for the intervention is small.

Incremental Cost Effectiveness
Taking into account the amendments described in section 4.8, and sections 4.10–4.11, the company's revised base-case Incremental Cost Effectiveness ratio (ICER) was £24,976 per quality adjusted life year (QALY) gained. The committee acknowledged that this

incorporated the adjustments made by the Evidence Review Group (ERG) to the company's original model, which the committee agreed was appropriate. The committee noted that the company had done scenario analyses that varied the estimate for post-hospitalisation mortality, resulting in ICERs between £16,293 and £30,349 per QALY gained. It appreciated that the true ICER may be slightly lower because of the double counting of deaths highlighted by the ERG (see section 4.12).
The committee concluded that the company's revised base-case ICER was a plausible estimate of the cost effectiveness of roflumilast as an add-on treatment to triple inhaled therapy, and that the company's ICERs are within the range normally considered a cost-effective use of NHS resources (that is, between £20,000 and £30,000 per QALY gained).

Availability of PAS and details (if appropriate): No
Availability of homecare service (if appropriate): N/A

**NICE funding requirements are based on Quality Adjusted Life Years (QALY) threshold. If there is evidence that the incremental cost rises above this threshold in the future, the PCN may reconsider the commissioning status.*

Alternative treatments and cost per patient (per year / per month as appropriate)

Other NICE recommended products:
None

Options not reviewed by NICE but used in standard practice:
Theophylline –not used often in practice due to high risk of toxicity, lack of evidence for clinical effectiveness, associated side effects (seizures, cardiac arrhythmias)

Impact to patients

Reduced rate of moderate and severe exacerbations compared with placebo (primary outcome) in the sub group of patients with severe COPD having exacerbations despite triple therapy.
Roflumilast is subject to additional monitoring for weight loss and patients to be issued with a patient card for reporting side effects.

Impact to primary care prescribers

Once the patient has been stabilised on the drug by a specialist in respiratory medicine, a primary care prescriber is likely to be asked to take responsibility for prescribing. Primary care prescribers are likely to be unfamiliar with this drug and may require information on how to assess clinical effectiveness and the requirement to monitor for weight loss.

Impact to secondary care

To be started by secondary care physician. Before requesting transfer to primary care the specialist should assess the patient's ability to tolerate the drug. As such it is recommended that the specialist in respiratory medicine prescribes for a minimum of one month.

Impact to CCGs

Some additional costs to primary care prescribing.
Evidence does not examine reduction in admissions.
Utilisation of prescribing support software (where available) to highlight risk of weight loss

Implementation

Consider need for starting criteria, monitoring parameters, stopping criteria – Work will need to be carried out with secondary care involvement.
Place in therapy – current guidelines will need updating
Any barriers to implementation locally? To consult with respiratory group on this
Is there a cohort of patients that will need special consideration ?Patients with frequent attendance at A&E, patients with frequent admissions
How does this treatment link to documents already on the prescribing advisory database? Links to Surrey CCGs Medicines Management of COPD Guidelines
Consider timescales (within 3 months, 6 months etc.?) Implementation to be completed within 3 months.

Recommendation to PCN
PbRe: N Colour classification guidelines **Recommended traffic light status (see attached guidelines):** Blue **Additional comments:** Recommended minimum duration of supply by specialist - 1 month

References:

1. https://www.nice.org.uk/guidance/ta461
2. https://www.medicines.org.uk/emc/medicine/23416

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Declaration of Interest:

None

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Declaration of Interest:

None

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VERSION CONTROL SHEET

Version	Date	Author	Status	Comment
v.1	*21/9/17*	*N. Devanney*		*For K. Solomons to Review*
v.2	*21/917*	*K. Solomons*		*Minor amendments. Ready for consultation*