**Title**: Input of a patient advisory group into evaluating the benefit:risk profile of existing and potential COPD therapies

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**Introduction**: People with chronic obstructive pulmonary disease (COPD) have considerable disability and reduced life expectancy, despite current treatments. New medicines are required, but few successfully complete clinical trials and become established in practice. During drug development, understanding the nature and magnitude of benefits relevant to patients and risks they will accept to achieve these is important, particularly where the drug has a narrow therapeutic index. Our aim was to explore patient perceptions of the benefit:risk profile of existing and potential COPD therapies.

**Methods**: Our local respiratory patient advisory group meets every 3 months to provide input into research. A focus group completed a conjoint analysis exercise1. Four current (aclidinium, azithromycin, carbocisteine) or potential (drug X) COPD medicines were presented iteratively in pairs (figure 1), comparing the magnitude of likely benefits (reduced exacerbations, improved overall health) and harms (risk of infection, antibiotic resistance, kidney failure, diabetes). For each pairing, participants indicated which medicine they would choose. Participants also ranked potential benefits (reduced exacerbations, increased survival, increased walking distance) and risks (death, kidney failure, diabetes) of medicines in order of importance and discussed how these should be prioritised.

**Results**: 9 male and 9 female COPD patients (age range 66-86 years, median 77 years, GOLD 1-4) and 2 carers took part. When confronted with two treatment options, participants consistently chose the treatment with a better safety profile, even if this meant less clinical benefit. Being able to walk further was the most important benefit (70% participants), over preventing exacerbations (5%) or increasing life expectancy (5%). Kidney failure was selected as the most concerning potential risk (50% participants) over chance of death (10%). A strong theme emerged that quality of life was more important than life expectancy.

**Conclusions**: Potential users of new treatments can weigh potential benefits and risks and judge their relative importance. This has potential to improve design of clinical trials, patient participation and development of medicines with real relevance to users.

**References:**

1. Bridges JF et al. Conjoint analysis applications in health—a checklist: a report of the ISPOR Good Research Practices for Conjoint Analysis Task Force. Value in Health. 2011;14(4):403-13.

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